

Job Announcement: Redwoods Rising Apprenticeship 2024

Redwoods Rising

Redwoods Rising is a unique collaboration among California State Parks, Redwood National Park, and Save the Redwoods League that integrates multiple disciplines to achieve landscape-scale ecosystem restoration. The primary goal of the Redwoods Rising Apprenticeship is twofold: to provide a career development opportunity for the next generation of natural resource managers and to boost capacity for Redwoods Rising projects. Redwoods Rising is about to begin its 5th year implementing ecosystem restoration projects in the northern **Greater Mill Creek (GMC)** area (comprised by Del Norte Coast Redwoods State Park and Redwood National Park) and the southern **Greater Prairie Creek (GPC)** area (comprised by Prairie Creek Redwoods State Park and Redwood National Park).

Apprenticeship Overview

Apprentices will be selected to work on restoration projects in **Redwood National and State Parks** and will function as a team, working closely with staff from the National Park Service on redwood ecosystem restoration. This program will provide professional networking opportunities with Save the Redwoods League, the National Park Service, and California State Parks. Apprentices will develop skills in scientific inventory and monitoring, data collection and survey methods, public speaking, and field safety. Necessary field equipment including a first aid kit will be provided by Redwoods Rising, however, apprentices typically supply their own clothing, boots, etc. If you do not have your own gear or ability to obtain it, please still apply, as we may be able to help with certain items.

Applicants should expect long days (four 10-hour days/week) of arduous fieldwork, hiking off trail, variable hours, and work that will require attention to detail.

Summer work will be 12 weeks (40hrs/week) with a required orientation during the first two days of the Apprenticeship beginning on May 20 and ending on August 9.

The reporting location for all apprenticeships, except for those based in Del Norte County, will be the Save the Redwoods League office in McKinleyville, CA.

Eligibility Requirements (if hired) - applicants must:

- Be enrolled for classes in Fall 2024 semester or graduating this spring from Cal Poly Humboldt (CPH) or College of the Redwoods (CR).
- Complete the Defensive Driver Training (online) prior to May 20.
 - o CPH Students: https://training.humboldt.edu/content/defensive-driving-program
 - o CR Students: https://www.dgsapps.dgs.ca.gov/DGS/TRS/course.asp?courseID=151
- Be willing to complete a federal or state background check.

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- Have a valid driver's license (or obtain one prior to May 20.
- Be willing to work long days with arduous fieldwork, hiking off trail, and variable hours.
- Arrange their own transportation to work reporting location (McKinleyville, CA).
- Deliver a culminating presentation to Redwood National & State Parks staff at the end of the field season and also possibly at the Informational Meeting for next year's apprenticeship.

Successful applicants will demonstrate: Attention to detail and direction, an eagerness to learn, values and respect for collaboration and shared responsibility, and a positive attitude. Apprentices will be allowed one week of unpaid vacation in the Summer.

Payment for this apprenticeship is \$16.00/hour for 40 hours per week, with the work typically being done in four ten-hour shifts. Once the overtime (1.5x pay) rate is applied to two hours per day, the final rate is \$17.60/hr.

Informational Meeting & Presentation

Monday February 5, 2024 at 5:30 pm: Cal Poly Humboldt, Wildlife & Fisheries Building, room 258.

There will be Pizza!

Applications

- 2024 Redwoods Rising Apprenticeship Application Due by Friday, February 16 by 11:59 pm.
- If you have any questions, please contact Bo Field at bfield@savetheredwoods.org
- Visit the Redwoods Rising Website to learn more about the project and apprenticeship.
- Save the Redwoods League, California State Parks and the National Park Service seek to increase diversity in the workplace and are committed to creating an environment of equity and inclusion. People of all identities, backgrounds, and cultures are encouraged to apply.



Watershed Apprenticeship – Position Description

Position Objectives

Assist with data collection and monitoring efforts required for regulatory compliance of restoration
work and conduct surveys to plan for aquatic and riparian restoration in Greater Prairie Creek. Data
collection may be used to prepare a further environmental analysis document for stream restoration if
it is not covered by current compliance documents.

Apprentice Duties and Responsibilities

- Collect baseline data for unburied stream channels
- Field validate streams in unrestored basins
- Collect stream habitat data for analysis towards riparian restoration
- Habitat surveys for previous and future projects in Prairie Creek

Skills and Qualifications

- Desired:
 - o A level of comfort and experience in and near swift and deep water
 - Educational background in watershed management, environmental engineering, environmental science, environmental studies, or fisheries
 - Experience hiking off trail, using maps, and GPS
 - Familiarity with identification of aquatic (fish, non-fish, and invertebrates) and plant (particularly tree) species
 - Experience conducting habitat surveys using tapes and stadia rods to measure depths and widths
 - Experience working in harsh terrain in variable weather conditions
 - Basic knowledge of Avenza maps, field maps, and ArcGIS
- Required:
 - o A flexible demeanor and ability to shift duties as priorities change
 - Ability to work well with others on interdisciplinary teams and cross train others assisting with daily tasks
 - An attention to detail in collecting and recording data
 - An understanding that this job will be arduous, with long-distance, off-trail hiking through forests and riparian areas in steep terrain with thick brush and large, downed logs in all weather conditions

Preferred Courses:

Cal Poly Humboldt (any of the following)

- FISH 380: Techniques in Fisheries Biology
- o WSHD 310: Hydrology
- ENGR 351: Introduction to Water Quality
- o ENGR 440: Hydrology I
- o ENGR 448: River Hydraulics

College of the Redwoods

- FNR 54: Introduction to Natural Resource Inventory Techniques
- FNR 80: Introduction to Watershed Management



Roads Apprenticeship – Position Description

Position Objectives

 Provide comprehensive road layout mapping in accordance with the 2024 Redwoods Rising Roads Operations work plans.

Apprentice Duties and Responsibilities

- Perform reconnaissance of future work units
- Assist with mapping road units in Greater Prairie Creek project area
- Assist with surveying road units
- Identify erosion features
- Flag and mark trees
- Monitor previous work completed and collect photo points, identifying and quantifying any erosion

Skills and Qualifications

- Desired:
 - Strong desire and willingness to work in the field
 - Understanding of the physical demands on the job, able to hike long distances on steep terrain, uneven ground, and in all weather conditions
 - o Interest in natural sciences, resource management, and restoration
 - o Experience working in harsh terrain in variable weather conditions
 - o Basic knowledge of Avenza maps, field maps, and ArcGIS

Required:

- o A flexible demeanor and ability to shift duties as priorities change
- Ability to work well with others on interdisciplinary teams and cross train others assisting with daily tasks
- o An attention to detail in collecting and recording data
- An understanding that this job will be arduous, with long-distance, off-trail hiking through forests and riparian areas in steep terrain with thick brush and large, downed logs in all weather conditions

- Cal Poly Humboldt (any of the following)
 - o GSP 101: Geospatial Concepts
 - o SOIL 260: Introduction to Soil Science
 - o SOIL 460: Wildland Soil Management & Erosion Control
 - o WSHD 310: Hydrology & Watershed Management
 - WSHD 424: Watershed Hydrology
 - o FOR 210: Forest Measurement and Biometry
 - o FOR 353: Forest Road/Location & Design
- College of the Redwoods
 - o FNR 54: Introduction to Natural Resource Inventory Techniques
 - FNR 80: Introduction to Watershed Management



Forestry Apprenticeship – Position Description

Reporting Location

McKinleyville, CA or Crescent City, CA.
 Positions are available in Humboldt and Del Norte counties. Applicants for Del Norte positions must live in the area or be able to relocate for the duration of the apprenticeship.

Position Objectives

 Help with preparing 2024 sites for treatment implementation and produce products that include maps, locations, and summaries of the resource inventories for the Greater Prairie Creek and Greater Mill Creek project areas.

Apprentice Duties and Responsibilities

- Delineation of Riparian/Wetland and Equipment Exclusion Zones Apprentice will learn to read the lay of the land and flag off sensitive treatment areas.
- Forest Inventory Apprentice will learn timber cruising techniques used to sample and assess forest characteristics.
- Contract Inspection Apprentice will learn the basics in monitoring contract progress and may serve as "eyes and ears" on the ground for the Forestry Team Leads.
- Forest Monitoring (as needed) Apprentice will learn how to establish new and re-measure existing permanent forest monitoring plots using established monitoring protocols. This includes learning plant species identification.
- Timber Marking (as needed) Apprentice will learn how to mark trees for removal or retention using specific silvicultural prescriptions.

Desired Skills and Qualifications

- Desired:
 - o Strong desire and willingness to work in the field
 - Understanding of the physical demands on the job, able to hike long distances on steep terrain, uneven ground, and in all weather conditions
 - o Interest in natural sciences, resource management, and restoration
 - Experience working in harsh terrain in variable weather conditions
 - o Basic knowledge of Avenza maps, field maps, and ArcGIS
- Required:
 - o A flexible demeanor and ability to shift duties as priorities change
 - Ability to work well with others on interdisciplinary teams and cross train others assisting with daily tasks
 - An attention to detail in collecting and recording data
 - An understanding that this job will be arduous, with long-distance, off-trail hiking through forests and riparian areas in steep terrain with thick brush and large, downed logs in all weather conditions

- Cal Poly Humboldt (any of the following)
 - o FOR 130: Dendrology
 - o FOR 131: Forest Ecology
 - o FOR 210: Forest Measurement and Biometry
- College of the Redwoods
 - o FNR 54: Introduction to Natural Resource Inventory Techniques



Botany Apprenticeship – Position Description

Position Objectives

 Assist rare plant surveys and invasive species control to support the Redwoods Rising project's restoration goals.

Apprentice Duties and Responsibilities

- Conduct rare plant surveys throughout the Redwoods Rising project area
- Map reed canary grass in the Lower Prairie Creek floodplain in support of aquatic/riparian restoration
- Survey and control invasive plants through use of manual and mechanical methods (digging, cutting and hand-pulling)
- Apply herbicide when treating certain invasive species, under supervision of a qualified applicator
- Gather mapping data according to protocols using phone or tablet-based GPS units
- Identify plants using botanical keys such as the Jepson Manual

Skills and Qualifications

- Desired:
 - Strong desire and willingness to work in the field
 - o Botanical knowledge and plant identification skills, specifically in coast redwood forest ecosystems.
 - o Interest in natural sciences, resource management, and restoration
 - o Basic knowledge of Avenza maps, field maps, and ArcGIS
 - o Experience working in harsh terrain in variable weather conditions
- Required:
 - o A flexible demeanor and ability to shift duties as priorities change
 - Ability to work well with others on interdisciplinary teams and cross train others assisting with daily tasks
 - o Able to work independently or in a team
 - o An attention to detail in collecting and recording data
 - An understanding that this job will include days with arduous, long-distance, off-trail hiking through forests and riparian areas in steep terrain with thick brush and large, downed logs in all weather conditions

- Cal Poly Humboldt (any of the following)
 - o BOT 105: General Botany
 - o BOT 350: Plant Taxonomy
 - o ESM 230: Environmental Methods
 - ESM 303: Applied Natural History
- College of the Redwoods
 - o BIOL5: General Botany
 - o FNR 54: Introduction to Natural Resource Inventory Techniques



Ecological Monitoring Apprenticeship – Position Description

Position Objectives

 Assist in ecological monitoring surveys to track the progress and effects of Redwoods Rising restoration efforts.

Apprentice Duties and Responsibilities

- Establish field plots to track & determine effects of Redwoods Rising forest restoration treatments
- Work with a Research Ecologist, Biologist and USGS field crew to survey sites before and after restoration treatments
- Conduct field surveys and stem maps within the Prairie Creek and Greater Mill Creek project areas
- Help to produce map products to assist forestry teams with decision-making tools for ongoing restoration planning
- Gather data using mobile devices, Survey123 and high-resolution GPS

Skills and Qualifications

- Desired:
 - Strong desire and willingness to work in the field
 - Ability to pay attention to details when collecting data, follow standard methodology or protocols, accurately record physical and biological data and to learn to identify tree species.
 Interest in natural sciences, resource management, and restoration
 - o Familiarity with Excel, Word, ArcGIS Pro, Access and GPS use.
 - Experience working in harsh terrain in variable weather conditions
 - An attention to detail in collecting and recording data
- Required:
 - o A flexible demeanor and ability to shift duties as priorities change
 - Ability to work well with others on interdisciplinary teams and cross train others assisting with daily tasks
 - Able to work independently or in a team
 - An understanding that this job will include days with arduous, long-distance, off-trail hiking through forests and riparian areas in steep terrain with thick brush and large, downed logs in all weather conditions

- Cal Poly Humboldt (any of the following)
 - o FOR 131: Forest Ecology
 - o FOR 210: Forest Measurements and Biometry
 - o FOR 311: Forest Mensuration and Growth
 - o GSP 270: Geographic Information Science
- College of the Redwoods
 - o FNR 5: Forest Ecology and Management
 - o FNR 54: Introduction to Natural Resource Inventory Techniques
 - FNR 32: Geographic Information Systems