Aquatic Ecology Research Assistant: Working in/near Glacier National Park with the University of Montana and the Flathead Lake Biological Station (FLBS, a field station), Polson, MT

Position:
- 3 month paid position ($8.50/hr) starting ~ March 1st, 2019 with possible extension up to 8 months
- Housing at FLBS or our field camp is also provided
- We are looking for a motivated and organized individual who can help plan and lead field efforts, identify aquatic insects, and participate in lab respirometry experiments
- Experience and training provided in a variety of lab and field techniques, and possibility of co-authorship on a publication
- Exposure to conservation ecologists from different agencies including USGS, GNP, and possibly the USFS, as well as faculty at FLBS.
- Applicants must have a valid driver’s license and be comfortable driving 4x4 trucks

Description:
As part of an NSF-funded project, the University of Montana is seeking a highly motivated and organized individual to assist with laboratory and field studies of aquatic macroinvertebrates. Work will be split between the lab at FLBS and field work on the Flathead River near Glacier National Park, MT. River floodplains are among the most diverse yet endangered landscapes on the earth, however the invertebrate communities have not been extensively studied yet using genetic techniques. Data that we collect for this project will be analyzed using novel genomic tools and modeling frameworks to assess the genetics, populations, and functional trait diversity among floodplain arthropods. In 2019 we will continue to conduct laboratory studies on the vulnerability of different stonefly (Plecoptera) species to changing dissolved oxygen and temperatures. The assistant will collect field specimens for experiments and will help run experiments in the lab. The research assistant will also help plan field sampling and will drive the field truck to conduct sampling efforts with field volunteers. The assistant will interact with staff and researchers at the FLBS and will also be exposed to multiple agency researchers and mangers to help understand different career options in biology.

The position will start in early March and first primarily be focused on Plecoptera taxonomy and preparation/planning for both laboratory experiments and field work. Most field work and lab experiments will start in April or May and may last until the end of October. Field sites are located on tributaries and floodplains of the Middle Fork, North Fork, South Fork and main Flathead River, and also in other rivers in MT. We will sample macroinvertebrates in tributaries and the main river using kick nets, sweep nets, and drift nets. Groundwater wells will be sampled to remove larval and adult macroinvertebrates from the river aquifer.

FLBS is one of the oldest active biological field research stations in the United States. It was established near Bigfork in 1899 and moved to Flathead Lake’s Yellow Bay in 1908. The station conducts multiple college courses, graduate programs, workshops, and research on genes to landscapes focused on the Crown of the Continent ecosystem and other systems from Yellowstone to China and worldwide. This position is an excellent opportunity to gain valuable experience and knowledge of river ecology, aquatic ecology field techniques, and to make valuable connections with professionals working in aquatic ecology, conservation biology, and genetics. It is also a great opportunity to work, explore, and live in one of the most beautiful areas of the country.

This work is part of an NSF-funded project to study river biodiversity led by PI Dr. Gordon Luikart, co-PI’s Dr. Jack Stanford and Dr. Brian Hand, and post-doctoral scholar, Dr. Rachel Malison.
Qualifications and Responsibilities:

Applicants should have a Bachelor’s Degree in Biology, Ecology, or a related field. Completion of at least 4 total semesters in biology, chemistry, environmental science, or equivalent is required. Preference will be given to applicants who have demonstrated passion and proficiency in field-related activities in their major program. Preference will also be given to applicants who demonstrate a familiarity and passion for working with and identifying aquatic macroinvertebrates. Applicants need to be interested in working in both the lab and the field. Applicants need to be willing to drive a 4x4 vehicle to sampling locations. While in the field the assistant will be responsible for keeping all sampling gear organized and ready, collecting samples, identifying macroinvertebrates, entering data, and keeping detailed field notes.

Applicants should be mature, hardworking individuals with good organizational skills and attention to detail. Ability or experience leading team efforts preferred. They should work well as part of a team, and have a positive attitude, a desire to learn, and a good sense of humor. A good applicant will be in good health, and be capable of hiking in rough terrain through thick vegetation and be able to lift up to 50 lbs. Applicants should have experience wading in swift currents over slippery rocks. They should also be comfortable using their hands in cold water for extended periods of time. Long hours are common during different sampling events as well as in the lab when experiments are running, and fieldwork will be conducted regardless of the weather. Applicants should be comfortable working in inclement weather. Mosquitoes can be persistent through parts of the field season, and fieldwork will be conducted in bear country. Applicants must be comfortable carrying bear spray, be willing to follow bear safety protocol, and living in a field camp for part of the season (with wall tents, limited power, no indoor plumbing (a shower is available), and no cell phone or internet service - there is a landline at the camp and cell phone service is available nearby in West Glacier).

Most of all, applicants should have a passion for aquatic ecology, interest in learning about biodiversity conservation, macroinvertebrates, and river floodplains, and be confident in their ability to fit the job description above.

To Apply:

If interested in this position please send the following to Dr. Rachel Malison, at rachel.malison@umontana.edu: An application should include a Cover Letter describing your interest and qualifications for this position (including any taxonomy experience), your resume, and at least two professional references, all attached as a single PDF document. Please include your DATES OF AVAILABILITY in this email and the letter.