

Western Bat Working Group

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Species Accounts

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Myotis yumanensis

YUMA MYOTIS

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I. DISTRIBUTION: *Myotis yumanensis*, a member of the Family Vespertilionidae, ranges across the western third of North America from British Columbia, Canada, to Baja California and southern Mexico. In the United States, it occurs in all the Pacific coastal states, as far east as western Montana in the north, and as far east as western Oklahoma in the south.

II. STATUS: Global Rank - G5. State Ranks: AZ - S3S4; CA - S5; CO - S3; ID - S3; MT - S3; NM - S5; NV - S?; OR - S3; TX - S4; UT - S3; WA - S?; WY - S2?; BC - S4S5. Former category 2 candidate species. Take regulated by permit in some states.

III. IDENTIFYING CHARACTERISTICS AND LIFE HISTORY: *Myotis yumanensis* is a small bat that is usually gray or brown to pale tan dorsally with a paler venter of tan or gray; ears and membranes are frequently pale brown to gray. In some areas *M. yumanensis* is difficult to distinguish from *M. lucifugus* and caution is required. Both species are usually associated with permanent sources of water, typically rivers and streams, but Yuma myotis also use tinajas in the arid West. It occurs in a variety of habitats including riparian, arid scrublands and deserts, and forests. The species roosts in bridges, buildings, cliff crevices, caves, mines, and trees. Individuals become active and forage just after sunset, feeding primarily on aquatic emergent insects. Their diet is known to include caddis flies, flies, midges, small moths and small beetles. After feeding, they periodically rest at night roosts where the food is digested. Mating is typically in the fall and females give birth to one young from mid-spring to mid-summer in maternity colonies that may range in size up to several thousand; males tend to roost singly in the summer.

IV. THREATS: May be affected by closure of abandoned mines without adequate surveys, some forest management practices, and disturbance of maternity roosts in caves and buildings. Since this species frequently occurs in anthropogenic structures, it is vulnerable to destructive pest control activities. Some riparian-management practices may be detrimental.

V. GAPS IN KNOWLEDGE: No information known on use and acceptance of bat gates, impacts of grazing and riparian habitat management, winter range, and winter roost requirements. Information is needed on geographic variation in roosting and foraging requirements.

VI. RELEVANT LITERATURE:

Barbour, R.W., and W.H. Davis. 1969. Bats of America. The University Press of Kentucky, 286pp.

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Brigham, R. M., H. D. J. N. Aldridge, and R. L. Mackey. 1992. Variation in habitat use and prey selection by yuma bats, *Myotis yumanensis*. Journal of Mammalogy, 73(3):640-645.

Harris, A.H. 1974. *Myotis yumanensis* in interior southwestern North America, with comments on *Myotis lucifugus*. *Journal Mammalogy* 55:589-607.

Hoffmeister, D.F. 1986. *Mammals of Arizona*. University of Arizona Press and Arizona Game and Fish Department, Tucson, 602 pp.

Pierson, E.D., W.E. Rainey, and R.M. Miller. 1996. Night roost sampling: a window on the forest bat community in northern California. Pp. 151-163 in R. M. R. Barclay and M. R. Brigham, eds. *Bats and Forests Symposium*, October 19-21, 1995, Victoria, British Columbia, Canada. Research Branch, Ministry of Forests, Victoria, British Columbia, Working Paper 23/1996.

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