

POSITION DESCRIPTION

Title: Conservation Associate

Working Title: Ecologist

Institute: Community, Food, and Environment Institute

Michigan State University Extension is committed to fostering a welcoming and inclusive organization, which requires all staff to contribute towards a vision for success. Diversity, equity, and inclusion are central to our work, regardless of title or position within the organization. This means that all staff at MSU Extension are dedicated to the following:

- *We work together to ensure that programming is delivered to diverse audiences, produces equitable impacts for all participants, and demonstrates partnership and inclusion for all groups.*
- *We embrace that it is everyone's job to create a culture that promotes diversity, equity, inclusion and belonging.*
- *We ensure that every team member is prepared with the skills and resources to contribute to our welcoming and inclusive culture.*
- *We foster inclusion by recognizing and valuing diverse perspectives, skills, experiences, and work to create equal access to programming for communities.*
- *We commit to continuous learning for diversity, equity, and cultural competency, in order to achieve inclusive excellence.*
- *We understand that diversity, equity, and inclusion are essential elements to our work and are vital to the organizational culture and programmatic success of MSU Extension.*
- *We embrace a culture of understanding, coaching and feedback towards achieving a vision of success for the entire organization and its staff.*
- *Together we will achieve success, and we commit to these goals in our work, continued education, and ongoing efforts.*

POSITION SUMMARY

As part of MSU Extension (MSUE), the Community, Food and Environment Institute (CFEI) and the Michigan Natural Features Inventory (MNFI), up to two positions will be filled to collect, analyze, and communicate information about Michigan's natural communities, help maintain Michigan's Natural Heritage Database, and work cooperatively with other MNFI personnel, Tribal organizations, public and private agencies, organizations, and individuals to inform and guide decisions that impact biodiversity conservation.

The mission of the Michigan Natural Features Inventory is to guide the conservation of Michigan's biodiversity by providing the highest quality scientific expertise and information. MNFI's vision is to be the authoritative source of information on biodiversity that is widely used to conserve Michigan's unique natural heritage for current and future generations. MNFI maintains the statewide Natural Heritage Database documenting the occurrences and status of exemplary natural communities and rare species. This core function is an essential component of many MNFI projects. The database is required by partner agencies who perform legally mandated regulatory functions, allowing them to complete tasks, perform regulatory reviews, produce products, and meet deadlines. This ongoing research is used by federal, state, and local agencies and private organizations to guide land management, development, and conservation decisions. The database forms the foundation for providing information to decision makers.

In this position, you will assist with an array of projects requiring expertise in natural community identification, ecosystem valuation, and interpretation of ecological relationships in plant communities. Applying for external funding and serving as principal investigator on MNFI projects will be a regular part

of this position. The proportion of time devoted to primary tasks will vary annually according to project requirements and individual interests but will generally consist of substantial field data collection during the growing season (40-60% of year), data management and analysis (15-25% of year), scientific writing (15-25% of year), and outreach/education activities (5-15% of year).

Although negotiable, this position will have statewide responsibilities and will be housed at the MNFI Office in Lansing, Michigan, or an alternate location in the State to be determined.

This position may be eligible to utilize a flexible work environment, however, there is an expectation to work from the MNFI office in Lansing. The needs, responsibilities, and opportunities of an individual's position and office location drive the ability and amount of work- location flexibility.

Characteristic Duties/Responsibilities

- Plan and conduct field surveys, monitoring, and research of natural communities and rare and declining species.
 - Collect, evaluate, analyze, and disseminate ecological information and manage data within multiple databases.
 - Assist with the maintenance and expansion of Michigan's Natural Heritage Database regarding natural community occurrences and support other heritage programming.
 - Develop and maintain good working relationships intra- and inter-organizationally, including with Tribal communities, natural resource managers, researchers, other partners, and stakeholders through collaborations and consultations.
 - Create and promote positive public relations for MSU Extension, the Community, Food, and Environment Institute, and the Michigan Natural Features Inventory.
 - Communicate and interact with formal and informal professional networks to evaluate the needs of the conservation community.
 - Prepare grant proposals, both independently and as part of teams with internal and external collaborators, to fund new projects that meet MNFI's mission.
 - Provide technical assistance and training to communicate current and timely information, research results, and relevant updates on Michigan's natural communities, invasive species, ecological restoration, and biodiversity stewardship to staff within Tribal organizations, Michigan Department of Natural Resources, other state, federal, and local agencies, and conservation organizations.
 - Disseminate information about ecosystems through project reports, publications, scientific presentations, and other written and oral communications.
 - Assist with and/or lead project management and implementation, including the preparation of proposals to obtain funding for projects that further MNFI's mission.
 - Engage in outreach activities with the public, community groups, and scientific community.
 - Serve on internal and external project teams, committees, and working groups.
 - Recruit, train, and direct seasonal staff.
 - Participate in MSU health and safety monitoring programs.
 - Actively participate in professional development opportunities.
 - Understand and support the Community, Food and Environment Institute's efforts in diversity, equity, inclusion, and Civil Rights, with a special emphasis on removing barriers from participation and reaching diverse populations, including but not limited to race, color, national origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status or veteran status, socio-economic class, and other human differences in rural, suburban, and urban communities.
 - Perform other duties or projects as assigned.
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- Delineate and classify vegetation using aerial photographs and GIS and conduct field inventories to ground truth stand delineations and classifications.
 - Read pertinent literature to maintain and expand knowledge of Michigan's natural communities.

SUPERVISION RECEIVED FROM

MNFI Director

WORK ENVIRONMENT

This position requires driving as a regular part of the position, and carrying field supplies, educational materials, equipment, etc. up to 25 lbs. This position will regularly and often independently conduct long days of strenuous field work under adverse conditions for prolonged periods of time throughout the State of Michigan, including working in remote areas, difficult terrain, and vast tracts of wetlands. Field days will regularly require over four miles of walking off trail.

MINIMUM REQUIREMENTS

- Master's degree from an accredited institution in a field of study related to ecology, plant biology, forestry, or closely related field must be earned by date of hire.
- Knowledge of the natural communities of Michigan and/or the Upper Great Lakes, including landscape ecology, natural processes, geology, soils, flora and fauna, and anthropogenic disturbance history that characterize them.
- Experience evaluating fire-dependent ecosystems and use of prescribed fire for ecological restoration.
- Understanding of Great Lakes Tribal communities, Treaty rights, land tending practices, and cultural burning.
- Demonstrated commitment to the conservation of biological diversity.
- Experience designing and conducting field-based ecological studies, especially those involving vegetation sampling, mapping, or monitoring.
- Understanding of standard forest measurements (e.g., basal area sweeps, canopy closure, size class estimation, tree diameter, and age determination).
- Ability to independently conduct long days of strenuous fieldwork under adverse conditions for prolonged periods of time throughout the State of Michigan.
- Ability to navigate in remote areas, including experience using a compass, maps, and GPS technology.
- Strong interpersonal, oral, and written communication skills, good organizational and time-management abilities, and attention to detail.
- Demonstrated ability to quickly learn new skills and procedures.
- Self-motivated and curious with the demonstrated ability to work independently without daily supervision and/or coaching.
- Ability to work effectively on multidisciplinary teams within a participatory workplace culture.
- Ability to work in an office or virtual environment and serve in both leadership and contributory roles.
- Proven ability in establishing and working with a diverse network of constituents and community members across race, gender, socioeconomic class, disabilities, and other differences.
- Proficiency in use of technology (e.g., web research, Zoom, Qualtrics, Microsoft Office Suite, Survey123/Field Maps, email/calendaring, distance technology, etc.) for day-to-day work, record keeping, reporting, team-based communications, and overall management.
- Ability to travel in local and surrounding communities and long distances, including weekends and for extended periods.
- Transportation is the responsibility of the employee.
- Other skills and/or physical abilities required to perform duties of this position.

DESIRED QUALIFICATIONS

- Ph.D. in relevant field.
- Experience engaging with Tribal communities and Indigenous knowledge.
- Experience developing and implementing monitoring protocols.
- Experience with natural community surveys and evaluation, including both upland and wetland ecosystems.

- Experience conducting floristic quality assessments.
- Demonstrated ability to quickly identify most plant species in the field in both upland and wetland communities, and in communities typical of both northern and southern Michigan.
- Demonstrated record of obtaining extramural funding.
- Knowledge of and/or experience in ecological restoration, silvicultural prescriptions, invasive species control, prescribed fire, and ecosystem management.
- Experience with ESRI GIS software and spatial analysis.
- Demonstrated analytical abilities and experience with statistical software (e.g., R, SAS, SPSS, or SYSTAT).
- Knowledge of NatureServe's natural heritage methodology and Biotics software.
- Red Card certified (certified in prescribed fire application).

This position is a full-time, fixed-term end-dated appointment, renewable annually based upon successful performance and continued funding.

FAIR LABOR STANDARDS ACT DESIGNATION

This position is exempt as defined under the FLSA.

MSU is an affirmative-action, equal-opportunity employer, committed to achieving excellence through a diverse workforce and inclusive culture that encourages all people to reach their full potential. Michigan State University Extension employment opportunities are open to eligible/qualified persons without regard to race, color, national origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status or veteran status. MSU is committed to achieving excellence through cultural diversity. Persons with disabilities have the right to request and receive reasonable accommodations.

The university actively encourages applications and/or nominations of women, persons of color, veterans, and persons with disabilities.