

## SEEKING VOLUNTEER FIELD ASSISTANTS FOR SUMMER BIOLOGY RESEARCH OPPORTUNITY



WESTERN MASSACHUSETTS  
MAY – AUGUST 2015

### *Environmental acoustics and vocal communication in Song Sparrows*

In many animal species, acoustic communication plays a key role in regulating intraspecific interactions. In territorial songbirds, long-range signals in particular are used to keep competitors at a distance and to catch the attention of potential mates. There are many environmental obstacles to sound transmission in nature, however, which threaten signal fidelity when a vocalization transmits from the sender-bird to the receiver-bird. For example, song structure may become degraded as sound travels through a thick forest or across a swampy habitat. I want to understand how degradation of sound over distance influences acoustic communication in birds.

I am looking for enthusiastic and dependable volunteers to contribute to a field study investigating the acoustic transmission of Song Sparrow vocalizations. We'll be mist-netting and banding birds to monitor local populations and nests throughout the breeding season, as well as mapping territories, collecting sound recordings, and documenting behavioral data based on song playback experiments in the field. Additionally, there will be a lab component of the project in which we'll bring adult males into the lab to take high quality sound and video recordings, along with possible neurophysiological recordings of brain activity, before returning the birds to the field. We'll be measuring and quantifying sound degradation using bioacoustic analysis of song recordings in the lab as well. There may be opportunities for assisting with data processing after the field season, if interested. I am looking for people with a strong interest in biological field research and bird behavioral ecology. You must be organized, reliable, flexible, and detail-oriented with comfort and competence both working independently and as part of a team. This is fieldwork – we will be outside in the summer heat and the summer mosquitos! You must be willing to get up and out the door **before dawn** regularly. Expected commitment 2-3 days per week. Exact times & dates negotiable.

Interested students should contact Amy Strauss, PhD student in the Organismic and Evolutionary Biology program at UMass Amherst, at [av Strauss@cns.umass.edu](mailto:av Strauss@cns.umass.edu).

Please include the following: 1) a brief paragraph describing your interest in the project and your relevant background/experience, 2) your resume, 3) a copy of your transcripts, and 4) a list of two references with contact information.