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Mountain Goats

Mountain goats would make any rock climber jealous.

They can pull themselves up from ledge to ledge with just their front feet; have been known to leap 10 feet from one rock ledge to another; and can

turn around on a platform that is only inches wide!

Mountain goats are true acrobats.

They need to be acrobatic. They live on the steep, rocky areas of some of Idaho's tallest mountains. You can find mountain goats in central Idaho's wilderness areas, the mountains in the Panhandle, in the Seven Devils, and in the mountain ranges of eastern Idaho along the Wyoming and Montana borders.

It can be difficult to tell male and female mountain goats apart. They weigh between 150 to 220 pounds; have white coats, beards and slender black horns. The males are slightly larger in size and their horns are a bit larger. The females' horns have a slight bend to them that is missing on the males' horns. Males are called billies. Females are called nannies, and babies are called kids.

There is another clue to try and figure out if you are looking at a billy or nanny goat.

Billies are commonly by themselves.
Usually the only time billies and nannies are together is during the breeding season.
Nannies live together with other nannies and their kids in small groups called bands.
There is a social order to mountain goat bands. The older nannies have the highest rank. They get the best resting and feeding spots and get to use the salt licks first.
Kids rank the same as their mothers.
If a billy goat happens to be around, he ranks the lowest of all. Only during the breeding season do billies rank higher than nannies.

Mountain goats breed in late fall and early winter. Males compete for females. They do not fight head-to-head like bighorn sheep. Billies fight side-to-side and stab each other in the flanks. Thick skin in this area protects them from most serious injuries, but sometimes wounds to the chest, neck or abdomen can cause deaths. Nannies give birth to their kids in May or June on very steep cliffs to avoid predators. Usually one kid is born, but sometimes two or three are born. Newborn kids weigh about seven pounds and stand soon after birth. Kids drink their mother's milk for three or four months. They will stay with their mother until she gives birth to another kid. This will be about one year.

Mountain goats are grazers; they eat grass. Sometimes food is limited on a mountain side, so they will also eat bushes, mosses, lichens and other plants. One thing mountain goats like is salt. They will travel quite a distance to find rocks with salt minerals.

Mountain goats do not have to worry too much about predators. Mountain lions are their main predator, but the steep cliffs where mountain goats live make it difficult for them to catch a mountain goat. The biggest threat to mountain goats is falling. More goats die from falls and avalanches than by any other way. If mountain goats keep their grip and hang onto the rocks, they usually live until their teeth wear down – about 12 years.

Next time you are hiking in Idaho's high mountains look for mountain goats. Watch them from a distance and be quiet. You may witness some incredible and nimble rock climbing!

Living at the Top

Mountain goats live in areas where few animals dare to tread. They live on the steep, rocky tops and cliffs of mountains. We would consider the top of an 8,000 foot mountain a hostile environment, but mountain goats are made to live there. They have many adaptations that allow them to live "at the top of the world."

One feature mountain goats have that allow them to live in their rugged home are their hooves. Mountain goat hooves have a hard outer shell and rubbery, concave (rounded upward) footpads. The pads of their feet act like suction cups. When mountain goats step down, the footpad spreads and flattens out to grab the rock. They also have flexible toes. They can spread their toes out or pull them in like tweezers to get the best grip.

Mountains can have extreme weather. In the winter, temperatures drop well below freezing, but mountain goats are covered with the perfect coat for challenging weather. During the winter, two layers of hair keep mountain goats warm. The hair close to their bodies is called underfur.

It is like the soft wool of a sheep and provides a base layer of insulation. Long thick hairs, called guard hairs, cover the woolly underfur. Guard hairs protect the goat's body from wind, rain and snow. This coat shields mountain goats from even the frostiest winter nights. By late spring, mountain goats start to shed the winter coat and replace it with a sleek summer coat. The winter coat comes off in chunks, making them look extremely ragged. Often they rub off the itchy winter coat against trees, bushes and rocks, leaving fluffy balls of fur behind.

Mountain goats are even the correct color for living at the top of high mountains - white.

Their white or yellowish coats are the perfect camouflage against the winter snow. Small patches of snow can even be found during the summer at the high elevations where mountain goats live. They can snuggle between the rocks and look like a little patch of snow sheltered from the summer sun.



Bovids

What are bovids you ask? Bovids are members of the animal family *Bovidae*.

Mountain goats are in this family. Cattle, bison, goats, sheep and antelopes are also members. Some people call the North American pronghorn an antelope, but they are actually members of a different family.

There are about 140 species of bovids in the world. They are found in Africa, Europe, Asia and North America. Africa has more types of bovids than any other continent. Just think of the African Plains with herds of roaming animals! North America has only five native species of bovids. They are the mountain goat, bighorn sheep, Dall's sheep, bison, and muskox.

There is much diversity among the bovids. The largest bovid is

There is much diversity among the bovids. The largest bovid is the gaur. It is found on the continent of Asia in Nepal and India. The gaur is huge. It can weigh up to 2,200 pounds and stand 10 feet at the shoulder. The smallest bovid is the royal antelope in Africa. It weighs up to six pounds and is only about 10 inches tall. It is about the size of a small pet cat!

Bovids are ungulates (UN-gyu-lits). All ungulates have hooves. They are also 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. They nip off plants, but they don't chew their food much before swallowing it. The plants go into the first chamber of the stomach. It is full of bacteria and other organisms that help break down the plants. Later, bovids spit up the food and chew it again. Have you ever heard of cows chewing their cud? They are chewing food regurgitated from their stomachs. Once chewed, the food is swallowed again and passes into the second and third parts of the stomach where water is taken out. The fourth chamber is the one that is most like your stomach. It absorbs the nutrients out of the food.

Photo by Henry Schimke on Flickr

One thing that sets bovids apart from other ungulates is horns.

All male bovid species have horns. Some female species also have horns, but the female's horns are always smaller at the base than the male's horns. This is the case with the mountain goat.

Many wild bovids have been domesticated by people.

Over the years, people have bred these wild animals into species to provide goods for people.

Can you think of a domesticated animal whose ancestors came from a wild bovid? There are many!



Illustration CCBY IDFG

Humongous Horns

Mountain goats, bison, pronghorn, and bighorn sheep have horns. Horns are a bit different than antlers. Horns have two parts, a boney middle and an outer sheath. The inside part is bone that is attached to the skull. The outside of the horn, the sheath, is a covering made of a tough fiberlike material called keratin. Your fingernails and hair also contain keratin. What purpose does the sheath serve? It protects the delicate bone underneath.

Both males and females may grow horns. Horns are permanent. In most cases, they continue to grow throughout an animal's life. Pronghorns are an exception to this rule. A pronghorn may shed and re-grow its sheath.

Bighorn Sheep (Ovis canadensis) CCBY Emőke Dénes

If you take a close look at most horns, you may see rings and segments. Counting the segments may give you an idea of an animal's age. Each segment is bordered by thicker, often darker, rings.

> There may be smaller rings inside the seament that happen as a horn grows throughout the year.





Photo CCBY IDFG

Mountain goats' horns grow quickly during their first three years of life.

About 94% of the horn growth happens during the first three years. The first year's growth ring is not visible on a mountain goat. To estimate a mountain goat's age, count the segments and add "1" to your total. This is the age of the mountain goat. Who knew you could learn so much just from a horn?

Awesome Antlers

Antlers grow on members of the deer family.

They are bones that grow out of the animal's skull.

An antler grows faster than any other kind of bone.

It can grow up to one inch a day during the summer!

Usually only the males grow antlers, but female caribou can grow antlers. There is even a species of deer where neither the male nor female grow antlers – the Chinese water deer.



At this time, they are covered with a thin skin called velvet. 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. If a deer damages his antlers badly at this point, he could actually bleed to death! Deer don't do much as their antlers are growing; they stay hidden and are not aggressive. Once the antlers have grown, the blood vessels in the velvet close off. The velvet dries up and starts to fall off. By October or September, the velvet has been completely rubbed off, and the antlers are hard and polished - ready to show off for the females and intimidate younger males.

Deer shed their antlers in early winter and then immediately begin to grow another set.

Then the process starts all over again!











Tracks!

Snow will soon cover many areas of Idaho. Just after a light snowfall 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 an 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.

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.

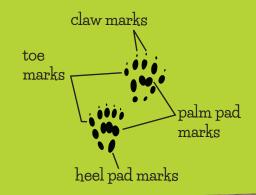
These are just some of the things to consider when looking at tracks.

Good Luck!



Spotted Skunk *Spilogale*Photo (BY-NC-SA) Alden M. Johnson CalPhotos

This is what a spotted skunk track might look like:









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It's Hunting Season! Have You Taken Hunter Education?

Fall brings with it cooler weather, colorful leaves, and hunting season! Hunting is a wonderful way to spend a crisp autumn morning. If you are interested in hunting, the first step is to take a hunter education class.

The goal of hunter education is to teach hunters to be safe, ethical and responsible. You must take a hunter education class to buy a hunting license in Idaho if you were born on or after January 1, 1975. You can take hunter education when you turn nine years old. What will you learn in a hunter safety class? The class will introduce you to many important things such as firearm actions and shooting positions. You will also learn how to safely handle a firearm in the outdoors. How you handle and carry your firearm around others is very important. You must know where that firearm is pointed at all times. You will learn about wildlife identification and Idaho laws and regulations. You will also learn how hunting is important to wildlife management, and the role hunters have played in wildlife conservation. These are just some of the things a hunter education class will teach you.

Are you ready to sign up for a course? Go to Idaho Fish and Game's website at https://idfg.idaho.gov/hunt/education. Here you can learn about the different types of courses offered and when the classes are offered in your area. The most common classes are:

Instructor-led Course: A classroom course recommended for students ages nine to 14 years of age or anyone new to hunting.

Internet Course: A self-paced online course for students ages nine and older; requires signing up for a field day following the course.

Hunter & Bowhunter Instructor-led Course: A classroom course for students ages nine and older. Students certify in both hunter and bowhunter education. This is a great course to take if you think you might want to hunt in an archery or bow-only hunt. To get an archery permit for this type of hunt, you must take bowhunter education.

Classes fill up quickly. If you are not able to sign up this year, you might want to get a hunting passport. The hunting passport lets a person eight years old or older hunt without taking hunter education. There are special rules and restrictions applied to the passport. Be sure to read the regulations and call a Fish and Game office if you have questions.

Hunting is an awesome lifetime sport! Take a hunter education class, buy your license and tags, and give it a try. You might discover that hunting is about a lot more than just harvesting an animal!



Be Outside!---Going Hunting

It is September which means that fall is almost here. Fall is hunting season in Idaho. Hunters head into the field to harvest game animals including deer, elk, waterfowl, and upland game birds like chukar and grouse. Most hunters will tell you that they enjoy hunting because it gets them outside in beautiful country. They also enjoy seeing many kinds of wildlife and spending time with family and friends. If hunters are lucky enough

to harvest an animal, they also enjoy the added benefit of a

freezer full of meat.

You can start hunting once you turn 10 years old. You need to take a hunter education class before you can get your hunting license. Read more about hunter education in this issue of Wildlife Express. Hunter education will teach you how to be a safe and responsible hunter.



learn about hunting. You can help spot animals, carry equipment, and help with field dressing an animal that someone has harvested. Going out with other hunters will help you learn a lot about hunting. You will also learn a lot about wildlife. Tracking deer and elk can teach you a lot about their habitat, where they go, what they eat, and what they do. Trying to find grouse in a forest will give you a whole new look at the importance of camouflage. And all your observation skills will be put to the test as you look for game animals. All these things will help you be a better hunter when it is your turn to head into the field.

If you go on a hunting trip this fall, make sure to wear warm clothing that you can layer if it gets cold. Leave your tennis shoes at home and wear good boots to protect your feet. You should also wear a hunter orange hat and vest so you are visible to other nearby hunters. Bring binoculars to observe wildlife and a camera to take pictures of what you see.

Going on a hunting trip will give you the chance to be outside in some of Idaho's beautiful wild places. It will also help you be ready for the day you become a hunter.





Mountain Goat Word Search



CIJOEНG Τ S 0 Υ G В Ε Υ \mathbf{L} L \mathbf{E} F Ε В \mathbf{L} Η \mathbf{L} 0 S Χ Z ΜK Χ Ι 0 Α Μ 0 I Ι Α Ι R W Р Р Τ Y Р T. IJ F D \Box Т \mathbf{E} R D S Ι Ι \mathbf{E} Ν ΚU C S F W Ν W

ACROBAT
BAND
BILLY
BOVID
CAMOUFLAGE
CLIFF
FOOTPADS
GRAZER
HOOVES
HORNS
KID
LEDGE
NANNY
ROCKY
WHITE

Words

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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:
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