

California Wildlife Habitat Relationships System
California Department of Fish and Wildlife
California Interagency Wildlife Task Group

CALIFORNIA MOUSE

Peromyscus californicus

Family: MURIDAE
M116

Order: RODENTIA

Class: MAMMALIA

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Found from San Francisco Bay south and east along the Coast Ranges to the border of Mexico, and at lower elevations in the western Sierra Nevada from Mariposa Co. south to Kern Co. Common resident of montane, mixed, and chamise-redshank chaparral, coastal scrub, valley foothill hardwood, and valley foothill hardwood-conifer habitats. Also found in a variety of other wooded habitats. Generally found below 1600 m (5000 ft), but may be found up to 2800 m (8000 ft).

SPECIFIC HABITAT REQUIREMENTS

Feeding: Major foods include fruits, flowers and seeds of a variety of plants, fungi, and arthropods. In woodland habitats, acorns are eaten, but the seeds of California bay are the major food (Merritt 1974). Laboratory studies have shown that *P. californicus* is capable of cracking the seed coats of California bay, while *P. truei* cannot (Merritt 1974). In coastal scrub, the California mouse prefers the seeds and fruits of shrubs, especially *Salvia* (Meserve 1976b). A good climber, and forages extensively in shrubs as well as on the ground (Meserve 1977). Food sometimes is cached.

Cover: Occupied or abandoned woodrat nests are an important source of cover, and there is experimental evidence that California mouse density is related to the availability of woodrat nests (Cranford 1982). Other suitable forms of cover are rotten logs, litter, stumps, and snags, any of which may be the site of a large nest with a central chamber. This species seems to be a relatively inefficient burrower.

Reproduction: An elaborate nest of grasses and forbs is built in a burrow, woodrat den, dense brush, or debris.

Water: Probably obtains water from vegetation and dew. In lab, California mice drank 0.11 ml/g/day (Merritt 1974). The California mouse is not an efficient water conserver compared to other rodents in its habitat (MacMillen 1964).

Pattern: Prefers dense oak-bay woodland or mature chaparral or coastal scrub interspersed with grassy areas. Density is related to presence of woodrat nests and, in woodlands, density of California bay. May invade dry habitats seasonally.

SPECIES LIFE HISTORY

Activity Patterns: Yearlong nocturnal activity. There may be an activity peak just before dawn. May enter torpor in periods of food shortage on a daily basis (Hudson 1967).

Seasonal Movements/Migration: May invade dry habitats in spring and early summer.

Home Range: MacMillen (1964) reported home ranges of 0.15 ha (0.37 ac). The home range size of this species may be underestimated if arboreal activity is not considered (Meserve 1977). Merritt (1974) reported densities of 77 and 92/ha (35 and 42/ac) in xeric chaparral-oak woodland and mesic oak-laurel woodland, respectively. Typical densities ranged from 9-27/ha (4-11/ac) (Merritt 1978). Smith (1981) reported that numbers of *P. californicus* remained at fairly constant low levels over a 9 yr period.

Territory: Mainly non-territorial, but like other *Peromyscus* shows aggressive behavior near the nest (McCabe and Blanchard 1950).

Reproduction: Mating may be yearlong, but occurs mostly from March to September. Gestation is about 21-25 days (Svihla 1932). Most young are born from April through October. Litter size averages 2 (range 1-3). There may be 3-4 litters per yr (McCabe and Blanchard 1950) in the wild, and up to 6 litters per yr in lab. The young are somewhat precocious compared to other *Peromyscus*, but have a relatively long period to weaning (5 wk), and require a long period to reach sexual maturity (at least 11 wk for females, longer for males) (McCabe and Blanchard 1950). There is a slight increase in litter size with age of the female. The male may assist in care of the young.

Niche: In foraging behavior, this may be the most specialized of the California *Peromyscus* species. California mice apparently competitively exclude *P. truei* from woodrat nests. The California mouse is largely sympatric with *Neotoma fuscipes* and *P. truei*. Fire favors *P. maniculatus* over *P. californicus*. Predators include weasels, coyotes, owls, snakes, and feral cats.

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