

**YELLOWSTONE AND GRAND TETON**

*wild life*





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## YELLOWSTONE AND GRAND TETON NATIONAL PARKS

by

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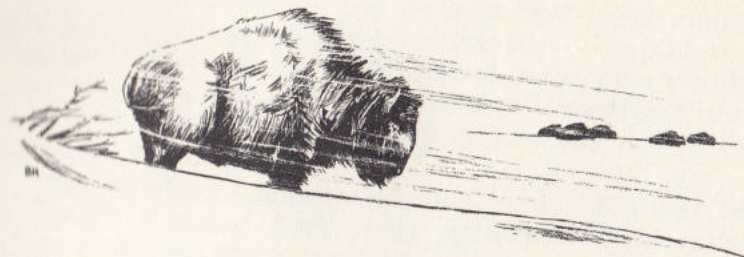
and

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Cover photo of Black Bears by William S. Keller



## INTRODUCTION

Perhaps you thought of mountains and geysers when you first visited the high country of northwestern Wyoming. This should be. The Teton Mountains and Yellowstone Geysers are marvelously beautiful and intriguing. Yet, as you drive the park roadways along the Teton Range and Yellowstone Plateau, you will quickly realize another attribute of these two National Parks. At the first sight of a bull moose, trumpeter swan, bison herd, or soaring pelicans, you may realize the other element of the parks — just as marvelous and intriguing as the giant geysers and towering mountains. It is, of course, their animal life. Nowhere else can you see such a complete assemblage of native North American wildlife in such a spacious natural environment.

This brief booklet is about a part of that superb wildlife. Though it is mostly a picture booklet, the appendix lists all vertebrate animals (except birds) that have been recorded here. Use these lists with the standard animal field guides to identify species you see. The text suggests likely locations and habitats to find the more common animals.

But as you visit these places searching out wildlife, remember — the largest portion of every National Park is a wild natural landscape where humans intrude into an environment belonging to the native animals. Of these, a few are quite formidable. A cow moose with calf, bull elk in autumn, and buffalo or bear at any season, can effectively defend their home territory or their young.





Pika

## THE NATURAL ENVIRONMENT

At one time or another, while wandering in the outdoors, almost everyone has noticed that some animals are best found in specific circumstances — a pika on a mountain rock pile, or a red squirrel in the pine woods—and that they are seldom encountered elsewhere. Animals are mobile. Yet, they seem inescapably tied to certain environments.

The physical environments of Grand Teton and Yellowstone National Parks vary greatly with elevation, climate, temperature, sunlight, and many other factors. Elevations, for example, range from less than 5,200 feet (near the north boundary of Yellowstone) to higher than 13,700 feet (summit of Grand Teton). Temperatures vary from warm niches in geyser basins to the cold belts at Jackson Lake and West Yellowstone where lows in the minus 60's have been recorded. It is obvious that the plant life, and its dependent animal life, varies accordingly. Several extensive plant groups are prominent in the two parks:

### Grassland-Sagebrush

A century ago, large areas — Hayden Valley, the floor of Jackson Hole, Gardner and Lamar River Valleys — were covered with nutritious stands of prairie grasses. Bluebunch wheatgrass, bluegrass, giant wildrye and needlegrass were dominant in a grassland community where antelope, buffalo, and elk wintered, and where wolves and lions (and Indians) preyed on these big game herds. During the last half century, overgrazing has modified these grasslands. Nutritious plant varieties grow in lesser amounts; the land can support fewer big game animals. These areas are not only vital to welfare of elk and buffalo in winter, but also to antelope, jackrabbits, uinta ground squirrels, and badgers the year-round. For the past several years the numbers of elk and buffalo have been deliberately reduced to preserve and restore the important grassland habitats.

### Coniferous Forests

Three general conifer forests occur in northwest Wyoming. Two of these, the douglas fir forest and the spruce-fir forest, are stable over long periods. Douglas fir dominates the drier (and usually lower) locations while spruce-pine fir persists on wetter (and usually higher)





Generalized vegetation zones in Yellowstone and Grand Teton Parks.

mountains. These forests remain generation after generation if left undisturbed. However, over much of this region forest fires temporarily destroy the stands. After a fire, lodgepole pine or shrubs and grass invade the burned area. Invading lodgepole pine forms a dense, even-age forest.

At present, lodgepole is the most extensive forest type in this region — owing its existence to a period of widespread fires near the turn of the century.

The pattern of fire and burnt-over land is beneficial to many animals. Unbroken stands of spruce and fir are not places of abundant wildlife, though occasionally many wide ranging species — elk, moose, buffalo, and deer — move in and out of the conifer zones. The only mammals found exclusively in conifers are snowshoe hare, lynx, red squirrel, and marten.

#### Aspen Forest

Along a broad zone between the upper edge of the grassland and lower edge of the conifers are pockets of aspen. Here, these seem to be relict stands from times when climates were slightly wetter. Normally, aspen is a tree which behaves like lodgepole pine — aggressively invading burnt-over areas, often by seed windblown many miles. But here we know of no instance where aspen seeds in this manner. In all groves of northwestern Wyoming the trees are reproducing only by shoots from existing underground roots. This circumstance and the browsing by elk, buffalo, deer, and moose makes the future of our aspen stands precarious. Aspen groves feed and shelter many animals. Birds nest in hollows in the trunks, and the bark is a principal food of beaver — who

by flooding bottomlands, create an unexcelled food supply for a host of other animals.

#### Alpine Meadow

Above 9,500 to 10,000 feet elevation, conditions become intolerable for forests. Engelmann spruce and alpine fir grow above this altitude — but as dwarfed, ground-hugging shrubs. Sedges, grasses, and heaths are prominent plants in this alpine zone, providing food for the few species (pika, phenacomys, marmot and bighorn) which live here.

#### Upland Herb Meadow

On many level to south-facing high plateaus and mountain ridges from 8,000 to 10,500 feet are subalpine meadows of lush flowers, grasses and sedges. These meadows appear to be above treeline, except that spruce and fir are found in and above this zone and the flowers are much too luxuriant to be called true alpine tundra. These places are warmer (facing more to the sun) than the true spruce-fir zones, and as the soils here mature, the mixed herbs and grasses invade and choke out the conifers. The great elk herds summer on these mountain meadows.

#### Cottonwood-Willow

Along stream margins at lower elevations, cottonwood and willow regularly occur. In new stream meanders and in beaver pond areas willow and sedges may grow over extensive valley bottoms. Willows and cottonwoods persist as long as the soils remain very wet, and the willow savannahs are particularly fine habitats for moose. Among the smaller mammals, meadow voles, water shrews, and mink live in these bottoms.



## THE MAMMALS

Sixty species of mammals occur (or did occur) in Grand Teton and Yellowstone Parks. Some of these are conspicuous, seen by almost everyone who visits the parks. Others are seldom observed. A few are so rare and secretive we scarcely know if they still survive here. But all are an irreplaceable part of the natural scene in these National Parks.

### The Shrews

The shrews are among the most primitive of our mammals. Outwardly, they resemble mice — small, with greyish fur, short feet, and long tails. But they are totally different and are completely unrelated. In contrast to mice, all shrews have almost invisible ears, long pointed snouts, and pinpoint eyes. They are the world's tiniest mammals (our rare **dwarf shrew** may weigh scarcely a tenth of an ounce). Despite their size they are the most fierce and active of the park's predators. Shrews hunt mainly insects, but are capable of attacking and killing even mice more than twice their size. The **water shrew** is our only species easily identified. It is larger than the others (5½ to 6 inches long including its tail) and its hind feet have a distinctive fringe of stiff hairs which are an aid in swimming. The other three species (the **dwarf**, **masked** or **common**, and **vagrant** shrews) can be surely identified only by a careful study of their tooth structure. Shrews are found in greatest abundance in grassy stream-side habitats, from our lowest elevations to higher than 10,000 feet.

### The Bats

Seven species of bats have been recorded in the Yellowstone-Teton region. Others probably are here, as we are in the range of at least three more species, but the bats of our mountain uplands have been little studied. Like the shrews, bats might be termed living fossils as they are also a very ancient order of mammals. Nonetheless their age-old technique of "flying by instrument"—emitting ultrasonic squeaks to locate objects from echoes striking their specialized ears — seems weirdly ultramodern, and it is such an effective means of nocturnal hunting that man has borrowed the idea for the echo location device we know as "sonar." A defense to the bat's "sonar" has evolved in at least a few species of



Masked Shrew

Photo: Willard E. Dilley

Little Brown Myotis

Photo: Willard E. Dilley



Black Bear

Photo: Wilford L. Miller





moths. The moths "tune in" on the bat beeps, and as the sound approaches they take evasive action — dashing, irregular flight, or abrupt power dives to the ground. The sounds are too high pitched for our ears, so most of us are never aware of the deadly warfare waged each summer evening, with one party gradually perfecting a science of attack, the other a science of defense.

The small *myotis* (our three species are the **little brown**, **long-legged**, and **long-eared**) are difficult to identify. All are small and brown, sparsely covered with fur, and have plain noses. Usually only a skilled mammalogist can tell them apart. The others found here are larger and more heavily furred. These, the **big brown**, **silver-haired**, **big-eared**, and the **hoary bats** are easier to distinguish, but none are well known from this mountain area.

### The Bears

Bears are more numerous in the high central plateau country of the Yellowstone than anywhere else in the continental United States. Both **grizzly** and **black bears** are found here in abundance, though most often it is the black, or one of his color variations, that you see. Their color variations are many, from light tawny or yellowish to cinnamon, brown, and black — with often two colors occurring in the same bear family. The grizzly, too, is found in several shades of these same colors, though with often a more grayish tinge to its fur. Because of their variable color, the two species can be recognized only by their size and shape. The grizzly is largest (about 3 to 3½ feet high) with a pronounced hump at the shoulders, very long front claws, and a prominent forehead (giving his facial profile a dishd-in appearance). Usually grizzlies stay clear of areas frequented by man, and they are seldom seen. In one respect this is fortunate, for the grizzly is the most formidable mammal in North America.

The black bear is regularly seen along the park's roadways. In spite of its many color varieties, its brownish snout, smaller size (2 to 3 feet at the shoulder), lack of humped back, and straight facial profile, serve to distinguish it from the grizzly. Though bears are classified as the largest of North America's carnivores, they are by habit omnivorous, eating virtually all forms of food including meat, insects, fruit, grass, as well as the plunder they have pilfered from careless campers and picnickers.



Black Bear cub

Photo: Wilford L. Miller

Grizzly

Photo: Bryan Harry



Grizzly family

Photo: Bryan Harry





## The Weasels

Members of the weasel family are the most diverse in body form of any closely related group of mammals. As evidence of their same evolutionary ancestry, all have ill-smelling, well developed musk glands at the base of the tail, and similar dental and skull structures. But at some time in the past, their genetic make-up allowed dramatic variation in body structure, as different members of the family became adapted to widely different habitats. Many of the present day weasels scarcely look alike — the thin and elongated **longtail weasel** as contrasted to the short, squat **badger**, or the skillfully aquatic **river otter** and the awkwardly ambulating **striped skunk**.

They have retained a similarity of behavior, however, for most of this group are fierce, skilled hunters — yet secretive and seldom observed in nature. Even where most abundant within their known range, the **wolverine**



Mink



Longtail Weasel (summer)

Photo: Willard E. Dilley

Longtail Weasel (winter)

Photo: Bryan Harry



Marten

Photo: D. L. Coe







Wolverine

and fisher are so elusive that few naturalists ever see them in the wild. Both species have been known in the Yellowstone-Teton area; but if they are still present, they are extremely rare.

Because of the great variation in their body form, the weasel tribe is more restrictive in its habitat requirements than many animal groups. The **marten** and **fisher** inhabit the coniferous forests. **Mink** and **otter** are found only along watercourses. **Badgers** are associated mostly with open sagebrush-grassland areas. Recent observations of **wolverines** have been near timberline, but they are to be looked for in forested regions as well. **Skunks** are known here only from cottonwood river bottoms at lowest elevations. **Shorttail** and **longtail weasels** are less selective in their distribution and have been recorded at virtually all elevations and vegetation zones where their chief food (mice and voles) is found.



Badger

Photo: Bryan Harry

Striped Skunk

Photo: Willard E. Dilley



River Otter

Photo: Willard E. Dilley







Gray wolf

### The Dogs

Coyotes have always been abundant here. Today, the Jackson Hole-Yellowstone country is the best place in the world to see this small edition of the wolf in a wild and natural environment. They range seasonally through all habitats — feeding primarily on small rodents, but occasionally, when lucky, taking larger animals. One of the lonely sounds of wild country is a coyote chorus, heard here on most any evening in spring or fall. Best places to see coyotes are in the grassland and meadow regions of the parks — the floor of Jackson Hole, and Lamar and Hayden Valleys.

Foxes are rare in these parks. A few have always been here and they have been reported in most habitats from lowlands to above timberline; but they are nowhere abundant.

Gray wolves are gone from northwest Wyoming. During the early years of conservation effort, extermination of large predators was the standard and unfortunate method of "protecting" elk, deer, and buffalo. In the 1890's buffalo and elk were in dire straits; it appeared that buffalo would soon become extinct. But the necessary predator control continued long after buffalo herds were past danger — until the gray wolf itself had been eliminated from Yellowstone and Jackson Hole. The last substantiated records in the Parks were in the late 30's and early 40's. Occasionally people still report seeing "wolves," but we have never been able to verify these sightings. The differences between wolves and coyotes are mainly in size, and in this part of the Rockies coyotes



Coyote

Photo: Bryan Harry

Coyote pup

Photo: Bryan Harry



Red Fox

Photo: Wilford L. Miller





grow large and have long fur. At best, wolves and coyotes would be difficult to tell apart.

Wolves have never been reintroduced here. The prevalent attitude of nearby ranchers is reflected in the many coyote "poisoning stations" along the north boundary of Yellowstone Park. Someday, as these attitudes change, an attempt should well be made to re-establish wolves. They are missed here as an important biological control on our too numerous elk, as an interesting and impressive animal in itself, and most as a wild attribute of the parks' superb wilderness. In the meantime, rangers must continually remove surplus elk to protect damaged grasslands — which could, in part, be "managed" by wolves were they still here.

### The Cats

Three species of cats occur here in scattered numbers over widespread areas. The three — **bobcat**, **lynx**, and **mountain lion** — are all secretive hunters and are only infrequently seen.

The lion can be recognized instantly as the only cat with a long tail. It ranges over wide areas in Yellowstone, Jackson Hole, and the nearby National Forest Wilderness Areas. The two short-tailed cats are identified primarily by the length of their ear tufts. The lynx (with longest ear tips) is seldom encountered far from the dense conifer forests which are the home of its chief food, the snowshoe hare. Bobcats have a more varied



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Usually, unless very lucky, footprints are all we see of the cats.



Bobcat

Photo: Bryan Harry & Stanley Broman

Lynx

Photo: Bryan Harry & Stanley Broman



Mountain Lion

Photo: Wilford L. Miller





diet and are found in a far greater variety of terrain, from dry rocky mountainsides and shrubland country to the coniferous forests.

### The Rabbits

The rabbit family is represented in northwestern Wyoming by a pika and three rabbit species. **Cottontail** rabbits are found only at lowest elevations in Yellowstone (in the vicinity of Mammoth and Gardiner). The other two rabbits (the **snowshoe hare** and **whitetail jackrabbit**) are more common. Both change fur color with the seasons and are entirely white in winter. Of the two, the snowshoe has shorter ears, but their habitat serves best to distinguish them. Snowshoe hares are found in the conifer forest. Jackrabbits frequent the sagebrush and grasslands.

Rabbits have a well-known ability to increase in numbers. This is a tendency of many species which eat only plants. These vegetarians (the rodents and deer as well as the rabbits) are an important link in the food chain of nature. As such they naturally have a capacity to reproduce in enough numbers to furnish a food supply for carnivorous animals without detriment to their own populations. Hudson Bay Company's long record of snowshoe hare and canada lynx pelt sales reflect this. For decades lynx numbers have followed the rabbit's through cycles of prosperity and despair — the lynx responding to rabbit abundance, but never capable of eliminating the snowshoe.

In the mountainous country at higher elevations, **pikas** (or conies) are inhabitants of talus slopes and rock piles. Pikas (only about seven inches long, with small ears and no tail) show their relationship to the rest of the rabbits by their peculiar tooth structure. Pikas advertize their presence in the high country by their plaintive "beeps" or "bleats." Listen for this sound and watch among the talus for small piles of curing grasses — the "haystacks" that are their winter food supply.



Pika

Photo: Richard J. Shaw

Cottontail

Photo: Willard E. Dilley



Snowshoe Hare

Photo: Stanley Broman





### The Rodents or Gnawing Animals

Rodents are a well-known group of animals with diverse membership varying in size from jumping mice weighing less than an ounce to beaver which may weigh up to seventy pounds. Despite many variations in outward appearance, all rodents may be identified at close hand by their distinctive gnawing teeth. These are the prominent, chisel-like front teeth (two on each jaw) separated from the back teeth by a wide gap. All of these gnawing mammals are principally vegetarians. And their specialized teeth are obviously an advantage, for rodents are the most numerous mammals in the world, both in terms of individuals and species. The large rodent group may be conveniently divided into small groups, such as squirrels, mice, voles, and others.

The squirrels, including chipmunks and ground squirrels, have relatively long-haired, bushy tails. Three **chipmunks** occur here and as a group can be identified by their striped sides and face. The three are the **least**, **yellow pine**, and **uinta** chipmunks. They are found widely from lower sagebrush-grasslands to above timberline. The species are difficult to tell apart, and it is usually sufficient to call them all just "chipmunks." **Mantled ground squirrels** (found along forest edges from low elevations to timberline) are often confused with chipmunks, but a true ground squirrel lacks the stripes on the sides of its face. The only other **ground squirrel**, the **uinta**, is dull grey-brown without striping and is found in the sagebrush country at low elevations. Both ground squirrels and chipmunks are abundant and are often seen in the two parks.

Grouped for convenience with ground squirrels, **yellowbelly marmots** are also commonplace animals in the parks. Marmots (weighing as much as ten pounds) are a larger edition of the well-known woodchuck. They usually have yellowish belly and brownish back, but color variations are frequent and entirely black specimens are known in the Tetons. Marmots make their burrows in rocky hillsides and they are found frequently in such rock locations from lowlands to above timberline. Marmots, ground squirrels, and chipmunks are true hibernators — entering their burrows in late August or mid-September for a deep coma-like sleep until late April or mid-May.



Chipmunk

Photo: Willard E. Dilley

Golden-mantled Ground Squirrel

Photo: Willard E. Dilley



Uinta Ground Squirrel

Photo: John M. Good





Red squirrels and northern flying squirrels (the only tree squirrels in the two-park area) are active throughout the winter. Flying squirrels are locally common in the lowest forest regions, but, being nocturnal, they are seldom seen. Red squirrels are conspicuous residents of the conifers. Ours is a dark race and is really more grayish than the red its name implies, but its noisy habit of chattering at every intruder is typical of the "redder" races farther east. Red squirrels collect and cache large quantities of pine cones as their winter supply of food.

The only true gopher in this region is the northern pocket gopher. Their front claws are adapted for digging, and they have unique fur-lined cheek pouches (their "pockets") which open on each side of their mouth. Because, however, pocket gophers spend most of their time underground, they are best recognized by the small mounds of fine dirt they have excavated. These mounds have no entrance holes; they have been closed with a plug of dirt as protection by the gopher. Often the mounds are interconnected by meandering, cylindrical ridges of earth. These were made in winter when the gophers packed snow tunnels with dirt excavated from their ground burrows. Ridges are left as snows melt. Pocket gophers are found in grassy swales with deep soils at all elevations to timberline.

Mice and voles are the most abundant animals in the parks. The two are easily distinguished. Voles have small ears and tiny eyes; the nocturnal mice have large eyes and ears. Most numerous of the mice are the deer mice, abundant residents of wooded areas at all elevations. Western jumping mice occur in the more grassy areas, up to 10,000 feet elevation. This species usually travels by hopping on its large hind feet balanced by its exceptionally long tail. Only one rat is found in the Teton-Yellowstone country. This, the bushytail woodrat or "packrat," inhabits cracks or crevices in rocky cliffs, and sometimes abandoned dwellings. Being nocturnal it is seldom seen, but its presence can be detected by the white blotches its droppings leave on the rocky outcrops it inhabits.

The voles and vole-like mammals are many — and difficult to identify. The main differences among these species are relative size, tooth structure and length of their tails. Four species of *Microtus* and one each of



Yellowbelly Marmot

Photo: Bryan Harry

Red Squirrel

Photo: Bryan Harry



Flying Squirrel

Photo: Willard E. Dilley





*Clethrionomys* and *Phenacomys* have been found in the parks. Of these, only the **boreal redback vole** (*Clethrionomys*) is easy to distinguish — by its reddish brown back and light sides. It is a forest species, found in cool, damp places in the conifer zones. The *Phenacomys* is a vole of the northern forests to above timberline. It can only be distinguished from the other voles by its tooth and skull structure.

Voles in the genus *Microtus* are found in grass environments at all elevations. They are by far the most abundant mammals here, their numbers in peak years locally exceeding a hundred voles per acre. Voles are active through the day and are the small “mice” which are usually seen during daylight hours. At the least, their main runways in the grass are conspicuous throughout the parks. Voles are prolific, each mother rearing many families every season, and they are the mainstay in food supply for most of the park predators — from shrews to coyotes and hawks and owls. For some reason, vole populations fluctuate wildly. Every few years they increase dramatically in number, and it is a time of feast for owls and coyotes. The boom doesn't last. Perhaps disease, starvation, an unknown factor, or more likely their own intolerance of each other ruthlessly kills off the voles, and for a year or two they are scarcely seen. Coyotes must look elsewhere for food; many starve.

**Muskrats** are large editions of voles — small ears and eyes, and the same body shape. Except — they are large, weighing two pounds instead of two ounces. They are aquatic and may be found in most ponds and small lakes which have abundant submerged plant life. They regularly live in beaver ponds and are often mistaken for beaver. But the muskrats are smaller and their tail is narrow (a beaver's is broad and flat). But like the beaver, muskrats have lodges — though theirs are smaller and are made of grasses and weeds; beaver lodges are large piles of logs, sticks, and mud.

The two largest rodents of this region, the porcupine and beaver, are well known. That they are both rodents we know again by their teeth. And it is evident that all three are “gnawers.” **Porcupines** are found throughout these mountains, not only in the conifer forests, but also in lowland willow thickets and high alpine meadows. They eat many shrubs as well as the bark of pine trees.



Northern Pocket Gopher

Photo: Willard E. Dilley

Deer Mouse

Photo: Willard E. Dilley



Meadow Vole

Photo: Willard E. Dilley







Muskrat and lodge

Beavers, mere rodents, engineer like a man. Their complex territory of dam, lodge, and waterways is an almost human-like enterprise. For the beaver it is an effective protection for an otherwise defenseless animal. The dam backs a protective moat around his lodge-type household, and with entrance under water the lodge is almost impregnable. The pond serves also as storage space for the winter's food supply of submerged aspen, willow and cottonwood branches. Far reaches of the pond may be extended more than a half mile by ditches — a waterway to easily float food supplies and building materials.

This is good beaver country. They are abundant in the Snake River watershed, and in Jackson Hole the side channels of the Snake are a succession of beaver ponds. Beaver profoundly change a stream valley. They eat and drown many plants, but the change creates a genuine utopia for many other species, as moose, ducks, snipe, songbirds, swans, deer, and muskrat are attracted to the ponds. In the long look, beaver is one of the few animals which truly creates a favorable environment for many other animals.



Porcupine

Photo: Willard E. Dilley

Beaver

Photo: Bryan Harry



Moose feeding in Beaver Pond

Photo: Bryan Harry





### The Hoofed Animals

The hoofed animals are the most conspicuous and well known of our mountain wildlife. Three groups live here — the Deer (including elk and moose), the Bison and Sheep, and the Antelope. Males of the **Deer** group have prominent antlers of bone which are shed and replaced each year. Both sexes of Antelope and the Buffalo-Sheep families have true horns.

**Elk.** Northwestern Wyoming is Elk Country. Great herds are here, and, at the right place and time, your chances are good of seeing bands of up to several hundred animals. In winter, large numbers are often seen near dawn on hillsides along the road from Gardiner to Lamar in Yellowstone and along the Gros Ventre River and Blacktail Butte in the Tetons. In spring the Potholes and Antelope Flats (Teton) are best places to see elk migrating into the highlands. And in summer, after the migration, elk are dispersed into the uplands and only occasional small bands are seen along park roadways. To best see elk in mid-summer, be out early morning and late evening — driving along the Madison River (Yellowstone) or hiking along Burnt Ridge (Teton). The largest herds summer at high timberline meadows — on Red Mountain, Big Game Ridge, Two Ocean Plateau, Berry Creek, and the Absarokas.

Of course, those high places are in deep snow country, where most hoofed animals must leave to survive. Historically, when the snows came, elk from southern Yellowstone and Jackson Hole moved out to the south, migrating to the Red Desert in west central Wyoming. Those in northern Yellowstone generally drifted down the Yellowstone Valley into central Montana. Times changed. Yellowstone Valley and bottomlands between Jackson Hole and Red Desert were homesteaded — by people who had to live off the land and its wildlife to survive. A homesteader on every lowland quarter-section meant heavy toll on the elk herds. "Tusk hunters" exploiting elk for their canine teeth to sell as ornaments further preyed on the migrants. Gradually the ancient patterns of migrations were drastically curtailed — until Jackson Hole elk no longer left the valley, and North Yellowstone elk scarcely left the park. The old pattern can never be re-established; the old elk winter ranges are now prosperous ranch and farm lands.



Elk bull

Photo: Bryan Harry

Elk cow

Photo: Bryan Harry



Elk calf

Photo: Willard E. Dilley





Over the years, progeny of elk which did not migrate entirely out of the highlands survived. They were aided by the early conservation attempts to subdue the wolf and lion, which prey on buffalo and elk. But the delicate interrelationships between elk and its environment are marred. The equation of winter range, elk, and wolves and lions is upset. Now too many elk stay high and feed on too little winter range.

Elk are a species that make severe inroads into the vegetation necessary for the survival of moose, beaver, deer, and bighorn. Whitetail deer are now gone from both Teton and Yellowstone; they failed to compete for the little supply of browse with multitudes of elk. Bighorn are still surviving, but by a thin margin. Most seriously, if the mountain slopes' mantle of vegetation is cropped too closely, there is no protection to the soil, and a denuded mountainside can never recover in our lifetime, or our children's. Prolific elk must be regulated — if not by wolves and lions, then by man — not only to restore a balance with other species, but for the welfare of the elk themselves.

**Deer.** Mule deer is the only deer now inhabiting the two parks. Formerly, a few whitetail deer were here in the lowland shrub areas, but the last of them were gone by the late 20's. Elk, on more and more restricted range, ravaged willow thickets along Flat Creek in Jackson Hole and the Gardner and Lamar Rivers in Yellowstone; whitetails disappeared unobtrusively as the willow declined in vigor. Mule deer were better able to survive, but they suffer too in competition with elk. They are undoubtedly fewer in number than they would be with smaller elk herds.

Mule deer scatter throughout the forest highlands in spring. They prefer broken woodlands and are most at home along forest edges. In winter they drift gradually out of the deep snow country to the lowlands. They are especially noticeable in winter along the Gardner River near Mammoth (Yellowstone) and along East Gros Ventre Butte near Jackson (Tetons).

Young deer, called fawns, are spotted — as are the young elk. Such spots are an excellent camouflage that is effective and utilized; elk and deer mothers often hide their young and leave them untended. Moose, the other deer family member, seldom leave very young calves



Mule Deer buck

Photo: Bryan Harry

Mule Deer fawn

Photo: Bryan Harry



Whitetail Deer buck

Photo: Willard E. Dilley





alone, and usually defend them aggressively against all comers. Their youngsters really don't need camouflage — and they lack it, being uniformly light brown without spots.

**Moose.** Moose are the largest, as well as the most ungainly and awkward appearing, of the world's antlered mammals. Mature bulls in Wyoming weigh as much as 900 pounds. Yet in spite of their size and apparent ungainliness they have a majestic beauty about them. They are impressive animals. Ours, in the Rockies, is the smallest race (Alaskan bulls weigh half again as much). The Wyoming Rockies are the southern limit of the moose's world-wide distribution, and this may in part explain why our moose are smaller. It is generalized that individuals of the same species grow larger in northern climates than in warmer areas. It is suggested that larger animals are more efficient in conserving their body heat, because the larger individuals have greater mass per unit of body area than smaller ones. Zoologists use North American moose as an example of this principle — the largest moose subspecies occurring in the Alaskan arctic; the smallest are here in Jackson Hole and Yellowstone.

In Wyoming, moose are a conspicuous but not abundant animal. Probably there are no more than 400 in Yellowstone and 300 in the Tetons, but, being large and dark-colored, they may be regularly seen. Their mood seems to vary from extreme wariness to open tolerance of people, which sometimes allows a close approach. But use caution with moose. They are large, potentially dangerous animals, and cows do attack to defend newborn young. Moose spend much of their time in shrubby places, usually in willow thickets and by beaver ponds along conifer woods. These are prime places to watch for them.

Such places as the Snake River bottoms, Blacktail Ponds, Third Creek Swamp in front of Jackson Lake Lodge (at Teton) or Pelican Creek, Lewis River, and Willow Park (Yellowstone) are the best habitats to see moose. They may be found up and about at any time of the day, but they are most active at twilight hours, and early morning and late evening are the best times to see them.

Except in fall and winter when they sometimes gather in loose herds, moose tend to be "loners," and single ani-



Moose bull

Photo: Bryan Harry

Moose cow and bull (horns out of picture)

Photo: Bryan Harry



Moose calf

Photo: Bryan Harry





mals are usually the rule. Moose's preference for solitude may limit their numbers as much as does food supply.

**Pronghorn Antelope.** Our pronghorn is not a true old-world antelope, but is really a uniquely American species, the only living representative of the family *Antilocapridae*. Fossil pronghorns are also known only from North America. Pronghorns are small, weighing only about a hundred pounds. They are a slender and graceful animal adapted by their delicate skeletal structure and enlarged heart, windpipe, and lungs for both speed and agility. Over good terrain antelope can run as fast as sixty miles an hour for short spurts up to a half-mile. Rapid flight is not their only defense. The odd harlequin color pattern is effective camouflage, and the hairs of the white rump patch can be erected, catching the sunlight, as a flash warning.

Pronghorns are not common in these two parks. The name, "Antelope Flats," in the Tetons is a misnomer. Only a few antelope regularly stay there; those who do must leave during the deep snow months to survive. The lowlands of northern Yellowstone support a few hundred head, and along the lower Gardner Valley they may be seen throughout the year. During summers, many drift up out of the lower Gardner to the Blacktail Deer Plateau and the Lamar Valley.

**The Bison and Sheep.** The family of mammals which include bison and sheep are represented here by the American buffalo and bighorn sheep. The distinguishing feature of this animal group is the presence of permanent true horns on both sexes.

**Buffalo** are the largest North American land mammals. Mature bulls weigh about two thousand pounds. They, and the grizzly, are the dominant animals in the Yellowstone. Several herds range here, but those easiest to observe frequent Nez Perce Creek, Lower Geyser Basin, and Hayden Valley.

Yellowstone is one of the world's last sanctuaries for the North American buffalo. From herds in the 1850's wildly estimated to exceed sixty million — now we are lucky to have any. Surviving herds are protected in a handful of refuges, parks, and reservations in both the United States and Canada, as well as here at Yellowstone. Today Yellowstone's buffalo number about a thousand, and surplus animals from this herd have been



Antelope buck

Photo: Bryan Harry

Antelope doe and kids

Photo: Bryan Harry



Antelope kid

Photo: Wilford L. Miller





used to establish many of the other refuge and park herds.

Buffalo were a plains animal, and they were as much a part of the plains landscape as were the dog towns, the wolves, the prairie grasses, and the endless horizon. In the few decades of the late 1800's this entire ecology was destroyed — by guns, plow, poison, and unconcern. Conscience mercifully called a halt to the buffalo slaughter, but by then Yellowstone had scarcely two dozen head remaining. A few more dozen, from zoos and private ranches, were added to these. They were given complete protection from poaching and predation; gradually the herds increased to their present size by the 1930's. Since then their numbers have remained fairly constant (at the maximum Yellowstone ranges can support).

We are lucky to still have buffalo as a living species. United States herds came back from remnant populations not much greater than the present day numbers of whooping cranes. In 1900 their situation was so desperate as to call for desperate measures. An all-out campaign was started against wolves, coyotes, and lions. Our early wildlife management was somewhat like driving a fast-moving car in a skid on ice; as it veers alarmingly one way, you desperately turn the other — only to oversteer too far in that direction. Fortunately, we didn't plunge completely off the road; we only hit a few posts on each side. The buffalo was saved from extinction. Wolves were lost to Yellowstone and Teton (but perhaps not permanently) and lion numbers were greatly reduced. Rebounding elk and buffalo populations depleted a sizable part of the northern natural ranges — severely reducing their carrying capacity. We are still trying to apply the brakes gently, but it will take a few more decades to restore a vegetative harmony to northern Yellowstone.

In the meantime, the species suffering most from depleted ranges is the **bighorn sheep**. Grasses vital to its winter welfare are drastically overgrazed by elk; only a few dozen sheep are left in the Tetons, and about two hundred scattered over the north half of Yellowstone.

Bighorn are wilderness animals. As their wild habitat has shrunk in size, their numbers have decreased. Ours summer in the high country, often above 10,000 feet.



Buffalo bull

Photo: Willard E. Dilley

Buffalo cow

Photo: Willard E. Dilley



Buffalo calf

Photo: Bryan Harry





Generally only the back-country traveler sees them in the summer season. Mount Washburn is the only good summer sheep range accessible by car. In winter sheep may often be encountered along the roadway from Gardiner to Cooke City, particularly along the base of Mt. Everts, Junction Butte, and Soda Butte.

As elk numbers are regulated more in harmony with forage conditions, bighorn fortunes should improve. Recovery will depend on improvement in soil and vegetation. Thus it may be slow. Animal populations can respond swiftly to change, but soil building is a slow process.



Bighorn Sheep ram

Photo: Wilford L. Miller

Bighorn ewes and lambs

Photo: Verde Watson



Western Toad

Photo: Willard E. Dilley





## THE AMPHIBIANS AND REPTILES

Grand Teton and Yellowstone Parks are not notable for their assemblage of cold-blooded animals. Their high elevation, long frigid winters, and short, cool summers offer poor prospects to an animal that assumes the temperature of its environment. Scarcely a dozen species of amphibians and reptiles live here; almost half of these are extremely rare. Three frogs, a toad, and a salamander comprise the amphibians. You could become an "expert" on them in half an hour of study.

### Toads

The **western toad** is the only toad known to occur here. It is quite common in a variety of habitats up to the lower edge of the alpine zone.

### Frogs

The most abundant frog is the tiny (about 1" long) **chorus frog**. It inhabits damp meadows, swamps, and marshes at least to 8,000 feet elevation. Though this tree frog is seldom seen, its chorus of loud "preep-preep" calls is the dominant night sound of early summer. The **western spotted frog** is the most abundant of the *true* frogs. A drab mottled or spotted frog with an obscure eye mask and white lip line, it is found along streams, ponds, and sloughs to the upper edge of the conifer forest zones. **Leopard frogs** occur in scattered populations at low elevations in the two parks, particularly in String Lake (Tetons) and the lower Madison River (Yellowstone).

### Salamanders

In the cool, dry air of Wyoming our only salamander species spends much of its time dormant or in seclusion beneath the ground. It finds refuge in abandoned rodent burrows and is active at the ground surface only briefly each year. At such times, usually on damp June evenings, the adult **tiger salamander** returns to a pond to breed. These breeding ponds are widely scattered through lower elevations of the two parks.

### Lizards

Two species of lizard have been encountered here. The **short-horned horned toad** has been seen on a few occasions at lower elevations in both parks. **Sagebrush lizards** live in some of the hot spring regions of Yellowstone. The warm ground of the thermal areas offers a



Chorus Frog

Photo: Bryan Harry

Spotted Frog

Photo: Bryan Harry



Leopard Frog

Photo: Bryan Harry





restricted suitable habitat for these reptiles, which ordinarily wouldn't be expected to survive in this harsh climate.

### Snakes

Snakes are not at all common in Yellowstone or Teton. Five species are known from the region. Only one of these is poisonous and this, the **prairie rattlesnake**, occurs only in a few square mile area near Gardiner, Montana. **Bull snakes** are also limited in distribution; they inhabit warmer low elevations near Mammoth and Gardiner, and very rarely the Snake River bottoms near Jackson. **Garter snakes** range widely in the Parks from lowest elevations to nearly 8,000 feet. They are associated closely with aquatic habitats — seldom being seen far from water. Two species are here. The **western garter snake** is a drab brownish reptile with a dull yellow body stripe. Our **common garter snake** is brighter brownish or blackish with a row of red scales along its sides.

The most unusual snake in the region is the **rubber boa**. Though small, rarely exceeding two feet in length, it is a true boa and closely related to the huge and more familiar tropical boa. Our boa is a velvety smooth, yellowish to greenish brown snake with a blunt tail and a peculiar rubbery appearance. The snake is secretive, spending most of its time beneath the moist duff and litter of the conifer forest floor.

## THE FISHES

In the high mountain country of Yellowstone and the Tetons, the aquatic habitats are characterized by the clear, cold water of snowfed mountain streams and deep glacial lakes. The cold temperature, nutrient deficiencies of the pure water, and the physical barriers of the mountain waterfalls limits the fish life. Only a dozen fishes are native to the two parks. These are typical fish forms of headwater streams in most American mountain areas — trout, sculpin, minnows, and suckers.

### Minnows

Minnows (a group of soft-finned, usually small fishes with teeth located in the throat) are the most numerous and varied of our parks' fishes. Five species are native. **Dace** are a type of minnow usually found among peb-



Tiger Salamander

Photo: Willard E. Dilley

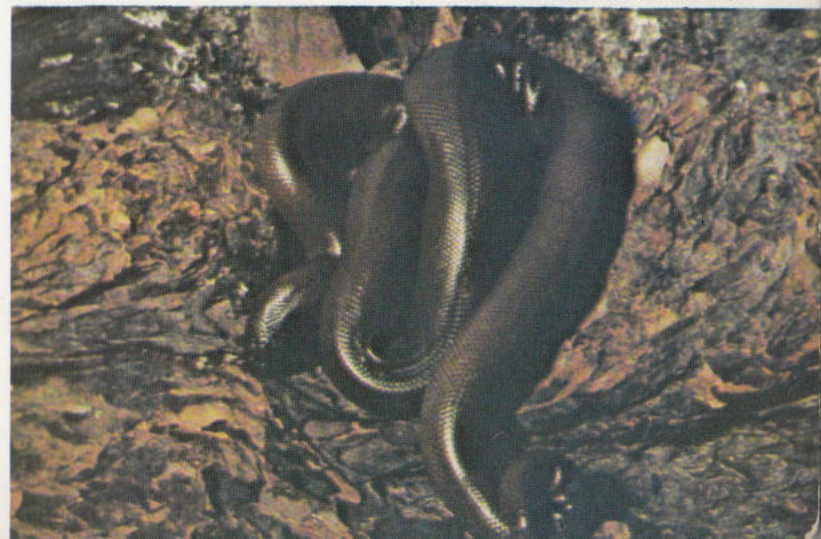
Garter Snake

Photo: Willard E. Dilley



Rubber Boa

Photo: George L. Downing





bles and boulders of rapid brooks and streams. Our **longnose dace** prefers this environment and may be found at heads of streams over 9,000 feet in elevation if waterfalls have not blocked their ascent to the brooks' upper reaches. **Speckled dace** are found in slower waters — pools, and occasionally even lakes with pebbly bottoms. Surprisingly, speckled dace also tolerate warm temperatures (up to near 90° F.) and they are abundant in the warm runoff waters of some hot springs, particularly in Witch Creek and hot springs along the Snake River. **Utah chubs** are the largest of the minnows in the Snake River watershed; adult specimens weigh up to two pounds. They are abundant in lakes of the Snake drainage — Emma Matilda, Two Ocean, Arizona, Jackson and Heart Lakes. The chubs are often associated with speckled dace in the warm spring waters such as Witch Creek. The other chub, the **leatherside**, is very rare. Only in Pacific Creek (Tetons) does it occur locally in any number. Our remaining minnow, the **redside shiner**, frequents lakes and quiet pools of the Snake River drainage. Its name "redside" describes the red margin along the male fishes' black lateral line; the name "shiner" describes its bright silver color.

### Suckers

The suckers are close relatives of the minnows. Their teeth, too, are located far back in their throat, and young suckers are difficult to tell from the minnows. But as they grow to adulthood, all develop downturned, sucker-like mouths. Their mouth structure determines their manner of feeding; our three species are bottom feeders, securing plant and animal materials by suction. The **webbug sucker** (also called rosyside or Utah sucker) is abundant in both lakes and slow streams of the Snake drainage. It spawns in early summer and sucker congregations are often seen along the shallow margins of Heart Lake and outlets of streams emptying into Jackson Lake.

In the Missouri watershed the **longnose sucker** is the ecological counterpart of the Snake's webbug sucker. Longnose suckers have ascended the Yellowstone River as far as the falls.

Varieties of the small (up to 12" long) **mountain sucker** are found on both sides of the Continental Divide.



Speckled Dace

Photo: Willard E. Dilley & Bryan Harry

Longnose Dace

Photo: Willard E. Dilley & Bryan Harry



Utah Chub

Photo: Willard E. Dilley







**Grayling**

Mountain suckers dwell in streams (Yellowstone, Madison, and Snake) where they feed almost entirely on algae.

#### **Sculpin**

The oddest fish in our waters is the fresh water sculpin. This representative of a group that is almost entirely ocean-living, is a mottled brown, bottom-feeder with a large flattened head. Its broad expansive pectoral fins and stunted body exaggerate its grotesque appearance. Sculpins live among rocks on bottoms of lakes and streams, feeding on algae and insect larvae.

#### **The Game Fish**

Three species (whitefish, grayling and cutthroat trout) comprise the native "game" fish of the two parks. These three are all cold water and fine fleshed fish. The **cutthroat trout**, named for the red slash mark on its lower gill cover, is held in high esteem by anglers. It is abundant in this part of the Rockies, in lake and stream alike, and on both sides of the Continental Divide. The cutthroat is the only native trout of this region. Despite the introduction of several other trout species in the past, the cutthroat remains the dominant game fish, and now most park waters are managed solely for this species. Yellowstone and Jackson Hole offer the finest cutthroat fishing in the world — on such waters as the Firehole, Yellowstone, and Snake Rivers, and Yellowstone, Heart, Jackson and Jenny Lakes — in wild scenic surroundings that are unmatched anywhere.

**Mountain whitefish** look like trout except that they have smaller mouths and larger scales. They inhabit



**Redside Shiner**

*Photo: Willard E. Dilley*

**Cutthroat Trout**

*Photo: Willard E. Dilley*



**Mottled Sculpin**

*Photo: Willard E. Dilley*





larger lakes and streams of both the Missouri and Columbia basins. Many local settlers call the mountain whitefish "grayling" — probably because their bluish silver color and large scales look similar to the grayling's. Genuine grayling have a very large dorsal fin which almost radiates iridescent green and purple colors. Grayling are native to the Madison and lower Gibbon Rivers. They are a rare fish now. They have been eliminated from most of their former range by poor conservation practices.

There are other fishes in the two Parks. Four other species of trout were introduced long ago to provide "better fishing." Two minnow species were accidentally stocked, probably by bait fishermen dumping their minnow pails at the end of the day.

With the fishes, man's attitude is still that there are "good" ones and "bad" ones. Good fish are those that are fun to catch or are delicious to eat, and they are to be stocked in most any waters with suitable habitat, regardless of the native fishes they might destroy. Fish that aren't good to catch are often classified as "trash" species — to be eliminated by most any means if at all possible. In times past this attitude prevailed even in National Parks. Yet logically, the parks' underwater habitats should be regarded no differently than those on land — as a place where each animal may pursue its own existence unaided, and unmolested, by man; as a place where the historically natural species, regardless of economic value, find sanctuary.

## STALKING WILDLIFE IN THE NATIONAL PARKS

One can hardly visit Grand Teton and Yellowstone National Parks without seeing some wildlife. Driving the Grand Loop Road you are almost certain to see a bear; stopping at prominent overlooks or picnic grounds you are assured of seeing at least beggar chipmunks, ground squirrels, or jays. And you are sure to see, just by chance, a few of the larger animals. But seeing wildlife consistently, even in these parks where animals are relatively tolerant of people, requires a hunter's way of looking. Skilled woodsmen scan along the edges of meadows (and even back into the trees along these edges). They notice automatically animals standing prominently in the open, but looking intently *only* at the meadow, you would miss animals hiding along the forest edges.

Some animals survive solely by their adeptness at hiding and camouflage. For many of these the best stalking principle is to recognize and search out their preferred habitat (and on the other hand, to recognize and waste no time searching poor habitats). Gradually you learn that by season and time of day, some animals are *certain* to be present in key places; at Jackson Hole in early spring, you can make a late evening visit to open plains with bitterbrush and be assured of seeing moose conspicuously in the open. Animals vary their activity by time of day as well as season. Hot mid-day is a poor time to find wildlife. Your success at finding animals about is a hundredfold better in early morning and late evening.

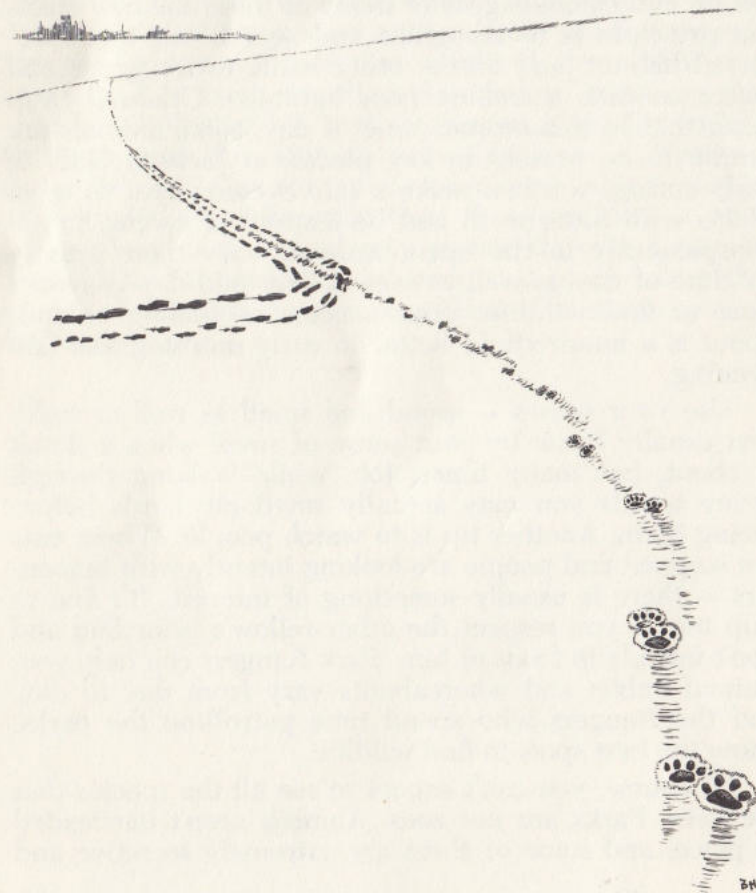
Use your senses — sound and smell as well as sight. You usually know by your sense of smell when a skunk is about, but many times, too, while walking through heavy woods you may actually smell elk herds before seeing them. Another tip is to watch people. Where cars are stopped and people are looking intently with binoculars — there is usually something of interest. It's fine to stop too, if you respect the other fellow's prior find and don't intrude in front of him. Park Rangers can help you. Animal habits and whereabouts vary from day to day, and the Rangers who spend time patrolling the parks, know the best spots to find wildlife.

Of course, you can't expect to see all the species that are here. Parks are not zoos. Animals aren't barricaded in place, and some of them are extremely secretive and



shy; others are rare. But it is still a good feeling to know that those species you don't see are here.

I've never seen a mountain lion in the parks. But I've gotten full value from those I know are here. Hiking one day with my young son, we cut across some large tracks. I thought aloud that "they look like lion tracks." "Are there *real* mountain lions here?" was the boy's quick query. At that moment a mere hike in the woods became a boyhood adventure as he began searching intently every windfall and thicket. For whether my identification of the tracks was correct or not — the boy knew it might have been; we both knew that there really *are* lions in the Yellowstone.



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# A CHECKLIST OF ANIMALS FOUND IN YELLOWSTONE AND TETONS

## Mammals

Abundance <sup>1</sup>	Common Name	Scientific Name
c	Masked Shrew	<i>Sorex cinereus</i>
c	Vagrant Shrew	<i>Sorex vagrans</i>
rT	Dwarf Shrew	<i>Sorex nanus</i>
u	Northern Water Shrew	<i>Sorex palustris</i>
c	Little Brown Myotis	<i>Myotis lucifugus</i>
u	Long-eared Myotis	<i>Myotis evotis</i>
uT	Long-legged Myotis	<i>Myotis volans</i>
rY	Big Brown Bat	<i>Eptesicus fuscus</i>
r	Silver-haired Bat	<i>Lasionycteris noctivagans</i>
r	Hoary Bat	<i>Lasiurus cinereus</i>
rY	Big-eared Bat	<i>Plecotus rafinesquei</i>
c	Black Bear ✓	<i>Ursus americanus</i>
c	Grizzly Bear ✓	<i>Ursus horribilis</i>
c	Marten ✓	<i>Martes americana</i>
*Y	Fisher	<i>Martes pennanti</i>
u	Shorttail Weasel	<i>Mustela erminea</i>
c	Longtail Weasel	<i>Mustela frenata</i>
u	Mink	<i>Mustela vison</i>
r	Wolverine	<i>Gulo luscus</i>
c	Badger ✓	<i>Taxidea taxus</i>
u	Striped Skunk	<i>Mephitis mephitis</i>
u	River Otter	<i>Lutra canadensis</i>
a	Coyote ✓	<i>Canis latrans</i>
*	Gray Wolf	<i>Canis lupus</i>
r	Red Fox ✓	<i>Vulpes fulva</i>
r	Mountain Lion	<i>Felis concolor</i>
r	Lynx	<i>Lynx canadensis</i>
r	Bobcat ✓	<i>Lynx rufus</i>
c	Pika	<i>Ochotona princeps</i>
c	Snowshoe Hare	<i>Lepus americanus</i>
uY	Whitetail Jackrabbit ✓	<i>Lepus townsendii</i>
c	Cottontail	<i>Sylvilagus nuttallii</i>
c	Least Chipmunk	<i>Eutamias minimus</i>
c	Yellow Pine Chipmunk	<i>Eutamias amoenus</i>
u	Uinta Chipmunk ✓	<i>Eutamias umbrinus</i>
c	Yellowbelly Marmot ✓	<i>Marmota flaviventris</i>
a	Uinta Ground Squirrel ✓	<i>Citellus armatus</i>
c	Golden-mantled Ground Squirrel ✓	<i>Citellus lateralis</i>
c	Red Squirrel ✓	<i>Tamiasciurus hudsonicus</i>
u	Northern Flying Squirrel ✓	<i>Glaucomys sabrinus</i>
c	Northern Pocket Gopher	<i>Thomomys talpoides</i>
a	Beaver	<i>Castor canadensis</i>

<sup>1</sup> Relative abundance in favorable habitats: a abundant; c common; u uncommon; r rare; \* known to have occurred in the parks. Presently absent or of unknown status.

Underlined species are introduced.

Y Recorded only from Yellowstone National Park

T Recorded only from Grand Teton National Park

## Abundance<sup>1</sup>

## Common Name

## Scientific Name

a	Deer Mouse ✓	<i>Peromyscus maniculatus</i>
u	Bushytail Woodrat	<i>Neotoma cinerea</i>
c	Boreal Redback Vole	<i>Clethrionomys gapperi</i>
c	Mountain Phenacomys	<i>Phenacomys intermedius</i>
c	Richardson Vole	<i>Microtus richardsoni</i>
a	Meadow Vole	<i>Microtus pennsylvanicus</i>
a	Mountain Vole	<i>Microtus montanus</i>
u	Longtail Vole	<i>Microtus longicaudus</i>
c	Muskrat	<i>Ondatra zibethicus</i>
c	Western Jumping Mouse	<i>Zapus princeps</i>
c	Porcupine ✓	<i>Erethizon dorsatum</i>
a	Elk ✓	<i>Cervus canadensis</i>
c	Mule Deer ✓	<i>Odocoileus hemionus</i>
*	Whitetail Deer ✓	<i>Odocoileus virginianus</i>
c	Moose	<i>Alces alces</i>
c	Pronghorn ✓	<i>Antilocapra americana</i>
c	Bison ✓	<i>Bison bison</i>
u	Bighorn Sheep ✓	<i>Ovis canadensis</i>

## Amphibians

c	Tiger Salamander	<i>Ambystoma tigrinum</i>
c	Western Toad	<i>Bufo boreas</i>
a	Western Chorus Frog	<i>Pseudacris triseriata</i>
c	Western Spotted Frog	<i>Rana pretiosa</i>
u	Leopard Frog	<i>Rana pipiens</i>

## Reptiles

*	Short-horned Horned Toad	<i>Phrynosoma douglassi</i>
rY	Sagebrush Lizard	<i>Sceloporus graciosus</i>
r	Rubber Boa ✓	<i>Charina bottae</i>
u	Western Garter Snake	<i>Thamnophis elegans</i>
u	Common Garter Snake	<i>Thamnophis sirtalis</i>
r	Bull Snake	<i>Pituophis catenifer</i>
rY	Prairie Rattlesnake	<i>Crotalus viridis</i>

## Fishes

a	Mountain Whitefish	<i>Prosopium williamsoni</i>
u	Brown Trout	<i>Salmo trutta</i>
a	Cutthroat Trout ✓	<i>Salmo clarki</i>
c	Rainbow Trout ✓	<i>Salmo gairdneri</i>
c	Brook Trout ✓	<i>Salvelinus fontinalis</i>
c	Lake Trout ✓	<i>Salvelinus namaycush</i>
u	Grayling	<i>Thymallus arcticus</i>
a	Utah Chub ✓	<i>Gila atraria</i>
*T	Flathead Chub	<i>Hybopsis gracilis</i>
uY	Lake Chub	<i>Hybopsis plumbea</i>
u	Longnose Dace	<i>Rhinichthys cataractae</i>
c	Speckled Dace	<i>Rhinichthys osculus</i>
a	Redside Shiner	<i>Richardsonius balteatus</i>
rT	Leatherside Chub	<i>Snyderichthys copei</i>
cY	Longnose Sucker	<i>Catostomus catostomus</i>
a	Webbug Sucker	<i>Catostomus fecundus</i>
u	Mountain Sucker	<i>Pantosteus platyrhynchus</i>
c	Mottled Sculpin	<i>Cottus bairdi</i>



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Striped Skunk