

**January 30, 2024**

**Position Titles:** Seasonal Forest Ecology and Botany Field Crew Lead and Members

**Employer:** University of California, Davis

**Location:** Southern Sierra Nevada mountain range. See below for more details.

**Dates:**

Application deadline: February 18, 2024

Start date: Variable – mid-May to mid-June, 2024

End date: Variable – mid-August to early-November, 2024

(constraints on availability may be accommodated)

**Pay and Compensation:**

Crew lead:                 \$24.77/hr

Crew member:            \$21.47/hr (w/ bachelor's degree, or equivalent experience)  
                                  \$19.20/hr (w/o)

All positions receive holiday pay, sick leave, and options for health insurance coverage.

**Position Overview:**

Crew lead(s) and up to six crew members are needed to collect ecological data related to forests, vegetation, and wildfires in support of research and monitoring on public lands. US Forest Service ecologists and UC Davis researchers from the lab of Dr. Hugh Safford will supervise but only occasionally accompany the field crew during field sampling. The data will be collected to support long-term monitoring, original scientific research, and evaluation of forest management activities and needs. Work is located in the southern Sierra Nevada mountains, primarily on national forest lands but with some possible work in national parks or other ownerships. Crews will generally work 10-hour days, on an 8-day on / 6-day off work rotation.

**Job Description:**

The crew will conduct field sampling primarily related to vegetation (e.g. forest stand structure, tree mortality, plant species composition, vegetation regeneration), but also related to forest fuels, fire severity, meadows, soils, hydrology, forest insects and disease, and other ecological parameters. One person will be hired primarily as a botanist, but in addition to plant identification, the botanist will be trained and participate in all field sampling protocols. The crew lead(s) will be responsible for leading the field sampling, ensuring that equipment and data are managed properly, coordinating scheduling and logistics with the supervisor, and communicating with the supervisor. Data entry may be required.

Field protocols, equipment, and safety training will be provided. The crew will report to the respective field briefing location on the first morning of each work rotation. During the work week, the crew will usually be car camping, either in designated campsites (paid for by the employer) or in unofficial “dispersed” campsites adjacent to remote roads. These latter sites lack running water and restrooms. In some limited cases, crews may be required to backpack into remote areas for multi-day overnight stays. The crew will be provided with a vehicle, but crew members are responsible for their own transportation to and from the duty station/housing at the beginning and end of the work week. Field driving will often be on remote and rugged roads. Shared camping equipment will be provided as necessary, and a limited supply of personal camping gear may be available to those who don't own the appropriate equipment.

Fieldwork in mountain environments is frequently very remote and can be physically and emotionally taxing. Field crews are often expected to navigate off-trail, in variable weather (hot, cold, wet, and/or windy) conditions, across steep slopes, and in remote and harsh environments. In some post-fire landscapes, the field crew can anticipate traveling through dense shrubs for long distances and working in exposed field plots with no or little shade, and under dead-standing trees. Candidates with backcountry savvy are preferred, but candidates with a proven hard work ethic in arduous conditions are encouraged to apply and will be trained in backcountry skills.

The exact duty station will be based near Coarsegold or Wawona, CA in the southern Sierra Nevada. Barracks housing should be available (but is not yet guaranteed) at a low cost, paid by the employee. Housing details will be made clear before a potential employee is asked to accept the position.

Projects vary throughout the field season, but some potential projects include:

- 1) Monitoring the effects of fire and forest management on forest structure, understory plant communities, rare plants, tree regeneration, and fuel loads (Sierra, Sequoia, and Inyo National Forests).
- 2) Monitoring forest meadows in preparation for planned restoration projects. Surveys include plant identification, meadow health indicators, quantification of conifer encroachment, and habitat type/quality (Sierra National Forest)
- 3) Monitoring the effects of wildfire on regeneration, fuels, and large tree survivorship in giant sequoia groves (Giant Sequoia National Monument, Sequoia and Kings Canyon National Parks).
- 4) Monitoring emergency fuel reduction treatments on forest structure and fuels surrounding large giant sequoias (Sierra National Forest).
- 5) Monitoring the effects of wildfires and insect outbreaks on montane forests and woodlands in the eastern Sierra Nevada, including whitebark pine stands (Inyo National Forest).

**Required qualifications:**

- Crew lead education: Bachelor's degree or equivalent experience in ecology, botany, forestry, range science, or related natural science field
- Crew member education: upper-division college coursework or equivalent experience in ecology, botany, forestry, range science, or related natural science field
- Crew lead field experience: A minimum of two seasons of related field work
- Crew member field experience: A minimum of one season of related field work or multiple relevant coursework field experiences
- Experience in conifer forest vegetation data collection methods OR experience using a dichotomous key to identify plants to the species level, preferably with the Jepson Manual
- Experience in identifying trees and shrubs
- Experience in the use of maps, compass, and GPS units for location and travel
- Ability to maintain a positive attitude in physically demanding and/or uncomfortable conditions
- Enthusiasm for the type of work to be conducted
- Knowledge of and experience with Microsoft Excel for data entry purposes
- CPR and Wilderness First Aid certified (certification may be accomplished after the job offer is made, with registration cost reimbursed by the employer up to \$250)

**Preferred qualifications:**

- Experience conducting forestry or ecological fieldwork, preferably in similar environments to those planned for these positions
- Excellent organizational skills and detail-oriented for data management, equipment management, crew management (crew lead only), and planning (crew lead only)
- Ability to take a leadership role and make decisions without input from supervisor when needed (crew lead only)
- Experience in a variety of vegetation sampling techniques
- Experience in identifying herbaceous species, including grasses, sedges, and rushes (for botany position only)
- Experience working with complex data recording equipment
- Experience in backcountry camping
- Valid driver's license
- Experience operating a vehicle on rough roads

**Physical Demands:**

- Ability to hike 5+ miles per day with a heavy pack, through difficult and steep terrain often without trails, and often in areas burned by wildfire or prescribed fire
- Willingness and ability to work in rugged/remote conditions, possibly with overnight stays away from vehicles (anticipate scarce to no phone signal during the field week)
- Ability to work in extremely hot and dry as well as cold and wet conditions

### **Covid-19 Precautions:**

Crews will be expected to carefully follow required Covid-19 precautions outlined by their supervisors (and required by the University of California and/or the US Forest Service). We expect employees to help protect the health of their fellow crew members by acting responsibly.

### **Crew Safety and Inclusion:**

Outdoor safety is of the utmost importance in fieldwork. This can have many meanings, including having first aid training, being a safe driver, being aware of your own abilities and limitations when off-trail, and being prepared for potentially negative interactions with strangers. We also recognize that some people may have less experience with backcountry work or recreation because of systemic barriers, lack of access to outdoor recreation opportunities, and/or fears about personal safety. There are UC Davis resources such as [Outdoor Adventures](#) and the [Field Safety office](#) that can help you gain some experience in the outdoors if you would like to pursue field ecology and don't know where to start to get the required experience. If you join one of our crews, we as a lab will do all that we can to ensure every crew member is safe and secure in the field.

### **To Apply (please follow these instructions exactly):**

Combine a cover letter (1 page maximum), CV/resume (2 pages maximum), and three references (including name, organization, phone, email, and relationship to you) **into a single pdf** with your last name at the beginning of the file name, and upload to the Box link below no later than February 18, 2024. Your cover letter must clearly state whether you are applying for crew lead or crew member, whether you wish to be considered for the botanist position, and any anticipated constraints on your availability between mid-May and early November. Your CV should address all the required and preferred qualifications that you meet. Email (travis.sowards [at] usda.gov) with questions. **Applications not following these instructions will not be considered.**

Thank you for your interest!

Application upload link:

<https://ucdavis.app.box.com/f/83560e93e2334a63aa288fd3d282df70>