



Volume 23

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WONDERFUL WAPITII!



Photo courtesy DonGettyPhoto.com





Photo courtesy DonGettyphoto.com

LET'S LOOK AT.....

ELK

Wapiti is the name Native Americans gave to the Rocky Mountain elk. This name is believed to mean “white rump.” This is certainly a characteristic of elk! Biologists call the elk *Cervus elaphus* (SER-vis e-LAY-fus).

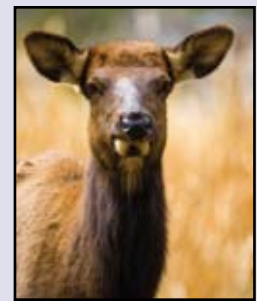
Rocky Mountain elk are light brown with a cream-colored rump. Their necks and legs are usually darker than the rest of their bodies. The males, called bulls, are big! They weigh about 700 pounds, stand about five feet at the shoulder and measure more than eight feet from their noses to their rumps. Bulls also grow antlers. A mature bull's set of antlers can weigh 40 pounds! The females, called cows, are smaller. They can weigh up to 500 pounds, stand about four and one-half feet at the shoulder and measure six and one-half feet from nose to rump.

Elk are mostly grazers. That means that they like to eat grasses. During the summer, they will also eat forbs. Forbs are low-growing, soft-stemmed plants like wildflowers. During the winter when grasses are hard to find, elk eat woody plants like willows and aspen trees. It takes a lot of food to keep such a large animal alive. On average, an elk eats about three pounds of food per day for every 100 pounds it weighs. A 700 pound bull elk will eat about 21 pounds of food a day! That would be like a 100 pound boy or girl eating five peanut butter sandwiches at every meal!

Calves, baby elk, are born in mid-May through early July. Cows leave the herd and go off by themselves to give birth. They do this for the protection of the calf. A newborn calf can't run fast enough to avoid a predator so hiding is their best bet for survival. Cows will return to the herd when their calves are strong enough to keep up with the herd. Cows eat away from their calves for the first few weeks after they are born and will return only for the calves to nurse. If they ate close to the calves, a predator like a wolf, mountain lion or coyote might see them. The cows also do something else. They eat the calves' poop! Yuck! That sounds gross, but a predator might smell the calves' droppings and locate where they are hidden. Eating the poop takes care of that problem.

Newborn calves weigh about 35 pounds. Their spotted coats and lack of odor are also important to help them hide from predators. Calves drink and eat only their mothers' rich, fatty milk for the first few weeks. During this time, a calf might gain as much as two pounds a day! Then they start to nibble on grass. By fall, calves no longer need to drink their mothers' milk and eat only plants.

Elk can live in a variety of habitats. You can find them throughout Idaho wherever there is enough food, water and cover. We are lucky to have a healthy and strong elk population!



*Photo courtesy
DonGettyphoto.com*

MAGNIFICENT MAMMALS

Elk 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.



Photo courtesy IDFG

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. Seals and whales make milk that 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!



Photo courtesy IDFG

THE DEER FAMILY

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, the deer finds a place to rest and hide. Now the 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!



Photo courtesy IDFG

AWESOME ANTLERS



Photo courtesy IDFG

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 an elk damages his antlers badly at this

point, he could actually bleed to death! 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 by the elk, and the antlers are hard and polished. Elk shed their antlers in early winter and then immediately begin to grow another set.

Antlers are most often used to settle differences about territory, strength and to win mates. An elk that has a large set of antlers is likely to be strong and healthy. He would be regarded highly by other elk.

HUMONGOUS HORNS

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 fiber-like material called keratin. Your fingernails and hair also contain keratin. What purpose does the sheath 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 sheath each year.

If you take a close look at most horns, you may see rings. A mountain goat's horns have rings around them. Counting the rings will tell you the age of the goat. Rings are formed each year after the goat is one year old, so the horns of a mountain goat will have one less ring than its

How do you tell horns and antlers apart from each other? Antlers often look like tree branches with a main beam and points coming off of the beam. Horns are usually not branched like antlers; they are shaped similar to the letters "C," "J," and "L." One animal in Idaho has "C" shaped horns. It is found living on rocky cliffs. Can you guess which animal it is?



Photo courtesy IDFG

its

ANIMAL TALK

Animals, like people, have a need to communicate with one another. They may need to warn of approaching danger or let others in the group know where to find food. They may want to protect their territory, keep their family together or find a mate.

Animals have many different ways of communicating. Signals from one animal to another animal may be visual, such as a white-tailed deer raising its tail. The signal may be a noise, such as a wolf howling to show its presence. Smells are also used. Many animals have special glands for making long-lasting chemical marks. Often these smells are used to mark territories or homes.

How do elk communicate with one another? They may use body language. An elk with more power will hold its head high. Elk are also pretty noisy. A bark is a warning of danger. Elk will also chirp, mew and squeal. Mother elk recognize their newborn calves by the squeal they make. Bugling, which is a bellow that escalates to a squealing whistle and ends in a grunt, is the most distinctive noise you'll hear from bull elk.

You'll hear elk bugling in the fall of the year. This time is known as the rut. Males advertise their fitness to cows and warn other bulls to stay away. Bulls will contest each other for dominance of a herd of cows called a "harem." If one bull is smaller or younger, it will likely retreat. Bulls of equal size usually confront each other. They bugle and thrash the ground with their antlers. The bulls will then lock antlers and shove each other with all their might. It is a show of strength. The weaker bull will usually trot away. All species have a need to communicate. Study other animals and find out the ways they "talk" to each other.



Photo courtesy IDFG

LIVING TOGETHER OR ALONE?

Elk usually live in groups. Other members of the deer family, like moose, like to live alone. Why do some animals live together and others live alone?

Female elk and their young live in herds. The main reason they live together is for protection. Females leave the group to give birth, but soon come back when their babies are a few weeks old. By living together, elk have more sets of eyes looking out for danger. If a predator does attack, there will be more hooves to fight it off.



Photo courtesy IDFG

Elk can also take advantage of babysitters. Elk take turns eating and looking after their young. A well fed mother can take better care of herself and her calf.

Wolves also usually live in groups called packs. Wolves like to eat elk. One wolf would have a difficult time bringing down a large elk, but by working together, wolves are more successful hunters.

Moose like to live alone. Moose can eat 40 to 50 pounds of food a day! In no time at all, a group of moose could do some serious damage to a grove of trees. By spacing out, they help to keep the habitat healthy. Sometimes moose live together in groups called "yards." You are likely to see a yard of moose during the winter when food is harder to find. Moose are sometimes forced to live together if food is only found in a few places. When food is plentiful, moose don't want or have to share.

These are just a few examples of why animals may live in groups or by themselves. Can you think of other animals that live in groups? How does this strategy help them survive? What about a solitary animal?



Photo courtesy IDFG

Does living alone offer it benefits?

FEEDING FRENZY

During the winter, people might see animals, like elk, looking for food. They often feel sorry for the elk as they paw through the deep snow. People sometimes wonder why Fish and Game doesn't feed the animals. Feeding animals in the winter may seem simple, but it is not.

In Idaho, we have a special group of people that figure out when we should feed deer and elk. They are called the Winter Feeding Advisory Committee. That is a big name! Their job is to look at the health of the animals, the amount of snow on the ground, and other factors that might make it difficult for deer and elk to survive the winter. They tell Fish and Game when feeding might be necessary. They don't recommend feeding all the time though, because feeding animals can cause problems.

When we feed animals, they crowd together to get the food. Many wildlife diseases are passed along in crowded conditions. It's just like when one sick student makes a whole class sick. Also in crowded conditions, the young usually get pushed out. Studies have found that at feeding sites the deaths of elk calves and deer fawns were actually higher than it was away from the feeding site. Another problem is giving wild animals the right kind of food. Hay and dry pellets are not the same as the natural foods the animals eat in the wild. Winter feeding is also expensive. In some past years, Idaho spent half of a million dollars feeding elk.

No one likes to see an animal struggle to survive, but no matter what Fish and Game does, one or two elk out of every 10 will not survive the winter. Some may die of starvation. Others will die from accidents, predators and diseases. The main reason animals die of starvation is not because they cannot find food during the winter. It is because they didn't have enough fat on their bodies before winter started. No matter how much food these animals eat during the winter, without enough stored-up fat their chances of survival are slim. All animals have a difficult time during harsh winters. Some people think we should help; others think we should let nature take its course. What do you think?



Photo courtesy IDFG



BE OUTSIDE

Fall is a perfect time to go outside. It is fun to see the changes that happen during this time of year, especially in leaves. Have you noticed a tree in your neighborhood that has started to prepare for the winter? The green leaves of summer start to turn bright yellow, orange and red as trees start to shut down their food factories – their leaves.

Find a tree and write down the changes that you notice over the next few weeks. You might be amazed by the changes that happen in just a few days!

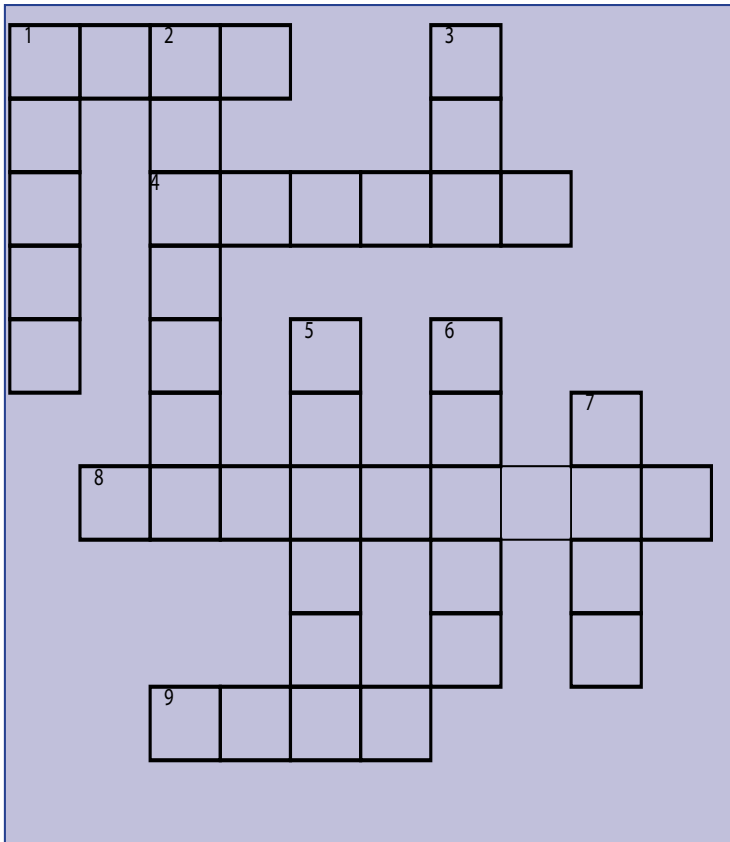
You can even preserve the changes that you see. Ask an adult to help you gather materials and lend a hand.

You need:

- Freshly fallen or picked leaves or branches
- A small bottle of glycerin – You can find this at your local drugstore in the skin-care or first-aid section.
 - Empty jars
 - Hot water
- Newsprint to protect your work surface.

Spread out several layers of newsprint. Stir together in a jar one part glycerin and three parts hot water. Clip the stems of the leaves and branches a tiny bit and place the stems in the mixture. Leave them in the solution for about a week. Make sure only the stems touch the solution (if the leaves touch the solution, they will turn black). After a few weeks in the solution, your leaves and stems will be preserved. They should look “fresh picked” for many years.





Elk Criss-Cross

Across

1. Antlers are made of this.
4. This means "white rump."
8. Members of the deer family are _____.
9. A baby elk is called a _____.

Down

1. Bulls _____ to advertise their fitness and to tell other bulls to stay away.
2. Elk keep their _____ calves hidden.
3. Most wild animals die in the winter because they didn't have enough stored-up _____.
5. A cow knows her calf by its _____.
6. Grazers, like elk, eat mostly _____.
7. Elk are members of the _____ family.

Words

Bone	Squeal
Bugle	Ungulates
Calf	Wapiti
Deer	Grass
Fat	Newborn

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