

MAMMALS OF CEDAR BREAKS NATIONAL MONUMENT



A Survey of Wildlife Observed 2017-2019

Nicki Frey, Ph.D., Natalie D'Souza, and Ethan Hammer
Utah State University Extension

Bryan Larsen and Jake Nielson
National Park Service

Introduction

This document is the result of a study of the terrestrial mammals found at Cedar Breaks National Monument from 2017-2019. During this time, we conducted a survey of mammals using a series of trail cameras. These cameras were set up in two ways. To detect larger mammals, we set the trail cameras at 1-meter (~3 feet) height, using camera poles and straps to attach cameras to trees. To detect smaller mammals, we set cameras at or within 0.3-meter (1 foot) height from the ground. We set a corrugated plastic tube in the foreground to provide a platform for small mammals to run along or into. We used survey results to provide an index of terrestrial mammals (excluding bats) within the park, to compare to a mammal inventory conducted about 10 years ago. We hope to repeat this study in another 5-10 years to detect any changes in species' distribution and abundance in the park.

Our goal is to provide you with a beginner's guide to the mammals at Cedar Breaks National Monument. We include information regarding appearance, diet, habitat, and population status according to the International Union for the Conservation of Nature (IUCN). We list scientific references and photo credits at the back of the document.

The species described herein are not the only mammal species that might be in the park. For example, our trail camera survey did not detect bats. Additionally, we could not differentiate among mice species. However, they do represent the species you, a visitor to Cedar Breaks National Monument, will most likely encounter during your visit. In addition to the traditional photographs, we provide many photos collected during our study. In some cases, these photos may be of lesser quality, but they provide a realistic example of what these species look like at our park, and while they are on-the-move. We think you will enjoy these photos of wildlife in action.

Have a wonderful visit to Cedar Breaks National Monument.

American Badger (*Taxidea taxus*)



This short-legged mammal has a flat body appearance with a reddish hue to the fur. American badgers weigh up to 26 pounds. They have small, rounded ears and an alternating pattern of white and dark gray stripes on the face, with a major white band starting at the nose and extending down the back. Badgers are known for their ferocious nature when threatened, and the distinct facial pattern is thought to have evolved as warning coloration. This species is considered of least concern for national conservation efforts. However, recent studies have shown that their populations are decreasing. This population

reduction is due to their habitat conversion to agriculture or logging, as well as the threat of statewide trapping in Utah.

Observations: While not commonly seen, visitors may see badgers in the meadows of Cedar Breaks National Monument from June–September.

Diet

Badgers use their long claws to dig up underground prey and will bury extra meat for future use. They forage for prey such as snakes, squirrels, insects, pocket gophers, mice, birds, and invertebrates. The American badger is one of few predators capable of eating rattlesnakes; it is unharmed from their venom unless the snake strikes the badger on the nose.

Habitat

Badgers are found throughout the entire state of Utah. Their widespread range is due to their ability to live in a variety of landscapes, from high up in mountain meadows all the way down to open country grasslands or deserts. In Cedar Breaks National Monument, badgers are found in Douglas, grand, and white fir forests. They have also been seen in aspen-mixed conifer forest.

Fun Facts

Badgers sometimes forage in association with coyotes. Long ago, the Navajo tribe noticed that when a badger digs out ground rodents at one end of a burrow, a coyote may wait to catch any prey fleeing through an escape hole at the opposite end.



American Black Bear (*Ursus americana*)



In the western United States, the American black bear can have either a black, brown, cinnamon, or blonde coat. This species has a shoulder height of about 2-3 feet. An average male black bear weighs up to 500 pounds, whereas a female will weigh about 330 pounds. The American black bear is distinguished from brown bears by their straight snout and short, round ears that sit atop their narrow heads. Black bears have long straight claws that allow for tree climbing when hunting for prey or escaping from threats on the ground. The American black bear has a timid nature, and is rarely aggressive towards humans. Black bears

are a species of least concern for conservation management. With improved management efforts and protection plans, black bear populations are increasing throughout North America.

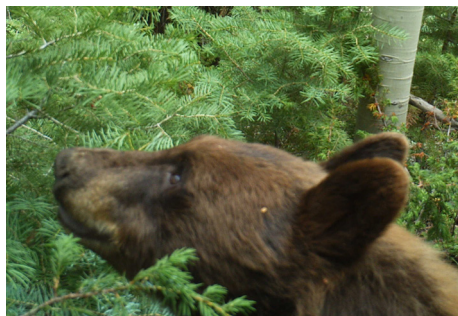
Observations: Black bears are uncommon, but may be seen at Cedar Breaks National Monument in June and July in the western portion of the park, near Ashdown Wilderness Area.

Diet

This omnivore is extremely adaptable, surviving off an array of prey depending on the season. In the spring in Utah, black bears will feed on herbaceous vegetation, insects, and young deer. As berries and nuts ripen in summer, they will become the main food source. To build up their fat reserves for the winter, a single black bear needs a total of 11–18 pounds of food a day to survive, and may eat up to tens of thousands of berries per day.

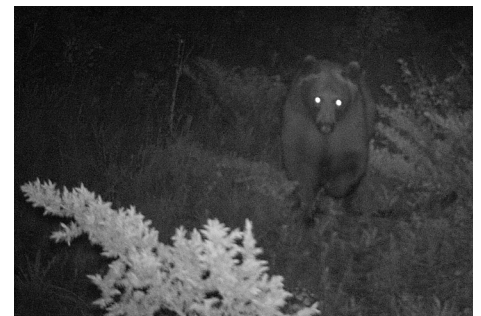
Habitat

Black bears have been seen in three different vegetation types throughout Cedar Breaks National Monument: aspen-mixed conifer forest, ponderosa pine forest, and mixed Douglas, grand, and white fir forests.



Fun Facts

Some American black bears on the western coast of British Columbia have a white coat. These white bears are called the Spirit Bear or Ghost Bear. This bear is thought to be an omen of good fortune if seen.



American Pika (*Ochotona princeps*)



The American pika has a small, egg-shaped body that is roughly 7.5 inches in length and weighs about 5 ounces. They have a light brown coat with a grayish hue and large, round ears edged in white. This species' tail is about 5 mm in length and is barely visible. They are rarely seen, but more often, one hears their short squeak across a talus slope. The IUCN lists American pika as a species of least concern for conservation efforts; however, recent scientific studies have shown an overall decrease in population sizes due to climate change. The American pika is well adapted to cold, alpine weather by having a high internal body

temperature. Pikas exist in a short marginal zone of cold temperatures and often live in areas above 7,500 feet in elevation. Even a short spell of 80-degree weather is enough to be fatal to an individual. As our climate continues to increase in average temperature, the American pika has to habituate in higher elevation regions to survive.

Observations: Pikas are rarely seen in Cedar Breaks National Monument because they prefer very rocky areas that most humans do not enjoy traversing. However, they are seen and heard in July and August in the northern and western portions of the plateau.

Diet

The American pika is a generalized herbivore that feeds on grasses, leaves, and flowering stalks. They are unable to grasp plants with their forepaws, so they have to eat vegetation with a side-to-side motion of their jaws. This species often hoards mouthfuls of plants while foraging, carrying it back to their dens to store for the winter months. They do not hibernate in the winter, and will use this stored vegetation to sustain themselves until spring.

Habitat

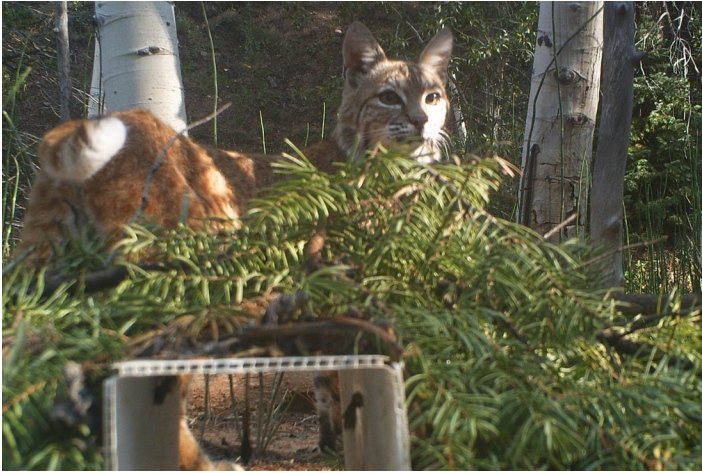
The American pika is found throughout western North America. Their distribution ranges from central British Columbia south to California and New Mexico. In Utah, this species is found in a diagonal strip across the state that starts in the northeast corner and ends in the southwest region. In Cedar Breaks National Monument, the American pika has been seen in the spruce fir forest areas adjacent to talus slopes.

Fun Facts

American pikas maintain tight-knit families and are one of the most social mammals. The young may often be seen trailing single file behind their father like a miniature train.



Bobcat (*Lynx rufus*)



Bobcats are generally the size of a medium-sized dog and weigh anywhere from 11–30 pounds. They have a reddish-brown coat with a white underbelly. Their back and legs are speckled with dark spots and they have short, fluffy tails with black stripes. A wide scruff borders their jaw with thin lines of black throughout. Their pointed ears are topped with tufts of thin hair, while the back of the ears is solid black with a large white spot in the center. Bobcats are often confused with the lynx (*Lynx lynx*) because of their similar facial appearance, but the lynx lacks a coat with prominent black spots, and lynx have shorter tails

that lack stripes. Bobcats are considered a species of least concern by the International Union for Conservation of Nature (IUCN) because their overall population trend is stable.

Observations: Even with a wide distribution across North America, bobcats are not common in Cedar Breaks National Monument. However, they may be spotted in the Monument from June–September.

Diet

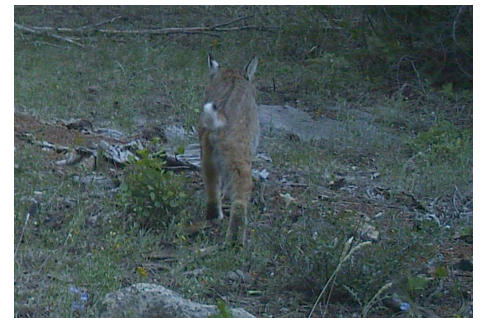
Bobcats are opportunistic hunters that eat rabbits, squirrels, birds, reptiles, insects, and even small deer. They have been known to prey on larger mammals such as foxes, porcupines, and even skunks. Bobcats will survive long periods without food, but often eat in excess when food becomes available, and will cache large kills for later consumption.

Habitat

Bobcats occur throughout most of North America with a distribution that ranges from southern Canada to southern Mexico. They live throughout Utah, often found in deserts, forests, or grasslands. In Cedar Breaks National Monument, bobcats have been found in aspen-mixed conifer forest and ponderosa pine forest, and savanna. They have also been seen in spruce fir forests.

Fun Facts

Bobcats are adept climbers that will seek the safety of a tree when threatened by a larger carnivore. They also use this high vantage point to scope out and pounce on prey found on the ground.



Coyote (*Canis latrans*)



The coyote has a buff-gray coat and stands about 18–21 inches high. Males are about 20% heavier than their female counterparts, weighing anywhere from 17–48 pounds. Their muzzle, outer side of the ears, forelegs, and paws are a dull, brownish-red color. Their throat and belly have a white coloring, whereas their long, bushy tail contains dark patches with a black tip. Coyotes are sometimes confused with wolves; however, coyotes are smaller in size and have a narrower snout and shorter, slender legs and smaller paws. Wolves are not present in southern Utah. The IUCN lists coyotes as a species of least concern

because their overall population sizes are on the rise. This increasing trend is due to this species being the most adaptable wild canine, often thriving in urban regions.

Observations: Active mainly at night, coyotes typically avoid humans. They have been observed in the months of August and September in Cedar Breaks National Monument.

Diet

Coyotes are opportunistic hunters, eating nearly anything available, such as fruits, rabbits, insects, snakes, and rodents. They have also been found to hunt in packs when pursuing larger prey, like mule deer. Coyotes are also considered scavengers, feeding off prey killed previously by another predator or foraging in domestic food waste.

Habitat

Coyotes live in a variety of landscapes across all of North America. They are found statewide in Utah, often located in open country, coniferous and deciduous forests, alpine zones, and grasslands or semi-deserts. Thus far, this species has only been found in aspen-mixed conifer forests within Cedar Breaks National Monument.

Fun Facts

Coyotes have the ability to interbreed with wolves and domestic dogs. The “Coydog” has been commonly seen around the outskirts of cities. These hybrids are more likely to attack livestock and domestic animals than coyotes themselves.



Deer Mouse (*Peromyscus maniculatus*)



In the western United States, the deer mouse has an average body length of 3 inches with a weight of 0.38–1.25 ounces. Its top coat is a dark color, usually tan, contrasting against their white bellies. Its tail is roughly the same length as its body, furred, and bicolored; the top is dark and the bottom is light. Deer mice have large, round ears and a narrow face. This species is easily confused with piñon mice (*Peromyscus truei*) and northern rock mice (*Peromyscus nasutus*). However, these two species of mice have much longer ears and shorter tails than deer mice.

Observations: This species is common throughout the Monument, but its small size and nocturnal nature limit sightings. Observe deer mice from May–October.

Diet

Deer mice are arboreal, meaning they spend most of their time living among trees. Consequently, deer mice will often feed on small fruits, seeds and nuts, insects, centipedes, or berries. In this region, deer mice are preyed upon by most predators. Because this species is abundant, the deer mouse is considered one of the primary food sources for many animals.

Habitat

The distribution of the deer mouse ranges from northern Canada to Mexico. Deer mice are found throughout most of the Midwest and through the northeast region of North America. Deer mice have been seen in a wide variety of habitat types within Cedar Breaks National Monument, most commonly spruce fir forests, and aspen-mixed conifer forests.

Fun Facts

Deer mice are one of the most common rodents of North America because of their ability to live in a myriad of habitat types. This has led to over 100 subspecies being identified throughout North America.



Desert Woodrat (*Neotoma lepida*)



The desert woodrat is about 8–15 inches in length and weighs around 4 ounces when full grown. Its top coat is a buff-gray color paired with a pale gray underbelly and white feet. It has round ears atop its narrow head and long snout. A long bicolored tail aids in balance while navigating across spiny cacti. The IUCN categorizes desert woodrat as a species of least concern due to their range overlapping with many protected areas, creating an overall stable population size.

Observations: This woodrat's small size and nocturnal nature make it seldom seen. However, it has been spotted during the months of July and August in Cedar Breaks National Monument.

Diet

The woodrat is a generalist herbivore, eating a variety of vegetation. The species forages on yucca pods, seeds, pinon nuts, bark, and berries.

Habitat

This is a common woodrat found throughout western deserts. Due to its ability to survive in hot climates, its distribution ranges from southeastern Oregon and throughout Nevada to southern California. This species lives in the western portion of Utah as well as a strip of range from the southwestern corner of the state to base of the Wasatch Range. This species has been found at Cedar Breaks National Monument in aspen-mixed conifer or spruce fir forests.

Fun Facts

Woodrats are often called packrats or trade rats because of their common behavior of collecting objects and then "trading" an item found for another. They collect shiny objects such as coins.



Elk (*Cervus elaphus*)



Elk have an average shoulder height of about 4 feet and weigh anywhere from 370–1,050 pounds. Mature males are often larger in size than females, and in the fall, will be adorned with antlers up to five feet long. These antlers have one main beam starting atop the head and then branch off as they extend upwards. In the summer, an elk's coat will be a red-brown, while in the winter, it will take on a more tan color. Its rump has a yellow-brown patch surrounding the tail, and its legs, head, chest, and neck are all colored brown. Calves are often seen with white spots along their tan coat, but still show

predominantly brown-colored heads.

Observations: Elk are a common species at the Monument, observed throughout the months of May–September.

Diet

This herbivore will follow the growing vegetation, moving upwards in the summer for the cool climates and budding plants, then retreating to lower elevations in the winter. It often grazes on weeds, lichens, or grasses and browses on trees or shrubs during dawn or dusk, and even at night.

Habitat

Elk spend time in areas that have a mix of open grassland and forests. They are found throughout most of the Intermountain West. Elk roam throughout the majority of Utah with the exception of the most southwestern corner of the state. In Cedar Breaks National Monument, elk mainly locate in alpine dwarf-shrubland, fields, meadows, aspen-mixed conifer forests, and spruce fir forests. They may also be found in grasslands as well as in western riparian woodlands and shrublands.

Fun Facts

Their strong, slender legs allow this species to run up to 35 mph with an adept ability to swim when needed.



Golden-mantled Ground Squirrel (*Spermophilus lateralis*)



The golden-mantled ground squirrel has a dark brown top coat with a thin beige stripe bordered in black on either side of its body. They are often confused with chipmunks, but chipmunk species' fur is more rusty-brown with a white underbelly. Golden-mantled ground squirrels lack the obvious white and brown facial stripes that chipmunk species have. The golden-mantled ground squirrel weighs 6–10 ounces with a length of 9–12 inches. The IUCN considers this a species of least concern. Its distribution often overlaps with

conservation areas, helping to stabilize their population numbers. Nonetheless, they face the threat of habitat loss, harassment, and the introduction of exotic species that carry foreign diseases and add extra competition for resources.

Observations: Golden-mantled ground squirrels are common to see scurrying across trails and roads within Cedar Breaks National Monument from May–September.

Diet

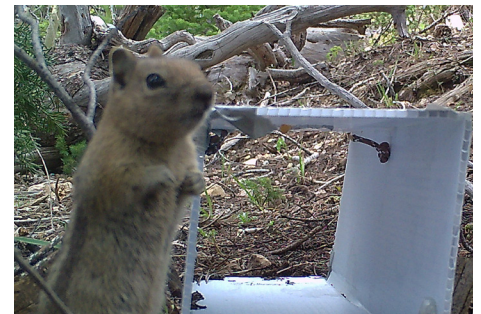
Golden-mantled ground squirrels have an omnivorous diet of seeds, nuts, berries, bird eggs, fungi, and insects. They are often seen carrying vegetation clippings in their cheek pouches to be stored for later consumption in the safety of their dens. Golden-mantled ground squirrels are notorious for their foraging behavior around campgrounds and picnic areas, often begging for human food. Their high consumption of food is geared toward building up fat reserves that will help this species survive its long months of winter hibernation in an underground burrow.

Habitat

This species is commonly seen throughout the mountains of the West in meadows, sagebrush flats, and rocky slopes. This species is found in multiple habitat types within Cedar Breaks National Monument. They frequent fir forests, ponderosa pine forests, and savannas.

Fun Facts

Golden-mantled ground squirrels will spend half of their life in hibernation, dedicating only 4–6 months to building up their fat stores before returning to dormancy underground.



Gray Fox (*Urocyon cinereoargenteus*)



The gray fox has a grizzled gray top coat with reddish-orange fur along the sides and back of the head. Its chest is red with a large white spot that extends to the bottom muzzle. Its narrow face is topped with prominently large ears. The gray fox can be commonly mistaken with the red fox (*Vulpes vulpes*), but the two are distinguished by the smaller stature of the gray fox (about 15 inches). More so, the gray fox lacks the easily identifiable white-tipped tail that red foxes exhibit. This species has few enemies in the wildlife community, and largely faces the threat of rabies and distemper. Throughout its range, the gray

fox is involved in negative human-wildlife conflicts with vehicle collisions, shooting, and trapping. Nonetheless, the IUCN lists the gray fox as a species of least concern with stable population numbers.

Observations: In comparison to the red fox, this species is uncommon to see at the Monument due to its low population sizes and elusive behavior. However, this species was seen at the Monument's Alpine Pond Trail during the month of July.

Diet

This omnivore actively selects for cottontail, insects, birds, and other small mammals. Their plant diet consists of grass, blackberries, corn, apples, and nuts. During the late summer and early autumn seasons, grasshoppers and crickets are a vital component of their foraging, providing key nutrients as they prepare for the winter season.

Habitat

The gray fox often selects for spruce fir forest and woodland, thriving in areas with a dense cover of trees. However, this species can be found in a variety of habitats that often overlap with the red fox. This species is found throughout most of the southern and eastern United States, extending into southern Utah.

Fun Facts

The gray fox is the only American canid that has the ability to climb. This behavior aids in its capability to forage in trees and escape from predators.



Least Weasel (*Mustela nivalis*)



The least weasel, the smallest of the weasel family, has a slender length of about 7 inches long. This species is also famous for its short tail that is only one-fifth the size of its combined body and head length. In the winter, its solid white coat blends well with the snowy background. As the weather warms, its coat will return to a dark brown coloring with a white underbelly. The least weasel is sometimes confused with long-tailed weasels (*Mustela frenata*) and ermines (*Mustela erminea*); however, its short tail lacks a black tip. The IUCN categorizes least weasels as a species of least concern for conservation agencies.

Even with a stable population size, these species are seldom seen. Their small stature and quick movement allow them to remain elusive, even though they are active day and night throughout all seasons.

Observations: This species is rare to see within this region, but was observed in the Monument during 2018.

Diet

The least weasel is the smallest living carnivore, and its ability to run up to 6 mph helps it chase down its main prey: meadow voles. It also forages on mice, birds, eggs, and insects. Its small size and rapid metabolism mean it has to eat about half its body weight every day to survive.

Habitat

The least weasel lives in landscapes of open areas like meadows and marshes. Its distribution ranges from the Northern Canadian Arctic to the Midwestern United States. Even though this species' range excludes the Intermountain West and has not been known to habituate in Utah, a 2018 remote trail camera survey detected this species (see photo) in Cedar Breaks National Monument.

Fun Facts

During a 2018 remote trail camera survey in Cedar Breaks National Monument, photos believed to be the least weasel were captured. The photos are still under review to solidify the identification because this would be the first time this species has ever been seen in this region.



Long-tailed Weasel (*Mustela frenata*)



Long-tailed weasels are slender in size with a length that ranges from 12-15 inches. Males weigh almost double the size of females at 12 ounces when full grown. Their tail is black tipped in all seasons and is almost half as long as the animal's body length. During the summer months, and all year-round in the southern states, their top coat is brown in color while their underparts, neck, and throat are a yellow color. In colder climates, their entire coat turns white to blend in with their snowy environment. In northern latitudes, long-tailed weasels are sometimes confused with stoats (also called ermines,

Mustela erminea); however, stoats are shorter in length and tail size, and their coat color is a solid brown on top with a white belly during the summer season. Long-tailed weasels are often referred to as ermines in other parts of the world.

Observations: The long-tailed weasel has only been seen in Cedar Breaks National Monument during the months of May and July due to its elusive nature and small size.

Diet

The most widespread carnivore in the Western Hemisphere, long-tailed weasels eat voles, rodents, and small rabbits. They are active during the day and night so that they have a greater chance of obtaining food to survive long winter months. The long-tailed weasel does have the ability to go on long-winded killing sprees, caching extra meat for times when food is less available.

Habitat

Long-tailed weasels are distributed across most of the United States, southern Canada, and northern Mexico. Usually uncommon to see, they will select for a variety of habitats that are close to water sources. Within Cedar Breaks National Monument, this species was seen in the habitat type of the spruce fir forest.



Fun Facts

This skillful hunter targets prey both underground and below the snow. This gives the weasel a greater chance of obtaining food due to little competition from above-ground and avian predators.



Mountain Cottontail (*Sylvilagus nuttalli*)



Mountain cottontails reach an average weight of about 1.5–2 pounds. They have a dull, brown coat with hues of red on their forelegs and the nape of their neck, and a noticeable puffy white tail. The belly fur is white, and the feet are covered heavily in long hair. Because mountain cottontails have a range that overlaps with the desert cottontail, they are often confused. To distinguish between the two, evaluate the features of the ears. If they are smaller in size, rounder, and are densely furred inside, then it is most likely the mountain cottontail. Another way to differentiate is based upon the location of the species; higher

elevations are usually associated with the mountain cottontail. Despite its decreasing population numbers throughout its distribution range, the mountain cottontail is categorized as a species of least concern by the IUCN. The mountain cottontail faces a major threat from the invasive eastern cottontail. Due to their similarity in food and habitat preferences, they are in competition wherever they share habitat.

Observations: Within Cedar Breaks National Monument, mountain cottontails are common and have been observed from June–August.

Diet

Mountain cottontails are herbivores, eating grasses, sagebrush, and juniper berries. In the scarcity of wintertime vegetation, they have been found to eat bark and twigs to survive.

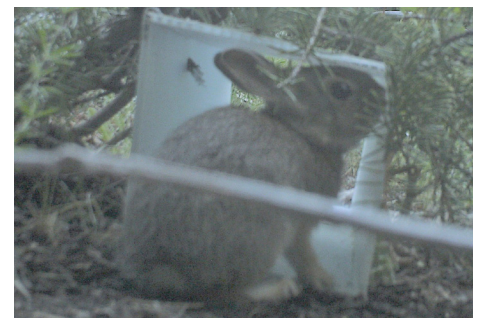


Habitat

Mountain cottontails will occupy burrows created by other species or they will inhabit available shelter in vegetation; they do not create their own burrows. Since this species favors sagebrush deserts as well as wooded areas, it is commonly seen throughout most of the Intermountain West. In Utah, mountain cottontails live throughout the state except for the Mojave Desert in the southwestern corner of the state. The mountain cottontail has been spotted in three different vegetation types in Cedar Breaks National Monument: aspen-mixed conifer forests, ponderosa pine forests, and riparian woodlands.

Fun Facts

Rabbits and hares inhabit every continent except Antarctica. They were introduced to Australia and most of South America.



Mountain Lion (*Puma concolor*)



An adult cougar has a tawny brown coat, and stands at a shoulder height of about 2–3 feet tall with a weight of about 75–275 pounds. Short, round ears frame large amber eyes lined with black on the animal's small head. Thick, sturdy legs aid in the ability to jump up to 20 feet when pouncing on prey, and its long tail tipped black provides ample balance when navigating rough terrain and when swimming. The IUCN lists mountain lions as a species of least concern, however a variety of natural and human threats have caused a decrease in their overall population numbers. Throughout their range, human-made

barriers of roads and residential areas limit migration, excluding gene flow and favoring inbreeding which reduces the genetic strength of populations.

Observations: Mountain lions are seldom seen due to their elusive behavior, but they have been observed during the months of June and August within Cedar Breaks National Monument.

Diet

The mountain lion's main hunting style is to locate prey items at either dawn or dusk and then stalk them for about 30 meters before pouncing. There is a preference for hoofed animals, favoring deer and elk as primary food sources. Mountain lions are opportunistic hunters, and will even hunt smaller animals such as beavers, rodents, birds, lizards, and even grasshoppers.

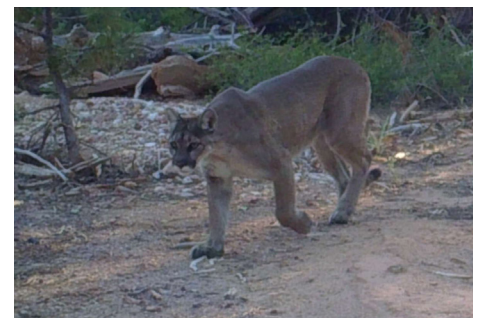
Habitat

The mountain lion is the most widespread land mammal in the Western Hemisphere with a range that extends from northern Canada to South America. Mountain lions are found throughout Utah, favoring dense cover and rocky terrain where they stalk prey. At Cedar Breaks National Monument, they have been detected in aspen-mixed conifer forests and fir forests.



Fun Facts

Wild cats are known to avoid water; however, mountain lions have the ability to swim and often do in the Florida Everglades, when hunting for prey or while patrolling their territory.



Mule Deer (*Odocoileus hemionus*)



Mule deer are about 3–4 feet tall at their shoulders. The young are born brown with white spots that will fade with age. A full-grown adult has a rusty-red color fur in the summer and a brownish-gray fur in the winter. The belly, inside of legs, and rump are all white. Its tail is white with a black tip. The face and throat have a white hue that frame a large black nose. There is often a dark patch, especially with males, on the forehead as well as a long dark stripe that extends down the back. This species is often confused with white-tailed deer (*Odocoileus virginianus*). However, mule deer antlers are dichotomous, meaning

they split into two main forks before branching off into smaller forks; there can be up to 8–10 points on an antler. In comparison, white-tailed deer only have one main beam on their antler on which the branches rise vertically.

Observations: An abundant population and overall large size make this species common to see throughout the park from May–October.

Diet

This species is an herbivore that prefers easily digestible foods such as young foliage, shoots, sprouting herbs and grasses, fruit, lichens, and mushrooms.



Habitat

The range of mule deer stretches from western North America to central America with a presence throughout the entirety of Utah, occurring in both deserts and forests. This species also has the ability to survive in urban settings, living off the vegetation and irrigation systems in human yards. Mule deer are one of the most common species to see in Cedar Breaks National Monument, and are mainly located in aspen-mixed conifer forests and spruce fir forests.

Fun Facts

Mule deer can run up to 40 mph.



North American Porcupine (*Erethizon dorsatum*)



Porcupines are the second-largest rodent in North America with stout legs supporting a weight of 8–40 pounds. A humped back is covered with long guard hairs on the front of its body while sharp quills armor the rump and tail. The hair color varies from black to a dark brown frosted with gray spots in the western states, while in eastern North America the color is more yellow. Porcupines are a species of least concern for conservationists. They are often hunted and trapped throughout their range because of their ability to damage property, crops, trees, and car tires.

Observations: This nocturnal species is seen in Cedar Breaks National Monument from May–August.

Diet

Porcupines often eat berries, seeds, nuts, and roots. With the ability to climb high into trees, porcupines also eat leaves, bark, and coniferous needles. This species is drawn to the taste of salt and will chew on wooden handles of tools, gloves, or wheelbarrows coated with human sweat. This species of porcupine is very near-sighted and relies heavily on its senses of touch, hearing, and smell to locate food and to detect predators.

Habitat

American porcupines are found all across North America except for the southeastern states of the United States and southwest California. With suitable habitat found throughout all of Utah, this porcupine is found in most forests in the state. The porcupine has been seen in six different habitat types in Cedar Breaks National Monument. The two main types with the greatest detection rates are aspen-mixed conifer forest and spruce fir forest.

Fun Facts

The sharp quills found on the rump and tail are actually modified hairs. They are loosely fastened to the muscles just underneath the skin so that the quills detach easily when the porcupine needs to defend itself. However, when threatened, a porcupine will opt for retreating up a tree instead of going on the attack.



Northern Flying Squirrel (*Glaucomys sabrinus*)



Northern flying squirrels are small (3–5 ounces), nocturnal squirrels with the ability to glide from tree to tree. Tall, round ears stick out from the top of its gray-colored head. Flying squirrels are mostly active at night, and their large eyes help the animal see better in the dark. Between the hind legs and forelegs is a stretch of skin, acting as a sail during its gliding movements. A furry, tan coat, with dark brown base, keep this animal warm during the winter months. The bushy, brown tail helps the species with balance as well as acting as a rudder during the squirrel's gliding movements between trees.

Observations: Though very uncommon to observe, the northern flying squirrel was detected during the month of August in Cedar Breaks National Monument.

Diet

Northern flying squirrels eat nuts, berries, sap, and bird's eggs. In the winter, flying squirrels will nest in tree cavities or atop branches, feeding on the lichen- and fungi-covered bark during the cold months when other vegetation supply is difficult to find.

Habitat

Northern flying squirrels are found mainly in Canada, although their range extends down into the American states of the northeast and the Pacific. Often selecting for coniferous forests, this species lives in the northeastern corner of Utah as well as sporadic southern locations like Cedar Breaks National Monument.

Fun Facts

These squirrels don't actually fly, but glide from tree to tree. Along each side of the body there is a loose flap of skin, called the patagium, which extends from their front to hind legs. The squirrel will assume a spread-eagle position when gliding in the air, using the tail as a rudder to precisely land in an area more than 200 feet away.



Red Fox (*Vulpes vulpes*)



Red foxes usually have a vivid red top coat with white underparts, chin, and throat. The tail is large and bushy, tipped with white. The lower legs, backs of the pointy ears, and feet are all colored black. The red fox occurs in three color variations, but in all color forms, the animal has a white-tipped tail. This medium-sized mammal stands at a shoulder height just over 1 foot tall and weighs 7–16 pounds. Red foxes are sometimes confused with the common gray fox (*Urocyon cinereoargenteus*). However, the common gray fox has a mainly gray coat with reddish hue on the back; the tail is also not tipped white.

Observations: The red fox is a common species to observe throughout the Monument from May–August.

Diet

Red foxes have a very eclectic diet, foraging on any available food item. They will eat mainly vegetation in the summer: berries, acorns, grapes, and grasses. In the winter, they will eat birds, mice, rabbits, squirrels, and marmots. Making up about one-fourth of the diet are invertebrates like grasshoppers, caterpillars, crickets, and beetles.

Habitat

The red fox's range is throughout most of Canada and the United States, with the exception of northwest British Columbia and southern Florida. In Utah, the red fox lives throughout the state. The species thrives in urban settings, but often selects for areas mixed with open fields and wooded or brushy lands. In Cedar Breaks National Monument, the red fox was commonly seen in spruce fir forest and aspen-mixed conifer forest.

Fun Facts

Red foxes are territorial and often place their scat on prominent objects, such as rocks, fence posts, or logs, to mark the borders of their home range.



Red Squirrel (*Tamiasciurus hudsonicus*)



This species of squirrel is small in size with a length of 11–14 inches and a weight of 5–9 ounces. It has a rusty-brown top coat with white underparts. The head has small, round ears and the eyes are ringed in white. Red squirrels have a large, bushy red tail that is speckled white, and in the winter, is outlined with large black bands edged in white. Along the sides of the red squirrel's body is a blackish line that extends from the forearms around the back legs.

Observations: A common species for the Monument, the red squirrel is seen from May–October along trails or foraging among spruce and

fir trees.

Diet

This opportunistic feeder has a diet that includes tree sap, beechnuts, insects, acorns, or bird's eggs. In the summer they will collect unripe cones from conifers and store them in mounds to help them survive winter. They have also been known to eat the amanita mushroom, a deadly fungus to humans. (Don't worry, this mushroom isn't found in Utah!)



Habitat

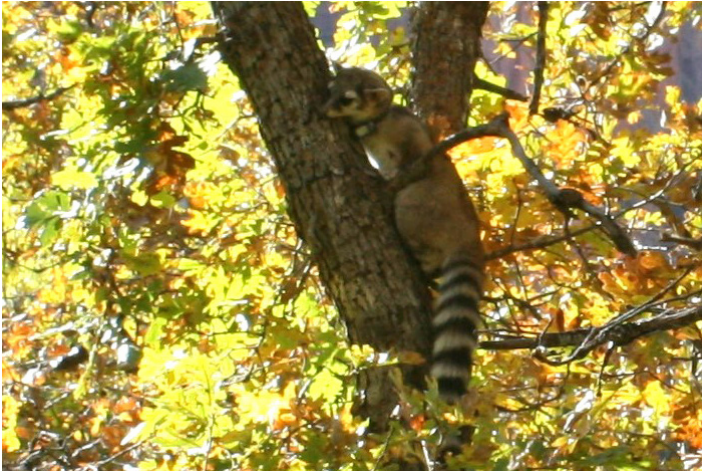
The red squirrel is found across most of Canada, excluding southern Alberta. They are also found throughout the Intermountain West, except for the western most regions. Favoring evergreen forests, they live in pine, spruce, fir, hemlock, or mixed conifer forests. There are four habitat types where the red squirrel was highly detected in the Monument. The main habitat type was aspen-mixed conifer forest; they were also found in fir forests, spruce fir forests, and riparian woodlands.

Fun Facts

Mushrooms are an important part of the red squirrel's diet. It is common to see this species hang mushrooms to dry out in the sun and then store them in mounds for later consumption.



Ringtail (*Bassariscus astutus*)



This species has a catlike appearance; sometimes it is called the “Ring-tailed Cat.” It has large ears as well as big, round eyes lined with white fur. The ringtail has a distinct, white tail striped with 9–16 black bands and a black tip. The top coat is colored a yellowish gray while the underparts are white. With partially retractable claws, the paw prints often resemble those of a housecat. This species weighs anywhere from 1.5–2.5 pounds, and are relatively small in size, about 24–32 inches in length. The ringtail is listed as a species of least concern; however, the overall population trend is unknown. Despite little scientific data

on population numbers, it is legal to trap these animals for fur in Arizona, Texas, New Mexico, and Colorado. However, ringtail pelts are of low quality, very thin, and a nondurable color that often fades.

Observations: Their elusive and nocturnal behavior make this species uncommon to see. They were detected during the month of August within Cedar Breaks National Monument.

Diet

This omnivore often forages on small birds, eggs, reptiles, insects, fruits, and acorns. They eat insects such as scorpions, centipedes, crickets, grasshoppers, and spiders. Ringtails have also been known to forage on small animals like rats, mice, and squirrels.



Habitat

Ringtails are distributed throughout most of the southwest, often found in wooded and rocky areas. Despite being a common species in this region, they are seldom seen because of their nocturnal behavior. Ringtails have also been found in urban areas, like attics or buildings, due to their ability to become accustomed to humans. They sleep during the day in tree hollows, dens in rock crevices, or in burrows already dug out by other animals. At Cedar Breaks National Monument, this species was seen in spruce fir forest habitat.

Fun Facts

The ringtail takes on many names throughout the southwest. The name “Miner’s Cat” comes from the time when ringtails were used in frontier mines to control the rodent population. “Cacomistle” is derived from the language of the Nahuatl Indians in Mexico, meaning “half mountain lion.” This species is also called the “Civet Cat,” named after the African species *Civettictis civetta*, because both species will emit a smelly fluid from their anal glands when threatened or fighting.

Rock Squirrel (*Osteopermophilus variegatus*)



Rock squirrels are the largest squirrels of this region with a length of 18–20 inches and a weight of 16–31 ounces. They have a slim body with a gray and orangey-tan mottled coat. The belly, throat, and legs are a pale-yellow color. Rock squirrels have a distinctly large, bushy tail colored the same as their top coat and edged in white. The tail has a varying pattern of buff and brown throughout. They have large, round ears and eyes lined with white fur.

Observations: This species is mainly observed from May–August at the western portion of the Monument along the Ashdown Gorge Wilderness.

Diet

Rock squirrels commonly eat juniper berries and mesquite seeds. This omnivore may also eat cactus fruits, insects, and occasionally, smaller animals.



Habitat

Rock squirrels are very common throughout their southwestern range of Utah, Arizona, and New Mexico, as well as some areas of Texas and Colorado. Rock squirrels live throughout most of Utah in areas with canyons, cliffs, and rocky deserts. In Cedar Breaks National Monument, rock squirrels have only been seen in two vegetation types: aspen-mixed conifer forest and fir forests.

Fun Facts

The calls rock squirrels make to communicate with one another often have the same tone and sound as the northern pygmy owl (*Glaucidium gnoma*).

Striped Skunk (*Mephitis mephitis*)



Striped skunks are quickly recognized by their furry black tail with a white stripe, although the white pattern varies depending on where the skunk lives. Usually skunks have black fur with two white stripes that stretch along the back and come together on the head. Thin white lines of fur cover the face and the tail has tufts of white fur along it. Striped skunks weigh 3–11 pounds with a total length of 23–31 inches. According to the IUCN, the striped skunk is listed as a species of least concern with an overall stable population. However, humans are responsible for the deaths of half of all skunks born each year; less than 10%

of skunks live more than three years because humans shoot, poison, or otherwise kill them, or they die in vehicle collisions.

Observations: This is an uncommon species at the Monument due to their nocturnal nature, but striped skunks have been observed during the months of June and July.

Diet

Skunks are omnivores, eating mice, frogs, eggs, crayfish, fruit, and insects as their main prey items. The striped skunk has also been known to threaten other animals in competition for the same food source by raising their tail—the behavior that occurs before a noxious spray. This species will even scavenge on roadkill along highways. They do not have many predators, except owls and raptors not repelled by their noxious odor.

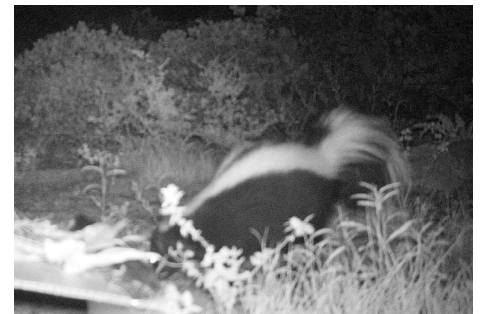


Habitat

Striped skunks occur throughout most of the United States as well as southern Canada and northern Mexico. It is the most common species of skunk, often habituated in suburban and urban areas, but also abundant along forest and field edges. Striped skunks live across almost all of Utah. There have been low detection rates of striped skunks in Cedar Breaks National Monument, seen only in two vegetation types: ponderosa pine forest and fir forests.

Fun Facts

When skunks spray their musk, they hit their target with fair accuracy up to 10–15 feet. The smell of their musk is detected up to 1 km downwind by the human nose. Once the odor is removed from their musk, it makes an effective perfume base due to its clinging characteristics.



Uinta Chipmunk (*Neotamias umbrinus*)



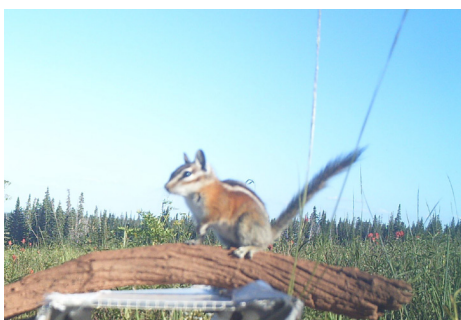
The medium-sized Uinta chipmunk has an overall length of 9 inches and an average weight of 2 ounces. Its fur is light brown to rust colored with white underparts and white stripes that extend across the face. The back coat is an alternating pattern of white and three dark lines. The brown tail is bushy and tipped black, often held horizontal while running. People often confuse Uintah and cliff chipmunks (*Tamias dorsalis*); however, cliff chipmunks have a more dull, brown coloration with less distinct stripes.

Observations: This is a common species to observe foraging along trails and among the base

of trees at Cedar Breaks National Monument from May–October.

Diet

Uinta chipmunks forage mainly on seeds, fruits, and berries. Comparatively, the Uinta chipmunk spends more time in trees than other chipmunk species, often nesting, foraging, and sleeping in trees. In the winter, this species will hibernate in underground burrows where it cached food during the summer months.



Habitat

Uintah chipmunks live in eight different states of the West: Montana, Wyoming, Colorado, Utah, Nevada, Idaho, and Arizona. However, their range is broken up into fragments, with only a small distribution within each state. In Utah, this species lives along the Wasatch Range extending north to the Bear River Range. In Cedar Breaks National Monument, the Uinta chipmunk is seen throughout the woodlands and forests.

Fun Facts

This chipmunk is considered a tree-dwelling species and is often found in the same areas as the golden-mantled ground squirrel.



Western Spotted Skunk (*Spilogale gracilis*)



The western spotted skunk is medium-sized with a length of 13–23 inches and wide-ranging weight of 7–32 ounces. They have a glossy black base coat, as well as pink flashed nose and paws. On their back is a complicated pattern of white spots and stripes. There is a triangular white patch on their forehead, and the tail is also mainly white-colored and bushy. Even though the IUCN has categorized this species to be of least concern, its overall population numbers are decreasing. This decline is a result of human activity. This species commonly falls victim to roadkill as well as shooting, poisoning, and trapping.

Observations: The spotted skunk is an uncommon species to observe due to its nocturnal nature; however, it has been spotted in September at Cedar Breaks National Monument.

Diet

The western spotted skunk hunts for its prey at night, foraging on small reptiles, birds, mice, dead animals, insects, and occasionally a variety of fruits and berries.

Habitat

The spotted skunk has a widespread distribution throughout most of the western United States, with the exception of northern Montana and Idaho. Its habitat ranges from farmland to open forest to brushy country throughout Utah. However, this animal is not commonly seen because of its nocturnal behavior. At the Monument, this species was detected in fir forests.

Fun Facts

Western spotted skunks can run at a considerable speed, and its glossy black coat contrasting with the white gives the appearance that its fur pattern is flashing.

Yellow-bellied Marmot (*Marmota flaviventris*)



The yellow-bellied marmot is heavy-bodied with an average weight of 4–12 pounds. Their coat is a yellowish-brown color with a yellow belly. Between the eyes is a white spot that stops just short of their small nose. Below the ears to the shoulders is a buff to yellowish color patch. The IUCN conservation status of yellow-bellied marmots is of least concern with overall stable population numbers. Currently, there are no major threats to this species.

Observations: Yellow-bellied marmots are a common species to see during May–July at the Monument, often observed foraging in meadows as they build up their fat reserves for winter.

Diet

Yellow-bellied marmots feed entirely on green vegetation of any kind, but they prefer green herbs over grasses. During the fall months, this species will put on a layer of fat to sustain itself through its long hibernation from about August to March.



Habitat

Yellow-bellied marmots are found throughout most of the northern and central portion of the Intermountain West. In Utah, they live in the northern and eastern portion of the state; however, they are found in a strip of mountain range that extends to St. George. This species prefers mountains abundant in rocks or boulders to serve as their dens, and they are commonly referred to as “rockchucks.” In Cedar Breaks National Monument, marmots are commonly found in barren areas, but they may also be seen in spruce fir forests.

Fun Facts

This fact is not so much fun. The yellow-bellied marmot is the host for the tick species that carries Rocky Mountain spotted fever, a bacterial disease treated with antibiotics.



Reference

Whitaker, J. O. (1996). National Audubon Society field guide to North American mammals (2nd ed.). Knopf: Distributed by Random House.

Photo Credits

The authors took the photos included in this guide, with exceptions noted below.

American badger

U.S. Fish and Wildlife Service Mountain-Prairie (n.d.). What are you looking at? [digital image]. Retrieved from <https://www.flickr.com/photos/usfwsmtnpairie/48480462057/>

Golden-mantled ground squirrel

Hollett, Jeff (Photographer). (2017, December 24). Ground squirrel at Crater Lake NP in OR [digital image]. Retrieved from <https://www.flickr.com/photos/50503887@N08/38388337855>.

Gray fox

Rahn, Stephen. (Photographer). (2016, September 21). Gray Fox [digital image]. Retrieved from <https://www.flickr.com/photos/srahn/29840263415/>

Least weasel

Bering Land Bridge National Reserve (Photographer). (2006, August 27). Least weasel [digital image]. Retrieved from https://www.flickr.com/photos/bering_land_bridge/3766818218/

Long-tailed weasel

Olds, Melanie (Photographer). (2013, May 10). Long-tailed weasel [digital image]. Retrieved from <https://www.flickr.com/photos/usfwsmtnpairie/8748517826/>

Mountain cottontail

Koerner, Tom (Photographer). (2015, December 2). Mountain cottontail on Seedskaadee NWR [digital image]. Retrieved from <https://www.flickr.com/photos/usfwsmtnpairie/23205818133/>

North American porcupine

Koerner, Tom (Photographer). (2015, January 4). Porcupine Seedskaadee NWR [digital image]. Retrieved from <https://www.flickr.com/photos/usfwsmtnpairie/16013698797/>

Northern flying squirrel

Schmidt, J. (Photographer). (1977). Northern flying squirrel [digital image, northern flying squirrel]. Retrieved from <https://www.nps.gov/features/yell/slidefile/mammals/flyingsquirrel/Page.htm>.

Ringtail

Wyatt, David (Photographer). (2005, November 6). Audrey [digital image, ringtail]. Retrieved from <https://bassariscus.me/ringtail-gallery/#jp-carousel-1639>.

Striped skunk

Penner, Keith (Photographer). (2014, March 3). Striped skunks and kits on the loose [digital image]. Retrieved from <https://www.flickr.com/photos/usfwsmtnpairie/12910473183/>

Western spotted skunk

Frederick Forestry Board (Photographer). (2020, June 16). Western spotted skunk. [digital image]. Retrieved from <https://www.flickr.com/photos/188126226@N02/50012889143/>

In its programs and activities, including in admissions and employment, Utah State University does not discriminate or tolerate discrimination, including harassment, based on race, color, religion, sex, national origin, age, genetic information, sexual orientation, gender identity or expression, disability, status as a protected veteran, or any other status protected by University policy, Title IX, or any other federal, state, or local law. The following individuals have been designated to handle inquiries regarding the application of Title IX and its implementing regulations and/or USU's non-discrimination policies: Executive Director of the Office of Equity, Alison Adams-Perlac, alison.adams-perlac@usu.edu, Title IX Coordinator, Hilary Renshaw, hilary.renshaw@usu.edu, Old Main Rm. 161, 435-797-1266. For further information regarding non-discrimination, please visit equity.usu.edu, or contact: U.S. Department of Education, Office of Assistant Secretary for Civil Rights, 800-421-3481, ocr@ed.gov or U.S. Department of Education, Denver Regional Office, 303-844-5695 ocr.denver@ed.gov. Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Kenneth L. White, Vice President for Extension and Agriculture, Utah State University. (07/2020)