

JESSE M. LINCOLN

Conservation Scientist
Plant Ecologist

Michigan Natural
Features Inventory

Michigan State
University Extension

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Core Expertise

- Conservation Planning
- Natural Community Classification
- GIS & Spatial Analysis
- Botanical Inventory
- Fire Ecology
- Pine Barrens Stewardship
- Natural Red Pine Ecology
- Forest Stewardship
- Ecological Silviculture
- Rare Plant Conservation
- Ecological Monitoring
- Scientific Writing
- Landscape Photography
- Public Communication

Education

2012 – Master of Science, Biology,
Grand Valley State University,
Allendale, Michigan

Thesis: *Effects of Ailanthus altissima soil leachates on nodulation and expression of two genes that regulate nodulation of Trifolium pretense.*

2007 – Bachelor of Science, Biology,
Grand Valley State University

Professional Portfolio

Professional Profile

Conservation scientist with over 15 years of experience developing science-based strategies for conserving rare biodiversity and restoring fire-dependent ecosystems across Michigan. Leads interdisciplinary projects that integrate field ecology, historical landscape analysis, prescribed fire, ecological silviculture, and GIS into practical conservation planning for state and federal agencies. Authored reports detailing landscape-scale conservation frameworks and influenced management priorities across hundreds of thousands of acres of public lands.

Selected Conservation Initiatives

**Michigan Natural Features Inventory – Michigan State University Extension, Lansing, MI
Conservation Scientist/Plant Ecologist | 2012–Present**

Lead ecological assessments and conservation planning projects across Michigan in collaboration with the Michigan Department of Natural Resources, U.S. Forest Service, National Park Service, Sustainable Forestry Initiative, Tribal partners, The Nature Conservancy, and other conservation organizations.

- **Statewide Natural Red Pine Stewardship; Michigan DNR**
Co-developed statewide guidance integrating prescribed fire and ecological silviculture to restore natural red pine forests across Michigan's State Forest system.
- **Identifying Recoverable, Fire-dependent Systems; Sustainable Forestry Initiative, Michigan DNR, United States Forest Service**
Directed landscape-scale assessments identifying recoverable, fire-dependent natural communities, including pine barrens, natural red pine forests, and other ecosystems for stewardship across state and federal lands.
- **Great Lakes Islands; EPA, EGLE, USFWS, USFS, NPS**
Conducted comprehensive ecological assessments and natural community evaluations. Developed prioritized management recommendations supporting conservation planning for coastal ecosystems, including globally rare natural communities in some of North America's premier wilderness landscapes.
- **Integrated Inventory; Michigan DNR Wildlife/Parks and Recreation Division**
Conducted thorough inventory of state-managed lands to document high-quality natural communities. Lead author for numerous reports incorporating best practices for rare taxa, natural communities, and control of invasive species.

**Michigan Natural Features Inventory – Michigan State University Extension, Lansing, MI
Seasonal Ecologist | 2010-2012**

Conducted thorough inventory of state-managed lands to document high-quality natural communities and populations of rare plants and animals.

**Biology Department – Grand Valley State University, Allendale, MI
Adjunct Faculty | 2007-2010**

Instructed biology labs, including: Plants in the World, The Biology of People, and assisted with Plant Morphology labs.

Selected Reports

- Lincoln, J.M., and C.C. Wojtowicz. 2026. [Maintaining Natural Red Pine in Michigan: A Framework for Fire Stewardship and Ecological Silviculture](#). Report No. 2026-10, Michigan Natural Features Inventory. Lansing, MI.
- Cohen, J.G., J.M. Lincoln, H.D. Enander, and A.F. Stone. 2026. [Natural Community Surveys of Isle Royale National Park, Lake Superior](#). Michigan Natural Features Inventory, Report No. 2026-06, Lansing, MI., 469 pp.
- Lincoln, J.M., M.R. Parr, and J.G. Cohen. 2025. [Identifying Recoverable, Fire-Dependent Systems in the Newberry Forest Management Unit](#). Report No. 2025-36, Michigan Natural Features Inventory. Lansing, MI. 115 pp.
- Bassett, T.J., J.M. Lincoln, and J.G. Cohen. 2023. [Natural Community Surveys of the Keweenaw Heartlands](#). Michigan Natural Features Inventory, Report Number 2023-32, Lansing, MI.
- Lincoln, J.M., A.P. Kortenhoven, P.J. Badra, Y.M. Lee, H.D. Enander, M.J. Monfils, A. Cole-Wick, C.M. Wilton, and J.G. Cohen. 2020. [Natural Features Inventory and Management Recommendations for Maple River State Game Area](#). Michigan Natural Features Inventory, Report Number 2020-10, Lansing, MI. 126 pp.

Invited Presentations

- Fire as a Stabilizing Force
- Maintaining Natural Red Pine in Michigan
- [Understanding What Remains](#)
- [Identifying Recoverable Fire-Dependent Systems](#)
- [Quercus alba: The Monarch of Michigan Forests](#)
- [The Art of Conservation Science](#)
- Seeing the Land
- Perspectives in Conservation