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**North American
Mammals**



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White-sided jackrabbit | *Lepus callotis*

The white-sided jackrabbit inhabits grassy plains from southwestern New Mexico, near the Mexican border, through the southern half of the Mexican tableland. The range in the United States is restricted to about 120 square kilometers in southern Hidalgo County, New Mexico. A specimen that is about 7,000 years old from Burnet Cave, Eddy County, New Mexico, may be *L. callotis*. No other fossils are known.

The most conspicuous behavioral trait of *L. callotis* is its tendency to form male-female pairs. This pair bonding is most evident during the breeding season. Once the pair bond is established, the male defends the pair from intruding males. The breeding season lasts at least 18 weeks, extending from mid-April to mid-August, but pregnant individuals can be found from March to October. The average number of young per litter is two, with a range of one to four.

The white-sided jackrabbit constructs and uses resting places called shelter forms. Its shelter forms are slightly larger than those of *L. californicus*, averaging 37 by 18 by 6 centimeters. Dense stands of tobosagrass usually surround the shelter form, which is located in clumps of grass. *L. callotis* sometimes occupies underground shelters, although that is rare.

This jackrabbit's back is pale brownish-red mixed with black. The underside of the tail is white, its upper surface is black, and many of the hairs are tipped with white. The sides are white, and the rump and thighs are white and lined with a few black hairs. The underparts are white, with a trace of the darker color usually present in front of the thighs. The ears are scantily coated with short hairs and their concave surfaces are almost bare, with a dusky spot along the posterior border.

Lepus callotis is most active from 10 p.m. until 5 a.m., particularly on clear nights with bright moonlight. In New Mexico, white-sided jackrabbits are flushed only in tobosagrass, and appear to flee to other tobosagrass stands. When flushed and running, the jackrabbit flashes its white sides alternately. It also



sometimes leaps straight upward, extending the hind legs and flashing the white sides, when escaping.

Lepus callotis avoids hilly areas, instead selecting level topography with little cover of shrubs. In New Mexico, it is found at elevations of 1,525–1,620 meters in an area that averages 38 centimeters of precipitation annually. Here the desert-grassland community is dominated by blue grama, black grama, ring muhly, buffalo grass, wolftail, bottlebrush-grass, and squirreltail. The more common shrubs include soap-tree, yucca, and honey mesquite.

Density is greatest in habitats composed primarily of grasses. In the only intensive study of habitat selection by white-sided jackrabbits, this species was observed in grassland habitat 97.1 percent of the time, in grass-forb association 2.4 percent of the time, and in grass-shrub type 0.5 percent of the time. All the nongrassland habitat was adjacent to large expanses of grassland. More than 99 percent of its diet is grass. Average density is about one jackrabbit per 32 hectares.

The white-sided jackrabbit has been reported as rare throughout its range, and has been proposed for listing as a threatened or endangered species. Livestock grazing may be

one of the factors contributing to its decline and its apparent replacement by the highly adaptable *L. californicus*. Prospects for the survival of *L. callotis* in many parts of its range are poor. In areas where grassland is interspersed with scattered shrubs and forbs, *L. californicus* is more common than *L. callotis*. Only *L. californicus* is found where shrubs and forbs are the dominant vegetation. Overgrazing and deterioration of grassland seem to favor the occurrence of *L. californicus* more than *L. callotis*.

Other mammals occurring in the same habitat as *L. callotis* include shrews, cottontails, ground squirrels, prairie dogs, pocket gophers, pocket mice, kangaroo rats, deer mice, pygmy mice, white-throated woodrats, grasshopper mice, cotton rats, foxes, skunks, long-tailed weasels, coyotes, bobcats, deer, and pronghorns. Predators include coyotes, kit foxes, golden eagles, marsh hawks, red-tailed hawks, swainson's hawks, and great horned owls. White-sided jackrabbits also have been used as food by humans. *T. L. Best*



Lepus callotis

Size

Males are smaller than females.

Total length: 525–532 (529) mm (males);

541–575 (558) mm (females)

Length of tail: 47–92 (71) mm

Weight: 1,500–2,200 (1,800) g (males);

2,500–3,200 (2,900) g (females)

Identification

Compared with *L. californicus*, the only other hare that shares its range in the United States, *L. callotis* can be distinguished by its whitish rather than brownish-gray sides and white-

tipped rather than black-tipped ears. The ears of *L. callotis* are generally shorter (average length, 118.2 mm; range, 102–136) than those of *L. californicus* (average length, 131.9 mm; range, 120–147).

Recent Synonyms

Lepus mexicanus

Lepus nigricaudatus

Other Common Names

Gaillard jackrabbit, beautiful-eared jackrabbit, snow sides

Status

Rare

Subspecies

Lepus callotis callotis, central Mexico

Lepus callotis gaillardi, southwestern New Mexico to Coahuila, Mexico

References

Mammalian Species 442; Bednarz and Cook, 1984; Dunn et al., 1982