

From: Katee Vallad
Subject: Field Technician - Aquatics Needed Tucson, AZ

Field Technician I-Limnology (with Instrumentation preferred secondary emphasis)

Location: Tucson, AZ US Worker Category :Regular Full-Time

COMPANY OVERVIEW

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 as a Field Technician I level depending on skills, experience, and education.

- Field Technician I - The Field Technician I is a biological sampling lead performing seasonal and periodic sampling activities and sample processing. Seasonal field sampling is conducted with the assistance of temporary field crews under the guidance of the Field Technician.

LOCATION

The Domain 14 Field Technician's primary work location is in Tucson, AZ. This position supports sites in the Desert Southwest Domain. Candidate sites are located in the Sonoran Desert at Sycamore Creek (northeast of Phoenix, AZ) and Santa Rita Experimental Range (south of Tucson, AZ), as well as the Chihuahuan Desert at Jornada Experimental Range (north of Las Cruces, NM).

Tucson is home to the University of Arizona, with an enrollment of 42,000 students. The city hosts a wide variety of restaurants and cultural events. In 2016, Tucson was designated a UNESCO World City of Gastronomy, the first city in the United States to receive that designation. Excellent camping and recreational opportunities (mountain/road biking, snow sports, backpacking, etc.) among the forested mountain tops of the surrounding Madrean Sky Island Archipelago can be accessed less than an hour drive from Tucson.

ESSENTIAL DUTIES AND RESPONSIBILITIES

Limnology 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 Battelle Ecology, Inc. 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 Battelle Ecology, Inc. 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 Battelle Ecology, Inc. 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).

Battelle Ecology, Inc. will be selecting an individual for a Field Technician I level. Equivalent education and experience may be considered.

Field Technician I

- Bachelor's Degree in ecology, environmental sciences or related scientific discipline.
- One (1) or more years' related experience. Previous experience in scheduling, training, leading and auditing the performance of field crews required.

Battelle Ecology, Inc. 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.

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.