January 26, 2021

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 and northern California mountains. See below for more details.

Dates: Application deadline: February 11, 2021
Start date: Variable - mid-May to early June, 2021
End date: Variable - mid-October to early November, 2021

Compensation: $18.34/hr (crew member) to $21.16/hr (crew lead), plus options for health insurance

Position Overview:

Up to four field crews (one crew leader and one to three 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 northern California mountains, primarily on national forest lands but with some possible work in national parks or other ownerships.

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, 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.

The exact duty stations may be negotiable. One crew will be based in each of the following four
general areas: 1) Quincy, CA, in the northern Sierra Nevada; 2) South Lake Tahoe, Placerville,
or nearby in the central Sierra Nevada; 3) Mariposa, North Fork, Pinehurst, and/or Springville,
CA in the southern Sierra Nevada; 4) Willows, Upper Lake, and/or Mad River, in northwestern
CA. Barracks housing may be available (but is not yet guaranteed) at a cost paid by employee.
Some crews may be assigned to more than one duty station during the season, and if that is the
case, supervisors will ensure barracks housing is available at the additional locations. 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 (Inyo, Sierra, Eldorado, Plumas,
Lassen, and Mendocino National Forests).

2) Collection of baseline forest structure data in old-growth stands that will be treated with
prescribed fire (Plumas National Forest).

3) 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).

4) 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).

5) Collection of data on forest stand structure, soil carbon, fuels, tree regeneration, and
understory plants for a research project evaluating the recovery of forests that recently
experienced high levels of tree mortality due to drought and bark beetles. Data will be collected
in the central and southern Sierra Nevada at sites where mechanical removal of dead trees was
conducted and at sites with no post-mortality tree removal (Stanislaus, Sierra, and Sequoia
National Forests, Mountain Home State Forest).
6) Collection of baseline data for forest treatments designed to reduce net greenhouse gas emissions through reducing risk of catastrophic wildfires and other stressors (Sierra National Forest).

7) Giant sequoia grove monitoring (Sierra and Sequoia National Forests).

8) Collection of baseline information in montane meadows prior to restoration treatment (Sierra 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 backcountry camping
- 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
- 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
- Enthusiasm for the type of work to be conducted
- Valid driver’s license
- Experience operating a vehicle on rough roads
- Ability to speak Spanish (only for work on Plumas National Forest)
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.

To Apply (please follow these instructions exactly):

Send a cover letter, CV/resume (2 pages maximum), and three references (including name, organization, phone, email, and relationship to you) to Rebecca Wayman at rbwayman@ucdavis.edu, no later than February 11, 2021. 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, and your preferred duty station, if any. Combine all application materials into a single pdf with your last name at the beginning of the file name and write “2021 Seasonal field crew, UC Davis” in the subject line of your email. Applications not following these instructions will not be considered. Thank you for your interest!