

Pájaros de los árboles

REU opportunity: Research Experience for Undergraduates Intern Position studying forest birds at the H.J. Andrews Experimental Forest in Oregon

Position period: May 15 - July 21, 2023 (ten weeks)



Location: H.J. Andrews Experimental Forest, Blue River, Oregon and Oregon State University, Corvallis, Oregon. *See this gorgeous forest on the next page!*

Description of the project: Applicants with bird experience are sought for an exciting collaborative research project investigating a potential mechanism for the “climate refugia hypothesis” for songbirds in the Pacific Northwest. Songbird populations appear more resilient to climate change in cooler, old growth forests. But why? The birds appear to easily tolerate the warmer temperature of the younger forests, so a physiological explanation is unlikely. Perhaps the cooler old growth forests harbor a higher diversity of arthropod prey within the microhabitats and microclimate provided by their structurally complex forest canopies?

This position is made possible by a collaboration between Oregon State University and Cal Poly Humboldt. This study will involve “target netting” songbirds (like the beautiful Hermit Warbler above!) occurring in old and young Douglas-fir forests and collecting fecal samples. Participating in ongoing point counts is also possible. The successful candidate will also likely participate in lab procedures to extract and amplify DNA from the feces and prepare samples for subsequent genetic barcoding analysis of the birds’ diet.

Duties include: 1) learn and assist songbird trapping, operating mist-nets, and collecting fecal samples; 2) learn and contribute to other tasks, including but not limited to avian point count surveys, fecal sample DNA extraction and amplification; 3) work with Drs. Johnson and Betts to design and analyze a small independent project that fits within the ongoing field work; 4) enter and proof data; and 5) conduct analyses with potential for later presentation at a scientific conference.

This internship will provide the undergraduate student an opportunity to participate in 10 weeks of mentored, paid, independent research. The student will interact with scientists, university faculty, federal scientists, and graduate students conducting research in the area. Participants will closely work with the PIs of the project (Drs. Matt Betts of Oregon State Univ and Matt Johnson of Cal Poly



Humboldt) and graduate students on the grant. The REU student will conduct supervised and guided research and be encouraged to tailor the research project to his/her own interests.

What is provided: Apartment-style, shared-room housing is provided at the [HJ Andrews Experimental Forest](#) field station. The field station is located in the Willamette National Forest near Blue River, OR and provides access to great hiking and mountain biking trails, swimming holes, and hot springs.

This position lasts for 10 weeks, May 15 through July 21, 2023, at least 40 hours/week. The REU intern will be responsible for 1) meeting all requirements of the mentors and 2) writing a final research report on the research experience. Housing and a stipend of \$5,500 will be provided. There are funds to defray the cost of traveling to the H. J. Andrews Experimental Forest. Please note that the REU program is considered an educational program rather than employment; therefore, Oregon State University does not provide Worker's Compensation insurance coverage nor medical insurance on your behalf. You are responsible for your own health insurance coverage.

Position Requirements: Applicants should have a valid driver's license, the ability to carry a heavy pack (40+ lb) for moderate distances (5+ mi) over uneven, mountainous terrain, and be comfortable spending long days on their feet in the field. The position will involve working very early mornings and in inclement weather. Applicants should have a strong work ethic, be self-motivated, and comfortable with working in remote areas alone. Being a team player is necessary for group work/living situation. Ability to adapt to a variable work schedule is also necessary. Our transects are in steep mountain slopes and across valleys with old-growth forest towering 200 feet or more. Previous bird-banding skills are preferred. Eligibility is limited to currently enrolled undergraduates that have a graduate date no sooner than fall 2023. All applicants must be U.S. Citizens or permanent residents. Underrepresented minorities are especially encouraged to apply.

To apply: Please submit a brief cover letter (1 page) indicating your interest, experience and professional goals after graduation, curriculum vitae or resume, transcripts (unofficial are acceptable) and 3 professional references (names, addresses, phone number, and email address) as 1 document to: matt.johnson@humboldt.edu. Please include in the subject: HJA REU 2023 Application. Only complete applications will be considered. Review of applications will start Feb. 27, 2023 and continue until a suitable candidate is identified.