

WILLIAM WARREN FETZER

1000 E. University Ave. –Dept. 3166
411 Biological Science Building
Laramie, WY 82070

wfetz@uwyo.edu
307.314.9204
www.wwfetzer.com

EDUCATION

Ph.D. Natural Resources, Cornell University, Ithaca, NY, August 2013

Advisor: Dr. Lars Rudstam

Minors: Biometry and Ecology & Evolutionary Biology

Dissertation title: “Disentangling the effects of multiple ecosystem changes on fish population and community dynamics”

M.S. Natural Resources, Cornell University, Ithaca, NY, August 2009

Advisor: Dr. Lars Rudstam

Thesis title: “Over-winter mortality of gizzard shad (*Dorosoma cepedianum*) in Oneida Lake, New York”

B.S. Zoology, University of Wisconsin-Madison, Madison, WI, May 2005

Advisor: Dr. Jake Vander Zanden

RESEARCH/WORK EXPERIENCE

Assistant Professor, Zoology and Physiology Department, University of Wyoming, January 2020 – Present

Research Scientist, Zoology and Physiology Department, University of Wyoming, August 2018 – December 2019

Adjunct Faculty, University of Wisconsin – Milwaukee, School of Freshwater Sciences, August 2016 – Present

Great Lakes Fisheries Specialist, Bureau of Fisheries, Wisconsin Department of Natural Resources, April 2016 – August 2018

Postdoctoral Research Associate, Department of Fisheries and Wildlife, Michigan State University, June 2013 – March 2016, *Mentors:* Dr. Brian Roth and Dr. Dana Infante

Graduate Research Assistant, Department of Natural Resources, Cornell University, July 2005 – May 2013

Undergraduate Research Assistant, Center for Limnology, University of Wisconsin – Madison, August 2003 – July 2005

National Science Foundation Research Experience for Undergraduates (NSF-REU), University of Wisconsin – Madison, Summer 2003

UNIVERSITY TEACHING EXPERIENCE

Instructor, University of Wyoming: LIFE 1003 – Current Issues in Biology, Spring 2019, 2020; ZOO 4440/4430 – Limnology Lecture and Lab, Fall 2019

Instructor, Shanghai Ocean University, China: Aquatic Landscape Ecology, Fall 2015

Instructor, Michigan State University: FW 474 – Aquatic Field Techniques, Fall 2014

Guest Lecturer

University of Wisconsin – Madison: ENV ST 101 – Forum on the Environment, Spring 2017

Michigan State University: FW 471 – Ichthyology, Spring 2014, 2015; FW 414 – Aquatic Ecosystem Management, Fall 2015, FW 101 – Fundamentals of Fish and Wildlife, Fall 2015, FW 472 – Limnology, Spring 2016

Cornell University: NTRES 3100 – Fish Ecology, Conservation and Management, Spring 2008, 2009

Graduate Teaching Assistant, Cornell University

BIOEE 1500 – Investigative Biology, 6 semesters, Fall 2010 – Spring 2013

NTRES 2100 – Environmental Conservation, 2 semesters, Spring 2007, 2010

NTRES 3100 – Fish Ecology, Conservation, and Management, 2 semesters, Spring 2008, 2009

Student Mentoring, University of Wyoming: 1 graduate student, 6 undergraduates; University of Wisconsin – Milwaukee: 2 graduate students; Michigan State University: 1 undergraduate; Cornell University: 7 undergraduates (6 pursued graduate degrees)

RESEARCH GRANTS FUNDED

Wisconsin SeaGrant. “Diversity of Great Lakes coregonines and the implications for Great Lakes fisheries management and restoration.” PI – M.J. Vander Zanden, Co-PIs – B. Bunnell, A. Muir, R. Eshenroder, W. Stott, W. Fetzer, C. Olds, B. Weidel, B. Marten, 2020-2022, \$238,233.

Great Lakes Fishery Commission. “Implications of phosphorus reduction for sustainable Great Lakes fisheries.” PI – M. Koops, Co-PIs – M. Hossain, R. Randall, E. Rutherford, H. Zhang, G. Arhonditsis, D. Mason, K. Wehrly, L. Rudstam, R. Jackson, C. Chu, D. de Kerchhove, W.W. Fetzer, and T. Hartman, 2018-2020, \$282,261.

Michigan Department of Natural Resources. “Characterizing spatial and temporal heterogeneity of coastal fish diversity.” PI - B.M. Roth, Co-PI – W.W. Fetzer, 2014-2015, \$20,000.

Cornell University, Program in Biogeochemistry and Environmental Biocomplexity. “Does trophic polymorphism promote population resiliency.” PI – W.W. Fetzer, 2010-2011, \$3,988.

REFEREED PUBLICATIONS

Fetzer, W.W., T.E. Brooking, J.R. Jackson, and L.G. Rudstam. Environmental conditions influence niche overlap between Yellow Perch and White Perch. *Under revision*.

Gaeta, J.W., T.D. Ahrenstorff, J.S. Diana, **W.W. Fetzer**, T. Jones, Z. Lawson, M.J. McInerney, V. Santucci, and M.J. Vander Zanden. 2018. Go big or... don't? A field-based diet evaluation of freshwater piscivore and prey fish size relationships. PLOS ONE. 13: e0194092.

Fetzer, W.W., B.M. Roth, D.M. Infante, D.F. Clapp, R.M. Claramunt, D.G. Fielder, D.K. Forsyth, J.X. He, T.J. Newcomb, C.M. Riseng, K.E. Wehrly, and T.G. Zorn. 2017. Spatial and temporal dynamics of nearshore fish communities in the Great Lakes. *Journal of Great Lakes Research* 43:319-334.

Fetzer, W.W., C.J. Farrell, J.R. Jackson, and L.G. Rudstam. 2016. Year class variation drives interactions between warm water predators and yellow perch population dynamics. *Canadian Journal of Fisheries and Aquatic Sciences* 73:1330-1341.

Collins, S.M., T.J. Kohler, S.A. Thomas, **W.W. Fetzer**, and A.S. Flecker. 2016. The importance of terrestrial subsidies in stream food webs varies along a stream size gradient. *Oikos* 125: 674-685.

- Fetzer, W.W.**, M.M. Luebs, J.R. Jackson, and L.G. Rudstam. 2015. Intraspecific niche partitioning and ecosystem state drive carbon pathways supporting lake food webs. *Ecosystems* 18:1440-1454.
- Fetzer, W.W.**, T.E. Brooking, J.R. Jackson, and L.G. Rudstam. 2011. Over-winter mortality of gizzard shad: Evaluation of starvation and cold temperature stress. *Transactions of the American Fisheries Society* 140:1460-1471.
- Carey, C.C., M.P. Ching, S.M. Collins, A.M. Early, **W.W. Fetzer**, D. Chai, and N.G. Hairston, Jr. 2011. Predator-dependent diel migration by *Halocaridina rubra* shrimp (Malacostraca: Attyidae) in Hawaiian anchialine ponds. *Aquatic Ecology* 45:35-41.
- Brooking, T.E., L.G. Rudstam, S.D. Krueger, J.R. Jackson, A.B. Welsh, and **W.W. Fetzer**. 2010. First occurrence of the mysid *Hemimysis anomala* in an inland lake in North America, Oneida Lake, NY. *Journal of Great Lakes Research* 36:577-581.
- Vander Zanden, M.J., and **W.W. Fetzer**. 2007. Global patterns of aquatic food chain length. *Oikos* 116:1378-1388.
- Olden, J.D., J.M. McCarthy, J.T. Maxted, **W.W. Fetzer**, and M.J. Vander Zanden. 2006. The rapid spread of rusty crayfish (*Orconectes rusticus*) with observations on native crayfish declines in Wisconsin (USA) over the past 130 years. *Biological Invasions* 8:1621-1628.

BOOK CHAPTERS

- Rudstam, L.G., J.R. Jackson, A.J. VanDeValk, T.E. Brooking, **W.W. Fetzer**, B.J. Irwin, and J.L. Forney. 2016. Walleye and yellow perch in Oneida Lake. Pages 319-354 in L.G. Rudstam, E.L. Mills, J.R. Jackson, and D.J. Stewart, editors. *Oneida Lake: Long-term dynamics of a managed ecosystem and its fishery*. American Fisheries Society, Bethesda, Maryland.

NON-REFEREED PUBLICATIONS

- Roth, B.M., C.M. Riseng, B.L. Sparks-Jackson, **W.W. Fetzer**, and D.M. Infante. 2016. Great Lakes indicator data accessibility and data gaps analysis for assessing progress towards achieving the GLWQA objectives. Report to International Joint Commission, Windsor, Ont. Canada.
- Roth, B.M., and **W.W. Fetzer**. 2015. Characterizing spatial and temporal heterogeneity of coastal fish diversity. Michigan Department of Natural Resources, Lansing, MI.
- Clapp, D.F., **W.W. Fetzer**, M. Herbert, and T. Zorn. 2013. A comprehensive plan for addressing gaps in understanding of near-shore fish communities in the Great Lakes. Michigan Department of Natural Resources, Lansing, MI.
- Jackson, J.R., L.G. Rudstam, S.D. Krueger, T.E. Brooking, J.L. Forney, K.T. Holeck, C. Hotaling, R.L. DeBruyne, and **W.W. Fetzer**. 2010. Fisheries and limnology of Oneida Lake 2000-2009. New York State Department of Environmental Conservation, Albany, NY.
- Rudstam, L.G., J.R. Jackson, **W.W. Fetzer**, T.E. Brooking, S.D. Krueger. 2010. Effects of variable winter mortality on fish recruitment and community structure. New York State Department of Environmental Conservation, Albany, NY.
- Rudstam, L.G., J.R. Jackson, T.E. Brooking, S.D. Krueger, J.L. Forney, **W.W. Fetzer**, R.D. DeBruyne, E.L. Mills, J. Swan, A. Siefert, and K. Holeck. 2009. Oneida Lake and its fishery in 2008. New York State Department of Environmental Conservation, Albany, NY.
- Rudstam, L.G., J.R. Jackson, T.E. Brooking, S.D. Krueger, J.L. Forney, **W.W. Fetzer**, R.D. DeBruyne, E.L. Mills. 2008. Walleye stock assessment and population projections for

Oneida Lake, 2007-2010. New York State Department of Environmental Conservation, Albany, NY.

Rudstam, L.G., J.R. Jackson, T.E. Brooking, S.D. Krueger, J.L. Forney, **W.W. Fetzer**, E.L. Mills, T.L. DeVault. 2007. Walleye stock assessment and population projections for Oneida Lake, 2006-2009. New York State Department of Environmental Conservation, Albany, NY.

REPRESENTATIVE PROFESSIONAL PAPERS & POSTERS

Garner, B., C. Webb, S. Gale, and **W.W. Fetzer**. “An application of Bismarck Brown Y as a short-term biological marker”. September 30, 2019. Poster Presentation. 149th Annual Meeting of the American Fisheries Society, Reno, NV. *Awarded Best Student Poster*.

L. Tristano, B. Ray, **W.W., Fetzer**, and T. Seilheimer. “Impacts of stocked splake on lake trout and brook trout fisheries.” June 11, 2019. Oral Presentation. 62nd International Association of Great Lakes Research, Brockport, NY.

Fetzer, W.W.. “Ecosystem changes and fish communities: the importance of nearshore habitats”. April 9, 2018. University of Wyoming, Laramie, WY. *Invited Seminar*.

Fetzer, W.W.. “Scaling down to address limitations to fish productivity across the Great Lakes”. February 22, 2018. Oral Presentation. University of Wisconsin – Milwaukee School of Freshwater Sciences Seminar Series, Milwaukee, WI. *Invited seminar*.

Fetzer, W.W.. “Developing “Manager’s Models”: Teaching students how science informs management and policy”. January 31, 2018. Oral Presentation. 78th Midwest Fish and Wildlife Conference, Milwaukee, WI.

Fetzer, W.W., D. Olson, A. Blizel, P. Hirethota, T. Kroeff, C. Masterson, and D. Schindelholz. “Forty years of changes in Wisconsin’s Bloater Chub (*Coregonus hoyi*) fishery in Lake Michigan”. September 11, 2017. Poster Presentation. 13th International Coregonid Symposium, Bayfield, WI.

Fetzer, W.W., D.M. Roth, D.M. Infante, D.F. Clapp, R.M. Claramunt, D.G. Fielder, T.J. Newcomb, and T.G. Zorn. “Spatial and temporal dynamics of nearshore fish communities in the Michigan waters of the Great Lakes.” January 26, 2016. Oral Presentation. 76th Midwest Fish and Wildlife Conference, Grand Rapids, MI.

Dennhardt, A., J. Bence, T. Brenden, B. Maurer, **W.W. Fetzer**, C. Riseng, K. Wehrly, and D. Forsyth. “Assessing factors influencing population dynamics in Lake Huron fish communities using dynamic factor analysis.” January 25, 2016. Oral Presentation. 76th Midwest Fish and Wildlife Conference, Grand Rapids, MI.

Fetzer, W.W., B.M. Roth, D.M. Infante, and D.M. Clapp. “Long-term coastal fish community dynamics in the Michigan waters of the Great Lakes.” August 20, 2015. Oral Presentation. 145th Annual Meeting of the American Fisheries Society, Portland, OR.

Vidal, T., C. Jansch, B. Irwin, T. Wagner, J.R. Bence, J.R. Jackson, L.G. Rudstam, and **W.W. Fetzer**. “Using variance structure as statistical indicators of large scale ecological change.” August 21, 2014. Oral Presentation. 144th Annual Meeting of the American Fisheries Society, Quebec City, QC.

Irwin, B., T. Vidal, T. Wagner, J.R. Bence, J.R. Jackson, L.G. Rudstam, and **W.W. Fetzer**. “Shifting variance structure as statistical indicators of large scale ecological change.” August 12, 2014. Oral Presentation. 99th Meeting of the Ecological Society of America, Sacramento, CA.

- Fetzer, W.W.,** B.M. Roth, D.M. Infante, and D.F. Clapp. "Assessing long-term nearshore fish community dynamics in the Michigan waters of the Great Lakes." May 30, 2014. Oral Presentation. 57th Annual Conference on Great Lakes Research, Hamilton, Ont.
- Fetzer, W.W.,** J.R. Jackson, L.G. Rudstam. "Alternative prey lead to prey buffering not apparent competition." August 6, 2013. Oral Presentation. 98th Meeting of the Ecological Society of America, Minneapolis, MN.
- Erwin, A.C., J.S. Cohen, **W.W. Fetzer,** and J.M. Watkins. "Local integration of ecological research, community values, and management goals: the case of a New York Finger Lake." August 5, 2013. Oral Presentation. 98th Meeting of the Ecological Society of America, Minneapolis, MN.
- Fetzer, W.W.,** J.R. Jackson, and L.G. Rudstam. "100 years of nearshore fish community changes in Oneida Lake, NY." June 5, 2013. Oral Presentation. 56th Annual Conference on Great Lakes Research, West Lafayette, IN.
- Luebs, M.M., **W.W. Fetzer,** J.R. Jackson, and L.G. Rudstam. "Temporal and spatial variability of carbon sources supporting age-0 fish production." February 3, 2012. Oral presentation. Annual Meeting of the New York Chapter of the American Fisheries Society, Lake Placid, NY. *Awarded Best Student Presentation.*
- Fetzer W.W.,** M.M. Luebs, J.R. Jackson, and L.G. Rudstam. "Extrinsic and intrinsic drivers of resource use by age-0 fish." September 6, 2011. Oral presentation. 141st Meeting of the American Fisheries Society, Seattle, WA.
- Fetzer, W.W.,** T.E. Brooking, J.R. Jackson, and L.G. Rudstam. "Evaluating relationships between water clarity and foraging by yellow perch and white perch." May 30, 2011. Oral presentation. 54th Annual Conference on Great Lakes Research, Duluth, MN.
- Fetzer, W.W.,** J.R. Jackson, and L.G. Rudstam. "Changes in habitat use by fish following zebra mussel introduction." June 10, 2010. Oral presentation. Joint Meeting of the Association for the Sciences of Limnology and Oceanography and the North American Benthological Society, Santa Fe, NM.
- Fetzer, W.W.,** D.C. West, K.E. White, J.L. Forney, J.R. Jackson, L.G. Rudstam, T.E. Brooking, and A.J. VanDeValk. "Evaluating mechanisms driving young-of-the-year yellow perch (*Perca flavescens*) population dynamics in Oneida Lake, NY." May 20, 2009. Oral presentation. 52nd Annual Conference on Great Lakes Research, Toledo, OH.
- Fetzer, W.W.,** T.E. Brooking, J.L. Forney, J.R. Jackson, L.G. Rudstam, and A.J. VanDeValk. "Investigating mechanisms of gizzard shad, *Dorosoma cepedianum*, over-winter survival in Oneida Lake, NY." August 18, 2008. Oral presentation. 138th Meeting of the American Fisheries Society, Ottawa, Ontario.
- Fetzer, W.W.,** K.E. White, J.L. Forney, J.R. Jackson, L.G. Rudstam, T.E. Brooking, and A.J. VanDeValk. "Young-of-year (YOY) yellow perch (*Perca flavescens*) response to habitat changes in Oneida Lake, NY." August 20, 2008. Poster. 138th Meeting of the American Fisheries Society, Ottawa, Ontario.
- Fetzer, W.W.,** T.E. Brooking, L.G. Rudstam, and J.R. Jackson. "Is over-winter mortality of gizzard shad (*Dorosoma cepedianum*) in Oneida Lake decreasing?" February 8, 2007. Poster. Annual Meeting of the New York Chapter of the American Fisheries Society, West Point, NY. *Awarded Best Student Poster.*
- Fetzer, W.W.,** T.E. Brooking, L.G. Rudstam, and J.R. Jackson. "Is over-winter mortality of gizzard shad (*Dorosoma cepedianum*) in Oneida Lake decreasing?" September 12, 2006. Poster. 136th Meeting of the American Fisheries Society, Lake Placid, NY.

Fetzer, W.W., and M.J. Vander Zanden. "Food chain length: Patterns across lakes, rivers, oceans, and estuaries." August 12, 2005. Poster. 90th Ecological Society of America Annual Meeting, Montreal, Quebec.

Schmidt, S.N., M.J. Vander Zanden, and **W.W. Fetzer**. "100 years of ecological change: Use of stable isotopes to reconstruct the historical food web of Lake Michigan." August 11, 2005. Poster. 90th Ecological Society of America Annual Meeting, Montreal, Quebec.

AWARDS

2017 Wisconsin DNR - Fish, Wildlife, and Parks Team of the Year

2013 Cornell University CALS Outstanding Teaching Assistant Award

2013 Dave Bryson Memorial Scholarship Award for Outstanding Fisheries Student in NY State

2013, 2010 New York Chapter of the American Fisheries Society Travel Award

2011 International Association of Great Lakes Research Travel Award

2010 Association for the Sciences of Limnology and Oceanography Travel Award

PROFESSIONAL SERVICE AND MEMBERSHIP

Committees

- Lake Superior Committee of Advisors (WI Alternate), Great Lakes Fishery Commission, 2018
- Lake Michigan Technical Committee, Great Lakes Fishery Commission, 2016-2018
- Lake Michigan Commercial Fishing Board (State of Wisconsin), Represent WDNR, 2016-2018

Proposal, Manuscript Reviewer

- **Funding agencies:** Cornell University Program in Biogeochemistry and Environmental Biocomplexity, Kieckhefer Foundation, Mellon Foundation
- **Journals:** Biological Invasions, Canadian Journal of Fisheries and Aquatic Sciences, Ecology, Ecology of Freshwater Fish, Ecosystems, Fisheries Management and Ecology, Fisheries Research, Journal of Great Lakes Research, Limnology and Oceanography, North American Journal of Fisheries Management, Transactions of the American Fisheries Society
- **Awards:** Robert L. Kendall Best Paper in Transactions of the American Fisheries Society (2008), Early Career Professional Travel Award (2017)

American Fisheries Society - Member

- President, Cornell University Student Subunit of the American Fisheries Society, Ithaca, NY, 2011-2012
- Assistant instructor, *Introduction to R for Fisheries Scientists* workshop, 138th Annual Meeting of the American Fisheries Society in Ottawa, Ontario, 2008

Ecological Society of America - Member

International Association of Great Lakes Research - Member

VOLUNTEER OUTREACH ACTIVITIES

Instructor, Fishing for Dinner, Wisconsin Department of Natural Resources, Spring 2016

Participant, Oneida Lake Dreissenid Mussel Scuba Survey, Bridgeport, NY Fall 2006-2014

Lead-coordinator, "Exploring the Environment," showcase of Cornell environmental research, Cayuga Nature Center, Ithaca, NY 2012

Outreach volunteer, Cayuga Inlet Hydrilla Task Force, Ithaca, NY, Fall 2011

Discussion facilitator, Global fisheries status, Newark Public Library, Newark, NY, 2010
Student assistant, Trout-in-the-Classroom, Ithaca, NY, 2009-2013
Student assistant, Oneida Lake Traveling Trunks, Bridgeport, NY, 2008-2013
Co-coordinator, Cayuga Lake Report Card, Cayuga Lake Watershed Network, 2007-2008
Student assistant, Cornell Biological Field Station Open House, Bridgeport, NY, 2006-2007
Co-coordinator, Freshwater Ecology Field Day, Dryden Elementary School, Dryden, NY, 2006