

Western Bat Working Group

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Species Accounts

Developed For the 1998 Reno Biennial Meeting

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Myotis volans

LONG-LEGGED MYOTIS

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I. DISTRIBUTION: *Myotis volans*, a member of the Family Vespertilionidae, ranges across western North America from southeastern Alaska, British Columbia and Alberta in Canada to Baja California and central Mexico. It occurs throughout the western United States from the Pacific coast to the Great Plains and central Texas.

II. STATUS: Global Rank - G5. State Ranks: AZ - S3; CA - S5; CO - S5; ID - S3; MT - S4; NM - S5; NV - S?; OR - S3; TX - S4; UT - S3S4; WA - S3; WY - S4; AL - S2; BC - S4S5. Former category 2 candidate species. Take regulated by permit in various states. Proposed as a Species of Special Concern in California.

III. IDENTIFYING CHARACTERISTICS AND LIFE HISTORY: *Myotis volans* is recognized by its short rounded ears, small hindfeet, long tibia, distinctly keeled calcar, and long, dense fur on the underside of the wing membrane that extends from the body to a line joining the elbow and the knees. Although some variation in color exists, it is typically dark brown. It is a bat primarily of coniferous forests, but also occurs seasonally in riparian and desert habitats. It is a relatively poor urine concentrator. *M. volans* uses abandoned buildings, cracks in the ground, cliff crevices, exfoliating tree bark, and hollows within snags as summer day roosts; caves and mine tunnels as hibernacula. It is active throughout the night, but peak activity is 3-4 hours after sunset. It is a rapid, direct flier, often traveling some distance while foraging, and feeds in and around the forest canopy, primarily on moths and other soft-bodied insects. Individuals copulate in autumn, with females storing the sperm overwinter, ovulating in the spring, and giving birth from May through August. Individuals have lived a minimum of 21 years.

IV. THREATS: May be affected by closure of abandoned mines without adequate surveys and certain forest-management practices. Residues of DDT and its metabolites have been found in this species in Oregon.

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. et al. 1997. A study of bat populations at Los Alamos National Laboratory and Bandelier National Monument, Jemez Mountains, New Mexico. Unpubl. report to Cooperators, U.S. Geological Survey, Biological Resources Division, Albuquerque, NM. 76 pp. + appendices.

Ormsbee, P.C. 1996. Characteristics, use, and distribution of day roosts selected by female *Myotis volans* (long-legged myotis) in forested habitat of the central Oregon Cascades. Pp. 124-131 in Bats and forests symposium, R.M.R. Barclay and R.M. Brigham, eds. B.C. Ministry of Forests, Research Branch, Victoria, B.C., Working Paper 23/1996.

Parker, D.I., J.A. Cook, and S.W. Lewis. 1996. Effects of timber harvest on bat activity in southeastern Alaska's temperate rainforests. Pp. 277-292 in *Bats and forests symposium*, R.M.R. Barclay and R.M. Brigham, eds. B.C. Ministry of Forests, Research Branch, Victoria, B.C., Working Paper 23/1996.

Warner, R.M. and N.J. Czaplewski. 1984. *Myotis volans*. American Society of Mammalogists, Mammalian Species, 224:1-4.

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