POSITION ANNOUNCEMENT

PhD Assistantship – Evaluating population structure and habitat connectivity in Coeur d'Alene salamanders in Montana

Department of Ecology, Montana State University

The Coeur d'Alene salamander (*Plethodon idahoensis*) is Montana's least studied chordate species. Due to its limited range, potentially isolated populations, assumed small population size, and potential for statewide or global extirpation, Coeur d'Alene salamanders (CDLs) are listed as a Species of Concern in Montana. Montana Fish, Wildlife and Parks' (MFWP) nongame program has prioritized monitoring and research efforts to better understand the distribution, status, and vulnerability of this species. Conservation of this species in Montana requires developing an understanding of the population distribution and connectivity, as well as mitigating potential negative impacts to habitat patches and connectivity among sites.

The successful candidate will pursue a Ph.D. degree at Montana State University in the Department of Ecology (http://www.montana.edu/ecology), advised by Dr. Andrea Litt (http://www.montana.edu/litt/) and will develop a research project that can build on our understanding about CDLs and inform management and conservation. The project will be a collaboration with and is funded by Montana Fish, Wildlife and Parks. Focal research areas will include: 1) applying the most current survey methodology to characterize the distribution and habitat features of CDLs in Montana, 2) delineating potentially distinct CDL populations in Montana, and 3) characterizing genetic connectivity by modelling landscape resistance between CDL habitat patches and/or populations as a function of landscape features. Specific research questions will be determined jointly by the advisor and selected candidate.

Required Qualifications:

- B.S. and M.S. in wildlife science, ecology, zoology, or closely related field.
- Applicants should have an average GPA of 3.0 in biology courses; 3.0 average in courses taken during the junior and senior years; and 2.5 average in chemistry, physics and mathematics courses.
- A strong work ethic, drive, and motivation to succeed
- Aptitude for modelling and quantitative ecology
- Strong verbal and written communication skills
- Ability to work independently and as a productive leader and member of a research team
- Ability to work under adverse field conditions

The Litt lab is committed to fostering diversity and inclusion and strongly encourages applications from candidates from diverse backgrounds. Interested parties are encouraged to apply even if these minimums aren't met.

Preferred Qualifications:

- Background or interest in genetics, herpetology, and habitat selection.
- Experience working and communicating with other biologists, landowners, and the public.

Stipend/Salary: The student will be supported by research assistantships ($2800/month). Insurance and tuition/fees also will be covered.

Start Date: October 2025, pending receipt of funding

Application Deadline: We will begin reviewing applications on 4 June 2025 and will continue until a candidate is selected.

To Apply: Please send: (1) a cover letter focused on the listed qualifications, as well as how the opportunity would help further career goals, (2) resume/cv – listing any presentations and publications, (3) unofficial copies of transcripts, and (4) contact information for 3 references to Dr. Andrea Litt (andrea.litt@montana.edu).