

Dr. Corey A. Krabbenhoft

*Postdoctoral Associate
Department of Fisheries, Wildlife and Conservation Biology
University of Minnesota
Email: ckrabben@buffalo.edu
Webpage: <https://coreykrabbenhoft.com/>*

EDUCATION

- Ph.D. Biological Sciences, 2019**
“Drivers and impacts of the invasive round goby (*Neogobius melanostomus*) in Michigan tributaries to the Great Lakes”
Wayne State University (WSU), Detroit, Michigan
- M.S. Biology, 2012**
“The contribution of young-of-year fishes to aquatic food web dynamics in an arid-land river system (Rio Grande, New Mexico)”
University of New Mexico (UNM), Albuquerque, New Mexico
- B.S. Biology, 2009**
University of New Mexico, Albuquerque, New Mexico

RESEARCH EXPERIENCE

- Starting Jan 2023*** Assistant Professor, Department of Biological Sciences, University at Buffalo (UB)
- Jan 2021 – present Postdoctoral Associate, Department of Fisheries, Wildlife and Conservation Biology, University of Minnesota (UMN)
- Jun 2019 – present Research Assistant Professor, Research and Education in Energy, Environment and Water (RENEW), University at Buffalo
- Jan 2019 – Jan 2021 Postdoctoral Associate, College of Arts and Sciences and RENEW, UB
- Aug 2014 – Dec 2018 Ph.D. Student, Department of Biological Sciences, WSU
- May – Aug 2014 Instructional Assistant, Department of Biological Sciences, WSU
- Apr 2013 – Mar 2014 Research Assistant, Department of Wildlife and Fisheries Sciences, Texas A&M University (TAMU)
- Feb – Apr 2013 Research Technician, Department of Biology, UNM
- Aug – Dec 2012 Research Technician, Museum of Southwestern Biology, Division of Fishes, UNM
- Aug 2010 – Jul 2012 MS Student, Department of Biology, UNM
- Jan – Aug 2010 Laboratory and Field Technician, Museum of Southwestern Biology, Division of Fishes, UNM
- Aug – Dec 2009 Undergraduate Research Assistant, Department of Biology, UNM
- May – Aug 2009 NSF Research Experience for Undergraduates (REU) Student, Department of Biology, UNM
- Jan – May 2009 Curatorial Assistant, Museum of Southwestern Biology, Division of Fishes, UNM

PUBLICATIONS ([Google Scholar](#))

- 2022 **Krabbenhoft C.A.**, and D.R. Kashian. Invasion success of a freshwater fish corresponds to low dissolved oxygen and diminished riparian integrity. *Biological Invasions*, Accepted.
- 2022 **Krabbenhoft C.A.**, G.H. Allen, P. Lin, S.E. Godsey, D.C. Allen, R.M. Burrows, A.G. DelVecchia, K.M. Fritz, M. Shanafield, A.J. Burgin, M.A. Zimmer, T. Datry, W.K. Dodds, C.N. Jones, M.C. Mims, C. Franklin, J.C. Hammond, S.C. Zipper, A.S. Ward, K.H. Costigan, H.E. Beck, and J.D. Olden. Assessing placement bias of the global gauge network. *Nature Sustainability*, doi: 10.1038/s41893-022-00873-0.
- 2022 DelVecchia A.G., M. Shanafield, M. Zimmer, M.H. Busch, **C.A. Krabbenhoft**, R. Stubbington, K. Kaiser, R.M. Burrows, J. Hosen, T. Datry, S. Kampf, S.C. Zipper, K. Fritz, K. Costigan, and D.C. Allen. Reconceptualizing the hyporheic zone of non-perennial rivers and streams. *Freshwater Science*, doi: 10.1086/720071.
- 2022 Hansen, G.J.A., J. Ruzich, **C.A. Krabbenhoft**, H. Kundel, S. Mahlum, C. Rounds, A. Van Pelt, L.D. Eslinger, D.E. Logsdon, and D.A. Isermann. It's complicated and it depends: A review of the effects of ecosystem changes on walleye and yellow perch populations in North America. *North American Journal of Fisheries Management*, doi:10.1002/nafm.10741. (invited contribution for special issue)
- 2021 Zipper S.C., J.C. Hammond, M. Shanafield, M. Zimmer, T. Datry, C.N. Jones, K.E. Kaiser, S.E. Godsey, R.M. Burrows, J.R. Blaszczak, M.H. Busch, A.N. Price, K.S. Boersma, A.S. Ward, K. Costigan, G.H. Allen, **C.A. Krabbenhoft**, W.K. Dodds, M.C. Mims, J.D. Olden, S.K. Kampf, A.J. Burgin, and D.C. Allen. Pervasive changes in stream intermittency across the United States. *Environmental Research Letters*, 16: 084033.
- 2021 Hammond J.C., M. Zimmer, M. Shanafield, K. Kaiser, S.E. Godsey, M.C. Mims, S.C. Zipper, R.M. Burrows, S.K. Kampf, W. Dodds, C.N. Jones, **C.A. Krabbenhoft**, K.S. Boersma, T. Datry, J.D. Olden, G.H. Allen, A.N. Price, K. Costigan, R. Hale, A.S. Ward, and D.C. Allen. Spatial patterns and drivers of non-perennial flow regimes in the contiguous U.S. *Geophysical Research Letters*, 48: e2020GL090794.
- 2020 Busch M.H., K.H. Costigan, K.M. Fritz, T. Datry, **C.A. Krabbenhoft**, J.C. Hammond, M. Zimmer, J.D. Olden, R.M. Burrows, W.K. Dodds, K.S. Boersma, M. Shanafield, S.K. Kampf, M.C. Mims, M.T. Bogan, A.S. Ward, M.P. Rocha, S. Godsey, G.H. Allen, J.R. Blaszczak, C.N. Jones, and D.C. Allen. What's in a name? Patterns, trends, and suggestions for defining non-perennial rivers and streams. *Water*, 12: 1980. (invited contribution for special issue)
- 2020 **Krabbenhoft C.A.**, and D.R. Kashian. Citizen science data are a reliable complement to quantitative ecological assessments in urban rivers. *Ecological Indicators*, 116: 106476.
- 2020 Zimmer M., K. Kaiser, J. Blaszczak, S.C. Zipper, J. Hammond, K.M. Fritz, K.H. Costigan, J. Hosen, S. Godsey, G.H. Allen, S. Kampf, R.M. Burrows, **C.A. Krabbenhoft**, W. Dodds, R. Hale, J.D. Olden, M. Shanafield, A.G. DelVecchia, A. Ward, M.C. Mims, T. Datry, M.T. Bogan, K.S. Boersma, M.H. Busch, C.N. Jones, A. Burgin, and D.C. Allen. Zero or not? Causes and consequences of zero-flow stream gage readings. *WIREs Water*, e1436.
- 2019 **Krabbenhoft C.A.**, S. Manente, and D.R. Kashian. Evaluation of an educational campaign to improve the conscious consumption of recreationally caught fish. *Sustainability*, 11: 700. (invited contribution for special issue)
- 2019 Alò D., C. Correa, H. Samaniego, **C.A. Krabbenhoft**, and T.F. Turner. Otolith microchemistry identifies diadromous populations of Patagonian river fishes. *PeerJ*, 7: e6149.

- 2017 **Krabbenhoft C.A.**, A.S. Burdett, and T.F. Turner. Direct and indirect effects of predatory young-of-year fishes in a dryland river food web. *Freshwater Biology*, 62: 1410-1421.
- 2015 Turner T.F., T.J. Krabbenhoft, M.L. Collyer, **C.A. Krabbenhoft**, M.S. Edwards, and Z.D. Sharp. Retrospective stable isotope analysis reveals ecosystem responses to river regulation over the last century. *Ecology*, 96: 3213-3226.

NON-PEER REVIEWED PUBLICATIONS

- 2022 **Krabbenhoft C.A.** and G.H. Allen. Identifying biases in the global placement of river gauges. *Nature Sustainability Research Briefing*, <https://doi.org/10.1038/s41893-022-00878-9>.
- 2020 Zimmer M., K. Kaiser, J. Blaszczyk, S.C. Zipper, J. Hammond, K.M. Fritz, K.H. Costigan, J. Hosen, S. Godsey, G.H. Allen, S. Kampf, R.M. Burrows, **C.A. Krabbenhoft**, W. Dodds, R. Hale, J.D. Olden, M. Shanafield, A.G. DelVecchia, A. Ward, M.C. Mims, T. Datry, M.T. Bogan, K.S. Boersma, M.H. Busch, C.N. Jones, A. Burgin, and D.C. Allen. Is the river really dry? Scientific interpretations of zero flow readings. *Advanced Science News*, 14 Apr 2020.
- 2020 Shanafield M., S. Godsey, T. Datry, R. Hale, S.C. Zipper, K. Costigan, **C.A. Krabbenhoft**, W.K. Dodds, M. Zimmer, D.C. Allen, M. Bogan, K.E. Kaiser, R.M. Burrows, J.C. Hammond, M. Busch, S. Kampf, M.C. Mims, A. Burgin, and J.D. Olden. Science gets up to speed on dry rivers. *Eos*, 101(2).

REPORTS

- 2021 **Krabbenhoft, C.A.**, S.A. Ludsin, E.A. Marschall, R.R. Budnik, L.Z. Almeida, and G.J.A. Hansen. A Unified Model of Walleye Recruitment. 2021 Project Progress Report, Great Lakes Fishery Commission.
- 2021 **Krabbenhoft, C.A.**, P.E. Gutiérrez-Fonseca, Z.G. Compson, and M. Peipoch. 2020-2021 Society for Freshwater Science Early Career Survey Report.
- 2020 Marcarelli, A., S. Thomas, F. Benfield, A. Burdett, A. Encalada, T. Hoellein, E. Hotchkiss, **C.A. Krabbenhoft**, P. Kranzfelder, M. Mims, P. Silver, A. Webb, A. Leidolf, A. Ramirez, and A. Rosemond. Five Year (2020-2025) Strategic Plan, Society for Freshwater Science.

SELECT INVITED SEMINARS

- 2021 Department of Environment and Sustainability, University at Buffalo, Buffalo, NY
Krabbenhoft C.A. Streamflow and the environment: from deserts to Great Lakes.
- 2021 Climate Adaptation Science Center, Fish Research Program, Virtual
Krabbenhoft C.A. An overview of the DryRivers RCN and the Global Gauge Gaps project.
- 2019 TriBeta Honor Society, Chapter Seminar Series, Daemen College, Buffalo, NY
Krabbenhoft C.A. The life history of a stream ecologist.
- 2019 Department of Civil, Structural and Environmental Engineering, University at Buffalo, Buffalo, NY
Krabbenhoft C.A. Recognizing the role of anthropogenic stressors in aquatic ecosystem function.
- 2017 NOAA Great Lakes Environmental Research Laboratory, Ann Arbor, MI
Krabbenhoft C.A. and D.R. Kashian. Investigating the impacts of round goby invasion on fish community diversity and habitat quality.

TEACHING

Teaching Assistantships

Winter 2018 Writing Intensive General Ecology 4130L, WSU
Fall 2017 Basic Life Mechanisms 1510L, WSU
Winter 2017 Basic Life Mechanisms 1510L, WSU
Fall 2016 Basic Life Diversity 1500L, WSU
Winter 2016 Writing Intensive General Ecology 4130L, WSU
Fall 2015 Aquatic Ecology 5100L/7110L, WSU
Winter 2015 Writing Intensive General Ecology 4130L, WSU
Fall 2014 Basic Life Mechanisms 1510L, WSU
Spring 2012 Limnology 496L, UNM
Fall 2011 Genetics 202L, UNM
Spring 2011 Ichthyology 487L, UNM

Guest Lectures

2020 Biology 7310: Sustainability of Urban Environmental Systems, Dep Biol Sci, WSU
2020 Biology 3500: Ecology and the Environment, Dep Biol Sci, WSU
2020 Biology 425/525: Ecological Genomics, Dep Biol Sci, UB
2019 Sustainability 501: Fundamentals of Sustainability, Dep of Sustainability, UB;
2019 Biology 330: Special Topics–Ecology of Living Systems, Dep Biol Sci, UB; 3 lectures
2017 Biology 1500: Diversity of Life, Dep Biol Sci, WSU
2017 Biology 5100/7110: Aquatic Ecology, Dep Biol Sci, WSU
2017 Biology 4130: General Ecology, Dep Biol Sci, WSU
2012 Biology 496: Limnology, Dep of Bio, UNM; 3 lectures

SELECT PRESENTATIONS (*presenter indicated by asterisk; student names underlined*)

2022 Joint Aquatic Sciences Meeting, Grand Rapids, MI
Krabbenhoft C.A., S.A. Ludsin, E. Marschall, R. Budnik, L.Z. Almeida, and G.J.A. Hansen. Spatial and temporal variability in walleye stock-recruitment relationships.

2021 American Fisheries Society, Baltimore, MD
Krabbenhoft C.A.*, S.A. Ludsin, E.A. Marschall, R.R. Budnik, L.Z. Almeida, and G.J.A. Hansen. A unified model of walleye recruitment.

2021 Society for Freshwater Science, virtual
Krabbenhoft C.A.*, G.H. Allen, J.D. Olden, P. Lin, S.E. Godsey, D.C. Allen, H.E. Beck, A. Burgin, R.M. Burrows, K.H. Costigan, T. Datry, A.G. DeVecchia, W.K. Dodds, C. Franklin, K. Fritz, R. Hale, C.N. Jones, M.C. Mims, A. Ruhi, M. Shanafield, A. Ward, M. Zimmer, and S.C. Zipper. Is our finger on the pulse? Global analysis reveals biases in the streamflow gage network.

2019 International Association for Great Lakes Research, Brockport, NY
Krabbenhoft C.A.* and D.R. Kashian. Native species diversity and riparian land cover influence round goby invasion.

2018 Ecological Society of America, New Orleans, LA
Krabbenhoft C.A.* and D.R. Kashian. Response of a native fish along the round goby invasion front.

PROFESSIONAL DEVELOPMENT

- 2019-present Invited participant, Flow and Function of Non-Perennial Streams NSF Research Coordination Network
- 2022 Invited speaker, Great Lakes Sea Grant Research Roundup, “The impact of secondary spread of invaders: round goby in Great Lakes tributaries”
- 2022 Symposium organizer: “On a quest for collaborative solutions: multicultural perspectives on aquatic conservation”, Joint Meeting of the Aquatic Sciences, Grand Rapids, MI
- 2022 Invited participant, NSF Dry Rivers Research Coordination Network workshop, Virtual
- 2021 Workshop coordinator, A Unified Model of Walleye Recruitment: State of knowledge and opportunities for progress, Virtual through UMN
- 2021 Workshop participant, Machine Learning for the Non-Machine Learner, UMN
- 2020 Private contractor, Riveredge Environmental Inc., mussel surveys, Niagara River
- 2019 Invited participant, NSF Dry Rivers Research Coordination Network workshop, Sevilleta LTER, NM
- 2019 Invited speaker, Michigan Sea Grant Aquatic Invasive Species Research webinar “Impacts and drivers of round goby invasion in Great Lakes tributaries”
- 2018 Invited participant, GIS Applications in Aquatic Ecology and Evolutionary Biology Workshop, Saint Louis University, MO (NSF sponsored)
- 2017 Workshop participant, Software Carpentry – Python, WSU
- 2016 Workshop coordinator, Undergraduate Science Education Program, Howard Hughes Medical Institute, University of Puerto Rico, Mayaguez
- 2012 NSF International Research Experience for Students participant: Mongolia
- 2009 Developed an Aquatic Invertebrate Reference Collection, Museum of Southwestern Biology, Div of Fishes and Div of Arthropods, UNM

RECENT PRESS

- 2022 University at Buffalo News Center, 25 Apr. “Study identifies gaps in monitoring of streams”. By Charlotte Hsu. <https://tinyurl.com/4k4afptz>. Picked up by [ScienMag](#), [EurekAlert](#), [Phys.org](#), [ScienceDaily](#), [Smart Water Magazine](#), [Lab Manager](#), [Thinking Port](#), [Water Online](#), [Mirage News](#), [Environmental News Network](#)
- 2021 *Science Magazine*, 12 Aug. “Climate change is drying out many part-time streams in the United States.” By Erik Stokstad. <https://tinyurl.com/nckmr6dr>
- 2021 *The Arizona Republic*, 6 Sep. “Dry wells, lower flows raise alarm about the Verde River’s future”. By Ian James. <https://tinyurl.com/8dk5398>
- 2021 *The Arizona Republic*, 7 Sep. “On the San Pedro River, water use is drying up stretches of a biodiverse ‘ribbon of green’”. By Ian James. <https://tinyurl.com/2sw83dhk>
- 2021 *Latin Post*, 8 Sep. “Vulnerable Streams Caught by Trump’s Ruling Highlighted in New Study”. By Mark Smith. <https://tinyurl.com/esmzcb5k>
- 2021 *Planet Detroit*, 14 Oct. “Riverwalkers aims to educate Detroit River anglers community on how to ear fish safely”. By Zaire Talon Daniels. <https://tinyurl.com/23rbf8fs>
- 2019 UBNOW: News and views for UB faculty and staff – UB Seen, “An Ice Age Refuge?” <https://tinyurl.com/42c8s6eb>