Magnificent Mule Deer
What’s the most common large animal in Idaho that jumps stiff-legged on all four legs to escape from danger? It’s the mule deer! The mule deer is one of two species of deer that live in Idaho. The other kind of deer is called the white-tailed deer.

Scientists call the mule deer Odocoileus hemionus (o-do-koy-LEE-us hem-EE Own-us). Hemionus means half-mule. By looking at the mule deer’s ears, it is easy to see why it was given this name. Mule deer have large ears that look a bit like mules’ ears. These large ears help mule deer listen for sounds of danger like mountain lions and coyotes.

Mule deer males are called bucks. Bucks average about 250 pounds. Bucks grow antlers. The better the quality of food a buck eats the healthier he will be and the larger his antlers will grow. You cannot tell how old a buck is by the size of his antlers. Females, called does, are smaller. They average about 155 pounds. Mule deer babies are called fawns. Fawns are born in May or June with a brown spotted coat. The spots help the fawns hide in and around bushes and tall grasses. Fawns drink only their mother’s milk until they are about five weeks old. Then they start to nibble on plants. By the time they are 16 weeks old, they are fully weaned and only eating plants.

Mule deer are found in many different habitats, from high deserts to coastal forests. In Idaho, mule deer like rocky, brushy areas, open meadows, pine forests, aspen tree groves and areas next to waterways. Where you may find mule deer depends a lot on what time of year it is.

Mule deer move, or migrate, to find food. During the summer and spring, mule deer may be found on mountain slopes where shrubs, flowering plants and grasses grow. Does with fawns may be found around aspen tree groves. Aspen groves have many flowering plants, called forbs. These plants are important for mule deer, especially nursing does, and the trees are great shelter for the fawns. During the winter, deep snow makes it harder for mule deer to get food. So they move down out of the mountains into the valleys and south-facing hillsides. Here snow is not as deep and food is easier to find. Mule deer may migrate 50 to 75 miles between their summer and winter homes. Sagebrush and bitterbrush are important mule deer food in the winter.

Mule deer like to eat the soft tips of shrubs and bushes. Shrubs are high in protein and have the nutrients mule deer need. Mule deer will also eat soft plants and some grasses. Grasses make up the smallest part of their diet. Grasses do not have as much nutrition and are harder for mule deer to digest.

The most important habitat for mule deer is the summer habitat. If deer eat well during the summer and are nice and fat when winter comes, they usually can survive cold harsh winters. But if mule deer cannot find good nutritious food in the summer, no matter how good the winter habitat may be, mule deer will have a hard time surviving the winter.

Keep an eye out for mule deer next time you are out in Idaho’s wild places. They are beautiful deer and lots of fun to watch, especially when they are bouncing away from danger. Mule deer can jump over a four-foot fence!
Be Outside
It’s Hunting Season!

Fall brings with it cooler weather, colorful leaves, and hunting season. For hunters, fall is their favorite season. While they all hope to harvest an animal, hunters also enjoy the other benefits of hunting: spending time outdoors with family and friends and watching wildlife.

If you are interested in hunting, a first step is Hunter Education. This class is required if you want to get a hunting license. You can take hunter education when you turn nine. The class will introduce you to many important things such as firearm safety, hunter responsibility, and wildlife conservation. These topics will help you learn to be a safe, responsible hunter. You will also learn how hunting is important to wildlife management, and the important role hunters have played in wildlife conservation in the United States.

You can also learn about hunting by going on hunting trips with family members or friends. Even if you are not ready to hunt, you can learn a lot from other hunters. Help look for animals by finding tracks and scat or scanning with binoculars. Bring a backpack to help carry equipment. Help find your way using a map and compass. If an animal is harvested, help field dress the animal and pack it back to your camp. You can even learn to cook what has been harvested. All these experiences along with hunter education will help prepare you for your first hunt.

Fish and Game often sponsors clinics and workshops for young hunters to learn new skills. Young hunters practice new skills such as shotgun shooting and do some actual hunting all under the watchful eyes of experienced instructors. For more information, contact your local Fish and Game office.

Which Deer?

Idaho has two different kinds of deer – white-tailed deer and mule deer. You need to be able to tell these two deer apart, especially if your family hunts. The way to tell them apart is as easy as a STARE – startled movement, tail, antlers, rump, and ears.

**White-Tailed Deer**
- S - When startled, raise tail and show white “flag”
- T - Brown tail with white fringe and white underside
- A - Antlers have tines all coming from large main beam
- R - Brown rump
- E - Small ears

**Mule Deer**
- S - When startled, jump away on all four legs, called a “pronk” or “stott”
- T - Skinny, white tail with black tip
- A - Antlers branch equally, separate beams fork into two tines forming a “V”
- R - White rump
- E - Large mule-like ears
**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.

Antlers are light and easily damaged until late summer. 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 mule 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!

**Humongous Horns**

Bison, pronghorn, mountain goats and bighorn sheep have horns. Horns are a bit different than antlers. Horns have two parts, a bony 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 fiber-like 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 will shed and re-grow its sheath each year.

If you take a close look at most horns, you may see rings or segments. Counting the segments may give you an idea of an animal’s age.

Bighorn sheep, for example, grow their first set of horns by six months and their second horn segment by 18 months. For males, count the horn segments and minus one. This is his age. In older females, their horns may not grow every year, so their horns may only tell you their minimum age. Who knew you could learn so much just from a horn?
Throughout the world there are about 40 different species (kinds) of deer. They are found on every continent except Antarctica and Australia. Africa has only one native deer, the red deer.

Deer come in many sizes. The smallest deer in the world lives in the Andes Mountains. The pudu stands about one foot tall and weighs less than 20 pounds. The biggest deer in the world is the North American moose. A male moose can weigh nearly 90 times more than the pudu – about 1800 pounds!

One thing all deer have in common is that they 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, deer 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.

Having a stomach with many chambers not only allows deer 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, deer find a place to rest and hide. Now deer can fully chew and digest their food, without having to constantly look out for danger.

Members of the deer family in North America include elk, moose, caribou, mule deer and white-tailed deer. Wherever you live in North America, you are likely to be near at least one member of the deer family. Idaho, however, is lucky. We have all five species living in our state!
Mule deer are mammals. Their bodies are covered with hair. They are warm-blooded, and they feed their young milk. Worldwide there are about 4,000 different species of mammals. They are found everywhere on Earth. The largest mammal is the blue whale. It can weigh up to 196 tons! The smallest mammals are the shrews which weigh about as much as three paper clips and the bumblebee bat which weighs as much as a penny.

Mammals are warm-blooded. The temperature inside their bodies stays about the same all the time. This allows mammals to live in a wide variety of places. Snakes are cold-blooded. Their body temperatures are always the same as their surroundings. Humans have a body temperature that is usually about 98.6 degrees Fahrenheit. Does this make you warm-blooded or cold-blooded?

Many mammals live on land, but not all of them. Whales, porpoises and manatees spend their whole lives in water. After their young are born, the mothers help their babies to the top of the water to take their first breath. Seals, sea lions and walruses spend most of their time in the water, but they leave the water to breed, give birth and rest.

Some mammals lay eggs! Have you ever heard of a duck-billed platypus or echidna (a-KID-na)? They are found in Australia. These mammals don’t give birth to live young. The young hatch out of eggs, but they still drink their mothers’ milk. Drinking mother’s milk is one thing that sets mammals apart from all other animals.

Mother’s milk is the perfect food for a young mammal. It is full of vitamins, minerals and lots of fat. Fat helps babies grow quickly. Seal and whale milk is half fat! That’s 50 percent! Whole milk you may drink from cows has four-percent fat. Seals and whales need a layer of fat, called blubber, to insulate them from the cold ocean water. The high fat content of their mothers’ milk helps ocean mammals build up a nice layer of blubber to keep warm. Fat is also important to help mammals’ brains grow. Mammals have the largest, most developed brains compared to other kinds of animals.

Mammals are all around us. To see a mammal all you have to do is look in the mirror. You are a mammal, too!
Over the past 20 years, the number of mule deer in Idaho has been going down. Mule deer numbers have not just been getting lower in Idaho. Mule deer are getting harder to find in every state in the west. Why is this happening, and how can Fish and Game help? To answer these questions, Idaho Fish and Game started the Mule Deer Initiative (MDI). MDI was started to help mule deer populations recover. Fish and Game is focusing on the mule deer in southeastern Idaho right now. What is learned will be used to help mule deer in other parts of the state.

Many things affect mule deer. Habitat, predators, hunting, weather, climate, and humans all play a role. Fish and Game has no control over some things, but they can influence habitat, predators, hunting and some human activities.

Mule deer habitat has been changing from shrubs, aspen trees and soft plants to habitats with more grasses and pine trees. Cheatgrass is one grass that has been spreading across the west. It came to our country in the 1800s and has been doing well ever since. Cheatgrass is not good food for mule deer and other wildlife. To improve mule deer habitat, Fish and Game works with landowners to plant bitterbrush, sagebrush and other shrubs mule deer eat. The aspen trees does and fawns need are also declining. Fish and Game is working with people to help restore this vital part of habitat.

Biologists also look at predators. Coyotes will eat mule deer fawns, and mountain lions eat both the fawns and adults. Biologists found that predators do play a role in the amount of mule deer in an area, but it is a small role. Just how much predators affect mule deer depends upon the habitat, weather and time of year. Removing predators from an area may help under certain conditions, but it costs a lot of money.

Fish and Game can use hunting seasons to manage mule deer. If the population of mule deer is high, managers can let hunters harvest more deer. If populations are low, managers may not let hunters harvest does or fawns. They may also shorten hunting seasons. This may help increase the population in the future.

To get an idea of the number of mule deer, Fish and Game goes up in the air. How would you like to buzz over a herd of mule deer in a helicopter? Fish and Game can’t fly over the whole state, so they pick important wintering grounds to fly over. Deer are grouped together in the winter, so this is the time to count. It is also easier to see brown deer in white snow. While flying over the deer in a helicopter or plane, people count all the deer they can see.

Fish and Game also puts radio collars on fawns. The collars are used to see how many fawns survive the winter. If many fawns survive the winter, managers know mule deer populations are doing well. If fewer fawns survive, managers may need to take steps to help the population.

Mule deer numbers are decreasing because of a number of things, not just one thing. It will take time, money and patience to increase mule deer numbers, but Fish and Game is up to the challenge.
Mule Deer Crossword

Across
3. Mule deer _________ has been changing.
4. These tree groves are important for does and fawns.
6. Mule deer don’t eat much _________.
8. Deer _________ to find food in the winter.
9. This is an important food for mule deer in the winter.

Down
1. Deer are _________.
2. Mule deer were named for their _________.
3. Fish and Game can use _________ seasons to manage mule deer.
5. They are predators on mule deer fawns.
7. The most important habitat for deer is the _________ habitat.

WORDS
Aspens
Bitterbrush
Coyotes
Ears
Grass
Habitat
Hunting
Migrate
Summer
Ungulates