

Developing and Testing Long-term Ecological Monitoring Protocols for Land Practitioners in South-Central Colorado

Fully Funded Student Summer Positions in Colorado Available for 2023

The Partnership in Forestry and Rangeland Research Program at the Yale School of the Environment (YSE) has a few *fully funded* summer positions available during May 30-August 12 2023 for Yale graduate and undergraduate students. This position fulfills the 'Summer Experience' (YSE006) requirement for students in YSE.

Background

These funded positions are part of a larger collaboration between YSE and practitioners in the western United States. The aim of this collaboration is to increase knowledge and understanding of landscapes, ecological processes, and effective land management strategies for conservation in the West.

Students participating in these summer positions will collaborate closely with YSE faculty, staff, and students as well as ranch managers working on a large ranch in the San Luis Valley in south-central Colorado. The ranch is located 2.5 hrs southwest of Colorado Springs and within 40 minutes of Alamosa, Colorado.

Summer Position Description

Goal

During the previous two summers, our YSE team collected field data at the ranch, studied ecological monitoring strategies as well as drafted and modified initial long-term monitoring protocols for the ranch. ***We are currently seeking Yale students to field test and implement these monitoring protocols at the ranch in Colorado during summer 2023.*** Student work this summer will directly contribute to our efforts to develop and test monitoring protocols for the ranch and study important land management questions. The monitoring protocols aim to answer key ecological questions over a variety of areas on the ranch, which include:

- Sagebrush sites
- High-elevation forests

Duties

Students will collect field data and work closely with YSE and ranch managers to adjust monitoring protocols as needed. Field work will include establishing long-term plots, sampling vegetation, establishing photo sites, sampling soil, and collecting plant specimens. Students will work daily in the field and may rotate between sagebrush and forested areas. Students will need to communicate well and often with the field team, ranch, and the YSE team. At the end of this position, students will have gained experience in:

- implementation of the scientific process

- monitoring plant response to land management strategies
- teamwork and communication skills
- working in a variety of field conditions
- Rocky Mountain flora plant identification
- understanding of the Rocky Mountain West and private land management practices

The Team

The YSE team includes Dr. Bill Lauenroth (faculty director), Michelle Downey (program director), Dr. Joe Orefice (faculty collaborator), and Dr. Trace Martyn (a YSE post-doc). Students will work closely with these staff and faculty throughout the summer. Students on the crew will have the opportunity to collaborate closely with other Yale students researching the efficacy of sagebrush treatments and the impacts of steep slope mechanized harvesting on forest ecosystems.

Qualifications

- Familiarity with plant identification and vegetation sampling methods (preferred)
- Ability to work in the field safely (i.e., operating vehicle on rough dirt roads, working in the sun/rain/heat)
- Project management and problem-solving skills
- Excellent communication skills
- Experience working as a team
- Valid driver's license

General Student Expectations

- Commit 10 weeks of time during May 30-August 11 2023 and work 5-day, 38 hours/week
- Conduct work professionally and timely with careful attention to detail
- Work closely and communicate often with YSE team
- Be an integral part of a field crew that works and lives together in south-central Colorado.

Compensation

- \$222 per day (\$1110 per week) for up to 10.5 weeks. This award is to cover travel to Colorado as well as a monthly stipend.
- Housing will be provided close to ranch.

How to Apply

Applications will be accepted on a *rolling basis*.

Please submit the following as 1 PDF to michelle.downey@yale.edu:

- Cover letter (1-page max.)
- Resume with 2 references and their contact information
- Unofficial transcripts (Yale and undergraduate)

- A document answering the following questions (max. of 300 words per question):
 1. Describe your career aspirations and what you hope to get out of this experience
 2. Describe the specific skills, traits, and/or experience you would bring to this work and how you have demonstrated these in past experiences. For skills, please state skill level (e.g., novice, some experience, extensive experience, expert).
 3. Briefly describe the amount of time you will have available to commit to this work during 10 weeks during May 30 to mid-August.

How to get more Information

You can direct questions to Dr. Trace Martyn (Trace.Martyn@yale.edu), Dr. Bill Lauenroth (William.Lauenroth@yale.edu) and Michelle Downey (Michelle.Downey@yale.edu).