

Research Technician:
Field Data Collection on a Collaborative Virtual Fence Project

Project managers: Laura Bohannon, Eagle County Conservation District (ECCD) (Eaglecountycd@gmail.com); Stephanie Pitt, Natural Resources Conservation Service (NRCS) (stephanie.pitt@usda.gov)

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Location: Eagle and Garfield Counties. Employee must be able to acquire temporary housing in Eagle, Gypsum, Glenwood Springs, Edwards, Avon, Vail, or other nearby location. Long-term camping in the area is also an option.

Background: Through an NRCS Conservation Innovation Grant award, the Eagle County Conservation District will be examining virtual fencing with VENCE Corp, a relatively new and innovative technology. Using a wireless network of GPS communication data, ranchers will place an invisible, electric fence around livestock from a computer or smartphone. The cattle will be trained to wear GPS-equipped collars that emit sensory sounds alerting the cattle when approaching boundary lines. This is a 3-year study upon which the ECCD and collaborators will be examining the effectiveness of the technology at the rangeland scale.

This position is an awesome opportunity to spend the summer hiking and collecting data in beautiful and remote locations in the central mountains, and gain invaluable experience as a field technician in collaboration with the Natural Resources Conservation Service, Bureau of Land Management, and the United State Forest Service. Sampling tasks will include categorizing soil types, assessing vegetation use, identifying major plant groups, and determining wildlife presence/absence. Field work will require the ability to use off-road vehicles in a safe manner and use basic navigation and backcountry skills. A successful applicant will also have the ability to work in a team of 1-2 technicians and interns funded by the Eagle County Conservation District and CSU. Given the nature of the field experience, applicants must demonstrate their ability to work long hours outdoors under inclement conditions and in hot weather. Applicants with interest in soils, botany, range science and/or wildlife habitat are preferred. There may also be social and ecological data analysis associated with this position, so the ability to use GIS, and interest in recording interviews with participants will be plus. This is an excellent opportunity for anyone interested in a career in wildlife, range, or natural resource management, and interested in cattle management on public and private rangelands. You will gain direct experience working with land management agencies, ranchers and individuals on a collaborative project.

Responsibilities will include but are not limited to:

- Collect 2nd year data for a 3-year experiment using virtual fence (Vence)
- Collect forage and vegetative productivity data on rangeland landscapes
- Perform Rangeland Health Assessments and Stream Visual Assessment Protocols
- Perform field work with potential long hours outside in variable weather

- Maintain safety awareness and practices in sometimes remote environments
- Safely drive a truck off-road on rough BLM and USFS roads
- Participate in interagency collaboration on land management
- Submit monthly and end-of-season reports of data collection and findings
- Participate in ongoing data entry and QA/QC
- Present findings to stakeholders

Qualifications:

- Valid driver's license and clean record
- Basic navigation and backcountry skills
- Ability to meet all physical demands of the position
- Able to work flexible hours
- Strong communication skills, both written and verbal
- Collaborative teamwork with co-workers and stakeholders
- Course work or experience in rangeland science or field monitoring preferred

Job Type: Summer Full-time (June-August) with the opportunity to return following summers

Compensation: \$21.50 per hour

Schedule: 40 hours a week; flexible hours (Mon-Thurs, 10 hours/day is standard, but inclement weather may require some flexibility)

Stakeholders and Professional Development: The Technician will have exposure to stakeholders who are responsible for managing western ecosystems, such as the USFS, BLM, NRCS, rancher partners and CSU Extension, and have the opportunity to engage with real-world monitoring and management, as well as application of new technology for grazing management.

Housing: Technician will need to have housing in Garfield or Eagle Counties and be prepared to spend two months of the summer in this area. Long-term camping in the area is also an option.