

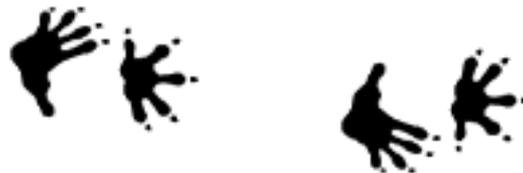
Mammals 2016

Virginia opossum

Didelphis virginiana

Identification: Medium-sized, furry mammal with grayish-brown fur (often appearing frosted) and white face. Their tails are void of fur, black to pinkish-gray in color, and are prehensile, meaning they can grasp tree branches or other objects with it. Their ears are also hairless and black. Their eyes are dark, but their nose is pink. Their rear limbs have clawless opposable thumbs (called a hallux). Their digits are pink. Average body length of 15-20 inches, weighing roughly 10 pounds.

- The only marsupial in North America
- Does not hibernate over winter



Cinereus shrew – *Sorex cinereus*

Identification: small mouse-like body with a pointed snout, and tiny black eyes. Ears, although covered in fur, are large and sometimes visible. Velvety fur is grizzled brown on the back and grayish-white on underparts. Tail is tri-colored; brown on top and paler underneath, with a black tip, nearly as long as body. Despite their name, they do not have any distinctive mask-like markings. Averaging 3.5 inches in length (including its long 1.5 inch tail) and weighs an average of 0.1 oz.

- Diet: omnivorous. Ants, insect larvae, both aquatic and terrestrial insects, occasionally seeds and fungi
- Solitary like most shrews

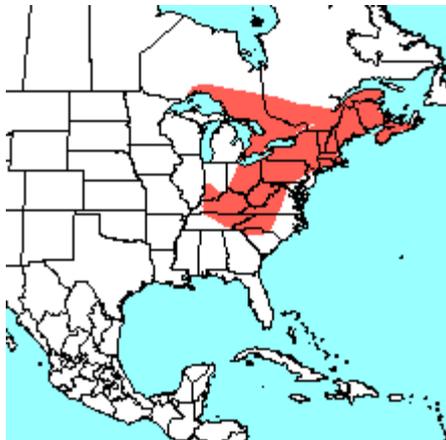


Smoky shrew

Sorex fumeus

Identifying characteristics: a mouse-like body with a pointed snout, tiny black eyes, and barely visible ears. Their velvety fur is almost uniformly grayish-brown in summer, but turns a smoky-gray in winter. The tail is long, about a third of the total body length, and is bi-colored: brown or gray on top and pale tan underneath. Size: a large shrew, 4 to 4.5 inches in length (including its 1.6 inch tail) and weighs about 0.3 oz.

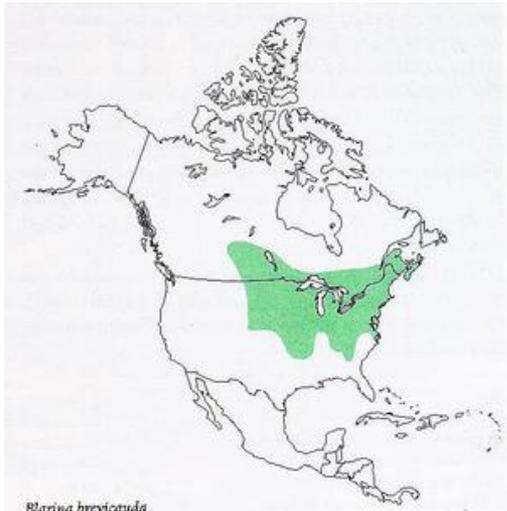
- Active during day and night
- They borrow extensively into the leaf litter of the forest floor and are rarely seen.



Short-tailed shrew – *Blarina brevicauda*

Identification: Mouse-like body with pointed snout, tiny black eyes, and barely visible ears. Compared to other shrews, the snout is shorter and more blunt. Velvety fur is almost uniformly gray with slightly lighter underparts. Tail is short, no more than a fifth of the body. Large shrew, 3-4 inches long (including 0.6 to 1 inch tail); weighs ~0.6 oz. Males a bit larger than females.

- This shrew is venomous. Its saliva contains a toxic substance that helps subdue larger prey.
- They will secrete a foul smelling substance to deter predators.

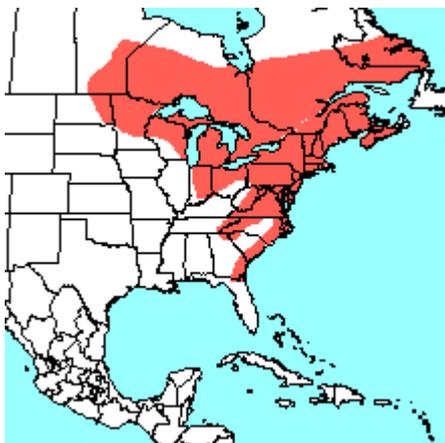


Star-nosed mole - *Condylura cristata*

Identifying characteristics: Easy to identify with its hairless, pink nose —ringed by 22 short, fleshy tentacles. The short, stout body and dark brown to black fur is similar to other moles, but the fur of this species tends to be more coarse. The tail is short, somewhat hairy, and constricted at the base. The tail tends to swell during the winter. The eyes are tiny and fur-covered and there are no external ears. Approx 7.5 inches in length and weighing 2 ounces. Males slightly larger than females.

- Tentacles on nose to detect prey
- Excellent swimmers and hunt in water

<http://www.arkive.org/star-nosed-mole/condylura-cristata/video-06.html>



Little brown myotis

Myotis lucifugus

Identifying characteristics: Small bat (a bit larger than Indiana bat), glossy brown fur on back and lighter-colored fur on belly. Ears are elongated, but relatively small. Face, ears and wings are black. Feet are large and have hair that extends past the toes. The eyes are tiny.

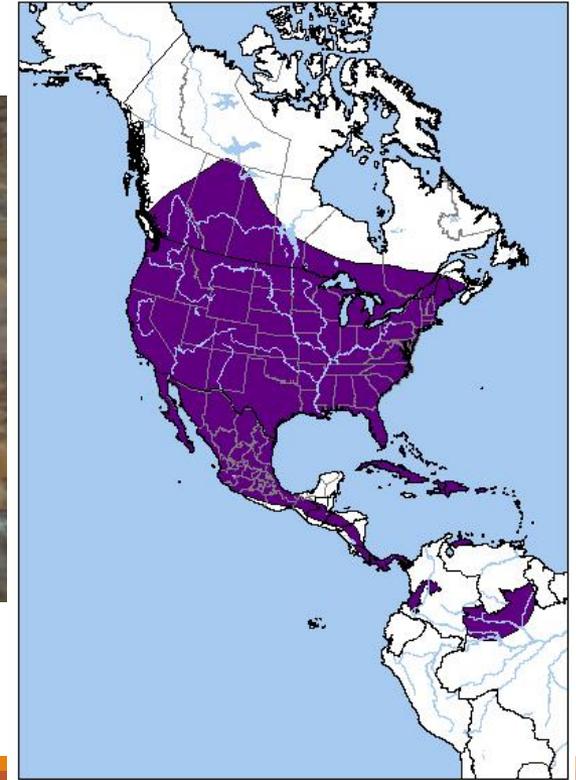
- One of the most common bats in the US
- Unlike many other bats, these bats are capable of catching insects directly with their mouth, rather than with their wings, which they use for larger prey.



Big brown bat - *Eptesicus fuscus*

Identification: A light or medium-brown furry bat, with a broad nose, fleshy lips and small, thick black ears. The ears, face and wings are devoid of hair and are black. Teeth are strong and capable of causing injury.

- Their tail and wing membranes are used to capture flying prey
- Big brown bats are reported to be one of the fastest bats reaching speeds of up to 40 mph.



Black bear - *Ursus americana*

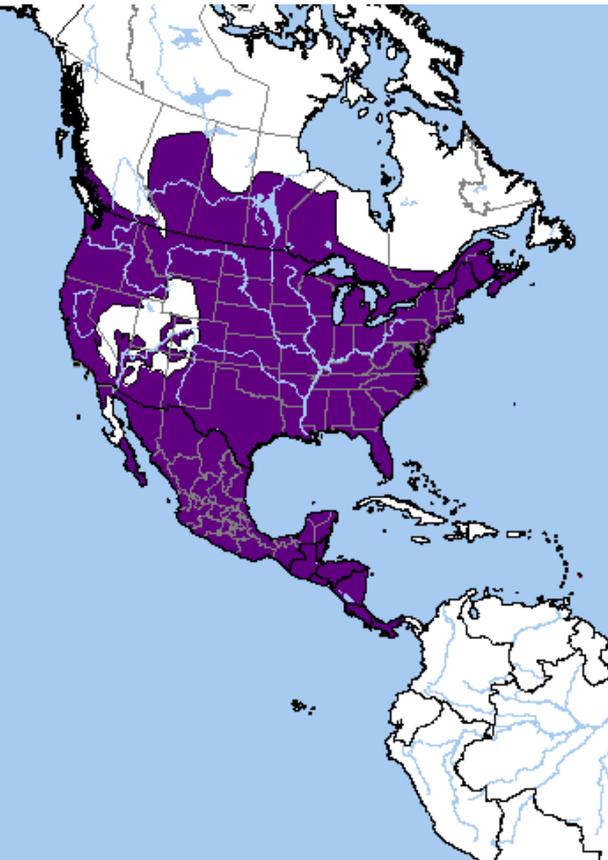
Identification: A thick coat of black fur, with cream-colored snout and a black nose. It has small eyes, large rounded ears, a dog-like snout and a small stubby tail. They walk on all fours, but will often stand on two legs when foraging, scouting or when threatened. The back legs are stronger and better developed than the fronts. Paws have five strong, sharp claws, used for climbing and foraging.

- Winter dens may be in caves, hollowed out trees or logs or underneath groupings of logs.
- Incredible sense of smell



Raccoon - *Procyon lotor*

Identification: Grayish-brown to gray fur and characteristic "black mask" across eyes, with pale fur outlining the black mask and along edges of ears. Bushy tail has from 4-10 black rings. The 5-toed forepaws resemble a human hand and have excellent grasping dexterity for a mammal without opposable thumbs. Hind paws also have five toes. Mean body length of 2-3 feet, and mean weight of 15 pounds (usually several more pounds in early winter). Males are generally larger than females.



- Most common carrier for rabies
- Major threat to many threatened amphibians and birds

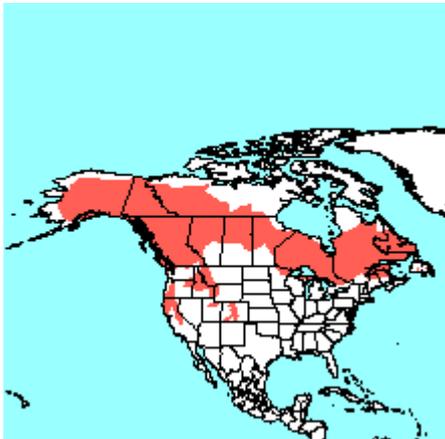


American Marten

Martes americana

Identifying characteristics: A small, weasel-like mammal (long body, short legs, long neck, triangular head, protruding ears, long whiskers) that is usually a light to dark brown with paler gray head, buff throat and cream under parts. The legs and long bushy tail tend to be a darker color than the rest of the body. The fur is generally shiny. The head and face appear cat-like and have dark lines that run from the muzzle past the inner corners of their eyes. Their ears are large and the snout is pointed.

- Arboreal and can move impressively in the trees
- Found in mature pine forests

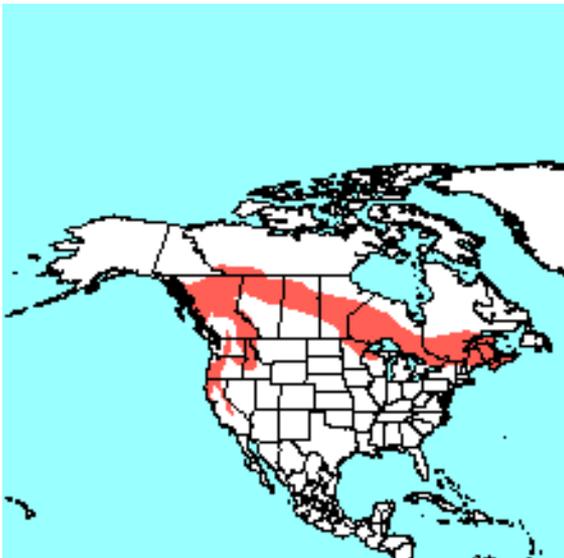


Fisher

Martes pennanti

Identification: A large mustelid (long body, short legs, long neck, triangular head, protruding ears, long whiskers) that tends to look stockier than other weasels due to its fluffy fur. They are medium to dark brown with either gold or silver hoariness around the top of the head and shoulders. The legs and tail are black. A cream-colored patch may be present on the neck or chest.

- Does not eat fish
- Porcupines are common prey items

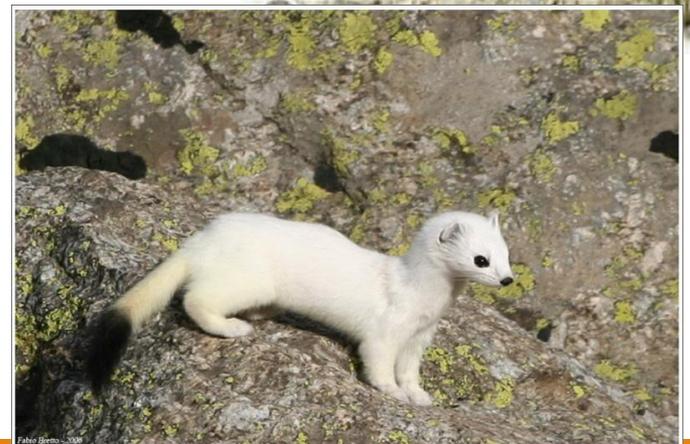
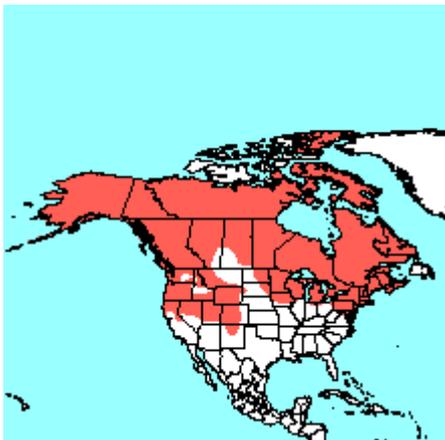


Ermine - *Mustela erminea*

AKA: Short-tailed weasel

Identification: A small, weasel-like mammal (long body, short legs, long neck, triangular head, protruding ears, long whiskers) with brown fur on top and white fur on the undersides including the neck and lower jaw. In winter they tend to turn completely white, except for the black tips of their tail.

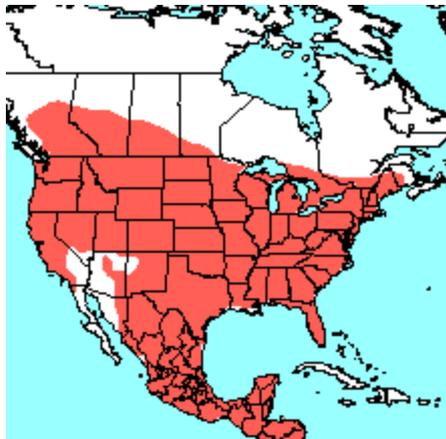
- Often cache food
- They will periodically stand upright to check their surroundings and to look out for predators.



Long-tailed weasel – *Mustela frenata*

Identifying characteristics: A small, weasel-like mammal (long body, short legs, long neck, triangular head, protruding ears, long whiskers) with cinnamon-brown fur and yellow-cream under parts, including their chin. They shed their fur twice a year and in winter may have a white coat. Their tail is long and bushy with a black tip. Their feet are brown. From 8 to 10.5 inches in length (not including their tails, which make up 50% of their total length) and weighing up to 1 pound. Males are twice as large as females.

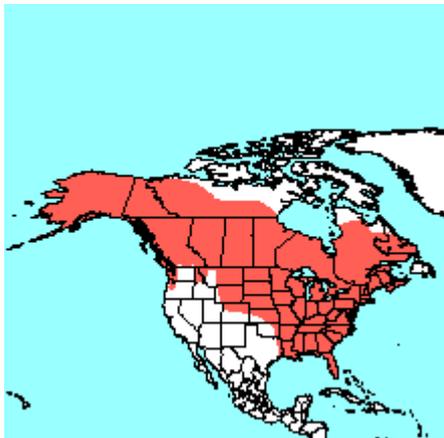
- **Habitat:** Lightly wooded areas, fields and crops. Dens can be hollow trees, stumps, crevices in rocks, under man-made structures, or the burrows of their prey.
- **Diurnal**



American mink – *Neovison vison*

Identification: A small, weasel-like mammal (long body, short legs, long neck, triangular head, protruding ears, long whiskers) with soft, glossy medium to dark chocolate brown fur with a cream patch on their chin. Their feet and tip of their bushy tail are near black. Their feet are partially webbed, an adaptation to their near-aquatic habitat. From 19 to 28 inches in length (not including tail, which make up 35% of their total length) and weighing up to 3 pounds. Males are roughly double the size of females.

- Most commonly sold fur
- Marks its territory with a strong musk secreted from its anal gland, making this one stinky animal

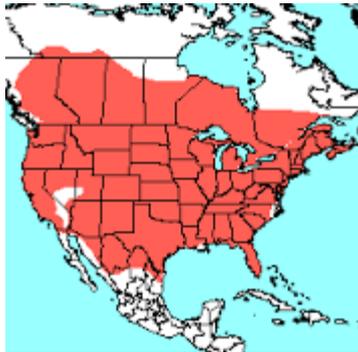


Striped skunk

Mephitis mephitis

Identifying characteristics: About the size of a domestic cat, they have black fur with a bold white stripe that runs from the top of the head and splits into two stripes at the shoulders. The stripes continue down the sides of the back and tail. The fluffy tail is bi-colored, with a black stripe running down the top and black fur underneath. A small white stripe runs down the face from the forehead to just past the eyes. Their heads, eyes, and ears are small; snouts are pointed and legs short. The front toes have large claws for digging.

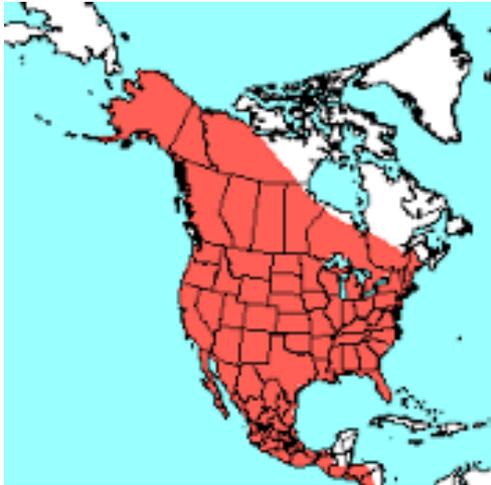
- Characteristic lawn damage of rolling up new sod
- Must be able to arch back to spray defensive musk

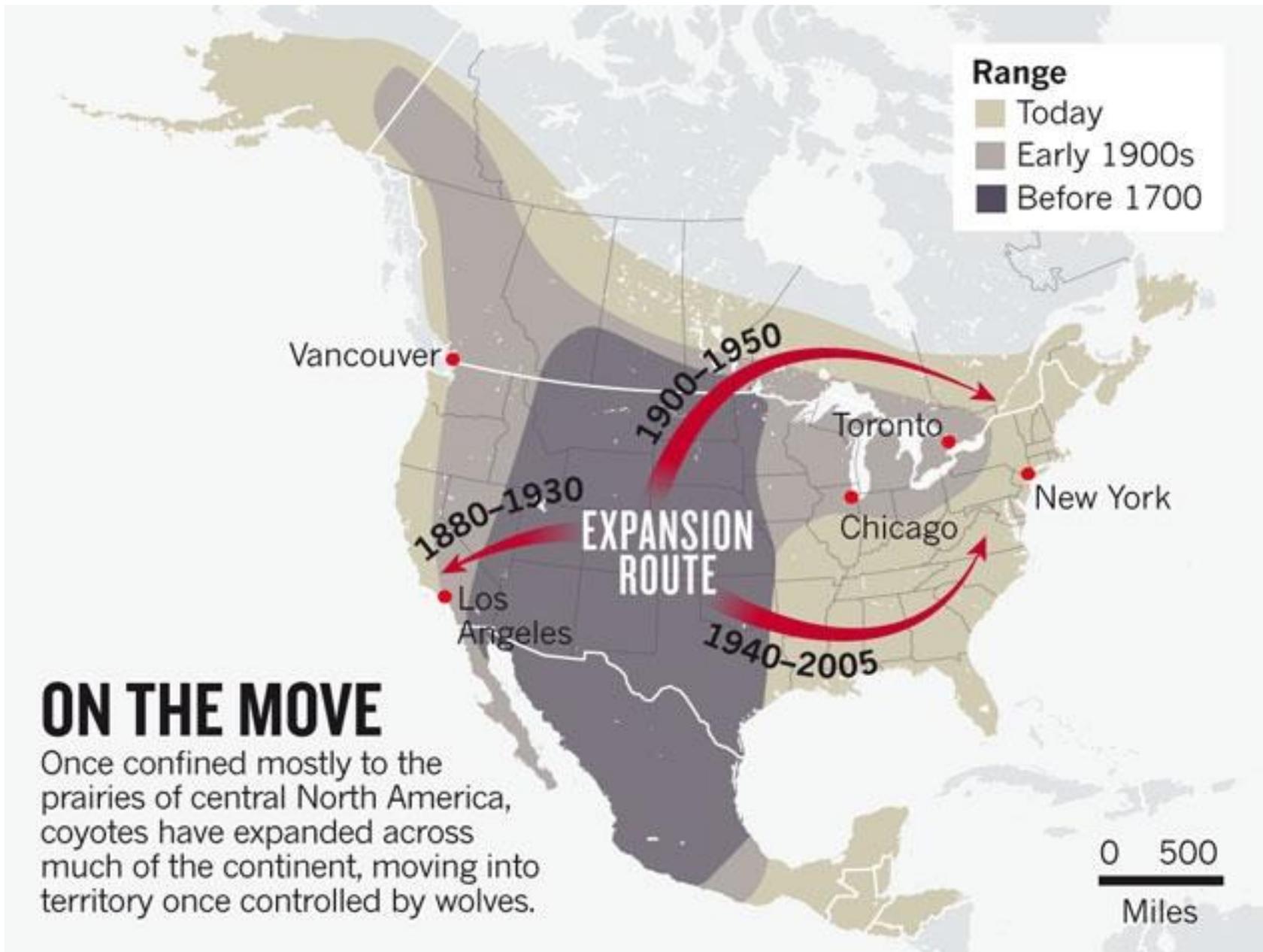


Coyote - *Canis latrans*

Identifying characteristics: Their thick fur coats of this wild dog are generally grayish-brown on the backs, with white throats and bellies. The forelegs, muzzle, side of the heads and back of the ears tend to have a reddish tint to them. Their ears are large, pointed and erect. Their tail is bushy and black-tipped. They carry it below the level of their back when they run. Wolves carry their tails at the level of their back. Muzzle is long and slender. Legs long; feet small, much smaller than wolves.

- Vocalizations make it sound like there are multiple, but rarely more than a pair in a given area
- Have adapted to urban and suburban areas



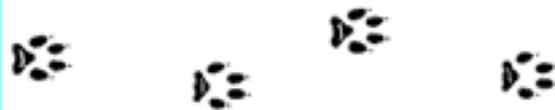
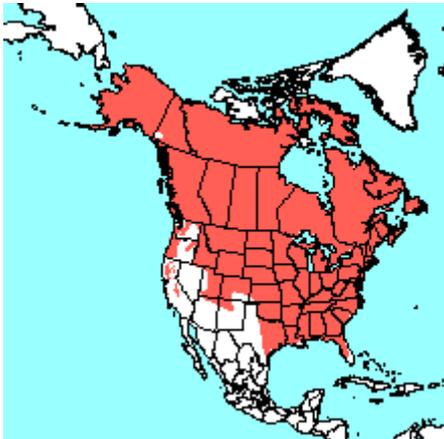


Red fox

Vulpes vulpes

Identifying characteristics: Red foxes have characteristic rusty red fur. The undersides, including the bottom of the muzzle and neck, are cream colored or white. The lower parts of the legs are generally black. The tail is bushy can either have a white or black tip. They have large, erect, pointed ears and small angular muzzles. Some variations may have predominantly gray fur, and is known as a Silver Fox, or a black stripe across the shoulders and down the back, which is known as a Cross Fox. Both variants are rare and still within the same species.

- Threat to poultry production
- Characteristic diving behavior for hunting



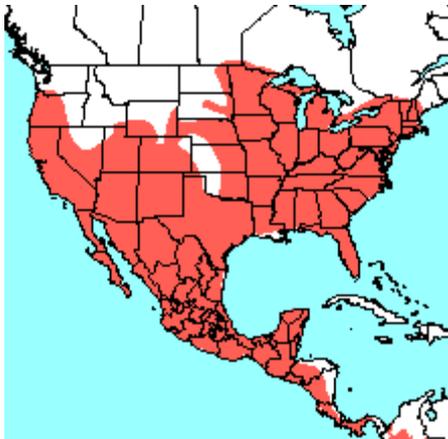
Gray fox

Urocyon cinereoargenteus

AKA: Tree fox

Identifying characteristics: Looking similar to a small dog with a small head and bushy tail, the gray fox is not really gray at all, but has patches of gray that are the result of the mixing of black and white fur. The top of the head, back, sides and tail are this grizzled, salt-and-pepper color. The tail has a black dorsal stripe and tip. The under parts are white and the sides of the head, neck, back and legs tend to be reddish. Their heads are small and ears large and erect. Their muzzles are small and angular, with black lines that run from the eyes to the front of the mouth.

- Tends to eat more nuts and fruit than red fox
- Climb trees with ease

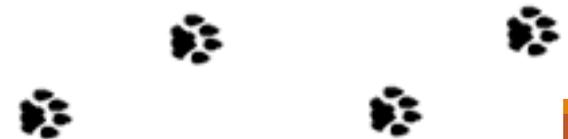
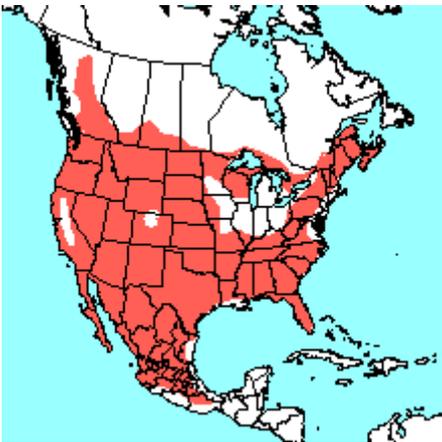


Bobcat

Lynx rufus

Identifying characteristics: Medium-sized cat with a coat that varies from light gray to yellowish-brown to reddish brown. Spots or small stripes are almost always present and more prominent on the sides and limbs than the back. The sides of the face have rough, sideburn-like tufts of hair. The backs of the triangular ears and the top of the tip of the tail is black. The tail is short, rarely more than 6 inches in length, and is white underneath.

- Will occasionally kill deer
- Dens are usually in hollow or fallen trees, rock crevices or other debris.



Woodchuck

Marmota monax

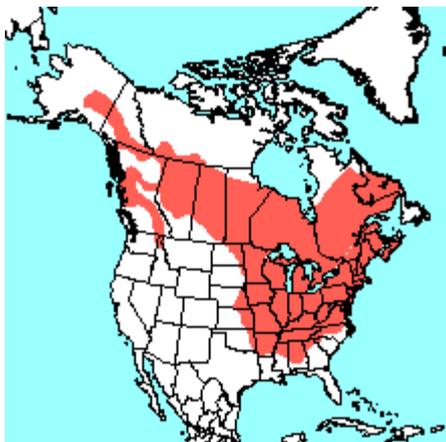
AKA: Groundhog, Whistlepig, Marmot

Identifying characteristics: A large ground squirrel with a stubby and chunky body.

The fur is a grizzled brown. The tail is bushy and a bit darker than the rest of the body.

It is also smaller in proportion to other squirrels. The eyes are large and black and the ears are small and round.

- Major problem for damage to fields, golf courses, lawns, etc.
- Vocalization: Very vocal squirrels. They are known for their whistle which alerts other of threats. Barks, squeals, and chirps are also common.

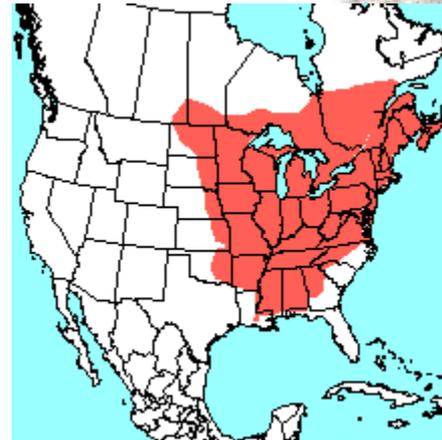


Eastern chipmunk

Tamias striatus

Identifying characteristics: The smallest of our native squirrels, the chipmunk is also the easiest to identify. Reddish-brown in color with 5 distinct black stripes down their back. In-between the black stripes are stripes of a lighter (white or brown or gray) color. A similar, but lighter, striping pattern runs from their nose, past their eyes to their ears. The underbelly is usually a lighter color. Their tails are dark and furry, but not as bushy as other squirrels. Their cheek pouches are large and can protrude greatly when full.

- They do not hibernate continuously, periodically waking to snack and replenish their fat supply.
- Food: Omnivorous. Primarily nuts and seeds, but also other vegetation, mushrooms, fruit and corn. They will also eat mollusks, insects, eggs and smaller mammals.

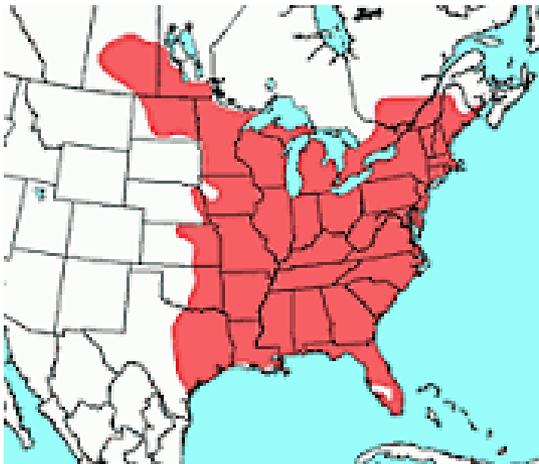


Gray squirrel

Sciurus carolinensis

Identifying characteristics: A medium-sized tree squirrel with gray fur above and cream fur covering the under parts. The head, feet and tail may have a reddish tinge. The tail is large and bushy, roughly half of the total length of the squirrel. In urban areas (due to isolated populations and reduced predation) completely black variations may be spotted. They are differentiated from the Fox Squirrel by their smaller size and dominance of grey hair.

- Do not hibernate
- generally solitary but may nest in small groups to maintain body temperature



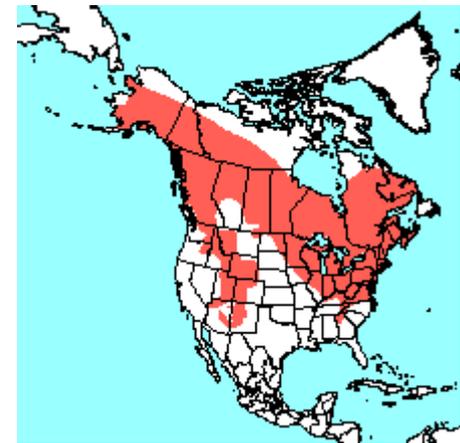
Red squirrel

Tamiasciurus hudsonicus

AKA: Pine squirrel, Chickaree

Identifying characteristics: The smallest tree squirrel in our area with brownish-red to grayish-red fur above and white or grayish-white below. Dark lines may separate the reddish fur from the white fur of the belly. The tail is large and bushy, but not as bushy compared to other tree squirrels. Their large black eyes have white outlines.

- Nests are often built of grass or shredded bark within the branches of conifers, but will also be in tree cavities, built on a tree fork, or in garages and attics.
- Litter size average 4 with up to 2 litters a year

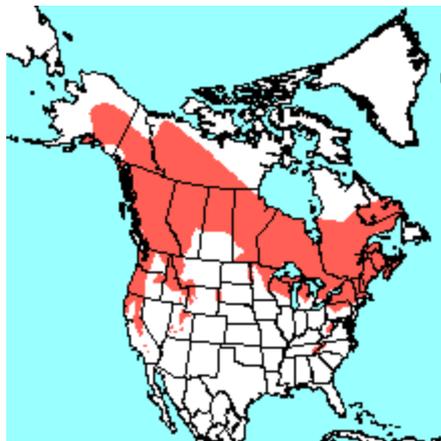


Northern flying squirrel

Glaucomys sabrinus

Identifying characteristics: They have thick cinnamon fur on their upper body, becoming more grey on the sides and have white fur on their undersides. A furry membrane stretches from the wrist of their front limbs to the ankles on each side, forming a wing-like apparatus, allowing the squirrel to glide from tree to tree. Their eyes are large (adapted for night vision) and their tails are flat and long (about 80% as long as the rest of their body). The Southern Flying Squirrel is different in that it is smaller and the belly tends to lack the gray hair.

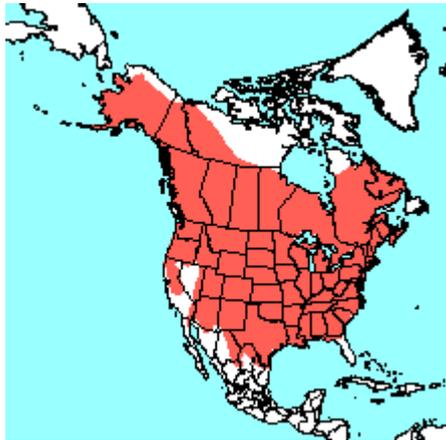
- Do not actually fly but glide
- They do not hibernate, but nest together to maintain body temperature in winter.



American Beaver – *Castor canadensis*

Identifying characteristics: A large aquatic rodent with varying degrees of dark brown fur. The fur is naturally thick and oily, due to its waterproof nature. The ears and eyes are small, dark and round and the nostrils are large and closable. The incisors are large and orange. The hind feet are fully webbed and the front feet are not webbed, are smaller and clawed. Due to the hind legs being longer than the front legs, the Beaver's body profile slants down towards the head. The beaver is easy to identify by the tail alone (if you are lucky enough to see it above water). The scaly black tail is large, very broad and flat.

- Ecosystem engineer
- Food: Herbivore. Bark and cambium (soft wood under the bark).



Beaver lodge



FOREST SUCCESSION & BEAVER ACTIVITY



A.

Beaver dam is built and floods a forest area; trees die

FOREST SUCCESSION & BEAVER ACTIVITY



A



B



Emergent vegetation at edges of wetland

FOREST SUCCESSION & BEAVER ACTIVITY



A



B



C

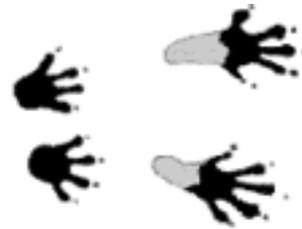
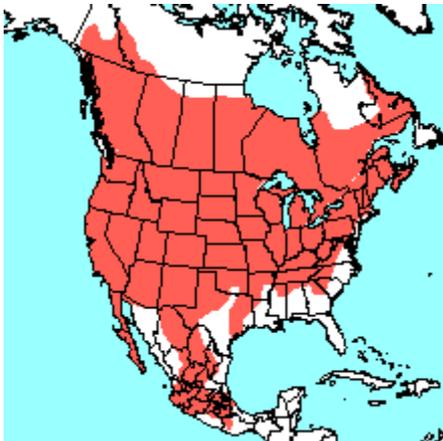


Wetland drains and old field succession begins

Deermouse *Peromyscus maniculatus*

Identifying characteristics: A small mouse, slightly smaller than the house mouse, with grayish to reddish-brown fur on top and whitish under parts. The tail is short-haired and bi-colored with darker fur on top and lighter fur underneath. The body is round and slender, with a large head and pointed snout with whiskers. The ears are large and round. The eyes are large and black. There are two forms, the woodland variety tends to have a longer body and tail as well as larger feet and ears than the prairie form.

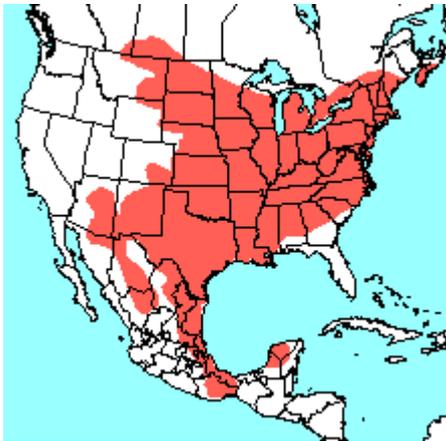
- Food: Omnivorous. Insects, fruits, vegetables, seeds, plants, various invertebrates, sometimes their own feces.
- They live as family units, but more may group together for warmth in the winter.



White-footed mouse - *Peromyscus leucopus*

Identifying characteristics: Often difficult to distinguish from the Deer mouse, they are generally in between the size and length of the woodland and prairie forms of deer mice. Although both species have bi-colored tails, the distinction is more prominent in the deer mouse. The deer mouse tends to have small white tufts at the base of the ears that are lacking in the White-footed mouse.

- Habitat: Most commonly in warm, dry wooded or brushy areas.
- Mate year round

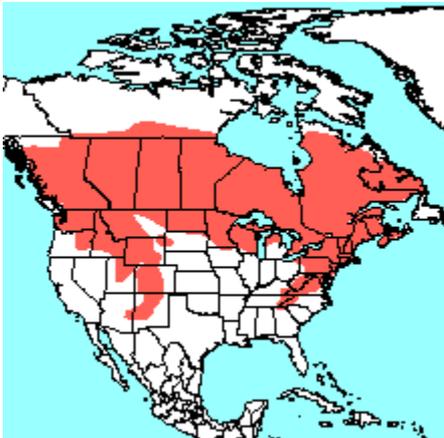


Southern Red-backed vole

Myodes gapperi

Characteristics: The southern red-backed vole is five to six inches in length. It is gray with a rust red stripe running from its head to its tail. It has a yellowish-brown face and sides and its undersides are white to gray. It has a short tail, short ears and a pointed nose. Its fur is long and thick in the winter and short in the summer.

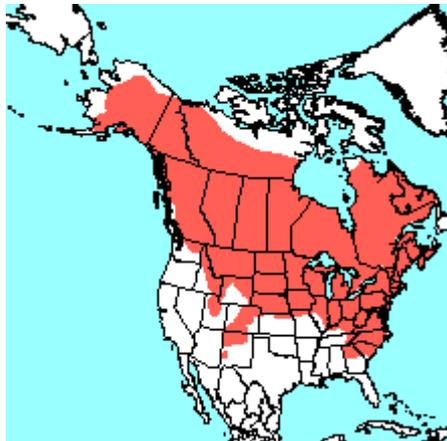
- Short life expectancy 10-20 months
- In the winter, it eats stored food and it forages for tree roots, seeds and bark.



Meadow vole (*Microtus pennsylvanicus*)

The total length of *M. pennsylvanicus* ranges from 128 to 195 mm with a tail about 40% of the body length. The dorsal surface is dark blackish brown to dark reddish brown with coarse black hairs. The ventral surface is grey or white and may be tinged with light brown. The winter pelage is duller and more grey. There is no sexual variation in size or color. The skull is moderately heavy, rather long, and slightly angular.

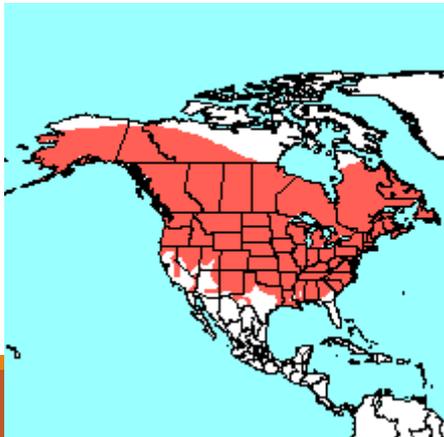
- *Microtus pennsylvanicus* is the most widespread vole in North America.
- When this species overlaps the range of cranberries, meadow voles feed extensively on these fruits.



Common muskrat *Ondatra zibethicus*

Identifying characteristics: They look like small beavers at first glance, with similar brown, glossy fur and robust body. But are considerably smaller and have a few other characteristics to help you distinguish them from beavers. The ears of a muskrat are so small, they are barely noticeable. Also the legs (both front and back) are short and stubby, with only minor webbing on the hind feet. More notably, the tail is not as broad and flattened like the beavers, it is more similar to the rat's; hence the name.

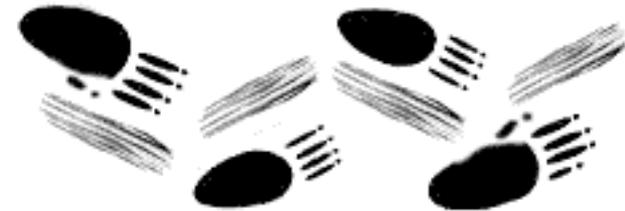
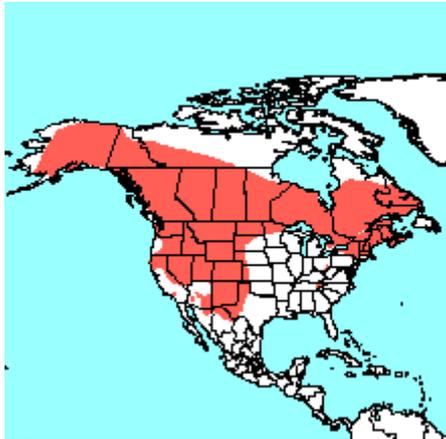
- Most common furbearer
- Food: Omnivore. Primarily green vegetation (aquatic plants, such as cattails, lilies and loosestrife), roots, crops. Sometimes will feed on mussels, crayfish or carrion, if available.



North American Porcupine *Erethizon dorsatum*

Identifying characteristics: A large, stout rodent with large bright-orange incisors. The fur is dark brown to black, mixed with longer cream-colored spines. The face is dark brown to black with a large blunt snout and large nostrils. The body is plump, the limbs are short, and the toes have long claws. They have 4 toes on the front paw, while the rear paw has a fifth (vestigial) thumb-like toe.

- Live in trees
- Feeding: Herbivore; feeding on bark, twigs, roots and other plant material.

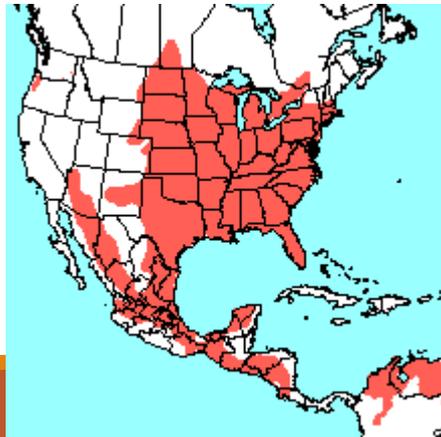


Eastern cottontail *Sylvilagus floridanus*

AKA: Rabbit

Identifying characteristics: The most common rabbit in the US, cottontails are covered with a grayish-brown coat (with brown underfur and gray and black guard hairs). The backs of their necks are usually rust colored. The under parts are white, including the bottom of its short tail, which appears fluffy, like cotton. Molting occurs twice a year. Spring coats appear more brown, winter coats are more gray. Their ears are erect and may be as long as the head or more. About half of specimens have a white blotch of fur on their forehead.

- Food: Herbivore. Grasses, green plants and vegetables in the summer. Wooded plants, bark in winter.
- Males may compete fiercely for mates and once found will perform intricate courtship dances.

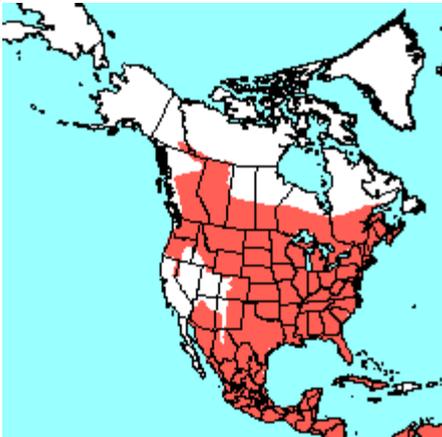


White-tailed deer

Odocoileus virginianus

Identifying characteristics: The light brown fur color of this deer varies based on season, with duller gray shades in winter and more redder tints in summer. White patches of fur outline the eyes and snouts, line the insides of the ears, underbelly and underside of the tail. Fawns commonly have white spots along their back and sides. Males have antlers that are shed each winter and grow back in spring.

- Most hunted game animal in the United States
- Fawns have spots for the first 2-4 months after birth



Moose – *Alces americanus*

Identifying characteristics: A large hoofed animal with thick, woolly brown fur (ranging from medium to dark, almost black). Their heads are long and end with fleshy lips and noses. Their throats have a prominent dewlap. The most striking characteristic for males is their large palmate antlers, which are shed every year after mating season.

- Water plants, such as horsetails and water lilies, are preferred in warmer months. In the winter months, when food is scarce, they resort to eating pine needles.
- Suffering from spread of meningeal worm

