MICHIGAN STATE



Field Technician for Climate Change and Herbivore Effects on Plant Communities Project Department of Forestry, Michigan State University



Position Description: The Field Technician will directly manage a long-term climate warming experiment on early successional plant communities in Michigan, USA. The goal of the experiment is to quantify the single and interactive effects of climate change and insect herbivory on plant communities through time. The Field Technician would oversee one experimental site (at the University of Michigan Biological Station (UMBS) in Pellston, Michigan), and assist with a second site (Kellogg Biological Station (KBS) Long-Term Ecological Research site (KBS LTER), in Hickory Corners, Michigan). The individual will work directly under Dr. Phoebe Zarnetske, to determine the experiment's management needs, and will additionally coordinate with a research associate, KBS technician, and students. Responsibilities include plant and insect field data collection (phenology, abundance, tissue samples), HOBO unit maintenance and data collection (weather data), data management, applying insecticide treatments twice monthly during the growing season, maintaining existing experiment infrastructure, and adding new warming and drought treatment (rainout shelter) experiment infrastructure. Preference will be given to individuals with experience in ecological field work with plants and/or insects. Position is available for 1 field season (April - October 2019). See more about the lab's research here: http://www.msu.edu/~plz.

Qualifications:

- Significant coursework in ecology, plant biology, or related field
- Strong written and verbal communication skills
- Experience with Microsoft Excel, Google Drive, Google Docs
- Commitment to scientific rigor: follow protocols precisely, attention to detail, excellent documentation skills
- State of Michigan Certified Pesticide Applicator or willing to become certified in March 2019
- Ability to work independently for full days
- Excellent ability to coordinate with researchers and technicians
- Willing to occasionally work long hours, and weekends
- Willingness to travel between field experiment sites, based on data collection schedule
- Excellent problem-solving skills
- Ability to work in hot and humid conditions, with biting insects
- Ability to manage multiple tasks and meet deadlines, including ordering & installing experiment components
- Interest in being outdoors

Preferred qualifications:

- Drive own vehicle
- Bachelor's degree in natural sciences, or related field
- Research experience involving field work in biology, environmental science, or related field.
- Data management and analysis skills
- Experience with R and RStudio
- Experience with GitHub
- Basic carpentry / ability to repair field equipment (wood, polycarbonate)
- Experience with Onset HOBO instruments
- Knowledge of common Michigan plant species
- Ability to key out plant species
- Ability to key out insect / invertebrate ID
- Experience with sample preparation for plant tissue chemistry analysis

Working Conditions: The position will be field-based, including some hot and humid weather. Field conditions may include carrying a less than 30-pound pack, carrying 1m x 1m plexiglass panels, and exposure to inclement weather, uneven terrain, insects and allergens.

Location: University of Michigan's Biological Station (UMBS), Pellston, MI and Kellogg Biological Station (KBS), Hickory Corners, MI, and Zarnetske lab location: Department of Forestry at MSU's Natural Resources building on the MSU Main Campus (East Lansing, MI). <u>UMBS</u> and <u>KBS</u> are premier biological field stations for terrestrial and aquatic research with vibrant scientific communities.

Compensation: \$15/hour for 20-40 hours per week, April-October 2019, with potential for extension, based on performance and funding. Travel funding (e.g., mileage) is available for travel between field sites. Housing is covered.

Apply: Email as one PDF: 1) a 1-page letter of interest detailing qualifications for the position and the dates/times of availability, 2) resume/CV with contact information for 2 references, 3) unofficial transcripts. Email: **Dr. Phoebe Zarnetske, Department of Forestry, Michigan State University: plz@msu.edu.** MSU students may also apply via Handshake to Job #2349860.

Deadline: Applications will be considered until February 20, 2019, or until the position has been filled. Applicants are encouraged to apply as early as possible.

MSU is an equal opportunity employer and the MSU Department of Forestry is committed to promoting diversity in research.