



MEM/MSE Graduate Research Assistantship Focused on the Application of Virtual Fencing Technology in Environmental Conservation, Western Colorado University

Job Title: Graduate Research Assistantship

Organization: Western Colorado University (WCU)

Location: Gunnison/Crested Butte, CO with occasional regional travel

Overview: Clark Family School of Environment and Sustainability faculty are recruiting Masters in Environmental Management (MEM) and/or Masters in the Science of Ecology (MSE) students to apply for **ecosystem restoration research positions** with the WCU Center for Public Lands. The student(s) will collaborate with landowners, natural resource agencies, and/or non-profit organizations on research focused on the application of virtual fencing technology to environmental conservation. The student(s) will determine baselines for management and restoration strategies on both private and public lands, including rangeland and US Forest Service allotments near Gunnison, Colorado and the Verzuh Ranch Living Laboratory (WCU) in Crested Butte, Colorado.

Duties: The Graduate Research Assistant(s) (GRA) will contribute to an interdisciplinary project focused on using virtual fencing technology to conserve and manage wildlife, water, and other natural resources. GRA(s) will inventory natural resources (especially wetland and stream habitats) to fine tune virtual fencing and grazing strategies, as well as establish a pre- and post-project effectiveness study design for multi-year research and monitoring. To achieve this work, GRA(s) may utilize remote sensing, GPS and GIS technology for monitoring. GRA(s) may also employ standard field-based methodologies to conduct bird and vegetation surveys.

The project may include an examination of the social, economic, institutional, legal, and/or technological barriers to adoption of virtual fences and relevant case studies. The project may also help determine management strategies and conceptual designs for ecosystem restoration, wetland creation, and rewilding. The GRA(s) will also assist with organizing research meetings and outreach events with involved stakeholders.

Ideal candidates for this position will possess outstanding communication skills, have experience collaborating or working as part of a team, have experience conducting research or stakeholder outreach, and an interest in ecosystem restoration. A background or experience with agricultural and land management in the American West is a plus. Candidates should have an interest in rural communities, appreciation for agricultural livelihoods, and a desire to work with diverse stakeholder groups. Candidates should show creative and flexible thinking, be self-motivated, and able to work independently with guidance and support from project collaborators. Preferred candidates will have and/or hope to acquire knowledge or experience with some or all of the following: applied conservation efforts, ranching, natural resource law and policy, land management in the American West, ecosystem restoration, remote sensing as well as wildlife and wetland monitoring techniques.

Qualified GRA applicants will pursue or be pursuing a MEM and/or MSE degree in the WCU Clark School of Environment and Sustainability with preference given to those who can work on this project for two years. Participants must be willing to start in the summer of 2024.

Qualifications: Preference will be given to applicants with interest and /or experience in ecosystem restoration; applied conservation; ranching; land management; and/or working in rural communities. Applicants who have a BA or BS in any field will be considered, with preference given to ecological science, social science, agriculture, business, or interdisciplinary fields. Applicants must have an undergraduate GPA of 3.0 or higher. Standardized test scores (e.g., GRE) are **not** required. Candidates from backgrounds underrepresented in higher education, conservation, and other natural resource fields are especially encouraged to apply. Formal application to the MEM and/or MSE programs at the Clark Family School at Western Colorado University is required subsequent to selection of the successful candidate(s). Inquiries about the position are welcome.

Funding Package: Up to \$20,000 over two years.

Application Deadline: Application deadline is rolling but first review of applications will begin with applications received by April 19 at 5 pm.

How to apply: Please send the following materials as **one** PDF document to Dominique Naccarato at DNaccarato@western.edu with the subject “**Your Name GRA Position**”. This packet should include:

- (1) Cover letter/narrative (roughly 2-3 pages) that explains your desire to pursue an ecosystem restoration project, how your research interests relate to the focus of this project, your career goals, and should highlight your relevant skills and experience;
- (2) Resume or CV including degree(s) earned, GPA, and contact information for at least three references; and
- (3) If newly applying to MEM and/or MSE program at Western Colorado University, please include an unofficial copy of your undergraduate transcript.