

From: Laura Reynolds
Subject: NEON D14 AZ Field Technician III job Limnology primary Instrumentation secondary

Battelle and its affiliate, Battelle Ecology, Inc. manage and operate the National Ecological Observatory Network (NEON) project, which is solely funded by the National Science Foundation. A 30+ year project dedicated to understanding how changes in climate, land use and invasive species impact ecology, the observatory's scientists and engineers are collecting a comprehensive range of ecological data on a continental scale across 20 eco-climatic domains representing US ecosystems. Our teams use cutting-edge technology, including an airborne observation platform that captures images of regional landscapes and vegetation; mobile, relocatable, and fixed data collection sites with automated ground sensors to monitor soil and atmosphere; and trained field crews who observe and sample populations of diverse organisms and collect soil and water data. Once structures are completed, a leading edge cyberinfrastructure will calibrate, store and publish this information. The Observatory includes more than 500+ personnel and is the first of its kind designed to detect and enable forecasting of ecological change at continental scales.

JOB SUMMARY

The Field Technician reports to the Field Operations Manager and will be hired at a Field Technician III level.

- Field Technician III - The Field Technician III is the shift lead performing and supervising seasonal and periodic sampling activities and sample processing. The Field Technician III will have primary responsibility for coordinating sampling and laboratory activities at terrestrial sampling sites. The Field Technician III will have additional roles and responsibilities assisting the Field Operations Manager with management of the Domain Support Facility, hiring and training seasonal field staff, and acting as manager in the absence of the Field Operations Manager.

LOCATION

The Domain 14 Field Technician's primary work location is near Tucson, AZ. This position supports sites in the Desert Southwest Domain. Desert Southwest sites are located at Santa Rita Experimental Range near Tucson, Jornada LTER near Las Cruces, NM and near Phoenix, AZ. The Desert Southwest Domain includes western Texas, southern Arizona, southern New Mexico, southern Nevada, and Southern California.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The primary responsibility for the position will be to lead aquatic sampling efforts at Sycamore Creek. This site will present a unique set of scheduling and sampling challenges due to flash flooding and seasonally dry conditions. As the only full-time aquatic hire in this domain, the ideal candidate will have experience carrying out standardized biological sampling protocols, maintaining aquatic instrumentation. The position will additionally require taking part in terrestrial sampling and tower maintenance activities at Santa Rita and Jornada Experimental Ranges.

Limnology primary emphasis:

- Monitor and sample aquatic sites for water quality, biological

indicators, physical properties of site (e.g. gaging streams, geomorphic mapping, etc.), and leading field crews to perform the aforementioned items.

- Test, troubleshoot and operate instruments, calibration equipment and test fixtures.
- Inspect and maintain aquatic sensors, gear and equipment.
- Assist the NEON Systems Engineering Product Team with instrument installation and testing (approximately the first 6 months).
- Perform aquatic vegetation diversity and primary productivity measurements.
- Sample for aquatic invertebrate and fish diversity and abundance.

Instrumentation (tower) secondary emphasis:

- Test, troubleshoot and operate instruments, calibration equipment and test fixtures.
- Inspect and maintain civil infrastructure including boom arms, sensor mounts, towers, boardwalks and instrument huts.
- Assist the NEON Project Systems Engineering Product Team with instrument installation and testing (approximately the first 6 months).
- Record activities, completed work and trouble tickets according to Field Operations protocol.

General duties include:

- Report activities, completed work, and sampling problems according to Field Operations protocols.
- Inspect, maintain and operate field, safety and laboratory equipment.
- Operate laboratory equipment (e.g. Wiley Mill, drying oven, analytical balance, centrifugal mill, pH meter, microscope, and muffle furnace).
- Assist the Field Operations Manager with recruiting and training of seasonal field personnel.
- Provide instruction and technical guidance to seasonal field personnel.
- Perform plot establishment by locating plots with GPS navigation as well as measuring and marking plots.
- Assist the Field Operations Manager with materials planning, inventory and ordering as well as day-to-day oversight of personnel and scheduling of activities coordinated from the field office.
- Follow the NEON Project's safety and Field Operations policy and procedures.

Field activities may include:

- Follow established, standardized field protocols for sample collection and handling; record and verify accuracy of data from sample collections; process samples in the laboratory; send samples to external analytical labs. Train and lead field crews performing the aforementioned items.
- Perform other field sampling activities as assigned including: ground beetle collection (pitfall trapping), mosquito collection (CO₂ light traps, tick collection (dragging and flagging) and soil core collection.
- Test, troubleshoot and operate tower, soil and aquatic instruments, calibration equipment and test fixtures.
- Inspect and maintain civil infrastructure including boom arms,

sensor mounts, towers, boardwalks and instrument huts.

- Monitor and sample aquatic sites for water quality, biological indicators and physical properties of site (e.g. gaging streams, geomorphic mapping).

Physical demands:

The work is physical and involves walking, hiking, prolonged standing, walking and bending. Heavy items (e.g. equipment and packs up to 40 pounds) must be lifted and carried on a routine basis.

Work environment:

Field work includes exposure to extreme weather conditions and terrain, pesticides, poisonous plants, biting insects, and wild animals. Tower work involves performing work on instrument towers ranging in height from 24 feet to 300 feet which will include ascending and descending multiple flights of stairs.

REQUIRED: EDUCATION, EXPERIENCE, KNOWLEDGE AND SKILLS

All Technician Levels:

- Ability to work in a team environment.
- Experience should include performing scientific data entry and data management.
- Ability to hike off-trail to assigned field site for long distances carrying field equipment (pack weighing up to 40 lbs.) for extended periods of time.
- Ability and willingness to travel overnight frequently (e.g. semi-monthly for 3-4 nights).

The NEON Project will be selecting an individual for a Field Technician III level. Equivalent education and experience may be considered.

Field Technician III

- Bachelor's Degree in ecology, environmental sciences or related scientific discipline.
- Five (5) or more years' related experience. Previous experience in scheduling, training, leading and auditing the performance of field crews required.

The NEON Project will take into consideration qualifications for specific and diverse experience in the following areas:

Leadership:

- Effective leadership skills and the ability to motivate others.
- Effective problem solving skills and the ability to determine and act on changing priorities in a fast paced dynamic environment.
- Ability to organize and execute multiple activities and priorities.

Skills:

- Ability to perform minor troubleshooting, calibration, and repair of field equipment.
- Ability to follow written and verbal instructions.
- Ability and willingness to learn and adopt new technologies as needed.
- Ability to work independently and as part of a team.

- High level of attention to detail and accuracy.
- Ability to make effective decisions that take into consideration safety and operational standards.

Working conditions:

- Ability and willingness to work varied field operations schedules (up to 12+ hours per day), including split-shift, part-time, pre-dawn early mornings, evenings and weekends.
- Ability and willingness to work on towers ranging in height from 24 feet to 300 feet including ascending and descending multiple flights of stairs on instrument towers.
- Perform field assignments in a variety of terrain and of weather conditions including cold and wet winter weather and extreme heat.
- Ability to withstand exposure to fumes, dust, and noise.
- Ability and willingness to travel overnight frequently (e.g. semi-monthly for 3-4 nights) is required.

APPLY: www.neonscience.org

Must possess a current and valid State issued driver's license with insurable Department of Motor vehicle record (parking violations, minor driving offenses excluded) as determined by Battelle Ecology Inc.'s insurance provider.

Must have permanent authorization for US employment. Battelle Ecology, Inc. will not provide any kind of visa sponsorship.

This position offers competitive total rewards including 401(k), health, vision and dental insurance, paid time off and the opportunity to work at an organization with a great mission.

Battelle Ecology, Inc. provides employment and opportunities for advancement, compensation, training, and growth according to individual merit, without regard to race, color, religion, sex, national origin, sexual orientation, gender identity, marital status, age, genetic information, or disability. Our goal is for each staff member to have the opportunity to grow to the limits of their abilities and to achieve personal and organizational objectives. We will support positive programs for equal treatment of all staff and full utilization of all qualified employees at all levels within Battelle Ecology, Inc.