



# Sensitive Species of the Santa Ana Watershed

## Western Red Bat (*Lasiurus blossevillii*)



The Western, or desert red bat is a medium sized bat measuring between 3.5 to 5 inches in length, and weighing between 9.5 to 15 grams, with a wingspan of 13 inches. It is a fast flyer, reaching speeds up to 40 mph (Stromberg 2005).

It is amber colored, but ranges from a bright orange-red in the males, to a golden brown in the females. It has a distinct white shoulder patch, and white tipped fur, which gives it a frosted appearance. It is referred to as a “tree bat”, like others in its genus, as they roost only in tree foliage. When roosting they are very cryptic, and resemble dead leaves when curled up in their furry tail membrane. Bats have even been mistaken for fruit, and plucked from tree roosts by humans (Stromberg 2005).

Unlike other bats, they are solitary, only coming together to mate and will sometimes form small groups for migration. They migrate to the southern part of their range where they hibernate in tree hollows or old woodpecker cavities for the winter. Their reproductive habits are also unusual in that they can produce

two to four pups per year, though three is the average. Most bats only produce one young per year.

### **Habitat**

Preferred habitat includes riparian areas below 6500 ft. and forests. They are closely associated with large deciduous trees such as oak, walnut, sycamore, and especially cottonwood. They have also been known to inhabit orchards.

### **Status and Distribution**

The Western red bat is a Proposed California Species of Special Concern, and is listed as Forest Service Sensitive. It is also proposed for listing by the U.S. Fish and Wildlife Service as threatened or endangered. It is found as far north as western Canada, throughout the western United States (CA, NV, AZ, UT, NM, TX), west Mexico, Central and South America, and as far south as Chile and Argentina.

In Northern California there are known populations in the Santa Cruz Mountains and along the Stanislaus River. There have been sightings in San Francisco from September to May, but none during the summer months. It is the opposite in Yolo County with sighting only in the summer months (Stromberg 2005). They are known to roost throughout the Sacramento Valley. In 2002, a female found at the Cosumnes River Preserve, fell from her roost due to an injury was later found to be pregnant with twins. (pers. obs.)

In Southern California, little information on distribution and abundance is known (Stephenson and Calcarone 1999). However, sightings have been recorded in Orange and San Diego Counties. Within

Orange County, the Western red bat has been reported at Starr Ranch Sanctuary, El Toro Marine Corps Air Station, Santa Margarita High School in San Juan Capistrano, and Yorba Linda Regional Park (Remington, 2000). In 2004, SAWA biologists detected a Western red bat during an acoustic survey of the Santa Ana River in Yorba Linda Regional Park (Remington, pers. comm.). Sightings in San Diego county include a breeding female with four pups in Lakeside, and bats caught in mist nets or detected acoustically by the United States Geological Survey (USGS) during a bat inventory study conducted in 2002 in four locations: Cabrillo National Monument, descanso district of the Cleveland National Forest, Santa Ysabel Ranch Preserve, and the Multi-Species Planning Area (MSCP) of the eastern San Diego County.

### **Threats**

Loss of lowland riparian forests and other broad-leafed deciduous forests due to agricultural conversion and the creation of water storage reservoirs is a major cause of the decline of this species. Other causes include intensive use of pesticides in orchards, which are a direct health threat to the bat. The use of pesticides also results in decreased insect prey availability. Predation by pets, raptors, corvids, opossums, and humans are also a problem.

### **Research and Management Needs**

Protecting riparian areas may be the best means of ensuring the survival of this species. Education of the public explaining the important role bats play in the ecosystem, and dispelling harmful myths about them can be helpful in eliminating the illegal killing of bats in homes and urban areas. Much more study is needed to properly manage this species. More research needs to be done on basic life history interactions, population status and trends, roost requirements, and migration patterns.

### **SAWA Contact**

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