Graduate (PhD) Assistantship

Studying how wolf-cattle interactions influence rangeland ecology

**Location:** Fort Collins, Colorado

**Job Category:** Graduate Assistantships

**Salary:** $26,000/year plus tuition and benefits

**Background:**
Carnivore populations, particularly wolves, have been recovering and reclaiming recently unoccupied habitat, with a corresponding increase in the intensity and frequency of livestock depredations. While there are many potential tools and strategies available to livestock producers and land managers, there is little research on how they influence livestock behavior or rangeland ecology. This project, funded through the WCNR Hatch Program, will evaluate direct and indirect impacts of various predation deterrent devices on livestock and rangeland ecology.

**Project Description:**
The Yovovich Lab in the Department of Fish, Wildlife, and Conservation Biology at Colorado State University is seeking motivated applicants for a PhD project focusing on indirect impacts of livestock-carnivore conflict and prevention on rangeland management and conservation. The overall project goal is to better understand how carnivores directly and indirectly influence cattle behavior, and how those dynamics influence rangeland ecology to help ranchers understand and manage these interactions. The successful applicant will design their dissertation to achieve the following project objectives:

- Gather information on current practices that Colorado ranchers utilize to protect their livestock against carnivore predation in rangeland settings.
- Determine livestock behavioral responses to carnivore predation deterrents on rangeland sites in Colorado.
- Measure how changes in cattle behavioral responses might lead to changes in rangeland ecological health.
- Develop an agent-based model to simulate the relationships between deterrent-induced changes in cattle behavior and consequences for rangeland ecology.
- Generate a strategic framework to minimize and mitigate unintended range management consequences of utilizing carnivore predation deterrents and extend that framework to livestock producers throughout Colorado and beyond.

This is a highly collaborative project, and the student will spend considerable time in the field, as well as working with project partners within and external to CSU.

**Qualifications:**
Candidates from underrepresented groups in STEM are strongly encouraged to apply. Applicants must possess a M.A./M.S. in wildlife biology, ecology, human dimensions of natural resources, environmental
studies, range science, or a related field. Applicants should be highly motivated with a strong work ethic and well-developed oral and written communication skills. Competitive candidates will demonstrate experience conducting independent research, presenting research/extension, and analyzing data in R or other statistical platforms. Applicants must have the ability to work well with others who may hold differing views and have a strong ability to communicate well with diverse stakeholders. Successful applicants will demonstrate capacity to work in a team-oriented environment, to learn new analytical skills, and experience conducting fieldwork and problem-solving in remote settings. Applicants must also possess a valid driver’s license.

**Compensation:**
Students will be supported (stipend, tuition, and health insurance) on a combination of research assistantship for 3 years and an additional semester of teaching assistantship (for 3.5 years of secured support) through the WCNR Hatch Program. The student will apply for additional funding to supplement the project and develop their grant-writing skills.

**To apply:**
Please send a single document (e.g., a Word or pdf document) that includes: 1) a cover letter, 2) a brief writing excerpt (1-2 paragraphs from a publication, class writing assignment, etc.), 3) a CV, 4) unofficial transcripts, and 5) contact information for three references (no letters needed yet). The name of the document should be titled YourName_HatchPhDapplication. This file should be sent to Dr. Veronica Yovovich (v.yovovich@colostate.edu), with “Hatch graduate student position” in the subject line.

**Applications due:** May 19, 2023, top applicants will be contacted for a virtual interview.

**Start date:** Fall semester of 2023