

Sponsored by The Wildlife Society – Western Section

Bat Ecology and Field Techniques Workshop

September 4 - 7, 2008

Sagehen Field Station (near Truckee, CA)

Instructors: Dave Johnston, Ph.D., Santa Clara University/H.T. Harvey Associates

Joe Szewczak, Ph.D., Professor, Humboldt State University

Stephanie Remington

Coordinator/Contact for Questions: Cynthia Perrine, csgperrine@yahoo.com

Description:

This workshop will introduce participants to the ecology and conservation of California bats through lectures and demonstrations on species accounts, physiology, anatomy, behavioral ecology, conservation issues, and mitigation strategies. Field techniques of mist-netting, assessing species presence or absence, and acoustic monitoring will be demonstrated with participants gaining hands-on exercise in field techniques of mist-net set-up and acoustic monitoring and analysis. Evening field excursions typically capture a half dozen bat species and allow practice in recording data from captured bats. (Participants must provide proof of rabies vaccination or titer checked within past 3 years to handle bats.) **20 participants maximum!**

Registration:

Registration fee includes 3 nights' lodging, gourmet meals and beverages from Thursday dinner through Sunday lunch, and all workshop materials. Registration starts August 1, 2008.

Pre-registration required by August 31*

\$450 Western Section Members

\$200 Students with proof of current university affiliation or Young Professionals (within 6 months of graduation from university or employed part-time or seasonally in a wildlife technician position.

\$485 Others

* The maximum enrollment is 20 after which, a waiting list will be kept. A minimum of 10 participants must register for the workshop by **August 21st** or the workshop will be cancelled and all registration fees will be returned. Registrants will be processed in the order received and successful registrants will be notified via **e-mail, starting August 22nd**, of workshop logistics and information.

All registrants please complete on-line registration at **www.tws-west.org** starting August 1, 2008, credit cards accepted on-line. Registrants wishing to pay with a check should register online and indicate that a check is method of payment. Then, send a copy of registration information by mail, accompanied by check, to:

The Western Section of The Wildlife Society
attn: Bat Workshop
Post Office Box 13543
San Luis Obispo, CA 93406 - 3543

Sponsored by The Wildlife Society – Western Section

Bat Workshop '08 PRINT REGISTRATION IF SENDING A CHECK BY MAIL
(Register on-line starting August 1, 2008 – all registrants must complete on-line form)

Last Name: _____ **First Name:** _____

Organization: _____

Address: _____

Address 2: _____

City: _____ **State:** _____ **ZIP:** _____

E-mail: _____

Dietary Restrictions/Special Needs: _____

\$450 TWS WS Members \$200 Students/Young Professional (include proof) \$485 Others

Paying by Check? Amount Enclosed by check \$ _____

Name on Check _____ **Check #** _____

___ Please charge my credit card ___ Visa ___ MasterCard (We accept Visa or MasterCard)

16 digit number _____ - _____ - _____ - _____

Expiration Date: _____

CID: _____ **3 digits, located on the back of credit card**

Cancellation policy:

Refunds, less a processing fee of \$50 will be provided for cancellations received up to 14 days prior to the first day of the workshop. Thereafter, registration fees are non-refundable regardless of medical, work, or personal emergency. However, registration may be transferred to another individual in the same organization as original registrant.

I have read and accept the cancellation and refund policy _____

Signature of Registrant

On-line registration found at www.tws-west.org → Meetings/Workshops
starting August 1, 2008

Sponsored by The Wildlife Society – Western Section

Draft Schedule – Bat Workshop ‘08

Thursday

- 5:00 p.m. Registration check-in, lodging assignment
6:00 p.m. Introductions of Participants and Instructors
6:45 p.m. Dinner
7:15 p.m. Introduction to California Bat Natural History
 - life history
 - challenges to life as a bat and the special solutions bats have developed, anatomy
 - bat physiological ecology relevant to their habitat needs
 - threats to bat survival; why are they so threatened?
 - ecological value of bats
 - foraging behavior and considerations8:15 p.m. Field Exercises

Friday

- 8:00 a.m. Coffee
8:30 a.m. Breakfast
9:00 a.m. Conservation Issues in California
10:00 a.m. Specific conservation issues in Central California and the San Francisco Bay Area
 - Habitats
 - Species specific issues
 - Conservation recommendations10:30 a.m. Mitigation and management strategies
 - Bats' legal status and its implications
 - Roles and responsibilities of agency personnel, environmental consultants, NGOs, and the academic community
 - Permit requirements
 - Predicting project related impacts to bats
 - Mitigation strategies
 - Mitigation results for recent projects in California
 - Where do we go from here?11:30 a.m. Acoustic monitoring (Echolocation 101)
 - The mechanics of sound and how it carries information
 - Techniques used to monitor bats
 - advantages/limitations of capture methods
 - advantages/limitations of acoustic methods
 - what information can be gained acoustically
 - Where and how to collect calls; practical advice
 - Monitoring program design, implementation, and data analysis
 - Understanding bat detectors and how they work (know your tool)
 - Understanding and using digital sound recording
 - automated recording
 - Terminology used to study bat echolocation
 - Call morphology and species discrimination12:30 p.m. Lunch
2:00 p.m. Identifying California bats
 - overall diversity and distribution
 - introduction to species identification and handling bats
 - using keys
 - tips on differentiating similar species
 - species accounts (5 minutes each participant*)

***Species Accounts:** One species will be assigned to each participant upon registration. Instructors will provide a photograph and range map for each presentation. Each species account presentation should cover the following for his / her species:

Sponsored by The Wildlife Society – Western Section

1. Physical description and identifying characters
2. Geographic range and habitat associations
3. Status (e.g., California species of special concern)
4. Reproduction and development
5. Ecology --
 - a. roosting
 - b. foraging
 - c. other aspects of natural history
6. Conservation issues (threats to California populations)

5:30 p.m. Intro to acoustic monitoring & determining presence or absence at roosts

6:30 p.m. Dinner

7:30 p.m. evening demonstration: Acoustic Monitoring & Mist-netting

Saturday

8:00 a.m. coffee

8:30 a.m. breakfast

9:00 a.m. More on Bat Ecology and Field Analysis, Introduction to Mitigation

11:30 Lunch & Pack your own dinner

12:00 to 3:00 BREAK (Go take a nap)

3:00 p.m. Group up to review gear and caravan for field exercises

4:00 p.m. Depart for Field

5:00 p.m. Start setting nets and acoustic equipment

5:30 p.m. Evening Demonstration

10:30 p.m. Return to Field Station and begin data analysis

Sunday

8:30 a.m. coffee

9:30 a.m. breakfast

10:00 a.m. Group analysis of data collected: food habits, acoustic monitoring, captures

1:00 lunch and fill-out evaluations

1:30 More discussion of Conservation and Mitigation Strategies

3:00 workshop concludes