

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

MOUNTAIN BEAVER

Aplodontia rufa

Family: APLODONTIDAE
M052

Order: RODENTIA

Class: MAMMALIA

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Found throughout the Cascade, Klamath, and Sierra Nevada Ranges. Distribution often is scattered; populations local and uncommon in the Sierra Nevada and other interior areas. Mountain beavers occur in dense riparian-deciduous and open, brushy stages of most forest types. Typical habitat in the Sierra Nevada is montane riparian; in the Coast Ranges, most populations occur below 900 m (2700 ft) (Borrecco and Anderson 1980). Frequent open and intermediate-canopy coverage with a dense understory near water. Deep, friable soils are required for burrowing, along with a cool, moist microclimate.

SPECIFIC HABITAT REQUIREMENTS

Feeding: Feed on vegetative parts of plants, mostly thimbleberry, salmonberry, blackberry, dogwood, salal, ferns, lupines, willows, and grasses. Voth (1968) found, in western Oregon, males and nonpregnant females fed on ferns (85%), deciduous trees (5%), and conifers (3%); lactating females (April through June) fed on ferns (45%), conifers (34%), grasses (18%), and forbs (3%). Coprophagous. Voth (1968) found changes in diet related to protein content of available vegetation. Forage underground, on ground, under snow, on surface of snow, and up to 4.5 m (15 ft) in trees and bushes. Vegetation is stored near a burrow entrance or in underground chambers (Maser et al. 1981).

Cover: Burrows and dense understory vegetation provide cover.

Reproduction: Burrows are located in deep soils in dense thickets, preferably near a stream or spring. Line nest with dry vegetation. Nest chambers situated 0.3 to 1.5 m (1 to 4.5 ft) below the ground surface.

Water: Mountain beavers do not concentrate urine and require a large daily intake of water (Nungesser and Pfeiffer 1965, Schmidt-Nielsen and Pfeiffer 1970). Most burrows contain water. In captivity, require 22% of body weight, or about 8 oz (218 g), of drinking water per day. In captivity, an individual lived 2½ mo on lush vegetation with no drinking water (Nungesser and Pfeiffer 1965, Schmidt-Nielsen and Pfeiffer 1970).

Pattern: Frequent dense riparian-deciduous vegetation .

SPECIES LIFE HISTORY

Activity Patterns: Active yearlong. Mostly nocturnal occasionally diurnal (Maser et al. 1981).

Seasonal Movements/Migration: Sedentary and non-migratory.

Home Range: Home range small; varied from 400-2000 m² (4400-21,800 ft²), with a

mean of 1000 m² (10,900 ft²) near Montesano, Washington (Martin 1971). Goslow (1964) estimated home ranges in Humboldt Co. varied from 5.6-279 m² (60-3,000 ft²). Home ranges often overlap. Most activity occurs within 24 m (80 ft) of nest (Martin 1971, Lovejoy 1972, Neal and Borrecco 1981). In forest stands, densities seldom exceed 4/ha (1.5/ac); in logged or disturbed areas, densities may rise to an average of 6-7/ha (3/ac) and a high of 15-20/ha (8/ac) (Hooven 1977, Neal and Borrecco 1981).

Territory: Defend burrow systems and nest sites (Goslow 1964, Borrecco and Anderson 1980).

Reproduction: Mountain beavers breed from December through March (peak in February). Young born February to June (peak March through May). One litter per yr; gestation 28-30 days; lactation lasts up to 60 days. Litter size averages 2-3 (range 1-5). Females usually do not bear young until their second yr. Longevity is unknown, but individuals have lived 3 yr in captivity (Martin 1971, Hooven 1977, Lovejoy and Black 1979b). Maximum life expectancy estimated to be 6 yr.

Niche: Occasionally damage coniferous tree plantations with burrowing and gnawing. Shrews, moles, snowshoe hares, brush rabbits, deer mice, voles, minks long-tailed weasels, and spotted skunks use mountain beaver burrows (Maser et al. 1981). Predators include bobcats, long-tailed weasels, minks, coyotes, and owls.

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