

PhD Graduate Assistantship – *Rangeland Grazing and Ecosystem Function*
Department of Ecosystem Science and Management - University of Wyoming

Project Description: We are seeking a PhD student at the University of Wyoming (UW) for a research project assessing rangeland soil, vegetation, and livestock on a high-elevation research ranch located 30 miles north of Laramie, WY. The project will involve field work assessing drivers and response of soil organic carbon accumulation and flux relative to cattle grazing management across different soil types. Energy, gas, and water response variables will be measured using a low-cost eddy covariance system. Soil and plant monitoring will include a variety of techniques including the Ecological Health Index (EHI) - a 16-indicator, applied land monitoring platform. Ecological measurements will be linked with agricultural metrics such as soil response, forage production, grazing days, and livestock performance. This project is part of an international effort with other intensive and extensive research locations in Oklahoma and Michigan and will offer the opportunity to interact with a larger research team including soil scientists from Colorado State University, social scientists from Oregon State University, engineers from England, research scientists from The Noble Research Institute, regional producers, in addition to many others.

Qualifications: We encourage applicants with BS and MS degrees in Rangeland Management, Natural Resources, Botany, Ecology, Environmental Science, Agronomy, Animal Science, or a related field completed by December 2022 and a competitive GPA (>3.0 required) (<http://www.uwyo.edu/esm/graduate/prospective/apply.html>). Experience with cattle, soil sampling, vegetation monitoring, data loggers, field data collection, and statistical analysis is preferred. Student must be self-disciplined, physically able to perform fieldwork with little supervision, able to work well with research technicians, and have strong verbal, written, and computational skills. We also seek a student with strong interests in scientific writing. We encourage applicants with previous experience and coursework in rangeland plant communities, livestock, and soils, 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 project is funded by the Noble Research Institute and the Foundation for Food and Agriculture Research with support for the doctoral student for four years and ideally the student will start in January of 2023. The graduate assistantship includes a stipend, health insurance, and tuition and fees (approval pending). 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.

Contact: If you are interested in this opportunity, please contact Dr. Derek Scasta (jscasta@uwyo.edu). Candidates must apply to the University of Wyoming Graduate Admissions program (<http://www.uwyo.edu/admissions/apply.html>).