

Western Bat Working Group

Species Accounts Developed For the 1998 Reno
Biennial Meeting Updated at the 2005 Portland
Biennial Meeting

***LASIURUS BLOSSEVILLII* WESTERN RED BAT**

Prepared by: Betsy C. Bolster

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I. DISTRIBUTION: *Lasiurus blossevillii*, a member of the Family Vespertilionidae, has a broad distribution reaching from southern British Columbia in Canada, through much of the western United States, through Mexico and Central America, to Argentina and Chile in South America.

II. STATUS: Global Rank - G5. State Ranks: AZ- S2; CA - S?; NM - S?; NV - S?; OR - S?; TX - S2; UT - S1; WA - S3; BC - S1?. *L. blossevillii* is proposed as a Mammal of Special Concern in California, is included in Arizona Game and Fish Department's Wildlife of Special Concern in Arizona, and is considered a Species of Special Concern due to declining populations and limited distribution in Utah..

III. LIFE HISTORY: *L. blossevillii* can be distinguished from all other western bat species except *Lasiurus borealis* (the eastern red bat) by its distinctive red coloration, and can be distinguished from *L. borealis* by its slightly smaller size and lack of frosted appearance. The only area where these two species are known to overlap is western Texas. *L. blossevillii* is typically solitary, roosting primarily in the foliage of trees or shrubs. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas. There may be an association with intact riparian habitat (particularly willows, cottonwoods, and sycamores). Roost sites are generally hidden from view from all directions except below; lack obstruction beneath, allowing the bat to drop downward for flight; lack lower perches that would allow visibility by predators; have dark ground cover to minimize solar reflection; have nearby vegetation to reduce wind and dust; and are generally located on the south or southwest side of a tree. *L. blossevillii* may also occasionally use caves, as both dead and live red bats, including a pregnant female, have been collected from Carlsbad Caverns in New Mexico. Red bats generally begin to forage one to two hours after sunset. Although some may forage all night, most typically have an initial foraging period corresponding to the early period of nocturnal insect activity, and a minor secondary activity period corresponding to insects that become active several hours before sunrise. Red bats have been observed feeding around street lights and flood lights. Reported prey items include homopterans, coleopterans, hymenopterans, dipterans, and lepidopterans. Red bats mate in late summer or early fall. Females become pregnant in spring and have a pregnancy of 80-90 days. Females may have litters of up to five pups per year. This species is considered to be highly migratory. Although generally solitary, red bats appear to migrate in groups and forage in close association with one another in summer. The timing of migration and the summer ranges of males and females seem to be different. Winter behavior of this species is poorly understood. The eastern red bat has been found hibernating in leaf-litter. Arousal from hibernation on warm days to feed has been reported, as has periodic foraging during the winter in the San Francisco Bay area. Predators reported for *L. blossevillii* include birds (e.g., scrub jays, falcons, accipters, owls, roadrunners), opossums, and domestic cats.

IV. THREATS: Loss of riparian zones, primarily due to agricultural conversion and creation of water storage reservoirs has reduced both roosting and foraging habitat of red bats. The intensive use of pesticides in fruit orchards may constitute a threat to roosting bats and may significantly reduce the amount of insect prey available. Controlled burns may be another significant mortality factor for red bats that roosting in leaf litter during cool temperatures.

V. GAPS IN KNOWLEDGE: The following areas need more investigation to accurately determine the status of and conserve the red bat in the western U.S.: habitat requirements (esp. roost sites and foraging

habitat), altitudinal distribution, migration patterns, effects of controlled burns, and effects of pesticide use in orchards.

VI. SELECTED LITERATURE:

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