

## Western Bat Working Group

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### Species Accounts

Developed For the 1998 Reno Biennial Meeting

Updated at the 2005 Portland Biennial Meeting

### *Myotis californicus*

#### CALIFORNIA MYOTIS

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I. DISTRIBUTION: *Myotis californicus*, a member of the Family Vespertilionidae, ranges across much of western North America from southeastern Alaska and southwestern British Columbia, through most of the United States west of the Rocky mountains, and south to Baja California and much of mainland Mexico, and into Guatemala. This species occurs in a wide variety of habitats. While typical of deserts and interior basins in the western U. S., it also occurs in forested and montane regions.

II. STATUS: Global Rank - G5. State Ranks: AZ - S4S5; CA - S5; CO - S3S4; ID - S3; MT - S4; NM - S5; NV - S?; OR - S4; TX - S4; UT - S3S4; WA - S?; WY - S4; BC - S4S5. Take usually regulated by permit procedures in individual states.

III. IDENTIFYING CHARACTERISTICS AND LIFE HISTORY: *Myotis californicus* is a small bat with dark brown to black ears and wing membranes, a distinctly keeled calcar, and pelage that varies from dark brown to pale reddish-yellow to blond. It is an acrobatic flyer and uses small waterholes to obtain needed moisture; its kidneys are adapted for arid environments. *Myotis californicus* differs from *M. ciliolabrum*, which is sympatric and similar in appearance, by having a more globose skull, narrower rostrum, overall more delicate appearance, and no black mask. These two species are often difficult to distinguish in the field. Individuals are most active soon after sunset and periodically rest at a night roost. They typically feed on moths and flies, but have been known to eat other insects. *Myotis californicus* mates during autumn, perhaps in the spring in California. In spring or early summer, females form maternity colonies where they give birth to one pup per year. Individuals have been known to live up to 15 years. During summer, *M. californicus* roost alone or in small groups in caves, mines, rocky hillsides, under tree bark, and in buildings. Recent studies in Canada have documented maternity colonies of up to 52 individuals roosting under sloughing bark, and in cracks and hollows of large diameter, intermediate stage snags (preferably ponderosa pine). In winter, solitary individuals and small groups have been found in caves, mines, and buildings. Individuals are known to be active periodically in the winter, even at temperatures below freezing.

IV. THREATS: May be affected by closure of abandoned mines without adequate surveys and by recreational caving. This species may be affected by some timber harvest practices, particularly the removal of large diameter snags. Like all bats it also could be subject to contaminant poisoning.

V. GAPS IN KNOWLEDGE: No information known on population trends and use and acceptance of bat gates. More information is needed on roosting and foraging requirements.

#### VI. RELEVANT LITERATURE:

Bogan, M. A. 1974. Identification of *Myotis californicus* and *M. leibii* in southwestern North America. Proceedings Biological Society Washington 87:49-56.

Bogan, M. A. 1975. Geographic variation in *Myotis californicus* in the southwestern United States and Mexico. U.S. Fish and Wildlife Service, Wildlife Research Report 3: 1-31.

Bogan, M. A. In Press. *Myotis californicus*. In: Book of North American Mammals, D. E. Wilson, ed. Smithsonian Press, Washington, D.C.

Brigham, R. M., M. J. Vonhof, R. M. R. Barclay, and J. C. Gwilliam. 1997. Roosting behavior and roost-site preferences of forest-dwelling California bats (*Myotis californicus*). Journal of Mammalogy, 78(4):1231-1239.

Simpson, M. R. 1993. *Myotis californicus*. American Society of Mammalogists, Mammalian Species, 428:1-4.

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