

## Master's Student Opportunity

### **“Effects of grazing systems on Intermountain West summer range plant communities”**

University of Wyoming - Department of Ecosystem Science and Management

*In cooperation with: USDA-Agriculture Research Service, Dubois, ID*



Photos: H.Wilmer, USDA-ARS

**Project Description:** We are seeking a MS candidate to be part of a research team at University of Wyoming (UW) for a funded two-year project investigating effects in extensive range sheep grazing systems on the production and composition of plant communities in high elevation summer ranges of the Centennial Mountains of Idaho. The student will be in the Department of Ecosystem Science and Management and will pursue a M.S. degree in *Rangeland Ecology and Watershed Management*. The primary focus of the MS candidate will be to document and understand plant-herbivore interactions in transhumant range sheep production systems, specifically using an exclosure experiment to examine grazing effects on mountain meadows. The field site includes plots established along an elevation gradient in backcountry summer grazing allotments in the Caribou-Targhee National Forest. This project is jointly supported by UW and USDA-ARS. The position will ideally begin in January of 2024 at UW, while field work will involve a summer seasonal position with the ARS-Range Sheep Production Efficiency Research Unit at the US Sheep Experiment Station in Idaho. Duties include leading a field crew, organizing logistics for field sampling, collecting, managing and processing data, and analyzing data in support of the development of peer reviewed publications. **Two summers of fieldwork (2024 and 2025) will take place in a remote, backcountry setting and involve several weeks of hiking, horseback travel with pack animals, and camping to collect vegetation data each growing season.**

**Qualifications:** We encourage applications from students with a BS degree in Rangeland Management, Natural Resources, Botany, Ecology, Environmental Science or a related field completed by Fall 2023 and a competitive GPA (>3.0 required) (<http://www.uwyo.edu/esm/graduate/prospective/apply.html>). Experience with social-ecological systems, livestock production systems, botany, vegetation monitoring, data management, field data collection, and statistical analysis is preferred. Student must be physically able to perform fieldwork with little supervision, able to serve as a leader in the field with a crew of scientists, seasonal interns and/or research technicians, and have strong verbal and written communication skills, and computational skills. We encourage applications from individuals with horsemanship and packing skills, camping, wilderness and backcountry experience, and those with previous experience and coursework in botany, rangeland management, social-ecological systems, livestock, and wildlife, and applications from underrepresented groups. Proficiency in spoken/written English, a valid US driver's license, and the ability to pass Wyoming DMV check are needed.

**Specifics:** The position will begin in January 2024. The student will be supported by an assistantship including academic year salary, tuition and fees and health insurance (approval pending), and summer salary through ARS. Funding is available for 2 years. The student will be co-supervised by Dr. Derek Scasta (UW) and Dr. Hailey Wilmer (USDA-ARS). Each summer, the project requires travel between

Wyoming and Idaho research sites (~500 miles one-way). UW, a land grant institution, is the only four-year university in the state. UW is located in rural southern Wyoming in Laramie, population approximately 30,000, close to excellent outdoor activities in the nearby Snowy and Laramie Ranges and near cultural and other amenities along the Front Range of Colorado. For more information department and the Laramie area, please visit: <http://www.uwyo.edu/esm/> and <http://visitlaramie.org/>. The University of Wyoming is an Equal Employment Opportunity/Affirmative Action employer.

**Application:** Candidates must apply to the University of Wyoming Graduate Admissions program (<http://www.uwyo.edu/uwgrad/prospective/applying/index.html>). Before beginning this process, prospective students should contact Dr. Derek Scasta ([jscasta@uwyo.edu](mailto:jscasta@uwyo.edu)) and Dr. Hailey Wilmer ([hailey.wilmer@usda.gov](mailto:hailey.wilmer@usda.gov)) for more information. The following will be needed: personal statement, CV describing qualifications and experience, unofficial transcripts (official transcripts will be required for formal application), and contact information for three references.