

SEEKING VOLUNTEER RESEARCH ASSISTANTS FOR SUMMER BIOLOGY RESEARCH OPPORTUNITY



AMHERST, MASSACHUSETTS
MAY – JULY 2016

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 research 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 young nestling birds into the lab to track song development over time. We'll be measuring and quantifying sound degradation using bioacoustic analysis of song recordings in the lab as well, so there will be some computer work. I am looking for people with a strong interest in biological 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. Much of this will be 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. Access to a car is ideal – if you do not have access to a car, you must be able to get to the UMass Amherst campus by 5am (before bus service begins). Expected commitment 2-3 days per week. Exact times & dates negotiable.

Check out Amy's blogpost about her field experience:

<https://dispatchesfromthefield1.wordpress.com/2015/11/20/mischief-in-sparrow-land/>

Interested students should contact Amy Strauss, PhD candidate in the Organismic and Evolutionary Biology program at UMass Amherst, at 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.