Stephanie Remington, M.S.

Designated Bat Biologist

Years of Experience 23

Education

- M.S., Biological Sciences,
 California Polytechnic
 University, Pomona, CA 2000
- B.S., Zoology, University of California, Berkeley, CA, 1998

Specialized Experience

- Work on transportation projects involving small and large bat colonies, including maternity colonies and sensitive species
- Habitat assessments
- Bat identification, visually and acoustically
- Bat capture and handling
- Humane bat exclusion
- Installation of alternative roosting structures
- Roost surveillance

Co-Authored

Bat survey of Griffith Park, Los Angeles, CA Author(s): Stephanie Remington and Daniel S. Cooper Source: The Southwestern Naturalist, 59(4):471-477. Published By: Southwestern Association of Naturalists DOI: http://dx.doi.org/10.1894/SGM-32.1

PROFESSIONAL EXPERIENCE

Ms. Remington has 20+ years of specializing in the field of bat biology. Ms. Remington designs and conducts biological field surveys for bats throughout southern California using primarily capture, acoustic, and roost surveillance techniques to address questions relating to presence/absence, species composition, roosting locations and types, and habitat use on public and private lands. Current projects are primarily related to transportation structures (e.g. widening, retrofitting), but vary from land development to long-term acoustic/capture surveys. Project areas range from large public and private property to point locations, such as buildings and bridges. Tasks include identification of roost structures (natural and human-made), determination of the type of use by bats, development of sitespecific species lists, measurement of activity levels, analysis of acoustic data, oversight of exclusions, and artificial roost installation. Final products submitted to clients include reporting of methods and results, and project-specific elements, such as recommending mitigation measures and management strategies.

For bats that are encountered before, during, or after construction and maintenance operations, Ms. Remington's expertise contributes to transportation-related projects in the following ways:

- Inspect bridges, culverts, and other structures where it is suspected that bats may occur; and confirm presence/absence.
- Relocate small numbers of individuals from areas where personnel are working.
- Provide methods and oversight for humanely excluding larger numbers of individuals.
- Identify the species present and type of roost to ensure that removal/exclusion methods and timing are in compliance with California regulations.
- Identify existing access points and potential access points for bats to prevent future re-entry into locations where personnel need to work.
- Provide designs and oversight of installation of alternative roosting habitat when required.
- Work with project engineers and construction personnel to minimize bat-related costs.

RECENT BAT PROJECTS

Interstate 10 Santa Ana River Bridges Seismic Retrofit Project

This project includes proposed repairs to, and retrofitting of, the three I-10 Bridges over the Santa Ana River. Ms. Remington was responsible for an emergence survey and writing of the draft Bat Avoidance, Monitoring, and Protection Plan, including recommendations of mitigation measures related to installation of alternate roosting habitat and humane exclusion. She is also responsible for oversight of the panel installation and humane exclusion.

Interstate 10 Corridor Project

This project includes proposed lane additions and other improvements including modification and replacement of existing structures along 33 miles of Interstate 10 in Los Angeles and San Bernardino Counties. Ms. Remington was responsible for initial site inspections and follow-up nighttime bat surveys along a 13 mile stretch of the project area in western San Bernardino and eastern Los Angeles Counties, and for writing the draft Bat Management Plan, including recommended mitigation measures.

State Route 91 Corridor Improvement Project, Riverside County, CA

The project included modifications to existing structures, replacement of existing structures, and construction of new bridges along two segments of SR-91 totaling approximately 12.5 miles. Ms. Remington is responsible for 20 months of post-construction monitoring at two sites with installed bat roosting habitat, and on evaluating the effectiveness of the project's bat-related mitigation.

Interstate 15 Express Lanes Project, Riverside County, CA

The project was to widen approximately 14.5 miles of I-15. Ms. Remington conducted preconstruction bat surveys throughout the project area, conducted a habitat assessment survey and identified structures within the project area that had bats roosting in them, authored the draft Bat Management Plan, including recommended mitigation measures, and oversaw vegetation removal, geologic boring, and installation of alternative roosting habitat. Exclusion from the impact area occurred in April 2018 and pre-construction roost monitoring continued through July 2018.

City of Santa Barbara- Multiple projects related to flood control and bridge replacement and retrofitting, Santa Barbara County, CA

Ms. Remington participated in this bridge widening and replacement project. She conducted preconstruction surveys on four small bridges and the surrounding habitat for the purpose of identifying roosting habitat, bat presence/absence, species identification, and recommending mitigation measures, when necessary.

6th Street Viaduct Replacement Project, Los Angeles County, CA

Ms. Remington participated in this viaduct replacement project. The project was to demolish and replace the 6th Street Viaduct. Ms. Remington conducted pre-construction bat surveys, recommended mitigation measures, and oversaw the installation of alternative roosting habitat on adjacent structures and exclusion of bats from the full length of the viaduct. She met with project engineers and other project personnel to discuss means of incorporating bat roosting habitat into the planned new viaduct.

State Route 91/SR-55 Separation Project: Santa Ana River Bridge Widening, Orange County, CA

The project was to widen and seismically retrofit the SR-91 Bridge. Ms. Remington conducted preconstruction bat surveys (identifying bat species roosting in the bridge and determining numbers of individuals present), provided specifications for alternative bat roosting habitat appropriate for the species present in the bridge, oversaw installation of alternative roosting habitat panels on the bridge structure, and oversaw installation of bat exclusion materials from the bridge hinges, as well as the exclusion of bats from swallows nests attached to the bridge. During the construction phase, she provided input to ensure construction operations complied with existing agreements with the California Department of Fish and Wildlife, including the streambed alteration agreement and bat monitoring plan. When issues arose during construction, Ms. Remington recommended mitigation measures designed to protect biological resources and maintain project schedules as closely as possible. After construction was completed, she monitored bat activity in the panels and hinges until the first evidence of bats re-inhabiting hinges. She trained Caltrans personnel in post-construction monitoring and they continued monitoring after the project ended.

Warehouse site inspection and exit survey: Los Angeles, Los Angeles County, CA

The project was to evaluate the potential of buildings on a parcel near the Fashion District for bat roosting, determine species and numbers present, determine the type(s) of roost(s), and recommend steps for compliance with California regulations prior to demolition.

Slauson Avenue Bridge Project: San Gabriel River, Los Angeles County, CA

The project was to seismically retrofit the Slauson Avenue Bridge. Ms. Remington conducted a preconstruction bat survey, identified types of roosts and bat species present in the bridge, determined numbers of individuals present, and provided recommendations and specifications for alternative bat roosting habitat appropriate for the species present in the bridge.

Riverside-Figueroa Viaduct: Los Angeles River, Los Angeles County, CA

The project was to replace the portion of the viaduct over the Los Angeles River. Ms. Remington conducted a pre-construction bat survey, identified types of roosts and bat species present in the bridge, determined minimum numbers of individuals present, and provided recommendations and specifications for alternative bat roosting habitat appropriate for the species present in the bridge.

Firestone Bridge over the Los Angeles and San Gabriel Rivers, Los Angeles County, CA

Ms. Remington conducted pre-construction bat surveys, identified types of roosts and bat species present in the bridge, determined minimum numbers of individuals present, and provided mitigation recommendations.