



Botany/Ecology Positions Job Description March 2008

Job Summary

California Native Plant Society (CNPS) is seeking applicants for up to 12 Botanist/Ecologist Positions for field work in the spring/summer 2008. At least three of these positions may extend into April 2009. Successful candidates will participate in both a Sierra Nevada Foothill vegetation mapping project and a San Joaquin Valley vegetation classification project in collaboration with the California Department of Fish and Game (CDFG). Candidates will be hired as either a *Team Leader* or a *Field Assistant*, depending on qualifications and experience. The main office for the project is in Sacramento, California, with a satellite office in Fresno. Field travel will include sites in the Sierra Nevada Foothills and the greater San Joaquin Valley ecosystem.

Organization Description

Founded in 1965, CNPS is a statewide non-profit organization that has grassroots and volunteer-based efforts. CNPS is dedicated to increasing understanding and appreciation of California's native plants and to conserve them and their natural habitats through scientific study, education, advocacy, horticulture, and land stewardship. CNPS has goals of habitat conservation through science-based methods and has been a state leader in developing protocols for inventorying and classifying vegetation, now widely used by many agencies and organizations. CNPS has approximately 10,000 members organized in 33 chapters, plus 14 state and local staff.

CNPS Vegetation Program

The CNPS Vegetation Program is dedicated to developing and maintaining information resources about California native plants, natural plant communities, and ecosystems. The Program develops quantifiable definitions of all types of vegetation in California to promote science-based conservation at the natural community level. The Program views vegetation as the best single expression of the range of ecological variation, which can be depicted in maps across any landscape and can be described with standard analytical vegetation descriptions.

The Program maintains a uniform system of vegetation sampling protocols and vegetation classifications. The protocols have been developed over the past 15 years by the CNPS Vegetation Committee, and include the CNPS Vegetation Rapid Assessment Protocol and the CNPS Relevé method. Quantitative data collected and archived by CNPS provide information directly for *A Manual of California Vegetation*, a CNPS publication on vegetation classification.

The sampling and classification methods of the Program have become standards for documenting vegetation patterns, utilized by state and federal agencies such as California State Parks, the California Department of Fish and Game (DFG), the Forest Service, and the National Park Service. The Program also works directly with DFG and other public agencies and conservation organizations on vegetation classification and mapping projects around the state.

Information about the CNPS organization, staff, vegetation protocols, and projects can be found at www.cnps.org.

Experience & Skills

The Field Assistants AND Team Leaders must have the following skills and experience:

- Basic knowledge of plant taxonomy and vegetation sampling techniques.
- Ability to identify plants to the species level, with a focus on the identification of California's Central Valley and Sierra Nevada Flora.
- Proven ability to conduct fieldwork in varied environmental conditions, including inclement weather and poison oak.
- Candidates must be in good physical condition and capable of long hikes in rugged terrain while carrying a backpack weighing up to 1/3 of their body weight.
- Good organizational skills, enthusiasm and a positive attitude.
- Undergraduate degree in biology, botany, or a related field - OR - work towards an undergraduate degree with completed courses including plant taxonomy, field botany, sampling design, or related courses.
- Ability to take direction and to work well in a team setting.
- Ability to drive 4X4 vehicles over variable terrain.
- A valid driver's license, proof of current car insurance, and a safe driving record are required.

Team Leaders must have the following additional experience and abilities:

- Strong background in California plant identification and experience conducting vegetation sampling (e.g., using cover estimation techniques), with coursework in plant taxonomy, botany, ecology, or other related courses.
- Strong organizational, communication, and leadership skills.
- Ability to lead assistants in the field while promoting safe working conditions, including navigating in remote terrain using a topographic map and compass.
- Proven ability to work independently and interact well with crew members.
- Ability to coordinate daily field tasks.
- Manage data for field team, ensuring data are recorded and entered accurately, consistently.
- Experience using GPS (Global Positioning System) units and other plant survey equipment (e.g., tape measure, compass).
- Experience with databases and/or spreadsheets.
- A high degree of enthusiasm and commitment to plant ecology, botany, and plant taxonomy.

Primary Duties and Responsibilities

The duties of the Field Assistants AND Team Leaders may include:

- Conduct field surveys in the San Joaquin Valley and the Sierra Nevada Foothills.
- Collect vegetation data using standardized CNPS vegetation protocols.
- Identify vascular plants to the species level.
- Use of field equipment, including: compass, GPS unit, hand-held data recorder, digital camera.
- Participating in 3-4 day sampling missions – overnight accommodations will involve either camping or staying in motels.
- Spending up to 1 day per week in the Sacramento office transferring data and preparing for sampling missions.
- Entering field data into computer and hand-held data recorder, using various software programs.

Additional duties for Team Leaders may include:

- Managing data for field team, making sure data are recorded and entered accurately, consistently, and efficiently.
- Supervise field assistants and ensure safe working environment.
- During field season, conduct quality accuracy on data.
- Assist in coordinating sampling missions by organizing field equipment and planning effective and safe routes to get to and from field sampling areas.
- Interact directly with the CNPS and CDFG project supervisors with regard to project planning and transfer of field data.
- After field season is completed, conduct office tasks (e.g., data entry, data quality accuracy and quality control, and plant identification) for up to 5 days per week.

Physical Requirements

Physical job requirements include sitting, driving, carrying, lifting, standing, and hiking. The position requires office work with prolonged sitting and use of a computer and mouse, as well as some standing and bending. It also requires the ability to work long field days under rigorous conditions (including inclement conditions), to hike in rugged terrain, and to lift/carry equipment that is up to 1/3 of your body weight.

Salary

The positions are offered at \$13.50-16.70 per hour, commensurate with experience. They are full-time, temporary positions, beginning in April 2008 and extending into August 2008, in the field. Additional work is available for some Team Leaders from August 2008 to April 2009, in the field and office. Extended employment may be possible through future grants/contracts.

Costs of travel away from the base office location will be reimbursed (including camping, motel, and per diem). Travel to and from field sites will be in rented vehicles.

To Apply

Please provide the following application materials: a cover letter, resume or curriculum vitae, and a list of three references (including reference name, address, phone number, and email, as references will be checked before hiring). *Please indicate whether you are applying for the Team Leader and/or Field Assistant positions.* The primary contact is Jennifer Buck, Vegetation Ecologist. Send your application materials *via* post mail, fax, or email to:

California Native Plant Society
2707 K Street, Suite 1
Sacramento, CA 95816
Attn: Vegetation Positions
fax: (916) 324-0475
e-mail: jbuck@cnps.org

Application Deadline

Hiring will remain open until positions are filled. Interviews, background reference checks, and hiring will occur by late March, 2008.

The California Native Plant Society is an Equal Opportunity Employer M/F

San Joaquin Valley and Sierra Foothills Project Description

Both the San Joaquin Valley and the Sierra Nevada Foothills are considered globally outstanding and highly biologically distinct ecological regions requiring immediate protection of remaining habitat and extensive restoration. Grasslands, oak woodlands and riparian systems of both the San Joaquin Valley and the Sierra Nevada foothills support high numbers of plant and wildlife species, many of which are at risk. Because these regions are largely in private ownership and are under development pressure from both suburban encroachment and subdivision for ranchettes and summer homes, CNPS and CDFG leadership have determined them to be a high priority for resource assessment.

The primary purposes of this project will be to develop a baseline vegetation inventory of the greater San Joaquin Valley ecosystem and to develop an accurate vegetation map for the northern Sierra Nevada Foothills through Accuracy Assessment (AA) field verification. The initial field season is in spring/summer 2008, and the second field season is in spring 2009. Data will be collected across both years using two sampling approaches: 1) the CNPS Vegetation Rapid Assessment Protocol and (2) the CNPS Relevé method. Descriptions of these methodologies can be reviewed on the CNPS website, www.cnps.org, under the Vegetation heading. These protocols comply with the state and national standards for vegetation classification and habitat assessment, as defined by the DFG, CNPS, and the National Vegetation Classification System.

The field effort in this project will increase our limited ecological understanding of vegetation in the greater San Joaquin Valley ecosystem. While some plant communities are already defined in *A Manual of California Vegetation*, the project will greatly further our knowledge of vegetation types and of rare vegetation communities and species across this ecological region. Furthermore, the final vegetation classification and database of the San Joaquin Valley will be used to monitor vegetation and plant and animal species' habitat over time and will assist agencies and organizations to make management and conservation decisions within this landscape.