

FULL-TIME PROJECT MANGER TROPICAL RESPONSES TO ALTERED CLIMATE EXPERIMENT

The Tropical Responses to Altered Climate Experiment (TRACE; forestwarming.org) is seeking a full-time Project Manager to assist the Principal Investigators in coordinating and maintaining a climate change experiment taking place in the Luquillo Experimental Forest in eastern Puerto Rico. TRACE is an in-situ field warming experiment that aims to study the effects of climate change on tropical forests, particularly effects on carbon and nutrient cycling.

The position is a one-year, full-time position contracted through the US Forest Service, and based at the Sabana Field Research Station in Luquillo, Puerto Rico. The position is subject to a performance review after six months. There is potential to extend the position an additional year, pending satisfactory performance. Annual compensation begins at \$32,000 but is commensurate with experience.

The Project Manager has a range of responsibilities that include a combination of office-, lab-, and field-based duties. Example responsibilities include: ensuring that the warming experiment is operating correctly, and identifying any issues or coordinating repairs as they arise; ensuring all sensors are properly working and calibrated; planning and scheduling field and lab work, including schedules, personnel, etc.; and managing interns.

We seek a dynamic, resourceful, and highly organized individual that meets the following requirements for experience and skills:

1. Master of Science degree in Biology, Ecology, Earth, Environmental Science or related field
2. Experience operating, troubleshooting, and maintaining field and laboratory instrumentation including dataloggers, environmental sensors, and infrared gas analyzers. Experience with LiCor instruments (8100A, 7810, LAI-2000, etc.), Campbell Scientific dataloggers and sensors (CR1000 and various sensors), or similar instruments and sensors is not required but highly valued.
3. Previous laboratory experience that includes laboratory use, maintenance, cleaning, stocking, and organization. Laboratory skills including biogeochemical extractions, environmental sample processing and preparation, and acid washing are a plus.
4. Experience with data management, including the use of R statistical software for data organization and processing. Experience working with large data sets is highly valued.
5. Ability to maintain a high level of organization with multiple types of data, samples, and events. This includes being detail-oriented while maintaining the ability to set priorities.
6. Excellent written and verbal communication skills in English to communicate with scientists and support staff.
7. Proficiency in Spanish
8. Excellent interpersonal and leadership skills to supervise TRACE technicians, interns, students, and volunteers, and to coordinate day-to-day research activities for TRACE. Prior experience supervising interns, students, or volunteers is highly valued.
9. Experience with fieldwork as well as the ability and willingness to conduct physically demanding work under climatically challenging conditions

10. A valid driver's license

Other highly valued skills include:

- Experience working in the tropics
- Experience with project management
- Experience with working with budgets and purchasing

Interested applicants should send an email to Dr. Tana Wood (tana.e.wood@usda.gov) with the following, compiled in a single PDF document: a letter of intent including a statement of career goals, curriculum vitae, copy of university transcripts, and contact information for three references. Please also include your name followed by "TRACE Project Manager Position" in the email subject line (i.e. Tana Wood – TRACE Project Manager Position). Applications are due May 19, 2020. Application reviews will begin immediately. The expected start is July 2020. Please see attached Statement of Work (SOW), below.

STATEMENT OF WORK (SOW)
TROPICAL RESPONSES TO ALTERED CLIMATE EXPERIMENT (TRACE)
PROJECT MANAGER

INTRODUCTION:

The TRACE Project Manager is responsible for the day-to-day management of the field warming experiment located at the Sabana Field Research Station in Luquillo, Puerto Rico. Responsibilities include working with the Principal Investigators for the project, collecting data both in the laboratory and in the field, managing a site with high voltage electricity and a canopy access tower, as well as coordinating with students, collaborators, and the USDA Forest Service International Institute of Tropical Forestry (IITF).

BACKGROUND:

The TRACE project is the first field warming experiment to be conducted in any tropical forested ecosystem. The project involves multiple institutions, lead scientists, students, collaborators, and volunteers. In addition, the project receives numerous site visits ranging from contractors to visiting classrooms to collaborating investigators. Furthermore, the field site involves management of substantial infrastructure, such as high voltage electricity and a canopy access tower, which requires full time oversight and management. Finally, the experiment requires the collection of numerous types of data both in the field and in the laboratory. The TRACE project manager is responsible for managing visitors to the site, oversight of the infrastructure, as well as attention to the scientific equipment and data collection.

SCOPE:

The TRACE Project Manager is responsible for the day-to-day operations of the field warming experiment, including sample and data collection, communication, facilitating collaboration, and maintaining infrastructure. This is a full-time position that will occasionally entail work outside of regular business hours when it is necessary for the success of the project. This time will be compensated for with time off.

TECHNICAL REQUIREMENTS/POSITION LOGISTICS:

The TRACE Project Manager will be based at the Sabana Field Research Station. This is an up-to one-year contractual position, pending a six-month performance review. There is potential to extend the contract pending availability of funds. Offeree required to register their entity with the System for Award Management (<https://www.sam.gov/SAM/>). The Project Manager is responsible for the following:

- a. Master of Science degree in Biology, Ecology, Earth, Environmental Science or related field.
- b. Demonstrated excellence in written and verbal communication in Spanish and English to effectively coordinate with lead scientists, collaborating scientists, graduate students, and support staff. The Project Manager must additionally keep the Principal Investigators updated on the progress of the study and work schedule.
- c. Strong leadership and organizational skills in order to manage day-to-day research activities for TRACE.

- d. Supervise and assist technicians, volunteers, students or interns that are working for the project. Coordinate their work schedule and any associated paperwork if needed.
- e. Conduct relevant fieldwork, which will include physically demanding work under climatically challenging conditions.
- f. Keep track of the various lines of research and ensure the quality of the data being collected.
- g. Conduct regular inspections of the field site and oversee the regular maintenance of the experimental infrastructure and electrical equipment by the contracted electrician to ensure that the infrastructure is safe and in good working order.
- h. Work and coordinate with electrical and structural engineers, contractors, and other professionals. This includes requesting work estimates, negotiating the work needed and supervising the work and the integrity of the field site during any construction work.
- i. Host site visits for approved groups and collaborators. Must also be able to represent the project in scientific meetings and workshops.
- j. Show proficiency with word processing, spreadsheet manipulation, and database management programs.
- k. Operate, troubleshoot, and maintain all relevant laboratory and field equipment, including, but not limited to, the following:
 - i. Campbell Scientific CR1000 data loggers and Loggernet software
 - ii. LICOR 8100 Automated Soil Gas Flux System
 - iii. Root scanner and WinRhizo software
 - iv. Sable Systems CA-10 Carbon Dioxide Analyzer
 - v. Bartz Technology Minirhizotron Camera
 - vi. Campbell Scientific CS655 Water Content Reflectometers
 - vii. VWR ULT -80C Upright Freezer
 - viii. VWR Refrigerated Incubators
 - ix. Weather station sensors
 - x. Soil temperature and moisture sensors (Campbell Scientific CS655, SoilVue10)
 - xi. Apogee oxygen sensors
 - xii. SPEX ball mill
- l. Set up and maintain an understory weather station with automated sensors.
- m. Maintain proficiency in a range of biogeochemical and microbiological assays, including laboratory soil extractions, sample collection for genetic analysis, root sorting and assessment, and trace gas analysis. Previous laboratory experience that includes laboratory use, maintenance, cleaning, stocking, and organization.

- n. Experience in climbing canopy access scaffolding towers. Working in the tower requires proper tower climbing and rescue training, including an up to date climbing certification.
- o. Attend relevant training courses to acquire the technical expertise needed to manage the project.
- p. Maintain and organize multiple large data sets from automated sensors.
- q. Must be fluent in English and proficient in Spanish.
- r. Send regular updates to the Principal Investigators and assist them with the required Annual Report.
- s. Maintain a safe driving record, a Federal Driving License, and oversee the maintenance of an on-site GSA Vehicle (e.g., regular mileage reports, scheduled maintenance, etc.).
- t. The Project Manager will receive an annual performance review by the Lead Principal Investigator of TRACE where the option to continue the contract will be discussed (pending availability of funds).
- u. Each invoice shall be accompany by a progress report. The time sheet/progress report template will be provided by TRACE Lead Principal Investigator.
- v. TRACE Lead Principal Investigator will be the official for requesting progress payments and any modifications to this contract. The Contracting Officer shall approve and execute all contract actions including progress payments and modifications.