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

CALIFORNIA MYOTIS Family: VESPERTILIONIDAE M028 *Myotis californicus* Order: CHIROPTERA

Class: MAMMALIA

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DISTRIBUTION, ABUNDANCE, AND SEASONALITY

The California myotis is a common species found throughout California. It is common to abundant below 1875 m (6000 ft). Optimal habitats for this species include all desert, chaparral, woodland, and forest from sea level up through ponderosa pine, mixed conifer, and Jeffrey pine.

SPECIFIC HABITAT REQUIREMENTS

Feeding: The California myotis feeds on a variety of aerial arthropods including moths, midges and other Diptera, beetles, and spiders (Krutzsch 1954, Black 1974, Whitaker et al. 1977, 1981). This species forages low over the ground or water, and among shrubs and trees, generally below 4 m (13 ft). Foraging flight is slow and highly maneuverable. The California myotis responds quickly to patches of prey (Bell 1980). Correlated with this ability are short detection-distance and the capacity to make several feeding attempts while passing through a patch of prey (Fenton and Bell 1979).

Cover: This bat may be characterized as a crevice-roosting species. Suitable crevices may be found in buildings, under bark, and in caves and mines. Open spots, especially in human-made structures, are used as night roosts. The California myotis roosts or hibernates in small groups, or singly. This species is less tied to the continual use of particular roosts than are other bats. Individuals appear to use the nearest available night roost after feeding. Transient occupation of roost sites is common, and this species is quick to occupy new sites (Krutzsch 1954, Barbour and Davis 1969, Maser et al. 1981).

Reproduction: Small maternity colonies are found in crevices in buildings, mines, hollow trees, and other sites.

Water: This species has an ability to produce concentrated urine, but it drinks regularly.

Pattern: The California myotis prefers rock-walled canyons with open water, open woodlands and forests, or brushy habitats for foraging.

SPECIES LIFE HISTORY

Activity Patterns: Nocturnal. Hibernates. Emerges early to begin foraging (Vaughan 1954, Jones 1965, Bell 1980). Activity in southern Nevada peaked 1-1.5 hr after sunset (O'Farrell et al. 1967). There may be a second peak before sunrise. This species has been found to be active between $5-33^{\circ}$ C ($41-92^{\circ}$ F). Above 15° C (59° F) it may be active all night, below 15° C the activity period is restricted to 4-5 hr (O'Farrell et al. 1967). Activity also is reduced by heavy precipitation or strong winds. The California myotis may be active at any time of year, although activity is greatly reduced in winter. Most individuals hibernate, emerging on warm days to forage (O'Farrell et al. 1967, O'Farrell and Bradley 1970).

Seasonal Movements/Migration: May make local movements to suitable hibernacula.

Home Range: No data found.

Territory: Probably not territorial. Roosts in small groups, or singly.

Reproduction: The California myotis mates in the fall. The young are born from late May-July, with a peak in early June. The single yearly litter averages one young. The young usually are capable of flight by mid-July.

Niche: The California myotis may be found feeding or roosting with other bats. Predators probably include owls, snakes, and small mammals. May carry rabies.

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