



Graduate Opportunity (MS) in Entomology, summer 2024 Department of Entomology, Washington State University

Position description: We are looking for applicants for a recently funded MS student position at Washington State University (WSU), Department of Entomology. The student will lead a research project on the pollinator fauna of a federally endangered, endemic flowering plant, Spalding's catchfly (*Silene spaldingii*). The successful candidate will be carrying out field work in the Pacific Northwest and use environmental DNA methods to: (1) identify pollinators of Spalding's catchfly, (2) identify the presence of potential nonnative plant species that may compete with Spalding's catchfly, (3) and examine the pollinator dynamics in an understudied Pacific Northwest ecosystem.

Spalding's catchfly (*Silene spaldingii*) is a federally listed plant endemic to the Pacific Northwest. This flowering plant depends on native grassland habitat which is declining throughout the PNW. Nonnative invasive plants are considered one of the greatest threats to Spalding's catchfly populations as they can compete for resources, alter ecosystem dynamics and may even alter pollinator behavior. There is reason to believe that the presence of specific nonnative species in Spalding's catchfly habitat may negatively impact reproduction and impede species recovery. Understanding this dynamic is imperative because successful pollination is vital to Spalding's catchfly recovery.

We seek an incoming graduate student with an interest in bee and/or pollinator biology, identification, and field work. The successful candidate will collaborate on a research project between (WSU) and the United States Fish and Wildlife Service (USFWS), with field sites in Northeastern Washington. The student will learn and use novel eDNA metabarcoding techniques, as well as observation and collecting, to identify the pollinator fauna of Spalding's catchfly, develop plant-pollinator visitation networks detailing plant usage, and contribute to the conservation of a threatened plant species.

Qualifications: BS in entomology, biology, or a related field. Preference given to candidates who have skills in bee and/or plant identification, and/or molecular lab work.

Professional expectations: The MS student will work at Washington State University, Pullman, in the lab of Silas Bossert and Elizabeth Murray. There will be several opportunities for travel during the appointment, including at least one scientific meeting. Pls will encourage professional development and creative and independent approaches to problem solving.

About the lab: Our lab is broadly interested in bee and pollinator biology and evolution. Our expertise includes phylogenomics, faunistics, taxonomy, museum curation, and comparative analyses. The lab is in the exciting stage of being recently established and building personnel and resources, and we welcome candidates who will contribute to a diverse laboratory environment (<https://murraylabwsu.com>).

About the location: Washington State University is a land-grant institution located in Pullman, Washington. The Department of Entomology (<https://entomology.wsu.edu>) hosts facilities such as the MT James Entomological Collection (<https://museum.entomology.wsu.edu>), the Honey Bee and Pollinator Research, Extension, and Education Facility, and state of the art laboratory equipment. Faculty in Entomology are located on campuses and research & extension centers across the state.

To apply: Contact Silas Bossert (silas.bossert@wsu.edu) prior to applying; please include your CV along with a description of your background and your fit for the position. Preferred start time for this position would be between May 15- June 15, 2024. Candidates will be reviewed starting February 5th, 2024.

Washington State University is an equal opportunity/affirmative action educator and employer. Members of ethnic minorities, women, special disabled veterans, veterans of the Vietnam-era, recently separated veterans, and other protected veterans, persons of disability and/or persons age 40 and over are encouraged to apply.