

January 18, 2023

Position Titles: Seasonal Forest Ecology and Botany Field Crew Leaders and Members

Employer: University of California, Davis

Location: Multiple duty stations in the Sierra Nevada. See below for more details.

Dates:

Application deadline: February 5, 2023

Start date: Variable - mid-May to early June, 2023

End date: Variable - late August to early November, 2023

(constraints on availability may be accommodated on some crews)

Compensation:

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

Crew member: \$20.74/hr with Bachelor's degree or equivalent experience; \$15.50-\$18.55/hr without Bachelor's or equivalent

Crew lead: \$23.93/hr

Position Overview:

Three field crews (one crew leader and one to five crew members per crew) are needed to collect ecological data related to forests, vegetation, and wildfire 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 the field crews but will only occasionally accompany the crews 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 will be located in the Sierra Nevada and southern California mountains, primarily on national forest lands but with some possible work in national parks or other ownerships. Crews will work 10 hour days on one of the following schedules, depending on the crew: 4 days on and 3 days off, or 8 days on and 6 days off.

Job Description:

The crews 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 per crew will be hired primarily as a botanist, but the botanist will be trained in and participate in all sampling methods in addition to plant identification. The crew leaders 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 method, equipment, and safety training will be provided. Crews will report to their respective duty stations the first morning of each work tour. During the work week, crews 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 at the beginning and end of the work week. Some field driving will be on remote and rugged roads. Shared camping equipment will be provided as necessary, and we have a limited supply of personal camping gear that may be available to those who don’t own the appropriate equipment.

Field work in mountain environments can be grueling, and crews will be expected to navigate off-trail, in hot or cold weather, on steep slopes and in harsh conditions. In some post-fire landscapes, field crew staff should anticipate traveling through dense shrubs for long distances to get to plots. Candidates with backcountry savvy will be preferred, but candidates with a proven hard work ethic in arduous conditions are welcome and will be trained in backcountry skills.

The exact duty stations may be negotiable. One crew will be based in each of the following three general areas: 1) Idyllwild, in southern California; 2) South Lake Tahoe or Placerville, or nearby in the central Sierra Nevada; 3) North Fork, Prather, or Wawona, CA in the southern Sierra Nevada. Barracks housing may be available in some locations (but is not yet guaranteed) at a cost paid by employee. Details of duty stations will be made clear before a potential employee is asked to accept the position.

Projects may change 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, Eldorado, and Stanislaus National Forests).
- 2) Monitoring effectiveness of conifer removal in high elevation meadows. Monitoring will involve visiting sites where conifers are being proposed to be removed or have been removed and re-measuring plots to evaluate conifer density and vegetation cover (Lake Tahoe Basin Management Unit, Eldorado, Tahoe, and Stanislaus National Forests).
- 3) Collection of post-thinning data on vegetation structure, fuels, and forest health and disease within red fir forests as part of a project monitoring the effects of red fir forest thinning (Eldorado and Stanislaus National Forest).
- 4) 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). 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 (Inyo National Forest).

6) Inventory of burned areas within the Caldor Fire perimeter, as well as in neighboring unburned control areas. Plots will be sampled to determine postfire vegetation conditions, including: tree mortality; tree regeneration; stand structure and composition; surface fuels; carbon stocking; understory plant diversity; noxious weeds; and ground cover (Eldorado National Forest and Lake Tahoe Basin Management Unit).

7) Monitoring the effects of wildfire on tree regeneration (Angeles and San Bernardino National Forests).

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 use of map, 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 job offer is made, with registration cost reimbursed by the employer up to \$250)

Preferred qualifications:

- Experience conducting forestry or ecological field work, preferably in similar environments to those planned for these positions
- Excellent organizational skills and detail oriented for data management, equipment management, crew management (crew leader only), and planning (crew leader only)
- Ability to take a leadership role and make decisions without input from supervisor when needed (crew leader only)
- Experience in a variety of vegetation sampling techniques
- Experience in identifying herbaceous species, including grasses, sedges and rushes (for botany positions 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
- 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 field work. This can have many meanings, including having first aid training, being a safe driver, being aware of your personal 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 5, 2023. 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 positions, your preferred duty station, if any, and constraints on your availability between mid-May and early November. Your CV should address all of the required and preferred qualifications that you meet. Applications not following these instructions will not be considered. Thank you for your interest!

Application upload link:

<https://ucdavis.app.box.com/f/b457373c2ef548339be4ba8c5f3590c1>