ACE EPIC USFS (CA): Eldorado National Forest, Botany Crew Member

Summary: American Conservation Experience, a nonprofit Conservation Corps, in partnership with the Eldorado National Forest, is seeking two Botany Crew Members. This opportunity is intended for an enthusiastic young professional with a deep interest in advancing their career goals in natural resource management and conservation.

The Eldorado National Forest is looking to fill a total of two positions for the 2020 field season. The crew will split their time between rare and invasive plant work. They will conduct rare plant surveys, assist with restoration projects and monitor rare plant populations for various landscape fuels and vegetation projects on the Eldorado National Forest. They will also focus on surveying and treating invasive plant populations using integrated pest management, which may include the use of herbicides. The work schedule typically consists of 4/10 hr days.

Start Date: April 27, 2020

End Date: October 12, 2020

Location: Camino, CA Eldorado National Forest, Placerville Ranger District

The Eldorado National Forest is located in the central Sierra Nevada region within California and encompasses a total of 798,279 acres, which includes 193,027 acres of private ownership.

The Eldorado National Forest is bordered on the north by the Tahoe National Forest, on the east by the Lake Tahoe Basin Management Unit and the Humboldt-Toiyabe, and to the south by the Stanislaus National Forest. The Eldorado is within 3 - 4 hours of the San Francisco Bay Area and about 1 - 1 1/2 hours from Sacramento. It ranges in elevation from 1,000 feet in the foothills to more than 10,000 feet above sea level along the Sierra crest. The mountainous topography is broken by the steep canyons of the Mokelumne, Cosumnes, American, and Rubicon rivers. Plateaus of generally moderate relief are located between these steep canyons.

The forest is also home to 297 lakes and reservoirs (including both public and private acreage), which total 11,994 surface acres. 11 large reservoirs account for 9,000 acres. The rest are mostly small, high mountain lakes. Both the rivers and lakes provide excellent fishing opportunities. The Eldorado National Forest provides diverse recreational opportunities to the public. The Forest offers every visitor the chance to enjoy nature and be outdoors. In addition to two popular wilderness areas (Desolation Wilderness and Mokelumne Wilderness), the forest offers more than 70-day use and overnight developed recreation facilities across the forest for the individual, families and groups.

Project Partner Websites:

For more information on the Eldorado National Forest, please click here.
For more information on the ACE EPIC Program, please click [here](https://www.ace.org/).  

**Living Allowance:** The member should anticipate serving 40 hrs/wk, with potential to work holidays and weekends. The Member will receive a living allowance of $693/wk for food and incidentals, dispersed bi-weekly.

**Housing:** Housing should be provided by the USFS at no cost to the member. Housing is in a typical Forest Service bunkhouse setting.

**Project Tasks:**

**Plant Surveys**

- Participates and conducts a variety of routine and often complex field studies of native and non-native botanical species and their habitats.
- Collects data for use in habitat and species condition analyses.
- Collects survey and inventory data to determine species identity, population characteristics, environmental conditions and factors affecting the vigor and extent of the species and their habitat.
- Keeps records of all data and produces maps of survey areas.
- Lays out monitoring plots by taking measurements and marking corners and boundaries.
- Uses botanical key to identify plants encountered during field trips or surveys of forest areas.
- Compiles and summarizes the vegetation types obtained from aerial and ground surveys including forest health monitoring, biological evaluations and pilot tests conducted as part of the project.
- Compiles and summarizes the data obtained from surveys, inventories, biological evaluations and monitoring.
- Uses computer systems and associated software for recording, organizing, storing, and analyzing data.

**Invasive Plants**

- Performs the full range of standard technical assignments consisting of a variety of routine and frequently complex tasks involving invasive non-native plant treatment, management, inventory, and monitoring.
- Assignments involve the performance of a series of basic related technical tasks, which must be completed according to a predetermined and established routine.
- May also perform a variety of nonstandard tasks related to invasive non-native plant treatment, management, inventory, and monitoring.
- Identifies invasive non-native plants using various field guides or botanical keys, surveys for target plants, collects and assesses data on infestation location and status, and treats invasive plant infestations.
- Treatments primarily involve using herbicides, but may also be accomplished by hand-pulling, or using hand tools, power tools, mowers and other standard control methods.
- Collects and records data related to infestation location and status.
- Responsible for ensuring that data related to invasive non-native plant treatments is recorded accurately and legibly, and according to specific protocols.
- Performs physical labor and daily hiking often to remote locations in rugged terrain under possible adverse weather conditions.
- Uses global positioning systems, aerial photographs, topographic maps, Geographic Information Systems (GIS), or compass in navigation.
- A portion of time may be dedicated to data entry and other duties in a laboratory or office setting.
- Applies herbicides using backpack sprayers or other equipment on a regular basis according to specific guidelines.

**Qualifications:** Applicants for this position should hold (or be pursuing) a bachelor’s degree in a natural resource field, and have experience with plants, either in the field or through coursework. This is a highly demanding outdoor position that requires substantial physical fitness and mobility, and a tolerance for extreme weather and demanding conditions.

**Training Provided:** The Forest Service will strive to provide members the opportunity to shadow conservation professionals to learn about botanical disciplines (e.g. invasive plant removal techniques, GIS mapping, qualitative and quantitative plant monitoring, plant systematics and taxonomy, seed collection and restoration techniques). However, a foundational knowledge of botany and plant identification is required for these positions.

**Preferred Skills:**

- Ability to work independently at day or night including hiking, driving, following survey protocol
- Experience driving 4x4 and/or all-wheel drive vehicles safely in off-road conditions
- Experience hiking over remote, steep, and rocky terrain in adverse weather conditions (cold/hot temps, light rain, etc.)
- Ability to navigate in remote areas using GPS, mobile devices, and paper maps
- Must have particular botany and plant identification skills outlined above and be willing to learn additional key skills as part of the internship
- Working knowledge of basic taxonomic principles and characteristics of major plant families and experience using taxonomic keys
- Knowledge of the technical processes, procedures and techniques related to biological science samples, measurements, and analysis
- Ability to work as part of a team to meet project goals, as well as independently to complete survey tasks
- Familiarity with Microsoft Excel and ArcMap
- Competency with data entry, summarizing and compiling data
- Must be able to work alone and in small groups with minimal supervision, and adhere to instructions, procedure and use initiative in carrying out recurring assignments independently

**Required:**

- Ability to perform the essential duties of the position with or without reasonable accommodation
- Proficient in English
- U.S. Citizen or Permanent Resident
- A valid driver’s license and an insurable driving record (documentation to be provided upon request)
- Ability to pass a federal criminal background check
- ACE is a drug free workplace and reserves the right to drug test at any time
The member must be willing and able to represent ACE and the Forest Service in a professional, positive and enthusiastic manner.

To Apply:
Please submit a resume, cover letter, and 3 professional references using the APPLY NOW section located in the upper right hand corner of the position listing on our website here: https://usaconservationepic.applicantpool.com/jobs/

Note:
Early consideration will be given as applications are received. This position may close at any time. If you have any questions regarding this position, please feel free to contact ACE USFS Recruitment Specialist, Caroline Canter at ccante@usaconservation.org or 385-249-4740

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