UC SANTA CRUZ CAMPUS NATURAL RESERVE

WESTERN RED BAT





Martin Gonzalez

Scientific Name: Lasiurus blossevillii Common Name: Western Red Bat Global Rarity: Apparently Secure State Rarity: California Species of Special Concern; Vulnerable

UCSC Rarity: Uncommon



General Description

The Western Red Bat is a medium-sized bat that weighs 0.25-0.5 ounces and has a wingspan ranging 11.4-13 inches long. This species roosts only in the foliage of trees, preferring low-mid elevation riparian forests. Aside from mating and migration, the species is solitary. The California central coast population appears to be non-migratory.



Identification

Color: Western Red Bats have orangebrown to yellow-brown fur with a furry tail membrane. The males are often brighter and have deeper red coloration than the females, who are slightly larger than the males. Body, but not face, fur can sometimes be white to silver-tipped. Despite their bright color, they can be difficult to see when roosting, as they can resemble dead leaves.

Geographic Range and Seasonal Movements

Western Red Bats are located throughout portions of the western and central United States, and much of Mexico, Central America, and South America. While most migrate to the southern portion of their range in winter, some populations are resident. Genetic work has shown that individuals in western Canada and northwestern US are actually Eastern Red Bats.





UCSC Distribution

The Western Red Bat can be found in forest, chaparral, and riparian (streamside), and possibly agricultural areas of the UCSC campus.

Life history

Habitat: Western Red Bats live in and on the edges of forests, rivers, fields, agricultural areas, and even forage around street lights.

Reproduction: Breeding season is from August to September but the fertilization does not occur until spring, as the females can store sperm from the male, waiting for optimal conditions. After 80-90 days, the female gives birth to 1-4 young who will cling to their mother's fur for most of the beginning of their lives.

Behavior: The bats usually fly in heights ranging from a few feet above ground to the tree line and are known for hanging on to branches and roosting areas by one foot. The species is nocturnal, often feeding in a pulse just after sunset and another just before sunrise.

Diet: Western Red bats are insectivores and will eat a variety of mostly flying insects including moths, flying ants, and beetles but can also occasionally eat ground insects.

Predators: The Western Red Bat's natural predators include falcons, scrub jays, roadrunners, feral cats, opossums, raccoons, and owls.

Research Highlights and Fun Facts

- Western Red Bats were split taxonomically from Eastern Red Bats (*Lasiurus borealis*) in 1988.
- Western Red Bats often give birth to twins.

Individuals can roost alone, but in a study in SW New Mexico, those roosting in groups of 2 to 3 had greater roost fidelity compared to those roosting solo.



Conservation Status: California Species of Special Concern

Threats

Statewide

- 1. Loss of riparian areas from development, alteration of hydrology, and climate change effects
- 2. Pesticide use in orchards, though more study is needed
- 3. Western Red Bat is **not** known to be affected by White Nose Syndrome

UCSC campus

- 1. Development in riparian and zones or forested areas on campus
- 2. Alteration of hydrology that may affect riparian areas



Ways you can help

- 1. Support the protection of riparian areas
- 2. Support organic agriculture

References

Anderson, B.R. and K. Geluso. 2018. Roost characteristics and clustering of Western Red Bats (Lasiurus blossevillii) in southwestern New Mexico. Western North American Naturalist 78:174-183.

Arizona Sonora Desert Museum. "Animal Fact Sheet: Western red bat." Retreived from https://www.desertmuseum.org/kids/bats/ western_red_bat.php on 14 May 2021.

Bat Conservation International. n.d. Lasiurus blossevillii. Retreived from https://www.batcon.org/bat/lasiurus-blossevillii/ on 15 May 2021.

Central Coast Bat Survey. n.d. Western red bat (Lasiurus blossevillii). Retrieved from https://centralcoastbatsurvey.org/western-red-bat/#:~:text=Roosting%3A%20Western%20red%20bats%20are,from%20a%20twig%20or%20branch on 15 May 2021.

Chavez, Samantha. 10/22/2015. "The Bats of Big Sur". https:// hilltromper.com/article/bats-big-sur

Corky Quirk. 2017. "Western Red Bat" Northern California Bats. Retreived from https://norcalbats.org/2017/12/01/western-red-bat/ on 14 May 2021.

Lower Colorado River Multi-Species Conservation Program. Updated 12/16/2019. "Western Red Bat". https://lcrmscp.gov/species/ western_red.html

Maharaj, Rajeev. The Online Guide to the Animals of Trinidad and Tobago (*Lasiurus blossivilli* (Red Bat)) Posted 2015, Revised 2016. University of the West Indies at St. Augustine, Trinidad and Tobago. https://sta.uwi.edu/fst/lifesciences/sites/default/files/lifesciences/ documents/ogatt/Lasiurus_blossevillii%20-%20Red%20Bat.pdf

NatureServe Explorer. 2021. Lasiurus blossevillii Western Red Bat. Retrieved from https://explorer.natureserve.org/Taxon/ELEMENT_ GLOBAL.2.102668/Lasiurus_blossevillii on 15 May 2021.

UCSC Long Range Development Plan. 2005. "Biological Resources". https://lrdp.ucsc.edu/Draft2005EIR/2005deir-4.4-bioresources.pdf

Cover Top photo, "The Lower Colorado River Multi-Species Conservation Program (LCR MSCP) provides conservation for two covered and two evaluation bats. In honor of 'Bat Week,' we would like to recognize our Western Red Bat! http://www.lcrmscp.gov/ species/western_red.html" by Bureau of Reclamation is licensed with CC BY-SA 2.0. To view a copy of this license, visit https:// creativecommons.org/licenses/by-sa/2.0/



Cover Bottom photo, "The Lower Colorado River Multi-Species

Conservation Program (LCR MSCP) provides conservation for two covered and two evaluation bats. In honor of 'Bat Week,' we would like to recognize our Western Red Bat! http://www.lcrmscp.gov/ species/western_red.html" by Bureau of Reclamation is licensed with CC BY-SA 2.0. To view a copy of this license, visit https:// creativecommons.org/licenses/by-sa/2.0/

Page 1 top photo, "The Lower Colorado River Multi-Species Conservation Program (LCR MSCP) provides conservation for two covered and two evaluation bats. In honor of 'Bat Week,' we would like to recognize our Western Red Bat! http://www.lcrmscp.gov/ species/western_red.html" by Bureau of Reclamation is licensed with CC BY-SA 2.0. To view a copy of this license, visit https:// creativecommons.org/licenses/by-sa/2.0/

Page 1 middle photo, "The Lower Colorado River Multi-Species Conservation Program (LCR MSCP) provides conservation for two covered and two evaluation bats. In honor of 'Bat Week,' we would like to recognize our Western Red Bat! http://www.lcrmscp.gov/ species/western_red.html" by Bureau of Reclamation is licensed with CC BY-SA 2.0. To view a copy of this license, visit https:// creativecommons.org/licenses/by-sa/2.0/

Page 2 top photo by Alex Jones, used by permission.

Page 2 bottom photo, "The Lower Colorado River Multi-Species Conservation Program (LCR MSCP) provides conservation for two covered and two evaluation bats. In honor of 'Bat Week,' we would like to recognize our Western Red Bat! http://www.lcrmscp.gov/ species/western_red.html" by Bureau of Reclamation is licensed with CC BY-SA 2.0. To view a copy of this license, visit https:// creativecommons.org/licenses/by-sa/2.0/

Page 3 photo, "The Lower Colorado River Multi-Species Conservation Program (LCR MSCP) provides conservation for two covered and two evaluation bats. In honor of 'Bat Week,' we would like to recognize our Western Red Bat! http:// www.lcrmscp.gov/species/western_red.html" by Bureau of Reclamation is licensed with CC BY-SA 2.0. To view a copy of this license, visit https://creativecommons.org/licenses/by-sa/2.0/