California Wildlife Habitat Relationships System

California Department of Fish and Wildlife California Interagency Wildlife Task Group

CACTUS MOUSE Peromyscus eremicus

Family: MURIDAE Order: RODENTIA Class: MAMMALIA

M115

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Occurs in coastal southern California, in the mountain ranges of San Luis Obispo and Kern counties, and in the the Mojave and Colorado deserts, Elevational range is from -75 m (-250 ft) (Grinnell 1937) to 1200 m (4000 ft) (Deacon et al. 1964). Common to abundant in desert riparian, desert scrub, desert wash, Joshua tree, pinyon-juniper, and palm oasis habitats. Common to uncommon in coastal scrub, chamise-redshank and mixed chaparral, and in sagebrush habitats. No longer included in the range of this species are populations now considered to be part of P. fraterculus (Riddle et al. 2000).

SPECIFIC HABITAT REQUIREMENTS

Feeding: Feeds on green vegetation, seeds, fruits, and flowers (Bradley and Mauer 1973). Cactus mice in coastal scrub of California feed heavily on shrub foliage, seeds, fruits, and flowers. Insects are moderately important in the diet (Meserve 1976b). Poison-oak is eaten in fall and winter. Treefoil is a major spring food plant, followed by sage and various grasses. In Arizona, arthropods were an important diet element (Reichman and Van de Graaff 1973). Hoards food.

Cover: Generally associated with moderate to dense canopy coverage (Bradley and Mauer 1973, Beatley 1976b, Meserve 1976a).

Reproduction: Little is known about nest characterisics. Probably grass-lined burrows at base of thorny desert shrubs, but also possibly in arboreal nests (McCabe and Blanchard 1950).

Water: Drinks water. Under lab conditions may drink about 11% of body weight (1.8 cc) (0.06 oz) daily (MacMillen 1964). Can survive on only 0.2 cc (0.007 oz) water/day (Lindeborg 1952).

Pattern: Sandy soils are preferred, probably in part for excavating burrows or occupying abandoned burrows.

SPECIES LIFE HISTORY

Activity Patterns: Nocturnal. Active year-round, but shows reduced above-ground activity in hot weather. Can enter torpor when stressed (food deprivation in winter and negative water balance in summer). May be less active on moonlit nights (Owings and Lockard 1971).

Seasonal Movements/Migration: None.

Home Range: Average density in Arizona creosote scrub was 1.09/ha (0.4/ac), ranging

from 0.21-3.3/ha (0.09-1.3/ac) (Chew and Chew 1970). In coastal sage scrub, MacMillen (1964) reported densities of 0.2-1.6/ ha (0.08-0.65/ac). Meserve (1977) reported an average home range of 0.42 ha (1.04 ac). Home range in California sage scrub was 0.3 ha (0.75 ac) (MacMillen 1964).

Territory: Aggressively solitary (MacMillen 1964).

Reproduction: Breeds year-round (MacMillen 1964, Rood 1966) over entire range, but in California peaks from April to October (Miller and Stebbins 1964). Gestation period 21-27 days (Svihla 1932). Average litter size varies from 2.5-3.7 (range 1-6, various studies). One to 3 litters per yr (MacMillen 1964). Under lab conditions up to 12 litters per yr, and maximum lifetime litter number of 16. Weaning complete by 25 days (Rood 1966). May breed in first few months.

Niche: Scansorial omnivore with excellent climbing abilities. Potential competitors include Perognathus, over which P. eremicus is said to be behaviorally dominant (MacMillen 1964), and Peromyscus maniculatus and P. crinitus. Predators include raptorial birds, snakes, and predatory mammals. Cactus mice are host to at least 1 species of flea (Beck and Allred 1966).

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M115

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