

Wildlife Express

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BUSHY-TAILED WOOD



Cute is a good word to describe bushy-tailed woodrats. With their large eyes, big ears and long, full whiskers, bushy-tailed woodrats look like cuddly stuffed animals. Don't be fooled though! These cute creatures are wild animals.

Bushy-tailed woodrats are found all across Idaho. They make their homes in caves, rockslides, rock crevices and abandoned man-made structures.

The features that make woodrats look cute help them in the dark. They are mostly nocturnal. Large eyes help them see in dim light, and large, round ears listen for danger. Their long whiskers are great for feeling around in dark, tight spaces.

They are usually gray in color with black tipped long hairs. The underside of their bodies is whiteish. They weigh between one-half to one and one-half pounds and measure 13 to 17 inches in length. This includes a five to eight inch long, bushy tail. Males, called bucks, are bigger and have bushier tails than females, called does.

Bushy-tailed woodrats were named for their tails, but they have been given a few other

names because of their behaviors. Some people call them packrats. They spend a lot of time collecting things they find interesting. Shiny objects are especially treasured! Another name they are given is trade rat. They may drop things they are carrying to pick up something else more interesting.

They carry these treasures back to their middens. Middens are messy piles of collected items that serve as a sort of house. Middens can be enormous; some have been over six feet tall! Middens are not dens or nests; dens and nests are found in middens.

Nests are kept clean and tidy. They are made of shredded plants and look a bit like a bird's nest. Here woodrats sleep and give birth. Females have about three babies in a litter, but they may have three litters in a year. Newborn woodrats are called pinkies; they are hairless and blind. Their eyes open in about two weeks, and they grow a soft, velvety fur. At this stage, they are called pups or kits. At about one month old, the pups are weaned and now eat plants. By the time they are about two and a half months old, they will be on their own.

Bushy-tailed woodrats do not hibernate, so they need to store food for the winter. These food stores are called caches (cashes). They may have several caches around their territories. A study in southeast Idaho found woodrats ate grasses, cactus, sagebrush and some insects. Woodrats do not need to drink water, since they get all the water they need from their food.

Woodrats may be aggressive towards other woodrats when it comes to defending their caches and middens, especially males. They tell others to go away by using scent. They have scent glands on their bellies. They put up scent “fences” by dragging their bellies over the ground. They also make scent posts. They pee in certain spots over and over. This creates a sort of stop sign, telling other woodrats to go away.

You may not see bushy-tailed woodrats, but you might see signs they are around. Look for their middens and their droppings. Their droppings are about one-half inch long pellets that look like giant mouse poops. They can make quite a mess. They poop 40 to 50 times a day!



Photo: CC-BY Kathy Lichtendahl at Naturalist



Photo: CC-BY guy in cognito at Naturalist

NATURE'S TIME CAPSULES

Photo: CC-BY Joshua Tree National Park at Flickr.com

Woodrat middens are fascinating structures. With all the treasures they contain and the way they are made, middens are time capsules to the past.

Middens are a collection of found objects and poop. Middens may contain sticks, bones, plants, pinecones, feathers, cans or coins. Anything woodrats can carry may be found in middens. To claim ownership of their treasures, woodrats pee on everything. The urine crystalizes and cements things in place.

Crystalized urine not only cements things together it also preserves objects. Have you ever seen a piece of amber? Amber is yellowish-colored and sometimes has insects in it. Amber is ancient, hardened tree sap. Insects get stuck in the sap and become preserved over time. This is what happens to things in woodrat pee; they become fossilized.

Woodrats have been living on our planet for thousands of years. Scientists know this because they have found middens that are over 40,000 years old! These middens offer glimpses of what

life was like during the time the middens were made.

Scientists, called paleontologists (pay-lee-uhn-tol-uh-jists), study the history of life on Earth. They do this by looking at fossils. Fossils give them an idea of what plants and animals lived in an area, hundreds, thousands or even millions of years ago. By testing the fossils and the soils where fossils are found, scientists can estimate the fossils' ages.

Woodrat middens have helped paleontologists discover what plants and animals were living during the Ice Age. Scientists have found fossils of plants, pollen, and animal bones from this time preserved in middens. Certain plants only grow in certain climates, so finding seeds or plant parts gives clues to whether it was hot, cold, wet or dry.

Woodrat middens have helped people piece together the family trees of plants and animals from long ago. They have also helped people discover what the climate was like thousands of years ago. Who knew all this could be learned from studying fossils in woodrat pee?

SURVIVING WINTER

The harsh, cold days of winter are upon us. At times, it may be hard to imagine that spring is just around the corner. Freezing temperatures, blowing wind, rain and snow not only affect us; they also affect wildlife. Winter can be a difficult time for wildlife. How do animals deal with the rigors of winter?

Some animals leave. They migrate to warmer climates where food is easier to find. Some animals travel long distances. Birds are the animals you probably think of migrating, but there are other animals that also travel great distances. Can you name an insect that travels to southern California and central Mexico for the winter? It is our state insect, the monarch butterfly!

Other animals sleep through the long, harsh winter. Marmots and bears are just some of the animals that hibernate through the winter.

Why do they hibernate? It's not the cold that causes them to hibernate; it's the lack of food. Marmots and bears eat plants. Most trees drop their leaves during the winter. Grasses and fruits dry up and turn brown. It can be difficult to find good plants to eat in the winter. It is best for these animals to conserve energy and wait for greener times. By hibernating and slowing down their body functions, animals are able to survive on their stored fat until food becomes available.

Bushy-tailed woodrats cache (cash) or stockpile food. Many animals try and store enough food to get through the winter. Beavers are animals that store food. Their pond is their pantry. Beavers cut limbs off of trees and stick them in the mud at the bottom of their pond. The bark on the limbs will help them make it through the winter.

Can you think of other ways animals handle winter's tough weather?

Snowflakes: CC-BY Vecteezy.com

Photo: CC-BY Kathy Preuit at Flickr.com



WONDERFUL WHISKERS

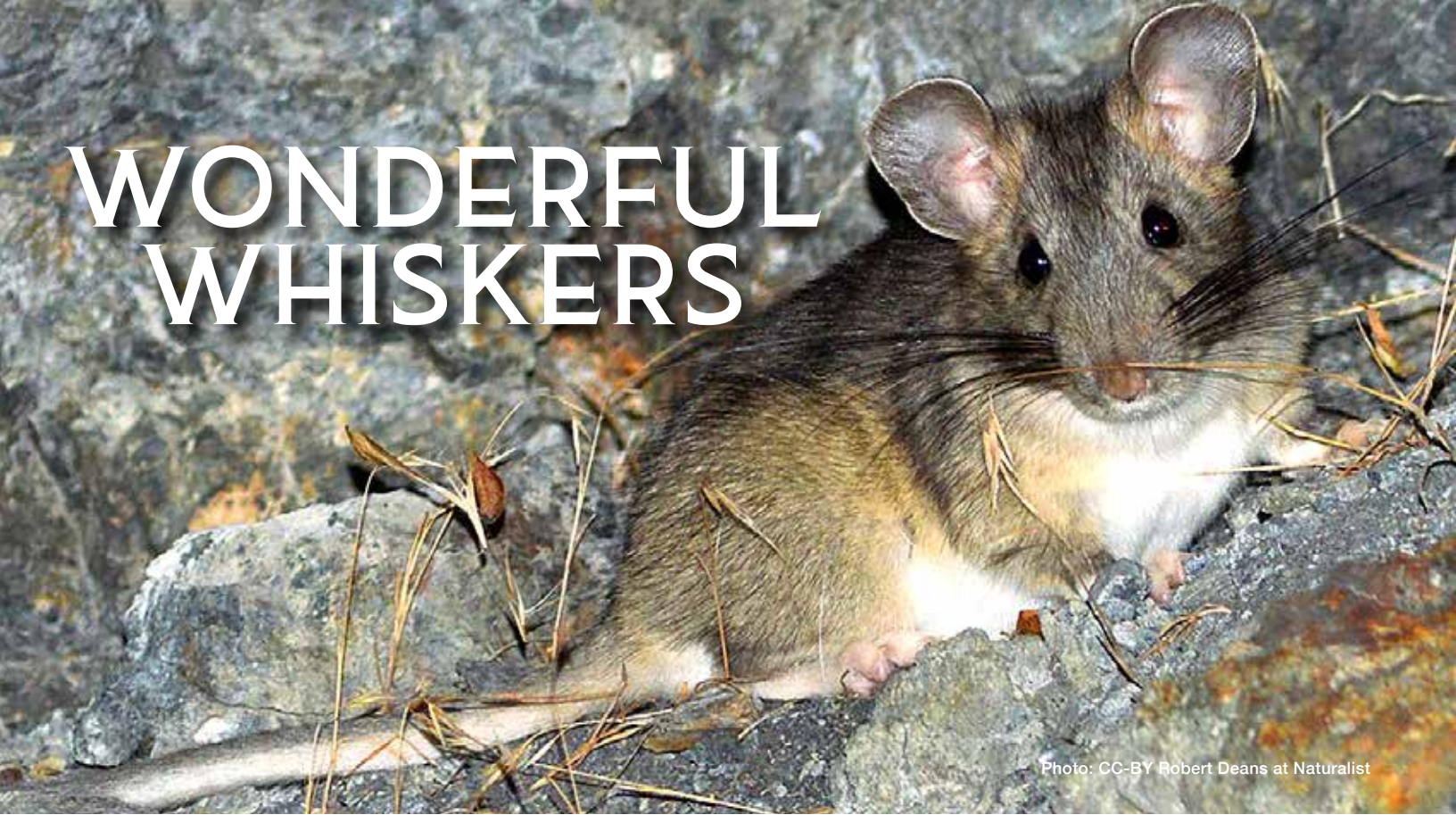


Photo: CC-BY Robert Deans at Naturalist

Bushy-tailed woodrats have whiskers that help them feel their way around in dark, tight places. Other animals depend on whiskers, as well. Imagine you are an animal hunting during a dark, moonless night. Your eyes, although designed to work in low light, are having a difficult time seeing. You are hungry, and you know a mouse must be nearby. How are you going to find the mouse if you can't see it? Use your whiskers to feel the vibrations caused by the mouse moving.

Whiskers are great tools for animals that hunt in places where it is difficult to see, that hunt at night, or that hunt in dark places. Whiskers also play a role in protecting animals being hunted. Whiskers are special hairs that are very sensitive to touch and movement. All mammals, except humans, have whiskers. Although men's beards are called whiskers, they are just body hairs. Animal whiskers are different than human whiskers.

Whiskers are called vibrissae (vy-briss-ee). They are thicker and rooted deeper in the skin

than regular hairs. Each whisker sits in a sack of fluid filled with nerves. Whiskers can turn in the fluid like a straw in a bottle. When something touches a whisker, the information goes down the hair to the nerves. The nerves tell the brain what the whiskers have felt.

Whiskers not only grow on animals' faces. Cats, foxes and squirrels have whiskers on their ankles. Some bats have them on their rumps. Underground burrowers, like pocket gophers, have whiskers behind their ears, on their tails and on their front feet. Flying squirrels use whiskers on their heads, feet and legs to help them find their way through trees at night.

Sometimes animals use whiskers to greet. When two rats meet, they rub their whiskers over each other. This helps them to identify the other rat.

Whiskers are more than just long, stiff hairs. They help animals survive and stay in touch with their environment.

WHAT'S IN A NAME?

Have you ever heard of scientific names? They are usually long and made up of two words. Sometimes they are hard to pronounce, because they are often in Latin. You may have wondered why people use scientific names. People use scientific names, so they know they are talking about the same animal.

In Idaho, we have cute rodents that love to collect things. They live in many habitats and make caches of food for the winter. They are this month's featured animal, bushy-tailed woodrats. But remember, they may also be called packrats or trade rats. Mountain lions have been called many different names. They may be called cougars, pumas, panthers, painters or catamounts. That's six different names for the same animal! Wow, that can be confusing.

The names listed above are the common names for bushy-tailed woodrats and mountain lions. Sometimes the name used depends on where a person lives. In Florida, people call mountain lions panthers. In the southwestern part of the United States, people are likely to call them pumas.

What if you wanted to share information about bushy-tailed woodrats with another person? It may be difficult if that person called them packrats or trade rats. What if you spoke a different language? This could really make things challenging. How do you make sure you are talking about the same animal?

Scientific names are the answer. They are the same everywhere in the world. By using a scientific name, people know they are talking about the same animal. That way they won't get confused by common names. The scientific name for the bushy-tailed woodrat is *Neotoma cinerea* (nee-o-toe-ma sin-air-ee-a).

The first part of a scientific name tells us what genus an animal is in. Animals with the same genus name are closely related. There is one other member of the *Neotoma* genus that lives in Idaho. It is *Neotoma lepida* (nee-o-toe-ma lep-i-da), the desert woodrat. It is found in the southern and southwestern parts of Idaho.

The second part of the scientific name is the species name. It tells us something specific about the animal. Sometimes animals are named after people. The white-tailed jackrabbit's scientific name is *Lepus townsendii*. It was named after J.K. Townsend. He was one of the first people that collected white-tailed jackrabbits.

Often animals are named for the way they look or a special feature they have. *Cinerea* means ash-colored. Bushy-tailed woodrats have grayish colored fur. The skunk's scientific name is *Mephitis mephitis*. This means bad odor, bad odor. That makes sense!

Next time you see a scientific name, do a little research and find out what the name means. You might be surprised by what you find!

Photo: CC-BY Biodiversity Heritage at Flickr.com



LOOKING FOR ANIMAL VALENTINES!

Bunnies: CC-BY Vecteezy.com

Are you giving anyone a special valentine this month? It's fun to make valentines to send to friends or give to family. With spring on the way, many animals will be giving "valentines" to each other, but their valentines are not made out of paper! When you are exploring outside this winter and spring, look for animals and the "valentines" they give to each other.



Great horned owls are some of the earliest nesting birds in North America. They nest in late January and February. This is the time when great horned owls show they are committed to each other. During mating season, male and female great horned owls hoot back and forth to each other. They also bow and rub bills.

Some animals will give food to each other. Barn owls offer their mates tasty mice as a gift. Before the female ever starts to lay her eggs, the male will bring her food. This may be his way of showing her that he is a good hunter. While the female barn owl sits on her eggs, the male will need to bring her food. He will also need to help bring food to the owlets.

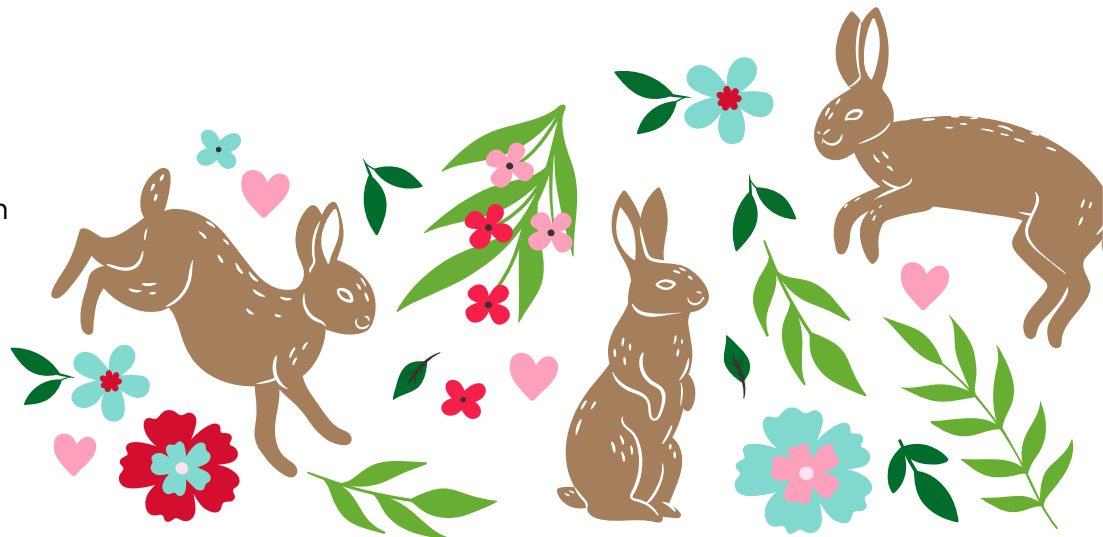
Sometimes animals try to impress their cuties by their actions. This is how bobcats impress their mates. They chase, bump and ambush each other. Play hunting between the male and female helps them bond with each other. Sometimes animals try to impress their cuties by their actions. This is how cottontail

rabbits impress their mates. They jump over each other. They may also do something that is a bit gross; they often urinate when they jump, spraying their potential mate with pee! You may think that is yucky, but cottontails don't seem to mind.

Male shrews get a bit chubby to impress female shrews. Some male shrews double their weight before breeding season. Could you imagine eating so much food that you doubled your weight in just a few weeks or months? You would have to eat tons of food! Female shrews must like their special guys on the plump side.

Some animals offer their mates valentines of dancing and singing. Male crows can put on quite a display. They dance, bow and strut with their wings and tail feathers spread out. While dancing, crows sing a song that is a bit like a rattle.

Animals may not give real valentines to their sweeties, but they offer other gifts to show they like each other. Be sure to look for these animal "valentines" outside this winter and spring.



BUSHY-TAILED WOODRAT CROSSWORD

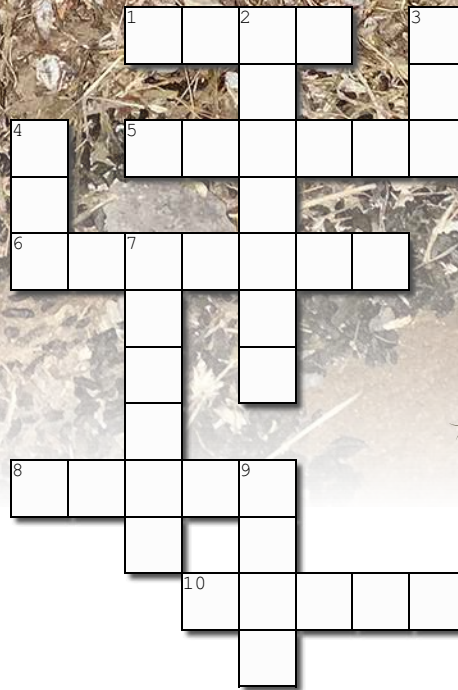


Photo: CC-BY Camilla Parker at Naturalist
Woodrat Art: CC-BY Vecteezy.com



Created using the Crossword Maker on TheTeachersCorner.net

Across

1. The name for a male woodrat.
5. The name for a newborn woodrat.
6. Another common name for a woodrat.
8. Woodrats mark their homes with this.
10. These have helped people discover plants and animals that lived during the Ice Age.

Down

2. This means gray in color.
3. The name for a female woodrat.
4. A baby woodrat who's eyes have opened and now has a velvety fur.
7. Woodrats store their food in these.
9. The bushy-tailed woodrat got its name from this.

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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: adare.evans@idfg.idaho.gov

or

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