

NICHOLAS P. DANZ

Associate Professor
Department of Natural Sciences
University of Wisconsin-Superior

Belknap and Catlin
Superior, WI 54880
(715) 394-8161
ndanz@uwsuper.edu

Research Interests

Quantitative ecology: Great Lakes wetland and dune plant communities, flora of northwest Wisconsin and Minnesota, biotic stress-response relationships in the US Great Lakes coastal region, response of breeding birds to forest management, statistical analysis of ecological data, development of ecological indicators, biological monitoring, conservation biology, landscape ecology.

Education

- Ph.D. Natural Resources Science and Management, University of Minnesota, 2009
Dissertation: Spatial vegetation-environment relationships and distributional changes in the presettlement Minnesota prairie-forest boundary
- M.S. Biology, University of Minnesota Duluth, 1998
Minor: Applied Computational Mathematics
Thesis: Influence of Canada yew on population structure of sugar maple and beech
- B.S.E. Biology and Broadfield Science Education, University of Wisconsin-Whitewater, 1993
Minor: Earth Science

Professional Experience

Associate Professor (2013-present) and Assistant Professor (2008-present), Department of Natural Sciences, University of Wisconsin-Superior
Responsibilities: design and implement biology curriculum for undergraduates, maintain active research program involving biology majors, serve on university and departmental committees, oversee greenhouse facilities and staff, direct university herbarium, and supervise work study student employees.

Courses: Biogeography and Conservation, Biology Seminar, Ecology, Forest Ecology and Management, Plants and People, Plant Physiology, Plant Taxonomy, Wisconsin's Vanishing Present

Graduate Faculty Member (2012-present), Integrated Biosciences Program, University of Minnesota Duluth
Responsibilities: advise graduate students, serve on committees.

Adjunct Research Associate (2010-present), Research Fellow (2003-2008), and Junior Scientist (1999-2003), Natural Resources Research Institute
Responsibilities: collect and analyze ecological data, author peer-reviewed journal articles and technical reports, administer and manage projects and budgets, develop sampling designs for ecological experiments and observational studies, develop and maintain relational databases and data entry software, provide statistical advice for students and colleagues, prepare presentations for scientific meetings.

Adjunct Instructor, Biology Department, University of Minnesota Duluth, 2000-2001, 2007
Responsibilities: design and implement course curricula for introductory biology and plant biology large lecture courses and an ecology field course. Coordinate teaching assistants, design assessments, implement technological tools for grading, instruction, and communication.

Research Assistant, City of Superior, WI, 1998-1999

Responsibilities: develop and analyze surveys to assess how municipalities implement pollution prevention, develop educational materials and curricula related to pollution prevention, give public presentations.

Botanical Contractor, Chippewa National Forest, USFS, 1997-1998

Responsibilities: collect and analyze floristic data from burned vs. unburned clearcut sites, conduct rare plant surveys on rotation-age forest stands, write technical reports.

Grants and Contracts

- 2014 Floristic inventory of High Conservation Value Forests in county forests of northern Wisconsin. Wisconsin County Forest Association. Principal Investigator. \$109,000.
- 2014 Integrating prior vegetation surveys to test spatial and temporal patterns of wetland floristic quality in the St. Louis River estuary. Wisconsin Sea Grant. Co-principal investigator with S. Schooler, \$98,000.
- 2013-2014 A comprehensive stressor-response model to inform ecosystem restorations across the Great Lakes basin. Michigan Water Center. Co-principal investigator with L.B. Johnson and D. Allan *et al.* \$458,000.
- 2013 Spatial and temporal variability in floristic quality indices in Great Lakes coastal wetlands. UWS Center for Excellence in Teaching and Learning Scholarship Jumpstart Grant. \$950.
- 2012-2013 STEM Mastery Through Great Lakes Stewardship: GLISTEN (the Great Lakes Innovative Stewardship Through Education Network). University of Harrisburg's National Center for Science and Civic Engagement. \$4000.
- 2012-2013 Survey of Terrestrial Invasive Plants on Wisconsin County Forests. Wisconsin Department of Natural Resources. Principal Investigator. \$70,000.
- 2012 Population Status Assessment of Marsh Grass-of-Parnassus in Northwestern Wisconsin. UWS Swenson Scholars Undergraduate Summer Program, Faculty Mentor with Daniel Fuller. \$5000.
- 2012-2013 Lake Superior Basin Floristic Quality Assessment – Phase 1: Setting Benchmarks to Create Plant Community Condition Tiers. Wisconsin Department of Natural Resources. Co-principal Investigator with T. Bernthal, P. Hlina *et al.* \$275,000.
- 2010-2015 Great Lakes Indicator Consortium: Implementing Great Lakes Coastal Wetland Monitoring, US EPA. Co-principal Investigator with D. Uzarski *et al.* \$10M (\$103,000 to UWS).
- 2010-2014 GLEI-II Indicator testing and refinement. Great Lakes Restoration Initiative, US EPA. Co-principal Investigator with L. Johnson *et al.* \$1.6M (\$45,000 to UWS).
- 2010 Development of indicators of salt marsh integrity. U.S. Geological Survey. Principal Investigator. \$24,662.
- 2010 Incorporating academic service-learning through Great Lakes stewardship in Biology 111 Plants and People. University of Wisconsin-Superior AS-L Mini-grants program. \$500.
- 2010 Incorporating time-lapse photography into to the plant physiology laboratory. University of

- Wisconsin-Superior Teaching with Technology program. \$600.
- 2010 Western Great Lakes GLISTEN Collaborative Center. Corporation for National Civic Engagement, November 2009. Co-Principal Investigator with P. Schoff *et al.* \$43,000 (\$15,000 to UWS)
- 2010-2012 Stressor gradients and spatial narratives of the St. Louis River estuary. University of Wisconsin Sea Grant and University of Minnesota Sea Grant. Co-Principal Investigator with J. Silbernagel *et al.* \$207,000 (\$78,000 to UWS).
- 2009 Plant physiology laboratory modernization: Qubit Systems for physiological research. University of Wisconsin-Superior, Laboratory Modernization Program. \$10,000.
- 2008-2009 Development of a multi-metric assessment tool for coastal salt marsh integrity: evaluation of pilot data. U.S. Geological Survey. Principal Investigator. \$20,000.
- 2007-2008 Monitoring breeding birds in western Great Lakes national forests. U.S. Forest Service. Co-Principal Investigator with G. Niemi. \$240,000.
- 2007 Development of landbird monitoring protocols for the Great Lakes Network parks. National Park Service. Principal Investigator. \$22,999.

Peer-reviewed Publications

- 2014* Niemi, G.J., R.W. Howe, B.R. Sturtevant, L.R. Parker, A.R. Grinde, N.P. Danz, M. Nelson, E.J. Zlonis, N.G. Walton, E.E. Giese, and S.M. Lietz. Analysis of long-term forest bird monitoring in National Forests of the western Great Lakes region. US Forest Service General Technical Report. *Final review stage, Fall 2014.
- 2014* Murray, M.W., P.E. Norris, D.A. Wilcox, A.D. Steinman, L.B. Johnson, J.D. Allan, N.P. Danz, and D. Scavia. Expert opinion to identify focus areas for restoration and protection in the Great Lakes. *To be submitted for review to Environmental Practice, Fall 2014.
- 2014* Riker-Coleman, K., M. Arnhold-Davies, N.P. Danz, R. Gabrys-Alexson, and J. Meyer. Cultivating STEM with Service Learning at a Regional University. To be published in forthcoming book Service-Learning and Civic Engagement: A Sourcebook Project. *Accepted for publication Fall 2013.
- 2014 Kovalenko, K.E., V.J. Brady, T.N. Brown, J.J.H. Ciborowski, N.P. Danz, N.P., J.P. Gathman, G.E. Host, R.W. Howe, L.B. Johnson, G.J. Niemi, and E.D. Reavie. Congruence of community thresholds in response to anthropogenic stress in Great Lakes coastal wetlands. *Freshwater Science* 33(3):958-971.
- 2013 Danz, N.P., L.E. Frelich, P.B. Reich, and G.J. Niemi. Do vegetation boundaries display smooth or abrupt spatial transitions along environmental gradients? Evidence from the prairie-forest biome boundary of historic Minnesota, USA. *Journal of Vegetation Science* 24:1129-1140.
- 2011 Niemi, G.J., E.D. Reavie, G.S. Peterson, J.R. Kelly, C.A. Johnston, L.B. Johnston, R.W. Howe, G.E. Host, T.P. Hollenhorst, N.P. Danz, J.H. Ciborowski, T.N. Brown, V.J. Brady, and R.P. Axler. An integrated approach to assessing multiple stressors for coastal Lake Superior. *Aquatic Ecosystem Health and Management* 14(4):356-375.
- 2011 Danz, N.P., P.B. Reich, L.E. Frelich, and G.J. Niemi. Vegetation controls vary across space and spatial scale in a historic grassland-forest biome boundary. *Ecography*, 34(3):402-414.
- 2009 Etterson, M.A., G.J. Niemi, and N.P. Danz. Estimating the effects of detection heterogeneity and overdispersion on trends estimated from avian point counts. *Ecological Applications* 19(8):2049-2066.
- 2009 Johnston, C.A., T. Brown, T. Hollenhorst, P. Wolter, N. Danz, G. Niemi. GIS in Support of Ecological Indicator

- Development. Pages 1095-1114 in M. Madden, ed. *Manual of Geographic Information Systems*. American Society for Photogrammetry and Remote Sensing, Bethesda, MD.
- 2009 Trebitz, A.S., J.C. Brazner, N.P. Danz, M. Pearson, G. Peterson, D. Tanner, D. Taylor, C. West, and T. Hollenhorst. Geographic, anthropogenic, and site-specific habitat influences on Great Lakes coastal wetland fish assemblages. *Canadian Journal of Fisheries and Aquatic Sciences* 66:1328-1342.
- 2009 Niemi, G.J., V. Brady, T. Brown, N.P. Danz, D. Ghioca, J.M. Hanowski, T. Hollenhorst, R. Howe, L.B. Johnson, C.A. Johnston, and E. Reavie. Development of ecological indicators for the U.S. Great Lakes Coastal Region - a summary of applications in Lake Huron. *Aquatic Ecosystem Health & Management* 12(1):77-89.
- 2008 Vora, R., S. Lerol, and N.P. Danz. Multi-species planting and other reforestation practices to restore within-stand diversity in northeastern Minnesota, USA. *Ecological Restoration* 26(4):340-349.
- 2008 Reavie, E.D., G.V. Sgro, N.P. Danz, R.P. Axler, A.R. Kireta, J.C. Kingston, and T.P. Hollenhorst. Comparison of simple and multimetric diatom-based indices for Great Lakes coastline disturbance. *Journal of Phycology* 44:787-802.
- 2008 Morrice, J.A., N.P. Danz, R.R. Regal, J.R. Kelly, G.J. Niemi, E.D. Reavie, T. Hollenhorst, R.P. Axler, A.S. Trebitz, A.M. Cotter, and G.S. Peterson. Human influences on water quality in Great Lakes wetlands. *Environmental Management* 41:347-357.
- 2007 Brady, V.J., J.J.H. Ciborowski, L.B. Johnson, N.P. Danz, J.D. Holland, D.H. Breneman, and J.P. Gathman. Optimizing Fishing Time: One vs. Two-Night Fyke Net Sets in Great Lakes Coastal Systems. *Journal of Great Lakes Research* 33(Special Issue 3):236-244.
- 2007 Brazner, J.C., N.P. Danz, G.J. Niemi, R.R. Regal, T. Hollenhorst, G. Host, T. Brown, A.S. Trebitz, C.A. Johnston, E.D. Reavie, R.W. Howe, J.M. Hanowski, L.B. Johnson, J.J.H. Ciborowski, and G.V. Sgro. Responsiveness of Great Lakes wetland indicators to human disturbances at multiple spatial scales: a multi-assemblage assessment. *Journal of Great Lakes Research* 33(Special Issue 3):42-66.
- 2007 Hanowski, J.M., N. Danz, R.W. Howe, R.R. Regal, and G.J. Niemi. Considerations for monitoring breeding bird communities in Great Lakes coastal wetlands. *Journal of Great Lakes Research* 33(Special Issue 3):245-252.
- 2007 Howe, R.W., R.R. Regal, J.M. Hanowski, G.J. Niemi, N.P. Danz, and C. Smith. An index of ecological condition based on bird assemblages in Great Lakes coastal wetlands. *Journal of Great Lakes Research* 33(Special Issue 3):93-105.
- 2007 Niemi, G.J., J.R. Kelly, and N.P. Danz. Environmental indicators for the coastal region of the North American Great Lakes: introduction and prospectus. *Journal of Great Lakes Research* 33(Special Issue 3):1-12.
- 2007 Kireta, A.M., E.D. Reavie, N.P. Danz, R.P. Axler, G.V. Sgro, J.C. Kingston, T.N. Brown, and T. Hollenhorst. Coastal geomorphic and lake variability in the Laurentian Great Lakes: implications for a diatom-based monitoring tool. *Journal of Great Lakes Research* 33(Special Issue 3):136-153.
- 2007 Howe, R.W., R.R. Regal, G.J. Niemi, N.P. Danz, and J.M. Hanowski. A probability-based indicator of ecological condition. *Ecological Indicators* 7:793-806.
- 2007 Hanowski, J., N. Danz, R. Howe, and G. Niemi. Consideration of geography and wetland geomorphic type in the development of Great Lakes coastal wetland bird indicators. *EcoHealth* 4:194-205.
- 2007 Danz, N.P., G.J. Niemi, R.R. Regal, T. Hollenhorst, L.B. Johnson, J.M. Hanowski, R. Axler, J.J.H. Ciborowski, T. Hrabik, V.J. Brady, J.R. Kelly, J.A. Morrice, J.C. Brazner, R.W. Howe, C.A. Johnston, and G.E. Host. Integrated gradients of anthropogenic stress in the U.S. Great Lakes basin. *Environmental Management* 39(5):631-647.

- 2007 Sgro, G.V., E.D. Reavie, J.C. Kingston, A.R. Kireta, M.J. Ferguson, N.P. Danz, and J.R. Johansen. A diatom quality index from a diatom-based total phosphorus inference model. *Environmental Bioindicators* 2(1):15-34.
- 2007 Brazner, J.C., N.P. Danz, G.J. Niemi, R.R. Regal, Trebitz, A.S., R.W. Howe, J.M. Hanowski, L.B. Johnson, J.J.H. Ciborowski, C.A. Johnston, E.D. Reavie, V.J. Brady, and G.V. Sgro. Evaluation of geographic, geomorphic, and human influences on Great Lakes wetland indicators: a multi-assemblage approach. *Ecological Indicators* 7:610-635.
- 2007 Hanowski, J., N. Danz, J. Lind. Breeding bird response to riparian forest management: nine years post harvest. *Forest Ecology and Management* 241:272-277.
- 2006 Hill, B.J., C.M. Elonen, T.M. Jicha, A.M. Cotter, A.S. Trebitz, and N.P. Danz. Sediment microbial enzyme activity in Great Lakes coastal wetlands. *Freshwater Biology* 51:1670-1683.
- 2006 Reavie, E.D., R.P. Axler, G.V. Sgro, J.C. Kingston, A.R. Kireta, T.N. Brown, N.P. Danz, and T.P. Hollenhorst. Diatom-based weighted-averaging models for Great Lakes coastal water quality: relationships to watershed characteristics. *Journal of Great Lakes Research* 32:321-347.
- 2006 Hanowski, J., N. Danz, and J. Lind. Response of breeding bird communities to forest harvest around seasonal ponds in northern forests, USA. *Forest Ecology and Management* 229:63-72.
- 2005 Hanowski, J.M., J. Lind, N. Danz, G.J. Niemi, and T. Jones. Regional breeding bird monitoring in western Great Lakes national forests. Pages 974-981 in Ralph, C.J., and T.D. Rich, editors. *Bird Conservation Implementation and Integration in the Americas: Proceedings of the Third International Partners In Flight Conference*. 2002 March 20-24; Asilomar, California; Volume 2. General Technical Report PSW-GTR-191. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture; 643 p.
- 2005 Hanowski, J., N. Danz, J. Lind and G. Niemi. Breeding bird response to varying amounts of basal area retention in riparian buffers. *Journal of Wildlife Management* 69:689-698.
- 2005 Danz, N.P., R.R. Regal, G.J. Niemi, V.J. Brady, T. Hollenhorst, L.B. Johnson, G.E. Host, J.M. Hanowski, C.A. Johnston, T. Brown, J. Kingston, and J.R. Kelly. Environmentally stratified sampling design for the development of Great Lakes environmental indicators. *Environmental Monitoring and Assessment* 102:41-65.
- 2004 Lind, J., N. Danz, M.T. Jones, J.M. Hanowski, and G.J. Niemi. Forest bird population trends in Minnesota, 1991 to 2002. *The Loon* 75:182-188.
- 2004 Niemi, G.J., J.M. Hanowski, J.M., N. Danz, R. Howe, M.T. Jones, J. Lind, and D. Mladenoff. Hierarchical scales in landscape responses by forest birds. *Landscape Ecology and Wildlife Habitat Evaluation: Critical Information for Ecological Risk Assessment, Land-Use Management Activities, and Biodiversity Enhancement Practices*, ASTM STP 1458, L.A. Kapustka, H. Gilbraith, M. Luxon, and G.R. Biddinger, Editors, American Society for Testing and Materials, West Conshohocken, PA, 2004.
- 2003 Hanowski, J., N. Danz, J. Lind, and G. Niemi. Breeding bird response to forest harvest and harvest equipment. *Forest Ecology and Management* 174:315-328.
- 2003 Lind, J., N. Danz, M.T. Jones, J.M. Hanowski, and G.J. Niemi. Forest bird population trends on the Chequamegon National Forest (1992-2002). *Passenger Pigeon* 65(4):233-244.
- 1999 Schimpf, D.J. and N.P. Danz. Light transmission through leaf litter: variation among northern hardwood trees. *Agricultural and Forest Meteorology* 97:103-111.

Technical Publications

- 2014 Cogger, B., and N.P. Danz. 2014. Baseline survey of terrestrial invasive plants on County Forests in northern Wisconsin. Technical Report, Lake Superior Research Institute, University of Wisconsin-Superior, Superior,

WI.

- 2013 Neckles, H.A., G.R. Guntenspergen, W.G. Shriver, N.P. Danz, W.A. Wiest, J.L. Nagel, and J.H. Olker. Identification of Metrics to Monitor Salt Marsh Integrity on National Wildlife Refuges in Relation to Conservation and Management Objectives. Final Report to US Fish and Wildlife Service, Northeast Region. USGS Patuxent Wildlife Research Center, Laurel, MD. 226 pp.
- 2010 Gostomksi, T., M. Knutson, N.P. Danz, B. Route, and T.W. Sutherland. Landbird monitoring protocol, Great Lakes Inventory and Monitoring Network. Natural Resource Report NPS/GLKN/NRR—2010/225. National Park Service, Fort Collins, Colorado.
- 2009 Danz, N.P. The Minnesota forest bird project database: description and user's guide. NRRI Technical Report, NRRI/TR-2009/35, University of Minnesota Duluth, Duluth, MN.
- 2008 Knutson, M. G., N. P. Danz, T. W. Sutherland, and B. R. Gray. 2008. Landbird Monitoring Protocol for the U.S. Fish and Wildlife Service, Midwest and Northeast Regions, Version 1. Biological Monitoring Team Technical Report BMT-2008-01. U.S. Fish and Wildlife Service, La Crosse, WI. 25 pages + 11 Standard Operating Procedures.
- 2008 Danz, N.P., A. Bracey, and G.J. Niemi. 2008. Breeding bird monitoring in western Great Lakes national forests 1991-2007. NRRI Technical Report NRRI/TR-2008/11.
- 2007 Etterson, M., N. Danz, J. Lind, J. Hanowski, and G. Niemi. Update Report: Breeding bird monitoring in Great Lakes national forests 1991-2006. NRRI Technical Report 2007/01.
- 2006 Niemi, G.J., Axler, R.P., Brady, V.J., Brazner, J.C., Brown, T.N., Ciborowski, J.J.H., Danz, N.P., Hanowski, J.M., Hollenhorst, T.P., Howe, R.W., Johnson, L.B., Johnston, C.A., Reavie, E.D., Simcik, M., Swackhamer, D. Environmental indicators for the coastal region of the U.S. Great Lakes. NRRI/TR-2006/11 1-124
- 2006 Lind, J., N. Danz, and J.M. Hanowski. 2006. Conservation analysis for declining forest bird species (1991-2005) on the Chequamegon, Chippewa, and Superior National Forests. NRRI Technical Report NRRI/TR-2006-07.
- 2005 Lind, J., N. Danz, J. Hanowski, and G. Niemi. Update Report: Breeding bird monitoring in Great Lakes national forests 1991-2005. NRRI Technical Report 2006/06.
- 2005 Kilgore, M.A., A.R. Ek, K.A. Buhr, L.E. Frelich, J.M. Hanowski, C.M. Hibbard, A.O. Finley, L.C. Rathburn, N.P. Danz, J.W. Lind, and G.J. Niemi. Minnesota timber harvesting GEIS: an assessment of the first 10 years. Staff Paper Series No. 182, Department of Forest Resources, College of Natural Resources, University of Minnesota.
- 2005 Hanowski, J., N. Danz, and J. Lind. Response of breeding birds to forest harvest in buffers around seasonal ponds in northern forests. Natural Resources Research Institute Technical Report NRRI/2005/10.
- 2005 Lind, J., N. Danz, J. Hanowski, and G. Niemi. Update Report: Breeding bird monitoring in Great Lakes national forests 1991-2004. NRRI Technical Report 2005/04.
- 2005 Lind, J., N. Danz, and J. Hanowski. Analysis of landbird monitoring data for national parks in the Great Lakes Network. Great Lakes Inventory and Monitoring Network Report GLKN/2005/08.
- 2004 Blinn, C.R., D.M. Atuke, N. Danz, J. Hanowski, D. Kastendick, R. Kolka, J. Lind, R. Newman, B. Palik, N. Schlessler, J. Steil, D. Strelow, B. Vondracek, and E. Zenner. Evaluating Timber Harvesting and Forest Management Guidelines. Final Report to Legislative Commission on Minnesota Resources.
- 2003 Lind, J., N. Danz, M.T. Jones, J. Hanowski, and G. Niemi. Update Report: Breeding bird monitoring in Great Lakes national forests 1991-2003. NRRI Technical Report 2003/46.

- 2003 Hanowski, J.M., and N.P. Danz. Response of breeding birds to forest plan revision alternatives in the Chippewa and Superior National Forests. Technical Report to Minnesota Center for Environmental Advocacy.
- 2003 Niemi, G.J., J.M. Hanowski, N. Danz, J. Lind, M.T. Jones, and J. Sales. Minnesota's Forest Bird Diversity Initiative FY02-03 Final Report. Fish and Wildlife Research #30. NRRRI Technical Report NRRRI/TR-2003/11.
- 2002 Lind, J., N. Danz, M.T. Jones, J. Hanowski, and G. Niemi. Update Report: Breeding bird monitoring in Great Lakes national forests 1991-2002. NRRRI Technical Report 2002/24.
- 2002 Howe, R., M.T. Jones, N. Danz, J. Hanowski, G.J. Niemi, D. Ewert, and J. Davis. A GIS framework for bird conservation and monitoring. Final Report to Great Lakes National Program Office, Chicago, IL.
- 2001 Hanowski, J.M., N. Danz, J. Lind, G. Niemi, and P. Wolter. Wildlife species: responses to forest harvesting and management in riparian stands and landscapes. Minnesota Forest Resources Council and National Council for Air and Stream Improvement. NRRRI/TR-2001/02
- 2001 Lind, J., N. Danz, M.T. Jones, J. Hanowski, and G. Niemi. Update Report: Breeding bird monitoring in Great Lakes national forests 1991-2001. NRRRI Technical Report 2001/39.
- 2001 Lind, J., N. Danz, M.T. Jones, J. Hanowski, and G. Niemi. Update Report: Breeding bird monitoring in Great Lakes national forests 1991-2000. NRRRI Technical Report 2001/04.
- 2000 Lind, J., N. Danz, M.T. Jones, J. Hanowski, and G. Niemi. Update Report: Breeding bird monitoring in Great Lakes national forests 1991-1999. NRRRI Technical Report 2000/04.

Lead-authored Presentations (>100 coauthored presentations)

- Wisconsin Wetlands Association annual meeting, LaCrosse, WI, 2014
- Society of Wetland Scientists Annual Meeting, Duluth, MN, 2013
- Western Great Lakes Resource Management Conference, Ashland, WI, Apr 2012
- St. Louis River Estuary Science Summit, Superior, WI, Mar 2012
- International Association of Great Lakes Research, Duluth, MN, June 2011
- St. Louis River Estuary Science Summit, Superior, WI, Feb 2011
- Department of Biology, University of Minnesota Duluth, Nov 2009
- Natural Resources Science and Management Program, University of Minnesota, St. Paul, 2009
- Northeast Forest Soils Conference, Cloquet, MN and Thunder Bay, ONT, 2007
- Department of Forest Resources, University of Minnesota, St. Paul, 2007
- International Association of Great Lakes Research, 49th Annual Conference, Windsor, ONT, 2006
- Estuarine and Great Lakes (EaGLe) Conference, Duluth, MN, 2004
- International Association of Great Lakes Research, 47th Annual Conference, Waterloo, ONT., 2004
- US EPA Environmental Monitoring and Assessment Program (EMAP) 2004, Newport, RI, 2004
- Estuarine and Great Lakes (EaGLe) Conference, Bodega Bay, CA, 2003
- Annual Meeting of the Ecological Society of America, Savannah, GA, 2003
- 17th Annual Meeting of the Society for Conservation Biology, Duluth, MN, 2003
- International Association of Great Lakes Research, 46th Annual Conference, Chicago, IL, 2003
- Lake Erie Millennium Network Biennial Conference, Windsor, ONT, 2003
- The Wildlife Society, Dubuque, IA, 2003
- Wisconsin Society of Science Teachers Annual Convention, Duluth, MN, 2001
- Annual Meeting of the Ecological Society of America, Baltimore, MD, 1998

Honors and Fellowships

- Distinguished Performance, Excellence in Scholarship campus-wide award recipient, University of Wisconsin-Superior, 2013
- Honorable Mention (coauthor with Morrice *et al.* and Trebitz *et al.*), Scientific and Technological

Achievement Award (STAA) Competition, US EPA, 2009
 Highly Cited Author Award (Reavie *et al.* 2007), Journal of Great Lakes Research 2006-2008
 Block Fellowship, University of Minnesota, Fall 2008
 Travel Fellowship, University of Minnesota Duluth, 1998
 Outstanding Graduate Teaching Assistant award, University of Minnesota Duluth, 1997
 Summer Block Fellowship, University of Minnesota Duluth, 1997
 Summer Block Fellowship, University of Minnesota Duluth, 1996
 Outstanding Junior in Biology, University of Wisconsin-Whitewater, 1992
 Outstanding Earth Science Student, University of Wisconsin-Whitewater, 1992
 Cummings Award in Biology, University of Wisconsin-Whitewater, 1992
 Irvin L. Young scholarship, University of Wisconsin-Whitewater, 1992

Professional Service and Volunteer Work

UWS

Biology Program Coordinator, 2012-2013

Undergraduate Senior Research project advisor

- D. Fuller. 2012. Population assessment of Marsh Grass-of-Parnassus in the St. Louis River Estuary
- G. Belde and D. Fraser. 2012. Baseline survey of invasive plants on Wisconsin Point
- M. Jahnke and D. Lisdahl. 2011. Fifty years of vegetation change on Wisconsin Point dunes
- L. Curtis. 2011. Developing plans for backdune habitat restoration at Wisconsin Point

Campus-wide committees

- Master Planning Steering Committee 2014-present
- Planning and Budget Council 2013-present
- First Year Experience Committee 2013-2014
- Library Committee 2011-2013
- Undergraduate Academic Affairs Council 2009-2012

UWS Representative to Wisconsin Point Management Planning team, 2011-2012

Search and screen committees

- Faculty position in Science Education (Committee chair), 2011
- Research Coordinator, Lake Superior National Estuarine Research Reserve, 2011
- Grant and Research Program Coordinator, 2010
- Faculty position in Geology, 2009-2010
- UWS Department of Natural Sciences representative to university-wide Undergraduate Academic Affairs Council, 2009-2012

Other

Appointed member of Wisconsin Point Plan Implementation Committee 2013-present

Manuscript and proposal referee: *Ecological Complexity*, *Ecological Indicators*, *Environmental Management*, *Estonian Research Council*, *Forest Ecology and Management*, *Journal of Field Ornithology*, *Journal of Great Lakes Research*, *Landscape Ecology*, *Polish Journal of Environmental Studies*

County Host, Northwoods Cooperative Weed Management Area 2011 Right-of-way Workshop, Spring 2011

Program Planning Committee, St. Louis River Estuary Summit, 2011, 2012, 2013, 2014

Minnesota Breeding Bird Atlas ad hoc Technical Committee, 2007

Douglas County delegate, Wisconsin Conservation Congress, Habitat Committee and Air, Water, and Waste Committee, 2003-2008

Abstract reviewer, Society for Conservation Biology, 2003

Participant, Brule River State Forest master planning citizen group, 1999-2001

Graduate student representative, College of Science and Engineering Program Committee, University of Minnesota Duluth, 1997-1998

Graduate student representative to Department of Biology, University of Minnesota Duluth, 1997-1998
 Volunteer naturalist, Military Ridge State Park Trail, WI, 1993-1995
 Member, Botanical Club of Wisconsin, 2000-present
 Member, The Nature Conservancy, Wisconsin Chapter, 1991-present

Research and Quantitative Skills

Field: knowledge of vascular flora of northern Wisconsin and Minnesota, floristic surveys in forests, open areas, and bogs using random walks, quadrats, and relevés, forest stand measurements using distance-based approaches (PCQ), wedge prisms, and enumeration, point estimates of vegetation cover, tree increment coring, seedling morphology measurements.

Statistical techniques: analysis of variance, regression (linear, loess, logistic, Poisson), classification and regression trees, ordination (correspondence analysis, non-metric multi-dimensional scaling, redundancy analysis, principal response curves), principal components analysis, canonical correlation analysis, mixed models, multi-response permutation procedure, bootstrapping, discriminant function analysis, before-after control-impact designs, stratified random sampling designs, repeated measures, hierarchical partitioning, power analysis, cluster analysis, model selection criteria, data transformations.

Software: SAS, S-Plus, R, CANOCO, PC-Ord, CART, ArcGIS, Microsoft Office suite, Paint Shop Pro.

Prior Teaching Experience

Instructor, Ecology Lab, 2 cr., University of Minnesota Duluth, 2007
 Instructor, General Biology II, 5 cr., University of Minnesota Duluth, 2000, 2001
 Instructor, General Biology I, 5 cr., University of Minnesota Duluth, 2000
 On-site Coordinator, Itasca Field Biology Enrichment Program, University of Minnesota, 1998
 Graduate Teaching Assistant, University of Minnesota Duluth, 1995-1998
 Life Science Teacher, Neenah Joint School District, Neenah, WI, 1994-1995
 Teaching Assistant, Science World, Wisconsin Department of Public Instruction, 1992-1993

Graduate Coursework

Plant Autecology	Economic and Social Aspects of Conservation
Plant Population and Community Ecology	Biology
Stream Ecology	Applied Statistical Analysis
Mathematical Ecology	Linear Regression Analysis
Measurement and Analysis of Vegetation	Multivariate Analysis
Conservation Biology	GIS for Natural Resources
Landscape Ecology	Proposal Writing
Research Problems: Forest Spatial Data Analysis	

Courses as Graduate Teaching Assistant

Human Anatomy	Plant Biology
Plant Diversity	Genetics
Biology and Society	Conservation Biology
Introductory Biology	