
TERR 12 SPECIAL-STATUS BAT SPECIES

1.0 EXECUTIVE SUMMARY

In 2004, seventy Project and recreation features in the Big Creek ALP study area were visited to assess their current and potential use by bats. Seven of these structures showed use by bats (*Myotis* spp.), not identifiable to the species level. Guano that is distinct to the genus level only (i.e., *Myotis*) was detected at these structures. The remaining 63 structures were deemed unsuitable for bat use or showed no evidence of bat use at the time of survey. There were no maternal roosts of bat species detected in any of the facilities surveyed.

2.0 STUDY OBJECTIVES

Determine the location of any active bat roosts or maternal roosts on or near Project and recreation features in the study area not surveyed in 2002 and 2003. If roosts are found, determine what species are present.

3.0 STUDY IMPLEMENTATION

3.1 STUDY ELEMENTS COMPLETED

- Conducted focused roost surveys at or near Project and recreation features in 2004 in the study area not surveyed in 2002 and 2003.

3.2 OUTSTANDING STUDY ELEMENTS

- There are no outstanding study elements.

4.0 STUDY METHODOLOGY

Roost surveys were conducted to determine where bats were roosting on or near Project and recreation features in the study area.

4.1 ROOST SURVEYS

Roost surveys were conducted in August of 2004 during the reproductive season of most bat species in the Sierra Nevada. Maternity colonies could potentially have been present during the survey period. A complete list of the Project and recreation features in the study area where roost surveys were conducted in 2004 is included in Appendix A. Roost surveys were focused on Project and recreation features in the study area that were not surveyed in 2002 or 2003. Refer to the 2002 TERR 12, Special-status Bats Technical Study Report (TSR) (SCE 2003) for a complete description of the methodology for roost surveys. Facilities that were not suitable for bat roosting were not surveyed (roads, transmission lines, trails, streams, etc). Discussions with SCE prior to the surveys eliminated some additional facilities from surveys (Mark Newquist and Wayne Allen, Personal Communication).

5.0 STUDY RESULTS AND ANALYSIS

5.1 ROOST SURVEY RESULTS

Seven Project and recreation features in the study area showed signs of bat use (Figures TERR 12-1a through TERR 12-1c, and Appendix A). All of these detections were of *Myotis* spp. Guano distinct to the genus level (i.e., *Myotis*) was detected at these structures. There were no facilities that had signs of definitive use by special-status bat species.

- **Shaver Lake Dam Tenders Cabin:** signs of light night roosting of *Myotis* species on the exterior of the structure and in the attic. “Light” represents infrequent use, less than 15 detections.
- **Shed near Shaver Lake Dam Tenders Cabin:** signs of light night roosting of *Myotis* species on the exterior of the structure.
- **Mammoth Pool Powerhouse Valve House:** signs of light night roosting of *Myotis* species at the door.
- **Gold Arrow Camp, Head Mechanic’s Accommodations:** guano of *Myotis* species detected in the metal roof, light day roosting use.
- **Shaver Lake Fishing Club, Middle House:** sign of light night roosting of *Myotis* species on the exterior of the structure.
- **Shaver Lake Fishing Club, Upper Cabin:** sign of light night roosting of *Myotis* species on the exterior of the structure.
- **Shaver Lake Fishing Club, Cabin across from Shafer Cabin:** sign of light night roosting of *Myotis* species under the eaves.

6.0 LITERATURE CITED

Allen, W. and M. Newquist. 2004. Personal Communication. Southern California Edison.

Southern California Edison. 2003. TERR 12, Special-Status Bat Species. 2002 Technical Study Report Package for the Big Creek Hydroelectric System Alternative Licensing Process prepared by Southern California Edison. October 10, 2003.

FIGURES

Placeholder for Figures

Non-Internet Public Information

These Figures have been removed in accordance with the Commission regulations at 18 CFR Section 388.112.

These Figures are considered Non-Internet Public information and should not be posted on the Internet. This information is provided in Volume 4 of the Application for New License and is identified as "Non-Internet Public" information. This information may be accessed from the FERC's Public Reference Room, but is not expected to be posted on the Commission's electronic library, except as an indexed item.

APPENDIX A

List of Project Facilities where 2004 Roost Surveys were Conducted for Special-status Bat Species and Roost Survey Results

APPENDIX A. List of Project Facilities Where Roost Surveys Were Conducted for Special-status Bat Species and Roost Survey Results.

Facility	Habitat Feature	Survey Date	Survey Type*	Notes
Mono Inlet Structure at Mono Forebay	Inlet structure	8/3/2004	ST	Very wet, cold and drafty with no crevices - no roosting habitat available.
Florence Lake Dam (walkway)	Dam	8/3/2004	ST	No sign of bat use
HB Valve, Ward Tunnel (Portal PH Bypass)	Structure	8/3/2004	ST	This structure has no crevice habitat and does not provide secure roosting habitat.
Shaver Lake Dam Tenders Cabin	Buildings	8/3/2004	ST	Bat access and sign. Light night roosting on the exterior of structure. <i>Myotis sp.</i> Hole into attic area appeared to show sign
Shed near Shaver Lake Dam Tenders Cabin	Buildings	8/3/2004	ST	Bat access and sign. Light night roosting on the exterior of structure. <i>Myotis sp.</i>
Shed near Shaver Lake Dam Tenders Cabin	Buildings	8/3/2004	ST	No bat access
Shed near Shaver Lake Dam Tenders Cabin	Buildings	8/3/2004	ST	No bat access
Tunnel No. 7 Vent	Structure	8/5/2004	ST	This structure has no crevice habitat and does not provide secure roosting habitat.
Huntington-Pitman-Shaver Inlet Structure & Gate 1A and 1B at Dam 2 (10' Gate House)	Structure	8/5/2004	ST	Very wet, cold and drafty with no crevices - no roosting habitat available.
Powerhouse No. 8, Inlet Structure at Dam 5	Structure	8/5/2004	ST	No bat access
Powerhouse No. 8, Surge Chamber	Structure	8/5/2004	ST	No bat access
Mammoth Pool Powerhouse, Valve House	Building	8/5/2004	ST	Bat access and sign. Light night roosting at the door by <i>Myotis sp.</i>
Golden Arrow Camp:				
Staff Showers	Building	8/4/2004	ST	Does not provide structure for suitable roosting habitat.
Maintenance Shed	Building	8/4/2004	ST	The interior of this structure is very open and human activity is high - no roosting habitat for bats.
Laundry Shed	Building	8/4/2004	ST	Bat access, no bat use
Exec. Cabin	Building	8/4/2004	ST	New, no access
Head Mechanic's accommodations	Building	8/4/2004	ST	Guano in metal roof. <i>Myotis sp.</i> Light day roosting use.
Head Mechanic #11	Building	8/4/2004	ST	Bat access, no bat use
Rock climbing shed	Building	8/4/2004	ST	Bat access, no bat use
Backpacking shed	Building	8/4/2004	ST	Bat access, no bat use
Girls quad	Buildings	8/4/2004	ST	No bat use
Shower tower	Building	8/4/2004	ST	Does not provide structure for suitable roosting habitat.
Chipmunk Lodge	Building	8/4/2004	ST	Bat access, no bat use
Storage shed	Building	8/4/2004	ST	Bat access, no bat use
Tack shed	Building	8/4/2004	ST	Bat access, no bat use

APPENDIX A. List of Project Facilities Where Roost Surveys Were Conducted for Special-status Bat Species and Roost Survey Results (continued).

Facility	Habitat Feature	Survey Date	Survey Type*	Notes
Golden Arrow Camp: (continued)				
Sunspot Directors cabin	Building	8/4/2004	ST	The attic space does not provide structure for suitable roosting habitat and no crevice habitat is available on the exterior.
Valhalla	Building	8/4/2004	ST	Bat access, no bat use
Fishing shed	Building	8/4/2004	ST	Bat access, no bat use
Life jacket shed	Building	8/4/2004	ST	Bat access, no bat use
Archery shed	Building	8/4/2004	ST	Bat access, no bat use
Sailing dock	Building	8/4/2004	ST	Bat access, no bat use
Riflery shed	Building	8/4/2004	ST	Bat access, no bat use
Cabin # 14	Building	8/4/2004	ST	Bat access, no bat use
Staff Lounge	Building	8/4/2004	ST	Bat access, no bat use
Office	Building	8/4/2004	ST	The attic space has no access for bats and no crevice habitat is available on the exterior.
Camp Chawanakee:				
Camp Chawanakee Office	Building	8/4/2004	ST	The attic space has no access for bats and no crevice habitat is available on the exterior.
Tent cabins	Tent cabins	8/4/2004	ST	Does not provide structure for suitable roosting habitat.
Trading Post	Building	8/4/2004	ST	Bat access, no bat use
Crafts Lodge	Building	8/4/2004	ST	Bat access, no bat use
Dining Hall	Building	8/4/2004	ST	Bat access, no bat use
Pioneer Shower	Building	8/4/2004	ST	Bat access, no bat use
Point Lodge Shower	Building	8/4/2004	ST	Bat access, no bat use
Latrines	Portable toilets	8/4/2004	ST	No bat access
Point Lodge	Building	8/4/2004	ST	Bat access, no bat use
Nature Shed	Building	8/4/2004	ST	Bat access, no bat use
Archery shed	Building	8/4/2004	ST	Bat access, no bat use
Shaver Fishing Club:¹				
Bottom House	Cabin	8/4/2004	ST	Bat access, no bat use
Storage shed bottom house	Shed	8/4/2004	ST	Bat access, no bat use
Middle house	Cabin	8/4/2004	ST	Bat access and sign. Light night roosting on the exterior of structure. <i>Myotis</i> sp.
Storage shed middle house	Shed	8/4/2004	ST	Bat access, no bat use
Upper cabin	Cabin	8/4/2004	ST	Bat access and sign. Light night roosting on the exterior of structure. <i>Myotis</i> sp.
Cabin across from Shaver cabin	Cabin	8/4/2004	ST	Bat access and sign. Light night roosting under eaves. <i>Myotis</i> sp.

APPENDIX A. List of Project Facilities Where Roost Surveys Were Conducted for Special-status Bat Species and Roost Survey Results (continued).

Facility	Habitat Feature	Survey Date	Survey Type*	Notes
Shaver Lake Marina Concessionaire Facility at Shaver Lake Point	Building	8/4/2004	ST	Bat access, no bat use
Ward Tunnel Overlook Office	Trailer	8/5/2004	ST	This trailer has no attic and no crevice habitat available for roosting bats.
Ward Tunnel Overlook Restrooms	Toilets	8/5/2004	ST	Bat access, no bat use
Rancheria Campground Restroom Style 1	Concrete with metal roof	8/5/2004	ST	Bat access, no bat use
Rancheria Campground Restroom Style 2	Fiberglass top	8/5/2004	ST	Bat access, no bat use
Rancheria Campground Restroom Style 3	Wood siding	8/5/2004	ST	Bat access, no bat use
College Campground Restrooms	Wood siding, fiberglass	8/5/2004	ST	Bat access, no bat use
Deer Creek Campground & Day Use Area	Concrete	8/5/2004	ST	Bat access, no bat use
Kinnikinnick Campground Restroom	Concrete	8/5/2004	ST	Bat access, no bat use
Catavee Campground Restroom	Concrete	8/5/2004	ST	Bat access, no bat use
Bear Cove Day Use Area Restroom	Concrete	8/5/2004	ST	Bat access, no bat use
Upper Billy Creek Campground Restroom Style 1	Fiberglass open beam	8/5/2004	ST	Bat access, no bat use
Upper Billy Creek Campground Restroom Style 2	Wood shingle	8/5/2004	ST	Bat access, no bat use
Billy Creek Day Use Picnic Area	No structure	8/5/2004	ST	There is no structure to provide roosting habitat.
Lower Billy Creek Campground Restrooms Style	Wood shingle	8/5/2004	ST	Bat access, no bat use
Lower Billy Creek Campground Restrooms Style	Fiberglass	8/5/2004	ST	Bat access, no bat use
Billy Creek Cabin/Huntington Lake Big Creek Museum	Buildings	8/5/2004		Bat access, no bat use
Dowville Day Use Picnic Area Restroom	Wood shingle	8/5/2004	ST	Bat access, no bat use

* ST = Structure Survey

¹ The fishing club had numerous cabins that are privately owned. A complete survey was not possible. Most of the cabins do offer bat habitat and likely have bat use.