

MEREDITH THOMSEN

Professor
Biology Department and River Studies Center
University of Wisconsin-La Crosse

PROFESSIONAL APPOINTMENTS

Director, Environmental Studies Program, UWL. 2015-present.

Professor, Biology Department, UWL. 2014-present.

Visiting Associate Researcher, Environmental Studies Department, University of California-Santa Cruz. Sabbatical 2012-2013.

Associate Professor, Biology Department, UWL. 2010-14. (Tenured 2011.)

Assistant Professor, Biology Department, UWL. 2006-2010.

Faculty Member, River Studies Center, UWL. 2006-present.

ACADEMIC BACKGROUND

Ph.D. in Integrative Biology, 2005: University of California, Berkeley

Doctoral dissertation: Ecological resistance, propagule supply and the invasion of California coastal prairie by the European grass *Holcus lanatus* L.

B.A. in Biology, Concentration in Environmental Studies, 1997: Carleton College, Northfield MN.

AWARDS

Wisconsin Teaching Fellow, University of Wisconsin System. 2010.

Chancellor's Inauguration Scholar, University of Wisconsin-La Crosse. 2007.

RESEARCH TOPICS

Restoration of invaded habitats

Predicting community responses to climate change

Effects of habitat fragmentation on community interactions

RESEARCH GRANTS

Thomsen, M.A. and Miller-Adamany, A. "Testing applied nucleation as a restoration strategy for the Upper Mississippi River floodplain forest." **United States Army Corps of Engineers**, \$8000. 2014.

Thomsen, M.A. "Physiological responses of reed canarygrass to restoration treatments." **UWL Faculty Research Grant**, \$11,570. 2013.

Strauss, E., Thomsen, M.A., and De Jager, N. "Reciprocal effects of alternative vegetation management techniques on soil nutrients and nitrification rates along an elevation

- gradient in an Upper Mississippi River floodplain forest." **United States Geological Survey**, \$13,177. 2012.
- Thomsen, M.A., and Wilmers, C. "Research Opportunity Award: Expanding the field-testing of a new instrument package for wild mammals." **National Science Foundation**, \$19,000. 2012.
- Thomsen, M.A. "How can protection from deer herbivory improve forest restoration in the Upper Mississippi River floodplain?" **UWL Faculty Research Grant**, \$11,193. 2010.
- Thomsen, M.A., De Jager, N. "Comparison of deer exclosure methods for protection of bottomland forest restoration sites." **United States Army Corps of Engineers**, \$6000. 2009.
- Thomsen, M.A., Suttle, K.B., Gerber, D.T. "LTREB: RUI: Grassland community responses to sustained rainfall manipulation." **National Science Foundation**, \$135,000. 2008
- Thomsen, M.A. "The regeneration of floodplain forest tree species in gaps invaded by reed canarygrass" **UWL Faculty Research Grant**, \$12,680. 2007.

RESEARCH PUBLICATIONS (**Indicates undergraduate or graduate student*)

1. De Jager, N., Swanson, W.*, Strauss, E., Thomsen, M.A., and Yin, Y. *In press*. Flood pulse effects on nitrification in a floodplain forest impacted by herbivory, invasion, and restoration. **Wetlands Ecology and Management**.
2. Kreiling, R.,M., De Jager, N., Swanson, W.*, Strauss, E., and Thomsen, M. *In press*. Effects of flooding on ion exchange rates in an Upper Mississippi River floodplain forest impacted by herbivory, invasion and restoration. **Wetlands**.
3. Thomsen, M.A., and D'Antonio, C.M. 2014. How does simulated gopher disturbance affect the establishment of *Holcus lanatus* L. (Poaceae) in California coastal prairie? **Madroño** 61:218-226.
4. Cogger, B.*, De Jager, N., Thomsen, M.A. and Reinhardt Adams, C. 2014. Winter browse selection by white-tailed deer and implications for bottomland forest restoration in the Upper Mississippi River valley, USA. **Natural Areas Journal** 34:500-509.
5. De Jager, N., Cogger, B.*, and Thomsen, M.A. 2013. Interactive effects of flooding and deer (*Odocoileus virginianus*) browsing on floodplain forest recruitment. **Forest Ecology and Management** 303:11-19.
6. Paluch, E.*, Volk, T., and Thomsen, M.A. 2013. Effects of resident soil fungi and land use history outweigh those of commercial mycorrhizal inocula: testing a restoration strategy in unsterilized soil. **Restoration Ecology** 21:380-389.

7. Thomsen, M.A., Brownell, K., Groshek, M.*, and Kirsch, E. 2012. Control of reed canarygrass promotes wetland herb and tree seedling establishment in an Upper Mississippi River floodplain forest. **Wetlands** 32:543-555.
8. De Jager, N., Thomsen, M.A., and Yin, Y. 2012. Threshold effects of flood duration on the vegetation and soils of the Upper Mississippi River Floodplain, USA. **Forest Ecology and Management** 270:135-146.
9. Salesman, J.*, and Thomsen, M.A. 2011. Smooth brome (*Bromus inermis*) in tallgrass prairies: a review of control methods and future research directions. **Ecological Restoration** 29:374-381.
10. Bennett, A., Thomsen, M.A., and Strauss, S. 2011. Multiple mechanisms enable invasive species to eliminate native species. **American Journal of Botany** 98:1086-1094.
11. Hawkes, C.V., Kivlin, S., Huguet, V., Thomsen, M.A., and Suttle, K.B. 2011. Fungal community responses to precipitation. **Global Change Biology** 17: 1637-1645.
12. Suttle, K.B., Thomsen, M.A., and Power, M.E. 2007. Species interactions reverse grassland responses to changing climate. **Science** 315: 640-642.
13. Thomsen, M.A., and D'Antonio, C.M. 2007. Mechanisms of resistance to invasion in a California grassland: the roles of competitor identity, resource availability, and environmental gradients. **Oikos** 116: 17-30.
14. Suttle, K.B. and Thomsen, M.A. 2007. Climate change and grassland restoration: lessons from a rainfall manipulation in California. **Madroño** 54: 225-233.
15. Thomsen, M.A., D'Antonio, C.M., Suttle, K.B., and Sousa, W.P. 2006. Ecological resistance, seed density, and their interactions determine patterns of invasion in a California coastal grassland. **Ecology Letters** 9: 160-170.
16. Thomsen, M.A., Corbin, J.D., and D'Antonio, C.M. 2006. The effect of soil nitrogen on competition between native and exotic perennial grasses from northern coastal California. **Plant Ecology** 186: 23-35.
17. Corbin, J.D., Thomsen, M.A., Dawson, T.E., and D'Antonio, C.M. 2005. Summer water use by California coastal prairie grasses: fog, drought, and community composition. **Oecologia** 145: 511-521.
18. D'Antonio, C.M., and Thomsen, M.A. 2004. Ecological resistance in theory and practice. **Weed Technology** 18:1572-1577.
19. D'Antonio, C.M., Levine, J.M., and Thomsen, M.A. 2001. Ecosystem resistance to invasion and the role of propagule supply: a California perspective. **Journal of Mediterranean Ecology** 2:233-245.

GRADUATE MENTORING

I have served or currently serve on nine M.S. and Ph.D. committees at UWL and UCSC, in addition to those of my own graduate students.

Current M.S. students:

Theresa Simpson, Brittany Harried, Amber Miller-Adamany - awarded a **National Science Foundation Graduate Research Fellowship** in 2014

Completed M.S. students and current affiliations:

Michael Merriman (MN Department of Agriculture), Benjamin Cogger (University of WI-Superior), Elisabeth Paluch (UWL), Jessica Bolwahn Salesman (Effigy Mounds National Monument)

TEACHING

University 1 st Year Seminar	Plant-Microbe Interactions
General Biology	Plant Ecology
Organismal Biology	Quantitative Methods in Ecology
Plant Biology	Biology Capstone
Ecology	

TEACHING GRANTS

Thomsen, M.A., "Camera trapping of small mammals to evaluate edge effects of prairie walking trails." **National Great Rivers Research & Education Center**, \$6000. 2015.

Thomsen, M.A. "Learning by design: Ecology." **UWL Learning by Design Grant**, \$2500. 2014.

Gerrish, G., and 10 others including Thomsen, M.A. "Re-designing Organismal Biology to better prepare majors for upper-division coursework." **UWL Curriculum Redesign Grant**, \$32,000, 2013.

Paluch, E., Baines, A., and Thomsen, M.A. "Training course for LI-COR portable photosynthesis system." **UWL Faculty Development Grant**, \$2094, 2013.

Thomsen, M.A., and Gerber, D.T. "Travel to CA for annual sampling of climate change experiment with students." **UWL College of Science and Health**, \$5000/year. 2012-2014.

Thomsen, M.A., "Comparison of methods to control reed canarygrass." **National Great Rivers Research & Education Center**, \$5000. 2012.

Thomsen, M.A., Gerber, D., and Baines, A. "Ecophysiology instrumentation for plant science classes and research." **LI-COR Environmental Education Fund**, \$53,100. 2012.

Baines, A., Thomsen, M.A., and Gerber, D.T. "Redesign of Plant Biology Laboratory: student-inquiry and active learning." **UWL Curriculum Redesign Grant**, \$23,000, 2011.

Thomsen, M.A., "Response of forest restoration sites to deer browsing." **National Great Rivers Research & Education Center**, \$4850. 2010.

Downey, N., Thomsen, M.A. "Summer Research Program for increasing student retention in the STEM disciplines." **Wisconsin Alliance for Minority Participation**, \$24,940. 2010 and 2009.

PEER-REVIEWED ONLINE LESSON PLANS

1. Aschenbrenner, R.*, Feldmeier, N.*, Schoenfeld, P.*, Gerber, D.T., and Thomsen, M.A. 2012. Using field notebooks for biodiversity study. **Science NetLinks/AAAS**.
2. Hill, E.*, Gerber, D.T., and Thomsen, M.A. 2011. Grassland plants: plant identification. **Science NetLinks/AAAS**.
3. Balistrieri, D.*, Gerber, D.T., and Thomsen, M.A. 2010. Simulating climate change research in grasslands. **Science NetLinks/AAAS**.

* Indicates graduate or undergraduate student.

INVITED TALKS

UWL College Writing Symposium, "Titles are the hardest part: my experiences with writing, by Meredith Thomsen." 2014.

UWL Pre-Veterinary Club, "A walk on the wild side: studying pumas in the Santa Cruz Mountains." 2013.

UC Santa Cruz, Department of Environmental Studies, "Clear eyes, strong backs, can't lose? Setting restoration priorities in the Upper Mississippi River floodplain forest." 2013.

The Prairie Enthusiasts, La Crosse Region, "California dreaming, or nightmare??? Invasion of California grasslands, 1849-present." 2007.

Upper Midwest Environmental Science Center (USGS), "How might interactions between ecological resistance and propagule supply determine patterns of invasive plant spread?" 2006.

Carleton College, "Testing ecological resistance to a plant invasion." 2006.

DEPARTMENT SERVICE

Biology Core Committee. Chair 2014-present.
Biology Education Search Committee. Member 2011-12.
Writing Across the Curriculum Committee. Chair 2010-12.
Organismal Biologist Search Committee. Member 2009-10.
Greenhouse Committee. Chair 2008-12.
Budget Committee. Member 2008-09.
Plant Biologist Search Committee. Member 2008-09.
Biology Club. Faculty Advisor 2006-09.
Curriculum Committee. Member 2006-07.
Room use/renovation Committee. Member 2006-07.
Limnologist Search Committee. Member 2006-07.
Comparative Animal Physiologist Search Committee. Member 2006.

COLLEGE SERVICE

Sabbatical Committee Review Committee. Chair 2013, Member 2014.
College Committee. Member 2009-11, Secretary 2011-12.
Summer Research Seminar Series. Co-organizer 2008
Dean's Distinguished Fellowship Committee. Member 2006-08.

UNIVERSITY SERVICE

Evaluation Committee for Assessment Software RFP. Member 2014-15.
UW System 30-Credit Transfer Committee. Member 2014.
General Education Committee. Chair 2013-2015. Member 2015-present
UWL Foundation Small Grants Committee. Member 2013-present
Graduate Curriculum Committee. Member 2013-14
Joint Committee on Environmental Sustainability. Member 2009-12.
Environmental Studies Pool Search. Member 2009.
Ad Hoc Online SEI Committee. Member 2009.

Cultural Affairs for Multicultural Student Services Committee. Member 2007-08.

Faculty Development Committee. Member 2007-08.

Student Organization Committee. Member 2007-08.

PROFESSIONAL SERVICE

Grant Review Panelist, National Science Foundation. 18 proposals reviewed. 2015.

Grant Review Panelist, National Science Foundation. 20 proposals reviewed. 2014.

Grant Review Panelist, National Science Foundation. 21 proposals reviewed. 2011.

Manuscript Reviewer for journals including Ecology, Conservation Biology, Journal of Ecology, Restoration Ecology, Oikos, Diversity & Distributions, Perspectives in Plant Ecology, Evolution and Systematics, Journal of Australian Biology.