Sponsored by The Wildlife Society – Western Section

Bat Ecology and Field Techniques Workshop June 2 – 5, 2010

Location: Wind Wolves Preserve, near Maricopa, CA (west of "The Grapevine")
Instructors: Dave Johnston, Ph.D., Santa Clara University/H.T. Harvey Associates;
Stephanie Remington;
Joe Szewczak, Ph.D., Professor, Humboldt State University

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 experience in mist-net set-up and acoustic monitoring and analysis. Evening field excursions typically capture a half dozen bat species and allow practice in extracting, handling, as well as collecting and recording data from captured bats. A detailed draft schedule is included below.

Requirements for Handling Bats During Workshop:

Handling bats is not a requirement of this workshop; participants will learn valuable field techniques with or without handling. However, participants must provide **proof of rabies vaccination or sufficient rabies antibody titer results affirmed by a physician's note (signature on the titer results is sufficient)** within past 3 years to handle bats. Workshop participants operate under current federal and state permits held by the instructors, and follow WNS protocol.

20 participants maximum!

Registration Fees and Details:

Registration fee includes meals, snacks, and beverages from Wednesday dinner through Saturday lunch, and all workshop materials. There is a cancellation fee of \$50 applied up to 14 days prior to the workshop. After that date, no refunds will be given regardless of personal or professional emergency. However, the registration may be transferred to another registrant from the same organization.

Pre-registration required by June 1st*

\$425 Western Section Members

\$225 Students with proof of current (half-time minimum) university affiliation or Young Professionals (within 6 months of graduation from university or employed part-time or seasonally in a wildlife technician position. Scholarships may be available, see details. **\$460** 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 **May 21** or the workshop will be cancelled and all registration fees will be returned. Registrants

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will be processed in the order received and successful registrants will receive workshop logistics and information once full payment is confirmed received.

All registrants (even those paying by check or purchase order) please complete online registration at http://joomla.wildlife.org/Western/; credit cards accepted on-line. Payment by purchase order or check should be accompanied by a printout of the online registration form and sent to:

The Western Section of The Wildlife Society attn: Bat Workshop Post Office Box 6756 Albany, CA 94706

Accommodations:

The Wildlands Conservancy (TWC), a private non-profit public benefit corporation, is our host for this workshop. The Wildlands Conservancy's Mission Statement is: "To preserve the beauty and biodiversity of the earth and provide programs so that children may know the wonder and joy of nature."

All public access, including camping, at Wind Wolves Preserve, as at all TWC preserves, is provided free of charge. The developed campground has running water; no showers.

Hotels are also available (separate reservation required, not included in the workshop registration fee) in Maricopa (11 miles) or Taft (18 miles) just a short drive: Motel 8, www.motel8maricopa.com, 600 Poso Street, Maricopa, CA 661-769-8291 Holland Inn & Suites, hollandsuites.com, 531 Warren St, Taft, CA 661-763-5211

Draft Schedule - 2010 Bat Ecology and Field Techniques Workshop

Wednesday	<u> </u>
5:00 p.m.	Registration check-in, lodging assignment
6:00 p.m.	Introductions of Participants and Instructors
6:30 p.m.	Dinner
7:00 p.m.	Field Exercises: Setting acoustic equipment
8:30 p.m.	Introductory Lecture on California Bat Natural History (Szewczak): 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 considerations
8:15 p.m.	Field Exercises (end at 10:00 p.m.)

Thursday

8:00 a.m.	Coffee
8:30 a.m.	Breakfast
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9:00 a.m. Lecture: Acoustic monitoring (Echolocation 101 – Szewczak): 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 discrimination

12:30 p.m. Long Lunch (rest time) & Pack your own dinner

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- 2:00 p.m. Lecture: Identifying California bats (Johnston and Szewczak): diversity and distribution; introduction to species identification and handling bats; using keys; tips on differentiating similar species; accounts:
 - 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. Review gear, Field Exercises: Acoustic Monitoring & Mist-netting (Dinner in the field)

Friday

8:00 a.m. coffee 8:30 a.m. breakfast

9:00 a.m. Review Previous Night's Captures, Additional Ecological Considerations, Data Analysis

12:30 a.m. Lunch & Pack your own dinner, BREAK (Go take a nap)

4:00 p.m. Review gear, prepare caravan for field exercises

5:00 p.m. Depart for Field (Bring Dinner to the field), Set nets and Acoustic Equipment, determining

presence or absence at roosts

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

Saturday

8:30 a.m. coffee 9:30 a.m. breakfast

10:00 a.m. Conservation Issues and Strategies (Remington)

1:00 p.m. Lunch and fill-out evaluations

1:30 p.m. Participant driven discussion of Conservation and Mitigation Strategies (Johnston and

Remington)

3:00 p.m. Workshop concludes