Sponsored by The Wildlife Society – Western Section

Noninvasive Acoustic Monitoring of Bats, Field Techniques Workshop May 20 – 23, 2010

Location: Wind Wolves Preserve, near Maricopa, CA (west of "The Grapevine")
Instructors: Joe Szewczak, Ph.D., Professor, Humboldt State University, developer
of SonoBat software

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

Description:

This workshop will introduce participants to noninvasive acoustic monitoring and species identification of bats. Beginning with the fundamentals of acoustics to interpret the biology and ecology of echolocation; we'll work to understand how bats use sound and how we can interlope into this realm to survey and monitor bats. From this foundation, participants will then learn the theory and practice of recording and analyzing ultrasonic bat vocalizations to interpret bat activity and species presence. Field outings will provide hands-on experience in deploying equipment and acquiring data to process. Tools and techniques for both short term and long-term passive monitoring of bats and automated data processing will be demonstrated. Participants will recognize the acoustic characteristics of western North American bats essential for species discrimination. Full spectrum acoustic techniques will be emphasized, as recommended by the new USFWS guidelines for Wind and Wildlife when species ID is important. Meals are included.

NOTE: We will not handle bats during this workshop. 20 participants maximum!

Brief Schedule – see below for detailed daily schedule

Thursday

5:00 p.m. Registration, check-in, set up housing 6:00 p.m. Introductions of Participants/Instructors

6:30 p.m. Dinner

7:30 p.m. Demonstration: Set up acoustic monitoring stations near Preserve

Headquarters

8:30 p.m. Walkabout near Preserve Headquarters actively monitoring bats

Friday

8:00 a.m. Coffee/Breakfast

9:00 a.m. Lecture: Echolocation 101

12:15 p.m. Lunch

1:30 p.m. Lecture: Recording Engineering 101

4:30 p.m. Long Break

6:00 p.m. Dinner

7:30 p.m. Field techniques, set up recording stations, active acoustic monitoring

10:00 p.m. Return

Saturday

8:00 a.m. Coffee/Breakfast

9:30 a.m. Return to field site to retrieve overnight data

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- 10:45 a.m. Lecture/Demonstration/Activity: What bat is that? (Lunch and long break included)
- 5:20 p.m. Set up recording equipment
- 6:00 p.m. Dinner
- 7:30 p.m. Head to field site, set up recording stations, active acoustic monitoring
- 10:00 p.m. Return from field

Sunday

- 8:00 a.m. Coffee/Breakfast
- 9:30 a.m. Return to field site to retrieve overnight data
- 10:45 a.m. Lecture: Acoustic study design
- 11:45 a.m. Break out session-download data from previous night, begin data analysis
- 12:15 p.m. Lunch
- 1:15 p.m. Continue data analysis, compile species lists
- 2:00 p.m. Lecture/Discussion: Recommendations for specific monitoring projects (rare species surveys, presence/absence surveys, wind energy, impact studies); Final recommendations and participant forum
- 3:00 p.m. Workshop concludes

Accommodations:

The Wildlands Conservancy (TWC), a private non-profit public benefit corporation, is our host for this workshop. All public access, including camping, at Wind Wolves Preserve, as at all TWC preserves, is provided free of charge. 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." The campground is developed.

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, <u>www.motel8maricopa.com</u>, 600 Poso Street, Maricopa, CA 661-769-8291 Holland Inn & Suites, hollandsuites.com, 531 Warren St, Taft, CA 661-763-5211

Registration:

\$395 TWS WS Regular

\$430 non-members

\$250 TWS WS Student*/New Professionals**

- *Students show proof of current (half-time minimum) university enrollment
- **New Professionals (within 6 months of University graduation or employed part-time/seasonally in a wildlife-related job assignment)

All meals, from Dinner Thursday to Lunch Sunday are included in the workshop. Please submit any dietary restrictions with registration.

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 5** or the workshop will be cancelled and all registration fees will be returned. Registrants will be processed in the order

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received and successful registrants will receive workshop logistics and information once receipt of full payment is confirmed.

All registrants please complete on-line registration https://www.wildlifeprofessional.org/western/bat2010_reg.php

Payment by purchase order or check should be accompanied by a printout of the online registration form and sent to:

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