

2024 Field crew positions in 3D forest fuels characterization with terrestrial Lidar and prescribed fire monitoring at UC Davis

The lab of Dr. Hugh Safford at UC Davis is looking to hire crew members for a seasonal field crew to collect data on vegetation, forest fuels, and prescribed fire effects in forest and shrubland ecosystems.

This work will support the project '*Scaling Science-Driven Vegetation Treatments for a Wildfire Resilient California*,' a collaboration between UC San Diego, CAL FIRE, UC Davis, UC Berkeley, and USF.

The people hired will be part of a 3-person team that travels to forest and shrubland ecosystems across California to establish monitoring plots and collect pre- and post-prescribed fire data on vegetation and biomass/fuels in order to calibrate and validate data collected coincidentally with a TLS sensor. Ultimately the data will find their way into 3-D forest fuel models and develop a prescribed fire planning support tool using 3-D fire modeling.

Work may include laboratory tasks to determine the moisture content of collected fuels, and participation in and observation of prescribed fires, depending on weather, availability, and partner organization invitations. Wildland and/or prescribed fire experience is a plus.

Expected employment period and start date:

Approximately 750-800 hours (4-5 months), starting around **July 15th**.

Job Description:

- Most of the work will be conducted in the field, sometimes many hours drive from UC-Davis.
- Crew members will conduct vegetation sampling for the establishment and monitoring of vegetation sampling plots across a range of habitat types using various methodologies, including standard 2-D data collection protocols and data collection protocols specifically designed to support TLS, in remote field sites, often in areas burned by prescribed fire.
- Laboratory tasks (5%) may include sorting of biomass samples and determination of the moisture content of collected fuels.
- Data entry and quality control (10% time): On a daily or weekly basis, crew members will enter & conduct QAQC on data collected. Data entry/cleaning may occur at the office location using Microsoft Excel or Access.

Minimum qualifications:

- Knowledge/experience in ecology, forestry, botany, range science, or related natural sciences
- Experience in vegetation sampling techniques
- Experience in identifying trees and shrubs.
- Experience in backcountry camping
- Experience in the use of maps, compass, and GPS units for location and travel
- Knowledge/experience with spreadsheet software and Mobile Apps for data entry purposes
- Wilderness First Aid certified (*may be completed after job offer, with registration paid by UCD*)
- Basic Drive License (Class C)
- Enthusiasm for the type of work to be conducted.

Preferred qualifications:

- Knowledge of/experience in the use of Terrestrial Laser Systems.
- Knowledge/experience with Laboratory tasks (e.g., vegetation sample sorting, fuel moisture determination)
- Wildland Firefighter Type II/Red Card certification
- Familiarity with California flora & ability to identify plants to species-level with dichotomous key
- Experience in forest vegetation data collection methods
- Ability to maintain a positive attitude in physically demanding and/or uncomfortable conditions

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 prescribe fires.
- Ability to work in hot and dry as well as cold and wet conditions

Work environment:

Field methods, equipment, and safety training will be provided. Crews will usually be car camping, with campsites paid for by the employer. Some camping will be in unofficial, “dispersed” sites on public lands. Campsites will change periodically depending on the duration of work at each site. Depending on site access and availability, crews work 4-8 day tours with 3-6 days off. The crew is 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 each tour. Some driving may be on remote and rugged roads. Working conditions may be remote and rugged, with possible overnight stays in the backcountry.

Compensation:

- Crew members earn \$20-\$23/hr* plus limited benefits.
- Crew leads earn \$23-\$27/hr* plus limited benefits.

*Based on experience & credentials

Positions are for immediate consideration, and applications will be accepted until the positions are filled.

To Apply:

Send CV, cover letter, and contact information for 3 references to Oscar Garcia at osgarcia@ucdavis.edu