

the Slinky, Stinky Weasel family

Have you ever heard anyone call somebody a weasel? If you have, then you might think that being called a weasel is bad. But weasels are good hunters, and they are cunning, curious, strong, and fierce.

Weasels and their relatives are mammals. They belong to the order Carnivora (meat eaters) and the family Mustelidae, also known as the weasel family or mustelids. *Mustela* means *weasel* in Latin. With 65 species, mustelids are the largest family of carnivores in the world. Eight mustelid species currently make their homes in Minnesota: **short-tailed weasel, long-tailed weasel, least weasel, mink, American marten, fisher, river otter, and American badger.**

flexible mammals

TOM AND PAT LEESON

You can recognize most mustelids by their tubelike bodies and their short legs. Some, such as badgers, are heavy and chunky. Some, such as minks, are long and sleek. All are very quick and flexible.

When traveling, fishers, weasels, minks, and otters flex their spine inchworm-style, thus appearing to have humped backs. Because of their shape and flexibility, mustelids can easily enter holes and tunnels, climb trees, and swim as they hunt prey to satisfy their big appetites.

Mustelids must hunt much of the time to survive. Their long bodies do not store heat well, so they need lots of food to fuel their internal “furnace.” They are active in winter too: Mustelids do not go into a deep sleep or hibernate. They often kill more animals than they can eat at one time and *cache*, or store, the carcasses for later.

Mustelids are adapted to hunt in different environments. Fishers and martens are expert tree climbers. Badgers have strong front legs and long digging claws for underground



marten

MARY CLAY, DEMBINSKY PHOTO ASSOCIATES

Here are two specialized mustelid feet. One is for climbing and the other for digging. Can you tell which is which?



badger

hunting. Otters and minks are excellent swimmers that hunt in or near lakes, rivers, and wetlands.

Most female mustelids have a special way to ensure their young are born when food is available. Called “delayed implantation,” this adaptation allows fertilized eggs to remain undeveloped for many months. When food is plentiful, usually when days are warm and long, the eggs develop and the young are born.

All mustelids have two large scent glands under the tail. These glands produce a very strong liquid scent, called *musk*, for marking territories and food caches, attracting mates, and deterring predators.

When mustelids move across the ice, it's easier to see the special way their bodies flex.

BILL MARCHEL



mink

TOM AND PAT LEESON

family of otters



WEASELS

Short-tailed weasels (*Mustela erminea*), long-tailed weasels (*M. frenata*), and least weasels (*M. nivalis*) live throughout Minnesota. In their northern range, including Minnesota, weasels turn white in winter. In autumn, white hairs begin to replace their brown summer coat. By winter the least weasel is mostly white, and the other two

STAN OSOLINSKI, DEMBINSKY PHOTO ASSOCIATES

The long-tailed weasel eats the most varied food of all weasels. It also lives in the widest variety of habitats and climates across North America.

long-tailed weasel: summer coat

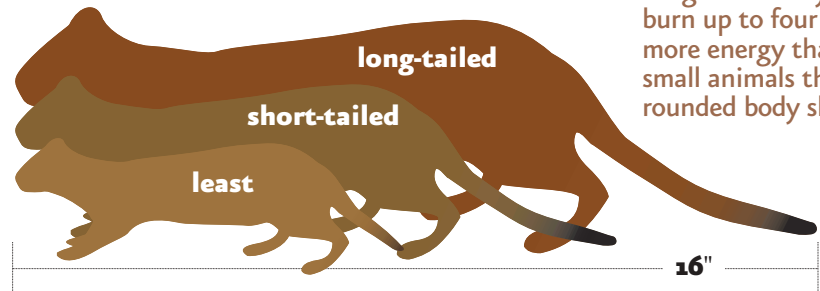


weasel species are white except for black tips on the tail. Owls and other predators sometimes focus on the black tip when attacking, which occasionally causes them to miss capturing the weasel all together.

With its long, tube-shaped body and short legs, the weasel can slip into just about any hole or

weight **male 11 oz**
female 7 oz

Because weasels are long, small, and slender and store little body fat, they must eat up to a third of their body weight each day. They burn up to four times more energy than do small animals that have rounded body shapes.





TOM AND PAT LEESON

long-tailed weasel: winter coat

burrow as it searches for food such as chipmunks, pocket gophers, rabbits, moles, rats, voles, mice, shrews, and sometimes birds, snakes, frogs, insects, and berries. It hunts almost constantly. Using its keen senses of smell and hearing, it

checks out every nook and cranny. It might disappear into a hole in a log and pop out seconds later somewhere else.

When it is very cold, weasels hunt and live under the snow. They make thick nests of fur plucked from their prey.

Foxes, coyotes, bobcats, domestic cats and dogs, hawks, owls, martens, fishers, minks, and occasionally snakes hunt and eat weasels.

Weasels are solitary except during the breeding season. Baby weasels are born blind and almost furless in the spring. In just three months, they are full-grown and ready to live on their own.

least weasel
weight 1.4 to 2 oz



JAMES PARNELL

The least weasel is the smallest carnivore in North America. It has the shortest tail of all Minnesota's weasels.

short-tailed weasel or ermine

weight **male 4 oz**
female 2.6 oz

TOM AND PAT LEESON



The fall coat of the short-tailed weasel is between its summer and winter fur colors.

Mink (*Mustela vison*) are good swimmers and spend plenty of time in and near water. They live on all kinds of land throughout Minnesota but always near water.



BILL MARCHEL

The mink eats a wide variety of foods. Favorite prey animals include fish, muskrats, rabbits, frogs, salamanders, diving beetles, and crayfish. Mink have also been known to eat waterfowl and chickens.

Full of curiosity, mink often sit straight up to better see whatever has captured their attention. They have to look out for owls, foxes, coyotes, dogs, and other predators.

In the spring a female mink gives birth to a litter of up to 10 kits. Mother mink might make her den under a rock pile or in an abandoned muskrat house, burrow, hollow log, or tree cavity. Her kits are born blind and helpless. By autumn the youngsters are fending for themselves.

Wild mink are common throughout North America, but as wetlands and wild shoreland vanish, so do they. Though good hunters both in water and on land, mink prefer hunting in water. Almost every mink has a white spot under its chin or on its throat.

mink weight male 2.2 lbs • female 1.6 lbs



TOM AND PAT LEESON

Muskrats are a favorite food of most mink. Mink will scavenge and eat dead muskrats if they are fresh.

AMERICAN MARTEN AND FISHER

Two to five marten kits are usually born inside a cozy tree hole in the spring. Mother marten lines the den with mosses and grass.

marten kit



DANIEL J. COX

Though excellent climbers, martens also spend time on the ground, where they take shelter and hunt prey under fallen wood. They sometimes visit campers because they are attracted to some human foods.

American or pine marten
weight **male 2.2 lbs**
female 1.75 lbs



With its foxlike face and attractive fur coat, the American marten (*Martes americana*) is a beautiful animal. At one time martens nearly disappeared from their north woods home because of logging and overtrapping for their valuable fur. Today martens range throughout the forests of northern Minnesota.

These exceptional tree climbers are also called pine martens because they prefer to live in old pine forests. Martens prey mostly on small rodents such as voles and mice, but eat whatever is available. They also hunt for squirrels, chipmunks, snowshoe hares, birds, eggs, and insects.

The fisher (*Martes pennanti*) is also common throughout the north woods. Unlike martens, fishers live in a variety of forests.

It's not entirely clear how the fisher got its name, because fishers rarely catch fish, though they do eat them. The fisher's favorite food is the snowshoe hare. It also eats small rodents such as mice and voles and larger prey such as raccoons, as well as nuts and berries. The fisher is one of the few predators to successfully prey on porcupines. It repeatedly attacks the porcupine's face while avoiding its quills. When the porcupine is tired and dazed, the fisher flips the animal and attacks its unprotected throat or belly.

A female fisher prefers dens inside trees or logs for raising her family of one to four young. The youngsters go off on their own before their first birthday.

MINNESOTA CONSERVATION VOLUNTEER



fisher weight **male 10.8 lbs • female 5.5 lbs**

DANIEL J. COX

Even though they do not climb as well as martens, fishers spend as much time in trees as on the ground, always hunting. Fishers and martens avoid open spaces and prefer the safe cover of trees. But fishers do not share territory with martens: At times they kill martens and other predators—including mink, young otters, and bobcats.

RIVER OTTER

Their large size helps river otters stay warm.

River otters (*Lontra canadensis*) have a reputation for goofing off. They spend a large part of their day wrestling, sliding on their bellies, and playing chasing games. These critters have even been observed playing with and teasing turtles, fish, and other animals.

Otters spend a lot of time in groups, usually of four to six family members. River otters are smaller than their West Coast cousins, sea otters. While sea otters can weigh as much as 100 pounds, most river otters weigh 15 to 30 pounds.

River otters are semiaquatic (living both in water and on land) and are quite common around Minnesota lakes and rivers. Intelligent and nosy, an otter will often swim close to boaters for a better look. It might grunt and pop halfway out of the water to get a good look at you.

An otter easily catches fish. It floats on its back or

river otter
weight **males 15 to 30 lbs**

DANIEL J. COX

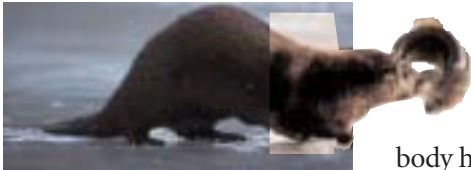


TOM AND PAT LEESON

Otters do not store food, but catch as much as they can before eating. Their favorites are suckers, sunfish, bass, minnows, crayfish, snakes, frogs, and sometimes muskrats, ducks, and mice.

carries its catch to shore to eat for its main meal. Otter fur is very dense and does a good job of insulating otters underwater. Glands under the otter's skin release oil to waterproof its thick fur. Because oil and water don't mix, water rolls off the oily fur and the otter's skin stays dry.

A river otter can hold its breath as long as two minutes and dive more than 40 feet deep! Mother otters coax their young into the water to teach them to swim. Webbed feet, ears and nose that close underwater, powerful hind legs, a long tail, and a flexible body help them become expert swimmers.



favorite food: fish

AMERICAN BADGER

How much digging must a badger do before it catches dinner? Studies in Minnesota showed that a badger burns up almost as much energy digging for prey as it gets from eating it. Many other animals, including foxes, owls, and snakes, rely on old badger holes for shelter.

badger
weight **male 18.5 lbs**
female 14 lbs

Built flat, wide, and low to the ground, the American badger (*Taxidea taxus*) has incredibly loose-fitting skin with a thick layer of fat under it. This skin helps the badger slip and slide in underground tunnels. The fat layer grows thicker in fall to keep the badger warm through the cold season.

Not many animals can dig better or faster than a badger can. Active at night, badgers use powerful front legs and long claws to dig many long, deep burrows—up to 60 feet long—and to hunt for ground squirrels, gophers, and other burrowing animals.

Badgers live throughout Minnesota in open, treeless areas where there is plenty of prey.

Two to seven baby badgers are born blind in underground dens. When they grow up, badgers are fierce and strong. Not many predators will attack an adult badger.



WOLVERINE

Wolverines (*Gulo gulo*) have large feet and long claws, and look like small bears. In fact, because of its strong odor and bearlike appearance, American Indians once called the wolverine “skunk bear.”

In North America, wolverines range throughout the forests and tundra of Canada and Alaska. At one time wolverines inhabited Minnesota's wilderness, but we don't know how many lived there. Wolverines are hard to find because they roam very large, remote territories ranging up to 566 square miles. Perhaps they were never more common in Minnesota than they are today. The last record of this species in Minnesota was a specimen taken in 1899 in Itasca County.

The wolverine is a good tree climber and eats just about anything, from cranberries to carrion. *Gulo* is Latin for *glutton*: Like other weasel family members, the wolverine has a big appetite. It protects its food stores by marking the food with a musk odor to keep away other carnivores.

Although not much bigger than a medium-size dog, the wolverine is ferocious. Its natural enemy is the wolf.

Blane Klemek, Becida, is a wildlife biologist naturalist, freelance writer, and DNR private lands specialist.



DANIEL J. COX

wolverine
weight **male 32 lbs**
female 20 lbs

Wolverines are very powerful for their size. They can kill moose and caribou, but more often they look for dead ones to eat.

valuable furbearers



COURTESY MINNESOTA HISTORICAL SOCIETY

A French-Indian trapper wears furs in 1870, when fur trading ruled Minnesota.

Mustelids are important *furbearers*, animals that are hunted or trapped for fur. Humans have a long history of making useful and decorative items from animal furs. American Indian chiefs adorned their war bonnets with weasel skins. French voyageurs and pioneers wore clothing made from mustelid fur. In fact, many Europeans came here to trade furs. Even today people trap many mustelids for fur.

The highest-priced Minnesota fur today is otter. It is prized for its luster, durability, and water resistance. Mink fur is favored for its combination of shiny, long guard hairs and dense, downy fur. Most mink used for today's fashions are raised on farms.

Marten fur (also known as American sable) is very soft and thick. Sometimes it is found in a rare orange-yellow color. Fisher fur is coarser, and sometimes grizzled with white hairs.

The badger's silvery long hair was popular for baggy fur coats in the 1920s. It is still used for high-quality paintbrushes and shaving brushes.

Wolverine fur is used to trim the hoods of parkas because frost doesn't stick to the long, soft, silky hairs.

Fur trappers buy licenses and follow trapping laws, which help the Department of Natural Resources manage furbearer populations. 📍

To find online teaching materials for this article, visit www.dnr.state.mn.us/young_naturalists/weasels.

To learn more about using Minnesota Conservation Volunteer as a teaching tool, contact Meredith McNab, meredith.mcnab@dnr.state.mn.us or 651-215-0615.



mistaken identity skunks?

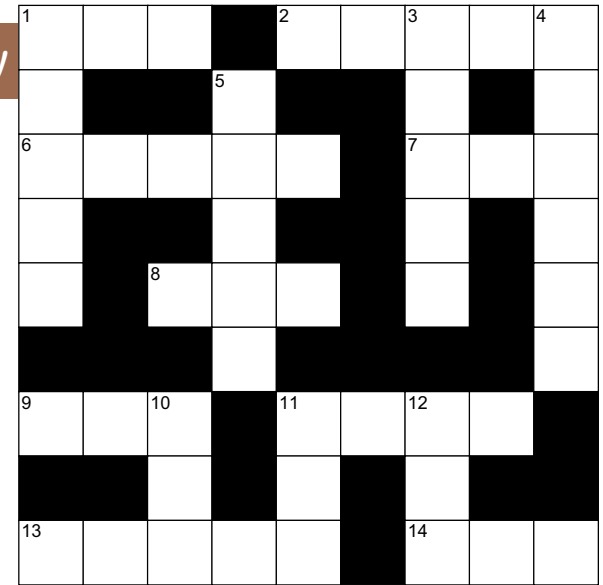
Until recently, skunks were included in the family Mustelidae because of their scent glands and other similarities. Now some scientists believe skunks might have evolved apart from mustelids.

Among differences, skunks have bigger scent glands and stronger musk than mustelids do. Some mammalogists place skunks into a family of their own, Mephitidae.

weasel wordplay

ACROSS

- River otters are smaller than their cousin, the _____ otter.
- Sometimes mustelids _____, or store, food for later.
- Wolverines look like small _____.
- A hunter will _____ at a target.
- Mother mink and kits live in a _____.
- A river otter can hold its breath for _____ minutes.
- Most minks have a white _____ under their chin.
- Mustelids have two large _____ glands under their tail.
- A female fisher may build her nest inside a _____.



MYLES MELLOR

DOWN

- Marten fur is known as American _____.
- A badger's long _____ help it dig.
- A short-tailed weasel is called an _____.
- Female fishers may build their nests _____ inside _____.
- Single _____
- Pose _____
- Glands under an otter's skin release _____ to waterproof its fur.



ANSWERS

weasel web sites

To learn more about mustelids, visit these web sites.

Minnesota DNR. Nature Snapshots. Learn about Minnesota's wildlife. www.dnr.state.mn.us/snapshots/mammals

Minnesota Zoo. Animals, education, and conservation. www.mnzoo.com

National Trappers Association. Trapping facts, furbearing mammals, and Kid's Corner. www.nationaltrappers.com