



**MSc Assistantship in Pearlshell Mussel Population Genomics
Wildlife Biology Program at the University of Montana in Missoula, Montana.**

Project Description

The University of Montana Conservation Genomics Lab is recruiting an MSc Student for Fall 2024. The student will work on a project examining western pearlshell mussel (*Margaritifera falcata*) population genetic structure and patterns of inbreeding. This work will directly inform decisions regarding population reintroduction attempts across Montana (performed along with fish host translocations). Analyses will use several approaches, including whole genome sequencing to test the population genetic consequences of hermaphroditism.

Work will be conducted in close collaboration with Montana Fish, Wildlife & Parks. The student will have an opportunity to interact directly with fisheries managers in this state agency. The majority of funding will be provided through research assistantships, and funding support will cover a tuition waiver, health care, and fees.

Our lab and our University of Montana are devoted to promoting diversity and supporting professional development of our students. The student will be part of the highly ranked Wildlife Biology Program. The University of Montana has a long history of excellence in conservation genetics. Missoula is a vibrant and growing community with excellent outdoor recreation opportunities and a great food and music scene.

The successful candidate will ideally start fieldwork in summer 2023.

Successful Candidates

The successful candidate must be willing and excited to learn skills related to population genomics (genomics techniques and bioinformatics), management and analysis of data, communication of results to diverse stakeholders, and publication of manuscripts in peer-reviewed journals. Prior experience with freshwater mussel sampling is beneficial but not required.

Funding

Support will come from TA or RA Assistantships at approximately \$25,000 per year, including summer salary. The assistantship will include a tuition waiver. Student fees and health insurance will be covered.

The University of Montana values leadership, engagement, diversity, and sustainability, because our institution is committed to respecting, welcoming, encouraging, and celebrating the differences among us. As members of the University of Montana community, we aspire to: (1) Respect the dignity and rights of all persons. (2) Practice honesty, trustworthiness, and academic integrity. (3) Promote justice, learning, individual success, and service. (4) Act as good stewards of institutional resources. (5) Respect the natural environment.

The Wildlife Biology Program has adopted a holistic approach to graduate admissions as part of our efforts to achieve a more diverse cohort of graduate students with varied experience, backgrounds, and expertise. Standardized test scores can be poor predictors of future success, and that our current approach may be disadvantageous to underrepresented groups. Graduate admissions rankings will be based on GPA, demonstrated ability to learn necessary skills, achievements in research, outreach, education, and community activities, strong motivations for the degree, demonstrations of leadership, adaptability, accomplishments, as well as letters of recommendation.

Graduate Entrance Requirements

- A bachelor's degree related to wildlife biology. This could include but is not limited to wildlife or fisheries ecology, ecology, biology, conservation, or environmental science.
- An undergraduate GPA of 3.0 GPA or better.

Please forward the following as an initial application

1. Answers to the following questions

- a. Please describe your motivations for obtaining this graduate degree and highlight some of your professional goals. (300-word limit)
- b. What accomplishment makes you most proud? For example, you could discuss a challenge that you overcame and/or an initiative that you have led? (300-word limit)
- c. Please provide a statement that illustrates your capacity to learn new skills, adaptability, willingness to challenge yourself, your passion, and/or where you have been key in bringing a project to completion? (300-word limit)

2. CV or resume

3. Unofficial transcripts

4. Contact information for 3 references

Timeline: Review of applications will begin on December 1, 2023. The finalists will be notified by December 15, 2023

The finalist will be asked to apply to the Wildlife Biology Program within the UM Graduate School by January 1, 2023

For more information contact Andrew Whiteley (andrew.whiteley [at] umontana.edu)