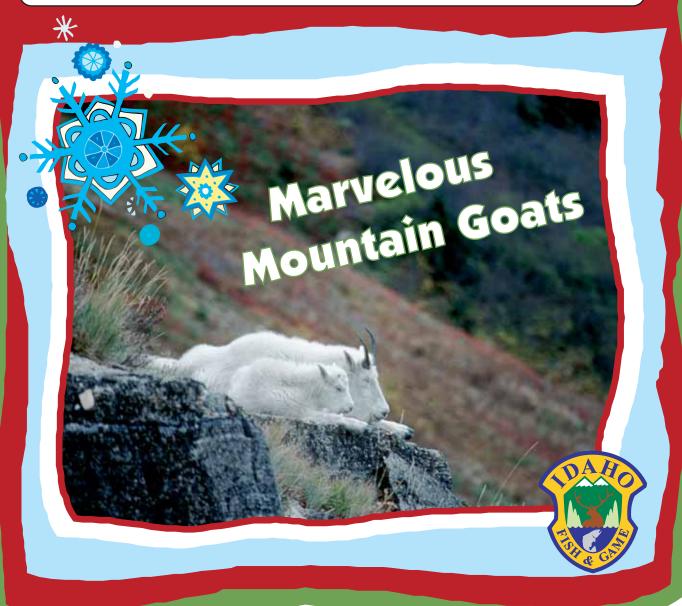


Volume 19 Issue 4 December 2005



Let's Look at... Mountain Goats



On August 24, 1805, Lewis and Clark first reported seeing a mountain goat near the Lemhi Mountains of Idaho. They had heard about this interesting white animal with slender black horns from the Native Americans. The Native Americans used mountain goat wool to make blankets and clothes.

The scientific name given to the mountain goat is *Oreamnos americanus*, (Or- REAM-nose a-meri-CAN-us) which means "mountain lamb belonging to America." Having the word "mountain" in their name makes a lot of sense. You see, mountain goats live in high mountains. They like steep rocky areas and have many characteristics to help them survive where other animals can't.

Can you tell by looking at the picture above what characteristics the mountain goat has that helps it stay alive? It looks like they're wearing a big white coat! The mountain goat's coat helps it to stay warm. During the winter, they have two layers of hair. Wooly fur is close to their bodies. Another layer, called guard hairs, covers the wooly fur and protects the goat's body from wind, rain and snow. During the spring, mountain goats shed their winter coats. They start to look a little ragged and will rub against the bushes and trees to get the coat off.

Another trait mountain goats have to help them survive might not be as obvious in the picture. Mountains can be steep and hazardous areas. When you're climbing in the mountains you need good shoes! Mountain goats' hooves are special. They have hard outer shells and rubbery footpads which act like suction cups when weight is applied. These animals can pull themselves from ledge to ledge with just their front feet!

Short, sturdy legs and a heavy-set body also help the goat balance and move on the steep, rocky cliffs it calls home. Mountain goats stand about three and a half feet tall. They weigh between 150 and 220 pounds. That's about what a grown man weighs.

It can be difficult to tell the difference between a male and female mountain goat. They are about the same size. They both have slender, black horns and grow beards on their chins as they get older.

Female goats, called nannies, are the bosses of the herd! Herds are made up of the nannies and their kids. Yes, the young are really called kids! The billy goats, or the males, form their own groups. They only join the nannies and kids during November and December, which is breeding season. They'll spend up to a month looking for the right nanny and will fight for her, if they need to. Only about half the nannies in the herd give birth in the springtime. Usually one kid is born. They can stand up and walk about 30 minutes after being born!

What do goats eat? They are herbivores. In the mountains, they eat any type of vegetation they can find. Grasses, woody plants, mosses and lichen fill their stomachs. They gobble up their food as fast they can. Later, when they can relax, they burp up the food and take the time chew it. To finish, they send it to the stomach for digesting.

Nature has solved many problems for mountain goats. Their special adaptations allow them to live in areas where other animals can't. Not surprisingly, their biggest threat is falling off a cliff. People and predators don't seem to be a problem!

Idaho is one of the few states that have these unique critters.

Living Close to the Clouds

Mountain goats are animals that live in some pretty high places. Here are some other Idaho animals that live close to the clouds, and the special features that let them live there.

Hoary marmots are rodents. Their first cousins are yellow-bellied marmots or rockchucks. To avoid the deep snow, hoary marmots hibernate. They often hibernate from September all the way to April. That's a long time! Hoary marmots get some of the water they need from the plants they eat. They can also lick dew off plants and eat snow.

Snowshoe hares are animals that do not hibernate. They eat mostly grasses in the summer and twigs and bark in the winter. Snowshoe hares have some interesting ways to protect themselves in the snow. One thing they do is change coats. Their fur is white in the winter and brown in the summer. If the snowshoe hare sees a predator, it freezes still and blends into the background. If this doesn't work, it runs. A snowshoe can run up to 27 miles per hour. That's fast! Snowshoe hares got their name from their feet. Their back feet are covered with stiff long hairs. These "snowshoes" help the hare run on the snow.

Many animals that live in snowy places have large, hairy feet. The lynx is one. Its large furry paws help it chase snowshoe hares. Wolverines also have large feet for walking on the snow. Wolverines may catch deer and elk in the winter. The deer's feet break through the snow while the wolverine's feet stay on top of the snow.

The northern bog lemming is an animal that looks a bit like a rabbit with short ears. It uses the snow as shelter. Lemmings are most active above ground during the winter months when predators are not as common. They make nests at ground level just under the snow. During the summer months, lemmings build nests underground where hawks and other predators are less likely to see them.

These are just a few of the animals that might share a mountain with a mountain goat. Can you think of others?

Holiday Wishes

During the holiday season our thoughts are about the things that are closest to us - our family and friends, our neighborhoods and schools. We think about what gifts we can give. We think about the events that are ahead. Here, at the Idaho Department of Fish and Game, we are thinking of wildlife. If you were to add wildlife to your gift-giving list, what might you plan on giving?

Habitat is the most important need for wild animals. A good habitat will provide food, water, shelter and space for an animal to live. What things could you do to improve habitat in your area?

Conservation is a big word that includes all kinds of things to do that help wildlife. Conserve means protect or preserve or to use carefully or sparingly. If you recycle, you cut down the amount of trash you throw away. If you turn your thermostat down, you're conserving energy. You're on the right path towards helping wildlife by doing these things. Picking up garbage or planting a tree are other things you could do. What other "gifts" could you give wildlife?

Some people like to put out food for wildlife. If you do this, use good sense. Remember they are wild animals, and you don't want them to become dependent on the food you provide.

Here are some fun ideas for bird feeding this holiday season. Make a garland of airpopped popcorn, cranberries, and orange slices. Hang it on a tree outside for decoration and a give a treat to a feathered friend.

Another idea is to put peanut butter on a pine cone, roll it in birdseed and hang it from a branch. You could also make a seed basket. Cut a grapefruit in half and scoop out the pulp. Poke holes in each side and string yarn through the holes to make a handle. Fill the basket with black oil sunflower seeds or whole corn kernels.

Have fun watching birds and squirrels having a holiday feast. Remember, by taking care of habitats, you are taking care of wild animals.

Horns

Horns are found on this month's feature animal. Other animals with horns include pronghorn, bighorn sheep, and bison. Horns are a bit different than antlers. They have two parts. The inside part is bone that pokes out from the skull. The outside of the horn is a covering made of a tough fiber-like material called **keratin**. Your fingernails are made of a similar tissue. What purpose does the keratin serve? It protects what's underneath!

Horns are permanent. In most cases, they continue to grow throughout an animal's life. Pronghorns are an exception to this rule. A pronghorn will shed and re-grow its horn sheath each year.

If you take a close look at a mountain goat's horns, you'll see rings. Counting the rings will tell you how old the goat is. Rings are formed each year after they are one year old. The horns of a mountain goat will have one less ring than its age. Both males and females can grow horns. A female mountain goat's horns are usually smaller and have a noticeable curve at the tip. Males have a gradual curve along the entire length.

Horns come in many shapes and sizes. They are usually not branched as an elk or deer antler is. Mature male bighorn sheep have horns that form a "c" shape on their head. A bison's horn, looks similar to another letter, can you tell which one?

Tracks!

Looking at animal tracks is a bit like playing detective. You observe, gather clues and do your best to put the clues together to solve a mystery. Tracking can be fun. It also can be difficult. Here are some tips to consider when figuring out what animal left a track.

The first thing to think about is what kind of habitat the track is in. You probably would not find a beaver track in the middle of a desert far away from water. Thinking about the habitat will help you remember what kinds of animals may be living there.

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.

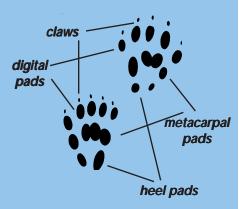
Notice the size of the track and its shape. Mammal tracks are usually made up of claw marks, toe pad marks, palm pad marks and space in between the toes and pads. Some tracks show heel pads. Not every track will show all of these things, of course. It all depends on the animal, and what the animal was doing at the time the track was left. The drawing to the right shows what a spotted skunk track might look like.

How many toes does the animal have? Weasels have five toes on both the front and back feet. 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 is usually found on the inside of most mammals' feet. This would be toe #1. This can help you tell front and rear tracks apart, as well as left and right tracks.

Toe shapes are also important. Four toe marks that are shaped like teardrops could be a cat. All cats have four toes that leave a teardrop shaped print. Mink and weasels also have toe marks shaped like teardrops, but they have five toes not four.

These are just some of the things to consider when looking at tracks. The mammal track comparison chart below will help you tell some tracks apart. At least you may be able to tell which family the animal is in. Good Luck!

skunk track



wolverine track



Track Comparison Chart

Toes	Claws	General Shape & Outline	Common Gaits	Shape of Pads		
4	Yes	iģi iģi			Dog Family	
4	No	000	0000000	\bigcirc	Cat Family	
4	Rare	0 O	0,0000	\Diamond	Rabbit Family	
4 or 5	Varies	Sent of the	000000000000000000000000000000000000000		Rodent Family	
5 th toe may not show	Occasionally			00	Bear Family	
5 th toe may not show	Occasionally	**************************************			Weasel Family	
5	Occasionally		00000	(A) A	Raccoon Family	
5	No	**	0,0000000000000000000000000000000000000	***	Opossum or Shrew	
2	Dew Claws		00 00 00 00	10	Deer Family	





WOLF



BLACK BEAR

Antlers

Antlers grow on members of the deer family. They are bones that grow out of the animal's skull. They begin as cartilage and slowly turn into bone. Antlers are light and easily damaged until late summer when they become hard. As they are growing, the antlers are covered with a thin skin called velvet. The velvet is covered with fine, short hairs and contains thousands of blood vessels. The blood vessels carry calcium and minerals needed for building strong bones. Once the antler has grown, the velvet falls off. Grooves and ridges are left where the blood vessels were once found.

An antler grows faster than any other kind of bone. It can grow up to one inch a day during the summer. It takes an elk four or five months to grow a complete set of antlers. By summer's end, a set of elk antlers may be as much as four feet long and four feet wide. They may weigh up to 40 pounds.



Antlers are shed every year. They fall off after being carried around for six or seven months. The stumps on the forehead where the antlers fall off bleed a little, but they soon heal and the cycle begins again.

Antlers most often are used to settle differences about territory and strength. The male with the largest set of antlers is regarded highly by all others. Other uses of antlers include scratching one's back and digging up food.

Contest!

Last year we had a contest for readers to make their own hybrid animal. We loved reading about all the wonderful animals and seeing your drawings. We have such talented readers! We knew we needed another contest, so here it is.

Your task is to take an animal out of its natural habitat and put it in a new, different habitat. An example would be to take a mountain goat out of the mountains and put it in a wetland. Once you have an animal picked, think about the adaptations on the animal that might need to change. A mountain goat's body sure would need some changes! Suction cup feet probably would not help a mountain goat live in a wetland. What kind of feet do you think would be better for living in a wetland? What about that thick long coat? It might work like a big sponge with all the water in a wetland!

Your animal could be any animal native to Idaho. Remember you can move your animal to any habitat or biome – woodland, meadow, desert, tundra, ocean, wetland, pond, river or mountain top.

The top three winners will receive great prizes and will take a starring role in a future issue! You could win a t-shirt with animal tracks, a lunch box and poster. Get your entry in soon. Here are the rules:

- 1. All animals need to be Idaho natives no giraffes please! The mountain goat may not be used, since we used it as an example.
- 2. All entries need a color drawing of the animal in its new habitat. Include the tracks made by the animal in your drawing, and write a short description (100 150 words) of the animal's new habitat and the adaptations that it needs to live in the habitat.
- 3. The deadline for all entries is February 3rd, 2006. Send entries to Wildlife Express Contest, P.O. Box 25, Boise, ID 83707.

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. 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 side of mountains.

The bottoms of porcupine feet are covered by small little 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 in 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.



Mountain Goat

hillies

snowshoe hare

The words below can be found in the word search, use them to fill in the blanks below.

hand

chode

nannies

	bleating antlers horns kids guard hairs	_
1.	A group of 2 – 20 mountain goats is called a	
2.	is the sound a goat makes.	
3.	Baby mountain goats are called	
4.	A mountain goatits coat each spring.	
5.	Male mountain goats are called	
6.	are long, thick hairs that grow over soft underfur.	
7.	Female goats are called	
8.	can be used to tell the age of a mountain goat.	
9.	Elk shed their every year.	
10.		

S	Ι	S	0	S	Y	W	В	S	E	Н	F	J	C	P
M	N	K	T	U	G	L	Q	Н	T	K	G	S	T	Y
T	I	0	G	F	E	M	I	E	A	Н	U	E	N	E
S	R	Z	W	A	I	C	D	D	L	Y	A	I	A	I
Z	E	E	T	S	C	G	C	S	P	T	R	L	U	V
В	0	Ι	E	В	Н	O	Η	J	S	Y	D	L	Z	G
Ι	N	S	N	S	F	O	0	R	0	X	Н	I	X	E
G	I	X	D	N	Н	C	E	K	Z	U	A	В	Н	Y
R	J	I	I	0	A	L	L	Н	I	J	I	В	T	J
D	K	A	R	A	T	N	A	S	A	E	R	E	R	E
R	V	N	Z	N	K	L	T	Z	Z			V	A	C
Η	S	M	A	0	L	V	L	I	P	J	E	C	E	R
Y	M	J	G	N	I	K	C	0	T	S	C	Y	T	В
\mathbf{Q}	T	J	Н	F	0	T	E	T	Q	S	V	F	D	S
Н	0	L	Ι	D	A	Y	В	A	N	D	0	В	U	Ι

WILDLIFE EXPRESS

Volume 19 ● Issue 4 ● *Mountain Goat*●

December 2005

Wildlife Express is published nine times a year (September-May) by the Idaho Department of Fish and Game. Classroom subscriptions and an Educator's Guide are available for \$30.00 per year and includes a classroom set of 30 copies mailed to your school each month. Subscriptions of five copies or less are available for \$10.00.

Wildlife Express is also available on the Idaho Department of Fish and Game website at no charge at http://
fishandgame.idaho.gov For more information, call or write: Wildlife Express, Idaho Department of Fish and Game, 600
South Walnut, PO Box 25, Boise, Idaho, 83707 (208) 287-2874.

Lead Writers: Lori Adams, Adare Evans Layout and Design: Alyssa Jones Contributors: Kevin Frailey ● Renai Brogdon ● Cristina Watson

WE WOULD LIKE TO HEAR FROM YOU!