The Smithsonian Book of North American Mannals



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Gray-collared chipmunk | Tamias cinereicollis

The gray-collared chipmunk is found only in montane coniferous forest at elevations of 1,950–3,440 meters. It is most common at 2,100–3,300 meters. Its range includes the mountain and plateau region of central Arizona, from the Bill Williams and San Francisco mountains southward across the Mogollon Plateau to the White Mountains and Prieto Plateau, and into the Black, Datil, Elk, Magdalena, Mimbres, Mogollon, San Francisco, and San Mateo mountains of New Mexico. Fossil remains have been found in Luna County, New Mexico (possibly late Wisconsinan in age). A jaw fragment was recovered from late Pleistocene deposits in Culberson County, Texas, but that specimen may be *T. canipes*.

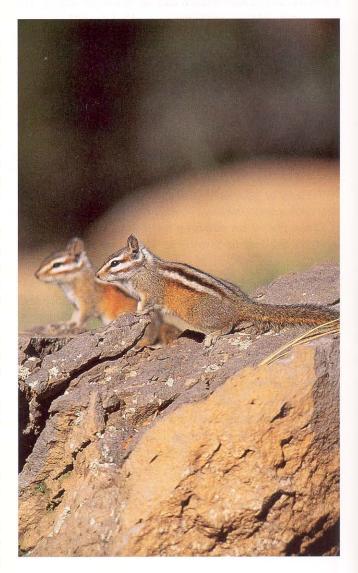
This active chipmunk is a good climber. It will climb even the tallest trees to gather food, and often takes to the trees for protection, hiding in dense foliage. Its favorite haunts are log piles near clearings, near the edges of burned forests, or in dense pine, spruce, or fir forests. Generally it is shy, and when alarmed it commonly disappears among the logs or trees. When not alarmed, the gray-collared chipmunk may sit on a stump or log and slowly wave its tail from side to side as it makes a low "chuck-chuck" or sharp "chipper" call. The alarm call is a shrill, rapid "chipper."

Tamias cinereicollis stores acorns in large quantities in the ground or in hollow logs. It may hibernate from late November to mid-March, or not at all. This chipmunk does not become noticeably fat in autumn, but it does gather food for winter. Although its tracks can be abundant on snow in the mountains, probably during the coldest part of winter it remains in its den, either sleeping or feeding on stored food.

The gray-collared chipmunk has five black or brown dorsal stripes; the outermost pair may be difficult to discern. There are two whitish and three brown facial stripes, and the forehead is brown and washed with pale gray. The cheeks, neck, shoulders, anterior part of back, and rump are also gray. Summer pelage (May–July) is softer, fuller, and brighter than autumn pelage. In the fall and winter, the tints of gray, black, and white are not as pure and the sides are tinged with pale yellowish-brown, sometimes blending with the color of the back.

One litter of four to six (average is five) young is produced each year. The gestation period is about 30 days. Young usually are born in early June. They are aboveground by late July, but lactating females may occur into August. Young begin eating solid foods at 36–40 days and stop nursing at 41–45 days. The color of half-grown young in August and September is similar to that of adults, but the pelage is thinner and more silky. By September and October, the young are almost fully grown.

The gray-collared chipmunk occupies ponderosa pine and spruce-fir forests, and occurs up to timberline in the San Fran-



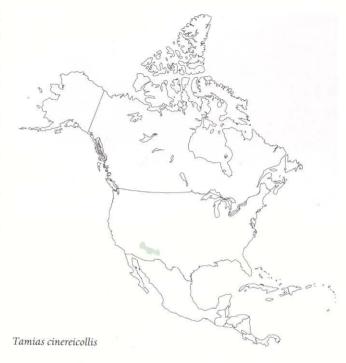
cisco Mountains, Arizona. This chipmunk is most common where Douglas fir and pine overlap. Of all the chipmunks in New Mexico, it is least likely to occur below the ponderosa pine forest, and usually occupies forests at higher elevations, but it may occasionally be common in oak and juniper habitat. In a second-growth pine forest, densities ranged from about 5 per hectare in May to 13 per hectare in August, when young-of-the-year were present.

Nests are placed under logs, stumps, and roots, or in hollows in trees. Woodpecker holes are often used as nest sites. One nest made of grass and weed fibers was in a crevice on the underside of a downed log; another, in a woodpecker hole in a large ponderosa pine, contained a mother and six young.

T. cinereicollis eats seeds of small plants, acorns of Gambel's oak, currants, gooseberries, shadblow berries, tubers, and

starchy roots. It feeds heavily upon legumes in the summer. It also consumes green vegetation, mushrooms and other fungi, seeds of Douglas fir, ponderosa pine, pinyon pine, and insects.

Tamias cinereicollis sometimes occurs in the same geographic area as *T. dorsalis* and *T. minimus*. In Arizona, *T. cinereicollis* only occurs with *T. dorsalis* in a few places on the Mogollon Plateau and in the White Mountains; *T. cinereicollis* is usually found higher in the forest and in less rocky situations. In New Mexico, *T. cinereicollis* also occupies only the higher forests, with *T. dorsalis* occupying the lower zones. In the White Mountains of Arizona, *T. cinereicollis* occurs more often in spruce-fir and mixed-conifer forest than does *T. minimus*, which uses pine and mixed-conifer forest. Mammals occurring in the same habitat as the gray-collared chipmunk include shrews, cottontails, golden-mantled ground squirrels, tasseleared and red squirrels, pocket gophers, Mexican woodrats, jumping mice, voles, elk, and mule deer. No parasites are known. *T. L. Best*



Size

Males are slightly smaller than females. Total length: 208–242 (224) mm Length of tail: 90–109 (99) mm

Weight: 55-70 g

Identification

The gray-collared chipmunk is pale grayish in color on the cheeks, shoulders, and anterior part of the back. Prominent areas of gray in these three regions are unique to the species. Compared with *T. dorsalis*, which occupies lower elevations on mountains where gray-

collared chipmunks occur, *T. cinereicollis* has conspicuous dorsal stripes. Compared with *T. minimus*, *T. cinereicollis* is larger and has gray on the neck, shoulders, and anterior back.

Recent Synonyms

Eutamias cinereicollis

Other Common Names Ash-colored chipmunk

Status Common

Subspecies

Tamias cinereicollis cinereicollis, east-central Arizona and western New Mexico Tamias cinereicollis cinereus, west-central New Mexico

References

Mammalian Species 436; Bailey, 1931; Hoffmeister, 1986