

Wildlife Working Team - Species Matrix Updates Supporting Information for Mammals List (February 2013)

American badger - Prefer open habitats and avoid densely wooded areas, although will enter forest margins. Badgers occur in grasslands, meadows in subalpine and montane forests, alpine tundra, and semidesert shrublands. They are most common in areas with abundant populations of ground squirrels, prairie dogs, and pocket gophers. Classified as a furbearer in Colorado.

American marten - Occur in most areas of coniferous forest in the higher mountains of Colorado. Inhabitant of subalpine spruce-fir and lodgepole pine forests, alpine tundra, and occasionally montane forests. Generally associated with older growth or mixed-age stands of spruce-fir and lodgepole pine. Classified as a furbearer in Colorado. **Forest Service Sensitive.**

Big brown bat - Diet consists mostly of beetles. Summer habitat in buildings in Fort Collins to hibernacula in rock crevices in the Upper Poudre River watershed to the northwest.

Bighorn sheep - Widely scattered in generally small and isolated populations throughout the Rocky Mountains. In Colorado, mountain sheep prefer open habitat with grass, low shrubs, rock cover, and topographic relief that provide good visibility and escape terrain. Vegetational succession, as encroachment of shrub-land and forest, has led to declines in sheep in recent years on some ranges. Classified as big game in Colorado. **Forest Service Sensitive; Arapaho-Roosevelt NF MIS.**

Bison - Occupied most of Colorado except for the Uncompahgre Plateau and the San Juan Mountains in the southwest. Generally a mammal of grasslands, including mountain valleys and parks, bison also occupied semidesert shrublands and piñon-juniper woodlands and even ranged onto the alpine tundra. Classified as livestock in Colorado.

Botta's pocket gopher - Prefer sandy soils of valley bottom riparian areas but will use many other areas except soils high in clay or extremely coarse substrates. Found in a variety of vegetation types, including agricultural land, grasslands, roadsides, open parklands, piñon-juniper woodlands, open montane forest, montane shrub lands, and semi desert shrub lands. **Colorado Species of Concern. Absent from Arapahoe-Roosevelt National Forest; Range extends to lower portion of Teller and El Paso Counties.**

Brush mouse - Typically occur in montane shrublands-especially oakbrush and mountain mahogany-and in pinon-juniper woodlands. Documented close association with several species of *Neotoma* in southeastern Utah. **Range extends into southeastern portion of Teller County.**

Bushy-tailed woodrat - Bushy-tailed woodrats feed on a wide variety of plant materials. Leaves of forbs and shrubs are frequently used, as are needles of coniferous trees. Foods that are particularly important when available include juniper "berries," fungi, chokecherry, aspen, rose, snowberry, currant, goldenrod, mountain mahogany, saltbush, piñon pine, rabbit-brush, prickly-pear, skunkbush, Russian-thistle, and hack-berry.

Colorado chipmunk - Feed on seeds, berries, flowers, and herbage of a variety of plants. Common foods include mountain mahogany, prickly-pear, juniper "berries," currants, wild cherry, and snowberry.

Deer mouse - Deer mice may be thought of as mammalian "weeds," not in a pejorative sense but because-like weedy annual plants-they are adapted to exploit disturbed habitats. The disturbance may result from grazing, land-clearing, artificial forest-thinning, mining, construction, avalanches, fire, flooding, or landslides. In short, anything that disturbs the habitat of specialists creates habitat for this quintessential generalist. **Appear to be a natural reservoir of hantavirus the causative agent of an "acute pulmonary syndrome."**

Desert cottontail - The species inhabits a variety of other situations, including montane shrublands, riparian woodlands and thickets, semi-desert shrublands, pinon-juniper woodlands, and various woodland-edge habitats. High tree density reduces the density of desert cottontails by discouraging growth of shrubs. Classified as small game in Colorado.

Dwarf shrew - Known from the Southern Rocky Mountains at elevations above 5,500 ft. More than 2 dozen specimens captured in pitfalls at their study area in Larimer County. Wide diversity of habitats occupied.

Ermine (short-tailed weasel) - Associated with montane forests, riparian zones, wetlands, and forest-edge situations. Moist areas in early successional stages are favored. Early successional patches may be quality habitat. Classified as a furbearer in Colorado.

Fringed myotis - Found in ponderosa pine woodlands, greasewood, oakbrush, and saltbush shrublands. Colorado records are scattered at elevations of 5,000 to 8,000 ft. Ranges across saxicoline brush and Douglas-fir forests on the Eastern Slope near Boulder and in piñon-juniper and ponderosa pine in other parts of the state. **Forest Service Sensitive.**

Golden-mantled ground squirrel - Golden-mantled ground squirrels are animals of open woodlands, shrublands, mountain meadows, and forest-edge habitat. They usually are not present in heavily wooded areas, favoring sites with good sunlight over more shaded areas. In western Montana, golden-mantled ground squirrels were favored by fuel-management programs that opened ponderosa pine stands while maintaining mature trees. **Important hosts for the virus that causes Colorado tick fever and the source of the virus for immature ticks, *Dermacentor andersoni*.**

Gray fox - Widely distributed along the foothills of the Eastern Slope. More omnivorous than other Coloradan foxes. Lagomorphs, *Peromyscus*, and *Neotoma* were among the most important mammalian prey, with grasshoppers being important insects. There is no open season on the species at this time. Rabies outbreaks occur periodically in the eastern United States.

Gunnison's prairie dog - Restricted to southwestern and south-central Colorado at an elevation range of 6,000-12,000 ft. Inhabit grasslands and semi-desert and montane shrublands. Classified as small game in Colorado. **Forest Service Sensitive (Pike-San Isabel NF). Absent from Arapahoe-Roosevelt National Forest.**

Heather vole - Although seemingly never particularly abundant, they are generally adaptable to a number of different habitats. Heather voles occupy stands of spruce, fir, lodgepole, aspen, and ponderosa pine and grassy meadows in montane forests, subalpine forests, and alpine tundra. In

Colorado they are most often associated with moist to seasonally dry areas close to water. Their diet includes foliage and fruits of willows, myrtle blueberry, and snowberry; kinnikinnik (*Artocostaphylos uva-ursi*) may constitute the bulk of the diet locally.

Hoary bat - Most widespread bat in North America. In Colorado, males over-summer, while females are rare. Taken frequently in ponderosa pine forests. Solitary and roost primarily in foliage of both coniferous and deciduous trees; uncommonly in woodpecker cavities, caves, and buildings. Forage predominately in open areas, preferring to consume moths. Loss of roosting habitat due to timber harvest is likely the biggest threat to the species. Most abundant among cottonwoods and Douglas-fir between 6,560 and 7,550 ft. in elevation (from a site in Rio Blanco County). **Forest Service Sensitive.**

Least chipmunk - Range over a wider area and in more different habitat types than any other chipmunk in the state. They occur from low-elevation semidesert shrublands, through montane shrublands and woodlands, to forest edge, to alpine tundra. Within these diverse ecosystems, they typically occupy relatively open, sunny areas on the edge of escape cover.

Little brown myotis - Inhabits most of North America, roosting by day under bark and rocks; in trees, woodpiles, buildings, and other structures; and less frequently in caves and mines. Highly versatile ecology. Prefer to forage over water but will also forage among trees and or in open clearings. Limited by roost availability. In Colorado, numbers have declined over recent decades. Known from ponderosa pine in Arizona. White-nose syndrome issue. **Petitioned for emergency listing.**

Long-eared myotis - Inhabitant of ponderosa pine forests in Colorado (coniferous forests at moderate elevations). Probably is most common in ponderosa pine woodlands but is also found in piñon-juniper woodlands, subalpine forests, and riparian habitats. The roost by day in tree cavities, under loose bark, and in buildings. A gleaner, it picks individual insects from leaves. Has been classified as beetle strategists, but also feed on moths and other insects, including caddisflies.

Long-tailed vole - Most often associated with marshy to dry grassy areas adjacent to water. Seem to be especially abundant in aspen woodlands. They have a wide ecological tolerance (perhaps because they are poor competitors with other arvicolines, such as montane and meadow voles, or because they are not obligatory runway builders) and can be found in sedge-forb meadows on alpine tundra, subalpine meadows and forests, riparian willow and alder thickets.

Long-tailed weasel - Most abundant in the mountains at moderate to high elevations in all habitat types. Distribution is probably more dependent on prey species availability in particular habitats than on vegetation or topography. Small mammals comprise between 50 and 80 percent of the annual diet.

Masked shrew - Range in elevation from 5,000-11,000 ft. Often the most abundant shrew at localities in Colorado's central mountains, the masked shrew occurs in moist habitats in montane and subalpine forests, especially in willow thickets and moist meadows.

Meadow jumping mouse - Apparently is an Ice Age relict, perhaps once widespread in a tall-grass prairie across the eastern plains but now restricted to scattered localities on the Colorado Piedmont and similar situations. Known in Colorado from Larimer, Weld, Boulder, Jefferson, Douglas, Elbert, El Paso, Adams, and Arapahoe counties and thus is present in both the South Platte and Arkansas river basins. Most common in heavy vegetation along watercourses or in herbaceous understories in wooded areas. Most specimens from Colorado appear to be from tallgrass habitats near water. *Z. h. preblei* subspecies is federally listed as Threatened; Colorado State Threatened.

Meadow vole - Distribution in Colorado is discontinuous. In mountainous areas it requires moist to wet meadows or bogs with dense cover of grasses, forbs, rushes, or sedges.

Merriam's shrew - Occupies drier habitats than other shrews in the state, particularly sagebrush or other semidesert shrublands. The species has also been captured in montane shrublands, piñon-juniper woodlands, mixed montane and subalpine forests, and grasslands.

Mexican woodrat - Found in a narrow band along the Front Range. The Mexican woodrat is a species of semiarid canyonlands, sedimentary foothills, and lower mountains, generally below about 8,500 ft. in Colorado. It is usually associated with rocky slopes and cliffs in montane shrublands, piñon-juniper woodlands, and montane forests. Limited range within Teller County.

Mink (American mink) - Although widespread across Colorado, mink seem not to be abundant. Although mink can be found in practically any habitat type, from boreal forests to saltwater marshes, they are obligate riparian animals, never found far from permanent streams, wetlands, or other surface water. Densities of mink are rarely high and vary with habitat, season, and abundance of prey. Mink are listed as furbearers (or small game).

Montane shrew (Dusky shrew) - Most frequently associated with the mesic habitats of aspen stands, willow thickets, moist openings in subalpine forests, and riparian communities. Marshy and clear-cut areas in the subalpine forest are also used. In South Park, commonly taken around beaver ponds and similarly flooded lowlands and boggy areas at the margin of ponderosa-bristlecone pine forest. In moist forested areas the animal lives in or beneath leaf litter or under downed and rotting timber. Montane shrews are greatly affected by temporal variation in ground cover. Dense herbaceous ground cover or woody ground cover such as logs and shrubs is preferred.

Montane vole - Found throughout the mountains of Colorado and locally is quite common, from about 6,000 ft. in elevation to well above tree line. Generally occupy moist to wet habitats with thick grass or forb cover, including aspen stands. They also occur in drier grasslands with forbs and sagebrush, but usually in lower numbers.

Moose - Moose are inhabitants of boreal forest edge and openings in forests adjacent to water. Moose require a plentiful supply of browse, including stems, bark, buds, and leaves of deciduous or evergreen trees or shrubs for winter forage. Consequently, they are largely dependent on early successional vegetation in areas that have been recently burned, logged, or manipulated by

beavers. Typical moose habitat in the Rocky Mountains includes a mixture of willow, spruce, fir, aspen, alder, and birch. Classified as big game in Colorado.

Mountain lion - Inhabits most ecosystems in Colorado. They are most common in rough, broken foothills and canyon country, often associated with montane forests, shrublands, and piñon-juniper woodlands. CPW actively engaged in research because of importance as a big game animal, role in elk and deer mortality (A. Anderson et al. 1992; M. Alldredge et al. 2008), and human-wildlife interaction, especially in much of the urbanizing corridor along the Colorado Front Range (M. Alldredge 2007, 2008; M. Alldredge and Freddy 2008). Require sufficient cover for stalking prey (e.g. brushy, wooded, or rough terrain). Prey mainly on deer. Classified as big game in Colorado.

Mule deer - In Colorado, mule deer are found statewide in all ecosystems. Reach their greatest densities in shrublands on rough, broken terrain, which provides abundant browse and cover. Highest densities include the foothills of the Front Range. A wide distribution and general adaptability make for broad diets, but eat small volumes of high-quality food. Classified as big game in Colorado. In a number of urban localities herds are large enough to damage landscape plantings and to constitute a serious traffic hazard. [Arapaho-Roosevelt NF MIS](#).

Muskrat (Common muskrat) - Occur statewide, wherever there is sufficient permanent water and a food supply. Semiaquatic animals occupying practically all aquatic habitats, from cattail marshes and ponds to lakes and rivers. Range from the edges of the alpine tundra through all other ecosystems in the riparian zone. Often abundant locally. Classified as a furbearer in Colorado. “watchable wildlife.”

Northern pocket gopher - Common in a variety of habitats above about 5,000 ft. in elevation. They are the most broadly distributed of the gophers in the state and are found in many different habitat types, including grasslands at lower elevations upward into alpine tundra. Activity of gophers in localized areas can increase productivity of the plant community, contribute to plant community structure and landscape-level pattern, drive predictable successional change, and increase plant species richness. Soil development, drainage, and forage availability are factors that define their ecological limits. Avoids only dense forests, very shallow, rocky soils, and areas with poor snow cover where the soil freezes over. [Colorado Species of Special Concern](#).

Northern rock mouse - Associated with montane shrublands and piñon-juniper woodlands along the Eastern Slope. Inhabits rocky canyons, cliffs, cuestas, and exposed hogbacks that provide numerous cracks, fissures, and overhanging ledges. The animals occupy colluvial debris at the bases of such outcrops. The rock mouse is almost always captured under ledges or rocks and not in areas devoid of rock cover, where deer mice are more common.

Nuttall’s cottontail (mountain cottontail) - In Colorado, found most frequently in montane and semidesert shrublands and in piñon-juniper woodlands as well as in edge habitats of montane and subalpine forests between 6,000 and 11,500 ft. in elevation. Also inhabits open parklands with sufficient shrub, rock, or tree cover. Tend to avoid dense riparian vegetation and heavy coniferous forest. Classified as a small game in Colorado.

Pine squirrel (chickaree, red squirrel) - Common in suitable forested habitat in Colorado at elevations from 6,000-12,000 ft. Pine squirrels are common throughout subalpine and montane forests in Colorado, except in stands of ponderosa pine occupied by Abert's squirrels. Where Abert's squirrels are absent from ponderosa pine, pine squirrels can be expected at least in low numbers. Have coevolved with the conifers upon which they feed. Pine squirrels' dispersal of mycorrhizal-forming fungi is important to conifer success. Classified as a small game in Colorado.

Porcupine (North American porcupine) - Porcupines are mostly associated with conifers in montane and subalpine forests and piñon-juniper woodlands. Populations of porcupines appear to have declined substantially along the Front Range over recent decades. The extent and cause of this decline are unknown. In addition, they occupy cottonwood-willow forests in river-bottoms, aspen groves, and semidesert shrublands. Feeding can cause damage to commercial forests.

Raccoon (Northern raccoon) - Raccoons occur throughout Colorado along riparian corridors to elevations of about 10,000 ft. Commonest in lowland riparian habitats, irrigated croplands, and urbanized areas of the eastern plains and foothills but are not uncommon along streams and reservoirs in mountain parklands. Classified as a furbearer in Colorado.

Red fox - Across North America the red fox is commonest in open woodlands, riparian ecosystems, pastures, and other agricultural lands. Red foxes also do well on the margins of urbanized areas and are common in open space and other undeveloped areas adjacent to cities along the Front Range corridor. They tend to favor areas with mosaics of vegetation types with good development of ground cover. Limited studies of food habits in Colorado indicate that red foxes are adept at taking ground-nesting birds and their eggs, as well as jackrabbits, cottontails, and occasionally pocket gophers. Classified as a furbearer in Colorado.

Red-backed vole (see Southern red-backed vole)

Ringtail - Ringtail ecology is poorly known. In Colorado the ringtail is typically associated with rocky canyon country and foothills areas of piñon-juniper woodlands, montane shrub lands, or mixed conifer-oakbrush. Mostly occur in southern Colorado, although they have been seen along the foothills of the Front Range and along the major canyons of the Western Slope. Classified as a furbearer in Colorado.

River otter (Northern river otter) - Inhabit riparian habitats that traverse ecosystems ranging from semi desert shrub lands to montane and subalpine forests. Tracks and other sign of otters have also been found in the Cache la Poudre and Laramie drainages in Larimer County. **Forest Service Sensitive; Colorado State Threatened.**

Rock squirrel - Rock squirrels are found in foothills and valleys below 8,300 ft. They occur in a band along the Front Range north nearly to the Wyoming border, up the Arkansas Valley, and eastward in southeastern Colorado to Baca County. Classified as small game in Colorado.

Silver-haired bat - Probably occurs statewide at elevations of 4,500-9,500 ft., at least during migration. Most records are from along the mountains on either side of the Continental Divide at elevations of 7,000-8,900 ft. Nowhere in Colorado does it appear to be abundant, but neither is it an unusual species, especially during spring and fall. Silver-haired bats roost in trees, including aspen and conifers. They often roost in tree snags. Seem to prefer forest edges and are most frequently seen foraging over open areas or over streams and ponds.

Snowshoe hare - Restricted to the higher mountains, most commonly in or near dense stands of subalpine forest and alpine tundra near tree line. Elevational distribution usually ranges from about 8,000-11,500 ft. In Colorado, spruce forest support the highest densities and lodge-pole pine forests the lowest. Forests impacted by wildfires, windfall, or logging provide excellent habitat, once sufficient succession has occurred. Classified as small game in Colorado. **Absent from within the CFLR boundary of the Pike National Forest.**

Southern red-backed vole - Red-backed voles are mostly associated with mesic coniferous forests at middle elevations in Colorado, occurring in both upper montane and subalpine forests. They are often common in mature lodgepole pine stands or in mixed spruce-fir forests with good cone production and an abundance of surface litter, including stumps, logs, and exposed roots of fallen trees.

Striped skunk - It occurs throughout Colorado and is locally common at elevations to 10,000 ft. Striped skunks occur in most habitats in Colorado, except for alpine tundra. They appear to be most abundant at lower elevations, especially in and near cultivated fields and pastures and in the vicinity of farmsteads. Classified as a furbearer in Colorado.

Thirteen-lined ground squirrel - Typical of grasslands of short- and midgrasses, and they utilize other habitats that are heavily grazed, mowed, or otherwise modified, including prairie dog towns. The diet contains nearly 50 percent animal matter; insect remains constitute 30 to 70 percent of stomach contents. Classified as small game in Colorado.

Townsend's big-eared bat - Western species occupying semidesert shrublands, piñon-juniper woodlands, and open montane forests. It is frequently associated with caves and abandoned mines for day roosts and hibernacula but will also use abandoned buildings and crevices on rock cliffs for refuge in summer. **Forest Service Sensitive; Colorado Species of Special Concern.**

Uinta chipmunk - Commonly occur in higher-elevation forest-edge situations in montane and subalpine forests (especially lodgepole pine on rubbly moraines), and they sometimes range into the alpine. Uinta chipmunks are often sympatric with least chipmunks and golden-mantled ground squirrels. The Uinta chipmunk ranges from as low as 6,500 ft. to about 12,000 ft. **Absent from Pike National Forest.**

Valley pocket gopher (see Botta's pocket gopher)

Virginia opossum - In Colorado, opossums are most abundant in riparian situations bordering agricultural lands on the eastern plains. Can also survive in marshes, forests, grasslands, urban areas, and wooded or brushy canyon country. Classified as a furbearer in Colorado. **Limited distribution within the Pike National Forest.**

Water shrew (American water shrew) - Restricted to riparian ecosystems, this is one of the better studied soricids. The animals are not uncommon along the banks of rivers and streams (especially in the tangle of roots under cut-banks), beside ponds and lakes, and in marshes in forested areas.

Western jumping mouse - Occurs widely throughout the mountainous western two-thirds of the state. Inhabitant of riparian communities at moderate to high elevations in Colorado, usually between 6,000 and 11,500 ft. The species is most abundant in streamside alder, willow, and aspen stands with a well-developed understory of forbs and grasses. Individuals also occur in bogs and marshes, and even occasionally on the fringes of dry meadows or sagebrush stands. Needs to be added to CFLR Wildlife List. Occurrence - Core; Ecol Inf - 1; Polit Prud - 0; Eco Socio - 0.

Western spotted skunk - Can be found in montane forest and shrubland, semidesert shrub-land, and piñon-juniper woodlands. Somewhat omnivorous, western spotted skunks eat a variety of foods but seem to concentrate on arthropods, small mammals, and birds.

White-tailed deer - One of the most adaptable of deer, are the most widely distributed cervids in North America. Occupy a variety of habitats, but they are typically associated with riparian woodlands and the associated irrigated agricultural lands of the eastern plains. Individuals are also known from several isolated locations in the mountains, including above timberline in Rocky Mountain National Park, Middle Park, the White River drainage in Rio Blanco County, and the San Luis Valley in Rio Grande County. They do not occupy dense coniferous forests or spend much time on open prairie. Choice of habitats seemed to reflect needs for thermal cover and security. Classified as big game in Colorado. Limited distribution within the Pike National Forest.

Wyoming ground squirrels - Occupy grasslands and semi-desert shrublands. A large number of predators feed on Wyoming ground squirrels, including raptors, badgers, coyotes, bobcats, weasels, and rattlesnakes. Red-tailed hawks and goshawks had a 17 percent kill efficiency when hunting these squirrels. Sylvatic plague may be a factor influencing densities of Wyoming ground squirrels in some areas. Classified as small game species in Colorado and may be harvested by licensed hunters year-round without limit.

Yellow-bellied marmot - Occur mostly at higher elevations over the western two-thirds of the state, from as low as 5,400 ft. to over 14,000 ft. Yellow-bellied marmots occupy various habitats, being most common at elevations above 8,000 ft. in alpine tundra and subalpine and montane meadows. Also range down into the foothills and canyon country on either side of the mountains where rock outcrops or boulders exist along with suitably productive and succulent vegetation. Classified as small game species in Colorado.