

ALLISON N. KNEISEL

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Ph.D. Candidate, University of Wisconsin-Madison, Department of Integrative Biology, WI
Advisor: Dr. Monica G. Turner

EDUCATION

Central Michigan University

M.S. in Biology

Advisor: Dr. Donald G. Uzarski

Thesis: *Impacts of invasive Phragmites australis on macroinvertebrate communities of Great Lakes wetlands*

Grand Valley State University

B.S. in Natural Resource Management, Minor in Spanish

RESEARCH INTERESTS

- Health and function of freshwater ecosystems
- Landscape ecology and spatial modeling
- Large-scale and long-term ecological monitoring
- Use of ecological data to impact management outcomes

RESEARCH AND WORK EXPERIENCE

Wetland Ecology Laboratory Manager

May 2017 – July 2022, Institute for Great Lakes Research, Central Michigan University

- Leading vegetation, fish, macroinvertebrate, and water quality sampling crews in Great Lakes coastal wetlands
- Calculation of spatial metrics for the Great Lakes Coastal Wetland Decision Support Tool (CWDST)
- Multivariate and univariate statistical analysis of water quality, plant, and invertebrate data
- Report writing and budget management for multiple grants
- Supervising graduate and undergraduate students in the field and laboratory
- Mentoring undergraduate research projects
- Assisting graduate students with data management and data analysis

Teaching Assistant - Biology for Non-Majors

Fall 2016, Biology Department, Central Michigan University

- Lecturing on laboratory topics
- Guiding students through experiments
- Grading assignments and reports

Wetland Research Technician

Summer 2015, Institute for Great Lakes Research, Central Michigan University

- Collecting macroinvertebrate, fish, soil, and water quality samples in Great Lakes coastal wetlands
- Performing titration and filtration of water samples
- Maintaining and calibrating field and laboratory equipment

Waste Management Intern

Spring 2015, West Michigan Sustainable Business Forum

- Interviewing recycling and waste management experts and local businesspeople
- Organizing and assisting a field crew that performed audits of waste entering landfills

Resource Recovery Specialist

Intern Summer 2013, Staff 2013 – 2015, Kent County Department of Public Works

- Running a countywide household hazardous waste program
- Creating recycling educational materials
- Answering waste management questions from Kent County residents

Summer Research Assistant

Summer 2011, 2012, Annis Water Resources Institute, Grand Valley State University

- Collecting water, fish, and invertebrate samples in wetlands and nearshore areas
- Organizing equipment and planning trips for fieldwork
- Summarizing fish data for reports

PUBLICATIONS

Kneisel, A.N., M.J. Cooper, A.K. Monfils, S. Haidar, and D.G. Uzarski. 2020. Ecological data as a resource for invasive species management in U.S. Great Lakes coastal wetlands. *Journal of Great Lakes Research*. 46 (4): 910-919. <https://doi.org/10.1016/j.jglr.2020.01.006>.

PRESENTATIONS AND POSTERS

Kneisel, A.N., D.G. Uzarski. May 2022. The development of a macroinvertebrate index of biotic integrity for Michigan palustrine wetlands. Joint Aquatic Sciences Meeting. Grand Rapids, Michigan. (Poster)

Kneisel, A.N., M.J. Cooper, D.G. Uzarski. September 2018. Coastal wetland monitoring data as a resource for invasive species management. ELLS-IAGLR Big Lakes Small World Conference. Évian, France. (Poster)

Kneisel, A.N., M.J. Cooper, D.G. Uzarski. May 2016. The impact of *Phragmites australis* invasion on macroinvertebrate communities in the coastal wetlands of Thunder Bay, MI. IAGLR Conference on Great Lakes Research. Guelph, Ontario. (Presentation)

Kneisel, A.N., M.J. Cooper, D.G. Uzarski. February 2016. The impact of *Phragmites australis* invasion on macroinvertebrate communities in the coastal wetlands of Thunder Bay, MI. Institute for Great Lakes Research, Mount Pleasant, Michigan. (Presentation)

Kneisel, A.N., C.R. Ruetz III, A.D. Steinman, and S.L. Cooke. December 2011. Is phytoplankton sufficient to support bighead and silver carps in Muskegon Lake? Midwest Fish and Wildlife Conference, Des Moines, Iowa. (Poster)

Co-author Presentations and Posters *denotes co-mentored undergraduate

Anderson, O.C., A.M. Harrison, A.N. Kneisel, B.W. Heumann, C.M. Godwin, D.G. Uzarski. 2022. The influence of extreme water levels on coastal wetland extent across the Laurentian Great Lakes. Joint Aquatic Sciences Meeting. Grand Rapids, Michigan. (Presentation)

Minor*, M.R., A.N. Kneisel, R.L. Uzarski, and D.G. Uzarski. February 2019. The presence of Microcystin in Isabella County, MI. 7th Annual IGLR Student Symposium, Mt. Pleasant, Michigan (Poster)

Tithof, G.M, J.M. Kosiara, A.N. Kneisel, D.G. Uzarski, K.L Pangle. June 2018. Analysis of nutrient movement from human-impacted coastal areas in northern Lake Michigan. IAGLR Conference on Great Lakes Research. Toronto, Ontario. (Poster)

Mattingly, A.C., A.N. Kneisel, D.G. Uzarski. June 2018. Developing indicators to evaluate health and functionality of *Typha* dominated palustrine wetlands. IAGLR Conference on Great Lakes Research. Toronto, Ontario. (Presentation)

Lewan*, M.E., A.N. Kneisel, D.G. Uzarski. April 2018. *Phragmites australis* in Great Lakes coastal wetlands acting as a filter of nutrients from the landscape. Capitol Scholars Research Exhibition, Lansing, Michigan. (Poster)

OTHER PROFESSIONAL CONTRIBUTIONS

Co-author. 2021 US EPA State of the Lakes Ecosystem Conference (SOLEC) Great Lakes Indicator report on Coastal Wetland Fish Community Health and Macroinvertebrate Community Health.

Co-author. A.N. Kneisel and D.G. Uzarski. November 2019. Using Indices of Biotic Integrity for Assessing Wetland Health in Michigan. Prepared for Michigan Department of Environment, Great Lakes, and Energy.

Panelist. September 20, 2019. Great Lakes Coastal Wetlands Collaboration Panel: Aligning targets for tracking progress across state and international boundaries. Great Lakes Coastal Wetlands Symposium. Oregon, Ohio.

Contributor. 2019 US EPA State of the Lakes Ecosystem Conference (SOLEC) Great Lakes Indicator report on Coastal Wetland Fish Community Health and Macroinvertebrate Community Health.

ADDITIONAL TRAINING

Coastal Wetland Monitoring Macroinvertebrate Taxonomic Workshop, February 2017
Central Michigan University, Mount Pleasant, Michigan

Working with Invasive Species Workshop, December 2016
Saginaw Conservation District, Mount Pleasant, Michigan

Grant Writing Workshop, November 2016
Central Michigan University, Mount Pleasant, Michigan

FELLOWSHIPS AND SCHOLARSHIPS

- Marion Whitney Summer Graduate Scholarship, Central Michigan University 2016
- Daniel E. and Mildred G. Wujek Scholarship, Central Michigan University 2016
- College of Graduate Studies Research Assistantship, Central Michigan University 2015 – 2016
- Distinction Faculty Scholarship, Grand Valley State University 2009 – 2013
- Michigan Excellence Award Scholarship 2009