

CARL R. RUETZ III

Annis Water Resources Institute
Grand Valley State University
740 West Shoreline Drive
Muskegon, MI 49441

Office: 616-331-3946
Fax: 616-331-3684
E-mail: ruetzc@gvsu.edu

EDUCATION

Doctor of Philosophy in Fisheries (Minor: Statistics), November 2001

University of Minnesota, St. Paul, Minnesota

Dissertation: *Effects of trout and sculpins on benthic macroinvertebrates, periphyton, and leaf litter decay in Valley Creek, Minnesota*

Master of Science in Forest Resources (Fisheries option), June 1997

University of Georgia, Athens, Georgia

Thesis: *Swimming performance of larval and juvenile robust redhorse: implication for recruitment in the Oconee River, Georgia*

Bachelor of Science in Biology (Minor: Chemistry), December 1994

Lake Superior State University, Sault Ste. Marie, Michigan

PROFESSIONAL EXPERIENCE

Professor, Annis Water Resources Institute (AWRI), Grand Valley State University (GVSU),
Muskegon, Michigan, 8/13-present

Interim Director, AWRI, GVSU, Muskegon, Michigan, 8/18-12/18

Associate Professor, AWRI, GVSU, Muskegon, Michigan, 8/09-8/13

Assistant Research Scientist and Assistant Professor, AWRI, GVSU, Muskegon, Michigan,
11/02-8/09

Post-doctoral Researcher, Department of Biological Sciences, Florida International University,
Miami, Florida, 11/01-11/02

PEER-REVIEWED JOURNAL PUBLICATIONS

(Mentored Students: †=undergraduate, §=graduate; *=corresponding author when not first author)

- 1) Mock[§], A., **C.R. Ruetz III**, J.N. McNair, D. Mays, and A. Martell. 2021. Evaluating remote site incubators in Michigan streams: implications for Arctic Grayling reintroduction. *North American Journal of Fisheries Management* 41:434-445. <https://doi.org/10.1002/nafm.10534>
- 2) Harris[§], B.S., **C.R. Ruetz III**, T.J. Ellens, B.A. Biddanda, and A.D. Weinke. 2020. Adult lake sturgeon (*Acipenser fulvescens* Rafinesque, 1817) occurrence in the Muskegon River system, a Lake Michigan drowned river mouth, USA. *Journal of Applied Ichthyology* 36(5):547-558. <https://doi.org/10.1111/jai.14076>.
- 3) Senegal, T., **C.R. Ruetz III**, G.M. Chorak[§], D.J. Janetski, D.F. Clapp, G.J. Bowen, and T.O. Höök. 2020. Differential habitat use patterns of yellow perch *Perca flavescens* in eastern Lake Michigan and connected drowned river mouth lakes. *Journal of Great Lakes Research* 46:1412-1422. <https://doi.org/10.1016/j.jglr.2020.06.021>.
- 4) Jenny, J.-P., O. Anneville, F. Arnaud, Y. Baulaz, D. Bouffard, I. Domaizon, S.A. Bocaniov, N. Chèvre, M. Dittrich, J.-M. Dorioz, E. Dunlop, G. Dur, J. Guillard, T. Guinaldo, S. Jacquet, A. Jamoneau, Z. Jawed, E. Jeppesen, G. Krantzberg, J. Lenters, B. Leoni, M. Meybeck, V. Nava, T. Nöges, P. Nöges, M. Patelli, V. Pebbles, M.-E. Perga, S. Rasconi, **C.R. Ruetz III**, L. Rudstam, N. Salmaso, S. Sapna, D. Straile, O. Tammeorg,

- M.R. Twiss, D.G. Uzarski, A.-M. Ventela, W.F. Vincent, S.W. Wilhelm, S.-Å. Wängberg, and G.A. Weyhenmeyer. 2020. Scientists' warning to humanity: rapid degradation of the world's large lakes. *Journal of Great Lakes Research* 46(4):686-702. <https://doi.org/10.1016/j.jglr.2020.05.006>
- 5) Dumke, J.D., G.M. Chorak[§], **C.R. Ruetz III***, R.A. Thum, and J.N. Wesolek[§]. 2020. Identification of black bullhead (*Ameiurus melas*) bullhead and brown bullhead (*A. nebulosus*) from the western Great Lakes: recommendations for small individuals. *American Midland Naturalist* 183:90-104.
 - 6) Harrison, A.M., A.J. Reisinger, M.J. Cooper, V.J. Brady, J.J.H. Ciborowski, K.E. O'Reilly, **C.R. Ruetz III**, D.A. Wilcox, and D.G. Uzarski. 2020. A basin-wide survey of coastal wetlands of the Laurentian Great Lakes: development and comparison of water quality indices. *Wetlands* 40:465-477. <https://doi.org/10.1007/s13157-019-01198-z>
 - 7) Chorak[§], G.M., **C.R. Ruetz III**, R.A. Thum, C.G. Partridge, D.J. Janetski, T.O. Höök, and D.F. Clapp. 2019. Yellow perch genetic structure and habitat use among connected habitats in eastern Lake Michigan. *Ecology and Evolution*. <https://doi.org/10.1002/ece3.5219>
 - 8) Kovalenko, K.E., L.B. Johnson, V.J. Brady, J.J.H. Ciborowski, M.J. Cooper, J.P. Gathman, G.A. Lamberti, A.H. Moerke, **C.R. Ruetz III**, and D.G. Uzarski. 2019. Hotspots and bright spots in functional and taxonomic fish diversity. *Freshwater Science* 38(3):480-490. <https://doi.org/10.1086/704713>
 - 9) Shock, N.T., A.J. Reisinger, L.S. Reisinger, M.J. Cooper, J.J.H. Ciborowski, T.M. Gehring, A.H. Moerke, **C.R. Ruetz III**, and D.G. Uzarski. 2019. Relationships between the distribution and abundance of the invasive faucet snail. *Biological Invasions* 21:2613-2628. <https://doi.org/10.1007/s10530-019-02000-1>
 - 10) Uzarski, D.G., D.A. Wilcox, V.J. Brady, M.J. Cooper, D.A. Albert, J.J.H. Ciborowski, N.P. Danz, A. Garwood, J.P. Gathman, T.M. Gehring, G.P. Grabas, R.W. Howe, L.B. Johnson, G.A. Lamberti, A.H. Moerke, G.J. Niemi, T. Redder, **C.R. Ruetz III**, A.D. Steinman, D.C. Tozer, and T.K. O'Donnell. 2019. Leveraging a landscape-level monitoring and assessment program for developing resilient shorelines throughout the Laurentian Great Lakes. *Wetlands* 39:1357-1366, doi:10.1007/s13157-019-01139-w.
 - 11) Cooper, M.J., G.A. Lamberti, A.H. Moerke, **C.R. Ruetz III**, D.A. Wilcox, V.J. Brady, T.N. Brown, J.J.H. Ciborowski, J.P. Gathman, G.P. Grabas, L.B. Johnson, and D.G. Uzarski. 2018. An expanded fish-based index of biotic integrity for Great Lakes coastal wetlands. *Environmental Monitoring and Assessment* 190:580, doi: 10.1007/s10661-018-6950-6.
 - 12) McNair, J.N., **C.R. Ruetz III**, A. Carlson, and J. Suh. 2018. Reducing effects of dispersal on the bias of 2-sample mark-recapture estimators of stream fish abundance. *PLoS ONE* 13(8):e0200733.
 - 13) Harris[§], B.S., **C.R. Ruetz III***, A.C. Wieten[§], M.E. Altenritter[§], and K.M. Smith. 2017. Characteristics of lake sturgeon *Acipenser fulvescens* Rafinesque, 1817 in a tributary of Lake Michigan, USA: status of the Muskegon River population. *Journal of Applied Ichthyology* 33:338-346.
 - 14) Uzarski, D.G., V.J. Brady, M.J. Cooper, D.A. Wilcox, D.A. Albert, R. Axler, P. Bostwick, T.N. Brown, J.J.H. Ciborowski, N.P. Danz, J. Gathman, T. Gehring, G. Grabas, A. Garwood, R. Howe, L.B. Johnson, G.A. Lamberti, A. Moerke, B. Murry, G. Niemi, C.J. Norment, **C.R. Ruetz III**, A.D. Steinman, D. Tozer, R. Wheeler, T.K. O'Donnell, and J.P. Schneider. 2017. Standardized measures of coastal wetland

- condition: implementation at the Laurentian Great Lakes basin-wide scale. *Wetlands* 37:15-32.
- 15) Homola[§], J.J., **C.R. Ruetz III**, S.L. Kohler, and R.A. Thum. 2016. Complex post-glacial recolonization inferred from population genetic structure of mottled sculpin *Cottus bairdii* in tributaries of eastern Lake Michigan, U.S.A. *Journal of Fish Biology* 89:2234-2250, doi:10.1111/jfb.13101.
 - 16) Rutherford, E.S., J. Allison[§], **C.R. Ruetz III**, J.R. Elliott, J.K. Nohner, M.R. DuFour, R.P. O'Neal, D.J. Jude, and S.R. Hensler. 2016. Density and survival of walleye eggs and larvae in a Great Lakes tributary. *Transactions of the American Fisheries Society* 145:563-577.
 - 17) Bhagat, Y., **C.R. Ruetz III**, and A.L. Akins[†]. 2015. Differential habitat use by the round goby (*Neogobius melanostomus*) and *Dreissena* spp. in coastal habitats of eastern Lake Michigan. *Journal of Great Lakes Research* 41:1087-1093.
 - 18) Janetski, D.J., and **C.R. Ruetz III**. 2015. Spatiotemporal patterns of fish community composition in Great Lakes drowned river mouths. *Ecology of Freshwater Fish* 24:493-504.
 - 19) **Ruetz, C.R., III**, B.S. Harris[†], J.N. McNair, and J.J. Homola[§]. 2015. Removal and mark-recapture methods for estimating abundance: empirical and simulation results for mottled sculpin in streams. *North American Journal of Fisheries Management* 35:62-74.
 - 20) Homola[§], J.J., **C.R. Ruetz III**, S.L. Kohler, and R.A. Thum. 2014. Weak effects of a microsporidian parasite on mottled sculpin in Michigan streams. *Canadian Journal of Fisheries and Aquatic Sciences* 71:915-926, doi: 10.1139/cjfas-2013-0545.
 - 21) Altenritter[§], M.E.L., A.C. Wieten[§], **C.R. Ruetz III**^{*}, and K.M. Smith. 2013. Seasonal spatial distribution of juvenile lake sturgeon in Muskegon Lake, Michigan, USA. *Ecology of Freshwater Fish* 22:467-478.
 - 22) Janetski, D.J., **C.R. Ruetz III**, Y. Bhagat, and D.F. Clapp. 2013. Recruitment dynamics of age-0 yellow perch in a drowned river mouth lake: assessing synchrony with nearshore Lake Michigan. *Transactions of the American Fisheries Society* 142:505-514.
 - 23) **Ruetz, C.R., III**, M.R. Reneski[†], and D.G. Uzarski. 2012. Round goby predation on *Dreissena* in coastal areas of eastern Lake Michigan. *Journal of Freshwater Ecology* 27:171-184.
 - 24) Parker, A.P., M.J. Cooper, **C.R. Ruetz III**, D.P. Coulter, and D.G. Uzarski. 2012. Chemical and physical factors associated with yellow perch abundance in Great Lakes coastal wetlands: patterns within and among wetland types. *Wetland Ecology and Management* 20:137-150.
 - 25) MacDonald, N.W., D.W. Mays, R.R. Rediske, and **C.R. Ruetz III**. 2011. Environmental variation, fish community composition, and brown trout survival in the Pigeon River, Ottawa County, Michigan. *Michigan Academician* XL(2):135-168.
 - 26) Bhagat, Y., and **C.R. Ruetz III**. 2011. Temporal and fine-scale spatial variation in fish assemblage structure in a drowned river mouth system of Lake Michigan. *Transactions of the American Fisheries Society* 140:1429-1440.
 - 27) Parkos, J.J., III, **C.R. Ruetz III**, and J.C. Trexler. 2011. Disturbance regime and limits on benefits of refuge use for fishes in a fluctuating hydroscape. *Oikos* 120:1519-1530.
 - 28) Johnson, K.A., A.D. Steinman, W.D. Keiper[§], and **C.R. Ruetz III**. 2011. Biotic responses to low-concentration urban road runoff. *Journal of the North American Benthological Society* 30:710-727.

- 29) LaRue[†], E.A., **C.R. Ruetz III**, M.B. Stacey[†], and R.A. Thum. 2011. Population genetic structure of the round goby in Lake Michigan: implications for dispersal of invasive species. *Hydrobiologia* 663:71-82.
- 30) Steinman, A.D., M. Ogdahl, and **C.R. Ruetz III**. 2011. An environmental assessment of a small shallow lake (Little Black Lake, MI) threatened by urbanization. *Environmental Monitoring and Assessment* 173:193-209.
- 31) Nelson[§], K.M., **C.R. Ruetz III**, and D.G. Uzarski. 2009. Colonisation by *Dreissena* of Great Lakes coastal ecosystems: how suitable are wetlands? *Freshwater Biology* 54:2290-2299.
- 32) Cooper, M.J., **C.R. Ruetz III**, D.G. Uzarski, and B.M. Shafer[†]. 2009. Habitat use and diets of round gobies in coastal areas of Lakes Michigan and Huron. *Journal of Freshwater Ecology* 24:477-488.
- 33) **Ruetz, C.R., III**, D.L. Strouse[§], and S.A. Pothoven. 2009. Energy density of introduced round goby compared with four native fishes in a Lake Michigan tributary. *Transactions of the American Fisheries Society* 138:938-947.
- 34) Parker, A.D., D.G. Uzarski, **C.R. Ruetz III**, and T.M. Burton. 2009. Diets of yellow perch (*Perca flavescens*) in wetland habitats of Saginaw Bay, Lake Huron. *Journal of Freshwater Ecology* 24:347-354.
- 35) Breen[§], M.J., **C.R. Ruetz III**, K.J. Thompson, and S.L. Kohler. 2009. Movements of mottled sculpins in a Michigan stream: how restricted are they? *Canadian Journal of Fisheries and Aquatic Sciences* 66:31-41.
- 36) Steinman, A.D., M. Ogdahl, R. Rediske, **C.R. Ruetz III**, B.A. Biddanda, and L. Nemeth. 2008. Current status and trends of Muskegon Lake, Michigan. *Journal of Great Lakes Research* 34:169-188.
- 37) Cookingham[†], M.G., and **C.R. Ruetz III**^{*}. 2008. Evaluating passive integrated transponder tags for tracking movement of round gobies. *Ecology of Freshwater Fish* 17:303-311.
- 38) **Ruetz, C.R., III**, D.G. Uzarski, D.M. Krueger, and E.S. Rutherford. 2007. Sampling a littoral fish assemblage: comparing small-mesh fyke netting and boat electrofishing. *North American Journal of Fisheries Management* 27:825-831.
- 39) Cooper, M.J., **C.R. Ruetz III**, D.G. Uzarski, and T.M. Burton. 2007. Distribution of round gobies in coastal areas of Lake Michigan: Are wetlands resistant to invasion? *Journal of Great Lakes Research* 33:303-313.
- 40) **Ruetz, C.R., III**, B.M. Earl, and S.L. Kohler. 2006. Evaluating passive integrated transponder tags for marking mottled sculpins: effects on growth and mortality. *Transactions of the American Fisheries Society* 135:1456-1461.
- 41) **Ruetz, C.R., III**, M.J. Breen[†], and D.L. VanHaitsma[§]. 2006. Habitat structure and fish predation: effects on invertebrate colonisation and breakdown of stream leaf packs. *Freshwater Biology* 51:797-806.
- 42) Breen[†], M.J., and **C.R. Ruetz III**^{*}. 2006. Gear bias in fyke netting: evaluating soak time, fish density, and predators. *North American Journal of Fisheries Management* 26:32-41.
- 43) **Ruetz, C.R., III**, J.C. Trexler, F. Jordan, W.F. Loftus, and S.A. Perry. 2005. Population dynamics of wetland fishes: spatio-temporal patterns synchronized by hydrological disturbance? *Journal of Animal Ecology* 74:322-332.

- 44) Chick, J.H., **C.R. Ruetz III**, and J.C. Trexler. 2004. Spatial scale and abundance patterns of large fish communities in freshwater marshes of the Florida Everglades. *Wetlands* 24:652-664.
- 45) **Ruetz, C.R., III**, B. Vondracek, and R.M. Newman. 2004. Weak top-down control of grazers and periphyton by slimy sculpins in a coldwater stream. *Journal of the North American Benthological Society* 23:271-286.
- 46) **Ruetz, C.R., III**, and D.W. Stephens. 2003. Site selection under differential predation risks by drifting prey in streams. *Oikos* 102:85-94.
- 47) **Ruetz, C.R., III**, A.L. Hurford[†], and B. Vondracek. 2003. Interspecific interactions between brown trout and slimy sculpin in stream enclosures. *Transactions of the American Fisheries Society* 132:611-618.
- 48) **Ruetz, C.R., III**, R.M. Newman, and B. Vondracek. 2002. Top-down control in a detritus-based food web: fish, shredders, and leaf breakdown. *Oecologia* 132:307-315.
- 49) **Ruetz, C.R., III**, and C.A. Jennings. 2000. Swimming performance of larval robust redhorse *Moxostoma robustum* and low-velocity habitat modeling in the Oconee River, Georgia. *Transactions of the American Fisheries Society* 129:398-407.
- 50) **Ruetz, C.R., III**, and C.A. Jennings. 1999. Instantaneous growth and mortality of alevin channel catfish *Ictalurus punctatus* (Siluriformes: Ictaluridae) in the Oconee River, Georgia. *Southeastern Fishes Council Proceedings* 39:1-6.
- 51) **Ruetz, C.R., III**, and C.A. Jennings. 1997. Efficacy of a vacuum benthos sampler for collecting demersal fish eggs from gravel substratum. *Ecology of Freshwater Fish* 6:241-244.

BOOK CHAPTERS

- 52) Moerke, A.H., **C.R. Ruetz III**, T.N. Simon, and C.M. Pringle. 2017. Pages 399-412 in Chapter 19: Macroconsumer-resource interactions in *Methods in Stream Ecology*, 3rd edition. F.R. Hauer and G.A. Lamberti, editors. Elsevier.
- 53) **Ruetz, C.R., III**. 2012. Poster and oral presentations at professional meetings. Pages 143-153 in *Scientific Communication for Natural Resource Professionals*. C.A. Jennings, T.E. Lauer, and B. Vondracek, editors. American Fisheries Society, Bethesda, Maryland.

OTHER PUBLICATIONS

- 54) Overton, A.S., T.R. Reinert, and **C.R. Ruetz III**. 2000. Keeping the communication lines open between you and your graduate committee. *Fisheries* 25(10):41-43.

MANUSCRIPTS IN PROGRESS^a

(Mentored Students: [†]=undergraduate, [§]=graduate; ^{*}=corresponding author when not first author)

^a *In Revision* means the manuscript was submitted to a peer-reviewed journal; the editor asked that the paper be revised based on referee comments and re-submitted to the same journal for further consideration. *In review* means the manuscript is under consideration by a peer-reviewed journal (i.e., in the review process). *In prep* means that a draft manuscript was produced and it is undergoing further editing and revision before it is submitted (or resubmitted) to a peer-reviewed journal for consideration.

SCIENTIFIC PRESENTATIONS

(Mentored Students: †=undergraduate, §=graduate; *=presenter when not first author)

Conferences^b, Meetings, & Public Events:

- 1) **Ruetz, C.R., III**, T. Höök, D. Clapp, G. Chorak[§], T. Senegal, and G. Bowen. 2021. Movement patterns of Yellow Perch in eastern Lake Michigan: implications for harvest. Oral presentation at the 64th Annual Conference on Great Lakes Research. May 17-21.
- 2) **Ruetz, C.R., III**. 2021. Connectivity and movement of fishes inhabiting Lake Michigan drowned river mouths. *Invited* keynote address to the annual meeting of the Mississippi River Research Consortium (Virtual). April 22-23.
- 3) Mader[§], M., **C.R. Ruetz III**, and S. Woznicki. 2021. Fish community response to shoreline structure and latitudinal gradient in drowned river mouths of eastern Lake Michigan. Oral presentation at the annual meeting of the Michigan Chapter of the American Fisheries Society (Virtual). March 16-17.
- 4) **Ruetz, C.R., III**, and T.J. Ellens. 2021. Muskegon Lake AOC fisheries monitoring. *Invited* oral presentation at the monthly meeting of the Muskegon Lake Watershed Partnership, Muskegon, Michigan. March 2.
- 5) Castle, D., A. Martell, D. Mays, **C.R. Ruetz III**, A. Mock[§], N. Auer, C. Goble, D. Hayes, N. Watson, T. Zorn, D. Sampson, B. Fessell, and J. Aho. 2020. Overview of the Michigan Arctic Grayling Initiative (MAGI): current and future projects. Oral presentation at the Annual Meeting of the Michigan Chapter of the American Fisheries Society, Mt. Pleasant, Michigan. March 12-13.
- 6) Yap[†], C., **C.R. Ruetz III**, and J.N. McNair. 2020. A new computer program to evaluate biases in the two-sample mark-recapture abundance estimator. Poster presentation at the Annual Meeting of the Michigan Chapter of the American Fisheries Society, Mt. Pleasant, Michigan. March 12-13.
- 7) Mader[§], M., **C.R. Ruetz III**, and S.A. Woznicki. 2020. Drowned river mouths of eastern Lake Michigan: geography and stressors. Poster presentation at the Annual Meeting of the Michigan Chapter of the American Fisheries Society, Mt. Pleasant, Michigan. March 12-13.
- 8) Oudsema[§], M., and **C.R. Ruetz III**. 2020. Spatiotemporal patterns of littoral fish assemblages in two Lake Michigan drowned river mouths. Oral presentation at the Annual Meeting of the Michigan Chapter of the American Fisheries Society, Mt. Pleasant, Michigan. March 12-13.
- 9) Mock[§], A., **C.R. Ruetz III**^{*}, J.N. McNair, D. Mays, and A. Martell. 2019. Evaluating Remote Site Incubators. *Invited* oral presentation at the Annual Partnership Meeting of the Michigan Arctic Grayling Initiative, Manistee, Michigan. October 8.
- 10) Mock[§], A., **C.R. Ruetz III**^{*}, J.N. McNair, D. Mays, and A. Martell. 2019. Evaluating remote site incubators to support the reintroduction of Arctic grayling to Michigan. Oral presentation at the Joint Annual Conference of the American Fisheries Society and The Wildlife Society, Reno, Nevada. September 29-Oct 3.
- 11) Mock[§], A., **C.R. Ruetz III**, D. Mays, and A. Martell. 2019. Evaluating Remote Site Incubators to support Arctic grayling restoration in Michigan. Poster presentation at the Annual Meeting of the Society for Freshwater Science, Salt Lake City, Utah. May 19-22.

^b Abbreviations for Conferences: AFS = American Fisheries Society, ESA = Ecological Society of America, IAGLR = International Association for Great Lakes Research, MFWC = Midwest Fish and Wildlife Conference, NABS = North American Benthological Society (currently Society for Freshwater Science).

- 12) Mock[§], A., **C.R. Ruetz III**, D. Mays, and A. Martell. 2019. Evaluation of Remote Site Incubators to support Arctic grayling restoration in Michigan. Poster presentation at the Midwest Graduate Research Symposium, Toledo, Ohio. April 6.
- 13) Mock[§], A., **C.R. Ruetz III**, D. Mays, and A. Martell. 2019. Evaluation of Remote Site Incubators in Three Tributaries of the Manistee River. Oral presentation at Michigan Fish and Wildlife Conference, Gaylord, Michigan. March 14-15.
- 14) **Ruetz, C.R., III**, and T.J. Ellens[§]. 2019. Lower Muskegon River habitat restoration project: pre-restoration monitoring. *Invited* oral presentation at the monthly meeting of the Muskegon Lake Watershed Partnership, Muskegon, Michigan. February 5.
- 15) **Ruetz, C.R., III**, and T.J. Ellens[§]. 2019. Fisheries and water quality monitoring: Muskegon River Veterans Memorial Park habitat restoration project. *Invited* oral presentation at the monthly meeting of the Muskegon Lake Watershed Partnership, Muskegon, Michigan. February 5.
- 16) Mock[§], A., **C.R. Ruetz III**, D. Mays, and A. Martell. 2019. Evaluating remote site incubators: implications for the reintroduction of Arctic grayling in Michigan. Oral presentation at Midwest Fish and Wildlife Conference, Cleveland, Ohio. January 27-30.
- 17) **Ruetz, C.R., III**. 2018. The Muskegon River: majesty and travesty of two fishes. *Invited* panelist as part of community book reading of “The Muskegon: Majesty and Travesty of Michigan’s Rarest River” in conjunction with the Smithsonian exhibit Water/Ways. Big Rapids Public Library, Big Rapids, Michigan. October 30.
- 18) Mock[§], A., **C.R. Ruetz III**, D. Mays, and A. Martell. 2018. Remote site incubators in the Manistee River: 2018 preliminary results. *Invited* oral presentation at the Annual Partnership Meeting of the Michigan Arctic Grayling Initiative, Traverse City, Michigan. October 29.
- 19) **Ruetz, C.R., III**. 2018. Fish use of Lake Michigan drowned river mouths: how common are migratory life history types? Oral presentation at “Big Lakes – Small World” a joint conference of the International Association of Great Lakes Research and European Large Lakes Symposium, Evian, France. September 23-28.
- 20) **Ruetz, C.R., III**. 2018. Fish use of Lake Michigan drowned river mouths: a conceptual model of life history types. Oral presentation at the Annual Meeting of the Society for Freshwater Science, Detroit, Michigan. May 20-24.
- 21) Ellens[§], T.J., **C.R. Ruetz III**, and S.L. Kohler. 2018. Seasonal top-down effects of fish on benthic macroinvertebrates and periphyton in a coldwater Michigan stream. Oral presentation at the Annual Meeting of the Society for Freshwater Science, Detroit, Michigan. May 20-24.
- 22) Dykstra[§], K.M., **C.R. Ruetz III**, M.J. Cooper, and D.G. Uzarski. 2018. Occupancy and detection of yellow perch in Great Lakes coastal wetlands. Poster presentation at the Annual Meeting of the Society for Freshwater Science, Detroit, Michigan. May 20-24.
- 23) Ellens[§], T.J., **C.R. Ruetz III**, B.S. Harris, A.D. Weinke, and B.A. Biddanda. 2018. Movement patterns of adult lake sturgeon in a Lake Michigan drowned river mouth. Poster presentation at the Great Lakes Lake Sturgeon Coordination Meeting, Port Huron, Michigan. February 21-22.
- 24) Mock[§], A.J., and **C.R. Ruetz III**. 2018. History and current status of Arctic grayling in Michigan. *Invited* oral presentation at the Pine River Association Annual Board Meeting, Rockford, Michigan. February 22.
- 25) Ellens[§], T., **C.R. Ruetz III**, B. Harris[§], B. Biddanda, and A. Weinke. 2018. Movements and habitat use of adult lake sturgeon in Muskegon Lake and Muskegon River. Poster

- presentation at the annual meeting of the Michigan Chapter of the American Fisheries Society (AFS), Port Huron, Michigan. February 13-14.
- 26) Emelander[§], K.M., **C.R. Ruetz III**, M.J. Cooper, and D.G. Uzarski. 2018. Occupancy and detection of yellow perch in Great Lakes coastal wetlands: preliminary results. Poster presentation at the annual meeting of the Michigan Chapter of the AFS, Port Huron, Michigan. February 13-14.
 - 27) Mock[§], A., **C.R. Ruetz III**, T. Ellens[§], D. Mays, and A. Martell. 2018. Evaluation of remote site incubators in three tributaries of the Manistee River. Poster presentation at the annual meeting of the Michigan Chapter of the AFS, Port Huron, Michigan. February 13-14.
 - 28) Scarborough[†], M., E. Hausig[†], **C.R. Ruetz III**, and T. Ellens. 2018. Seasonal diets and feeding rates of brown trout and mottled sculpin: preliminary results. Poster presentation at the annual meeting of the Michigan Chapter of the AFS, Port Huron, Michigan. February 13-14.
 - 29) Senegal, T., **C.R. Ruetz III**, D.J. Janetski, G. Chorak[§], and T.O. Höök. 2018. Morphological variation in yellow perch *Perca flavescens* in Lake Michigan and drowned river mouth lakes. Poster presentation at the Midwest Fish and Wildlife Conference, Milwaukee, Wisconsin. January 28-31.
 - 30) Reed, E.M., J.H. Chick, S.M. Creque, P.S. Forsythe, **C.R. Ruetz III**, and S. Czesney. 2017. Nearshore zooplankton communities in Lake Michigan: implications for bighead carp survival. Oral presentation at the State of Lake Michigan Conference, Green Bay, Wisconsin. November 7-10.
 - 31) LaGory[§], S., and **C.R. Ruetz III**. 2017. Seasonal ecology of brown trout in a Michigan stream. Poster presentation at the Wild Trout Symposium, West Yellowstone, Montana. September 26-29.
 - 32) Chorak[§], G., **C.R. Ruetz III**, R.A. Thum, C. Partridge, D. Clapp, and D.J. Janetski. 2017. Habitat heterogeneity shapes population genetic structure of yellow perch (*Perca flavescens*) in eastern Lake Michigan. Oral presentation at the Annual Meeting of the Ecological Society of America, Portland, Oregon. August 6-11.
 - 33) LaGory[§], S., and **C.R. Ruetz III**. 2017. Seasonal ecology of mottled sculpin (*Cottus bairdii*) and brown trout (*Salmo trutta*) in a coldwater Michigan stream. Oral presentation at the Annual Meeting of Society for Freshwater Science, Raleigh, North Carolina. June 4-8.
 - 34) Colasante, J.M., G. Chorak[§], D.J. Janetski, **C.R. Ruetz III**, and D. Clapp. 2017. Size at age comparison of yellow perch across a north-south gradient of lakes connected to Lake Michigan. Poster presentation at the Annual Meeting of Society for Freshwater Science, Raleigh, North Carolina. June 4-8.
 - 35) LaGory[§], S., and **C.R. Ruetz III**. 2017. Seasonal growth, movement, and survival of mottled sculpin (*Cottus bairdii*) and brown trout (*Salmo trutta*) in a coldwater stream: preliminary results. Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, Mackinaw City, Michigan. March 15-16.
 - 36) Chorak[§], G., **C.R. Ruetz III**, R.A. Thum, C. Partridge, D. Clapp, and D.J. Janetski. 2017. Genetic stock structure of yellow perch in drowned river mouths of eastern Lake Michigan. Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, Mackinaw City, Michigan. March 15-16.
 - 37) Colasante, J.M., G. Chorak[§], D.J. Janetski, **C.R. Ruetz III**, and D. Clapp. 2017. Size at age comparison of yellow perch across coastal drowned river mouth lakes. Poster

- presentation at the Annual Meeting of the Michigan Chapter of the AFS, Mackinaw City, Michigan. March 15-16.
- 38) Mock[†], A., S. LaGory[§], **C.R. Ruetz III**, and J.N. McNair. 2017. Reducing bias in mark-recapture abundance estimators for stream fishes using a modified sampling scheme. Poster presentation at the Annual Meeting of the Michigan Chapter of the AFS, Mackinaw City, Michigan. March 15-16.
 - 39) LaGory[§], S., **C.R. Ruetz III**, and M.E. Altenritter[†]. 2016. Leaf packs reduce predation risk for stream invertebrates. Poster presentation at the Annual Meeting of the Society for Freshwater Science, Sacramento, California. May 21-26.
 - 40) Ellens[§], T.J., **C.R. Ruetz III**, and S.L. Kohler. 2016. Top-down effects of fish on benthic macroinvertebrates and periphyton in a Michigan stream. Poster presentation at the Annual Meeting of the Society for Freshwater Science, Sacramento, California. May 21-26.
 - 41) **Ruetz, C.R., III**. 2016. Monitoring for BUI removal: loss of fish habitat and degradation of fish populations. *Invited* oral presentation at the 2016 Areas of Concern Conference, Dearborn, Michigan. March 2. Participated in a panel discussion following presentation titled "BUI verification monitoring: how to monitor: evaluate, and expedite removal of BUIs".
 - 42) Reed, E.M., S.M. Creque, J.H. Chick, **C.R. Ruetz III**, P. Forsythe, and S.J. Czesny. 2016. Evaluating the nearshore rotifer community composition in Lake Michigan. Poster presentation at the Joint Annual Conference of the American Fisheries Society and Illinois Lake Management Association, Springfield, Illinois. February 29-March 2.
 - 43) **Ruetz, C.R., III**, and A.L. Whitten. 2016. Pre-restoration fisheries monitoring results for the Muskegon River Veterans Memorial Park habitat restoration project. *Invited* oral presentation at the Muskegon Lake Watershed Partnership, Muskegon, Michigan. January 28.
 - 44) McNair, J.N., **C.R. Ruetz III**, and A. Carlson. 2016. Reducing effects of dispersal on the bias of 2-sample mark-recapture abundance estimators. Oral presentation at the Midwest Fish and Wildlife Conference, Grand Rapids, Michigan. January 24-27.
 - 45) Whitten, A.L., and **C.R. Ruetz III**. 2016. Littoral fish assemblages in two Lake Michigan drowned river mouths: preliminary results. Oral presentation at the Midwest Fish and Wildlife Conference, Grand Rapids, Michigan. January 24-27.
 - 46) Weinke, A.D., **C.R. Ruetz III**, D.J. Koopmans, and B.A. Biddanda. 2016. Out of breath: hypoxia and its effects on fish species composition and abundance in the bottom waters of Muskegon Lake, Michigan, with lake-wide implications. Poster presentation at the Midwest Fish and Wildlife Conference, Grand Rapids, Michigan. January 24-27.
 - 47) Chorak[§], G.M., **C.R. Ruetz III**, D.J. Koopmans, A.D. Weinke, D.J. Janetski, B.A. Biddanda. 2016. Hypolimnetic hypoxia across a gradient of Lake Michigan drowned river mouth lakes. Poster presentation at the Midwest Fish and Wildlife Conference, Grand Rapids, Michigan. January 24-27.
 - 48) Whitten, A.L., and **C.R. Ruetz III**. 2015. Littoral fish assemblages in two Lake Michigan drowned river mouths. Poster presentation at the State of Michigan Water Collaboration Workshop, Roscommon, Michigan. October 9.
 - 49) Harris[§], B.S., **C.R. Ruetz III**, K.M. Smith, and A.C. Wieten[§]. 2015. Seasonal movement patterns and habitat use of adult lake sturgeon in the Muskegon River system, Michigan. Oral presentation at the Lake Sturgeon Committee Meeting, Fisheries Division, Michigan Department of Natural Resources, Wolf Lake State Fish Hatchery. July 21-22.

- 50) **Ruetz, C.R., III**, S.M.P. Morsches[†], and S.M.P., D.J. Janetski. 2015. Environmental drivers of fish community structure in river mouths of Lake Michigan, USA. Poster presentation at the 9th Symposium for European Freshwater Sciences, Geneva, Switzerland. July 5-10.
- 51) Janetski, D.J., **C.R. Ruetz III**, M.J. Breen[§], and S.L. Kohler. 2015. Macroinvertebrate beta diversity among stream micro-habitats. Poster presentation at the Annual Meeting of the Society for Freshwater Science, Milwaukee, Wisconsin. May 17-21.
- 52) Morsches[†], S.M.P., D.J. Janetski, and **C.R. Ruetz III**. 2015. Spatial patterns of fish assemblages in Lake Michigan drowned river mouths. Poster presentation at the Annual Meeting of the Society for Freshwater Science, Milwaukee, Wisconsin. May 17-21.
- 53) Harris[§], B.S., **C.R. Ruetz III**, K.M. Smith, and A.C. Wieten[§]. 2015. Seasonal movement patterns and habitat use of adult lake sturgeon in the Muskegon River, Michigan, USA. Oral presentation at the annual coordinating meeting of the Great Lakes Acoustic Telemetry Observation System, Ann Arbor, Michigan. March 11-12.
- 54) Dumke, J., **C.R. Ruetz III**, G.M. Chorak, R.A. Thum, and J. Wesolek[§]. 2015. New information regarding identification of young brown and black bullheads. Oral presentation at the Annual Meeting of the Wisconsin Chapter of the AFS, Eau Claire, Wisconsin. February 24-26.
- 55) Ellens[§], T.J., and **C.R. Ruetz III**. 2015. Temporal patterns of littoral fish populations in a Lake Michigan drowned river mouth. Oral presentation at the Midwest Fish and Wildlife Conference, Indianapolis, Indiana. February 8-11.
- 56) Harris[§], B.S., **C.R. Ruetz III**, K.M. Smith, and A.C. Wieten[§]. 2015. Seasonal movement patterns and habitat use of adult lake sturgeon in the Muskegon River, Michigan, USA. Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, Bay City, Michigan. January 20-21.
- 57) Whitten, A.L., and **C.R. Ruetz III**. 2015. Littoral fish assemblages in two Lake Michigan drowned river mouths. Poster presentation at the Annual Meeting of the Michigan Chapter of the AFS, Bay City, Michigan. January 20-21.
- 58) Ellens[§], T.J., and **C.R. Ruetz III**. 2015. Temporal patterns of littoral fish populations in a Lake Michigan drowned river mouth. Poster presentation at the Annual Meeting of the Michigan Chapter of the AFS, Bay City, Michigan. January 20-21.
- 59) Morsches[†], S.M.P., D.J. Janetski, and **C.R. Ruetz III**. 2015. Spatial patterns of fish assemblages in Lake Michigan drowned river mouths. Poster presentation at the Annual Meeting of the Michigan Chapter of the AFS, Bay City, Michigan. January 20-21.
- 60) Chorak, G.M., **C.R. Ruetz III**, R.A. Thum, J. Wesolek[§], and J. Dumke. 2015. Identification of brown and black bullheads: evaluating DNA barcoding. Poster presentation at the Annual Meeting of the Michigan Chapter of the AFS, Bay City, Michigan. January 20-21.
- 61) Harris[§], B.S., **C.R. Ruetz III**, A.C. Wieten[§], M.E.L. Altenritter[§], and K.M. Smith. 2014. Population status of lake sturgeon in the Muskegon River system, Michigan. Oral presentation at the 144th Annual Meeting of the AFS, Quebec City, Quebec, Canada. August 17-21.
- 62) Janetski, D.J., and **C.R. Ruetz III**. 2014. Spatiotemporal patterns of fish community composition in drowned river mouth lakes of eastern Lake Michigan. Oral presentation at the Joint Aquatic Sciences Meeting, Portland, Oregon. May 18-23.
- 63) **Ruetz, C.R., III**, D.J. Janetski, J.L. Woods[§], J.C. Waller[†], and J.N. McNair. 2014. Drift settling rates of benthic macroinvertebrates: evaluating turbulent transport dynamics of

- particles in streams. Oral presentation at the Joint Aquatic Sciences Meeting, Portland, Oregon. May 18-23.
- 64) **Ruetz, C.R., III.** 2014. Fish population and community patterns in Muskegon Lake and other DRM lakes. Oral presentation at the Lake Michigan – Muskegon Lake Connectivity Workshop, Great Lakes Environmental Research Laboratory-NOAA and Annis Water Resources Institute-GVSU, Muskegon, Michigan. April 28-29.
 - 65) **Ruetz, C.R., III.** 2014. Fish ecology in drowned river mouth lakes: importance to the Lake Michigan food web? Oral (3 min) presentation at the Lake Michigan Food Web Workshop, Lake Michigan Great Lakes Regional Research Information Network, Ann Arbor, Michigan. April 1-2.
 - 66) Harris[§], B.S., **C.R. Ruetz III**, A.C. Wieten[§], M.E.L. Altenritter[§], and K.M. Smith. 2014. Population status of lake sturgeon in the Muskegon River. Poster presentation at the Annual Meeting of the Michigan Chapter of the AFS, Holland, Michigan. February 25-26.
 - 67) Janetski, D.J., and **C.R. Ruetz III.** 2014. Spatiotemporal patterns of fish community composition in drowned river mouth lakes of eastern Lake Michigan. Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, Holland, Michigan. February 25-26.
 - 68) Wesolek[§], J.N., **C.R. Ruetz III**, and R.A. Thum. 2014. Genetic structure of yellow perch in coastal areas of Lake Michigan. Poster presentation at the Annual Meeting of the Michigan Chapter of the AFS, Holland, Michigan. February 25-26.
 - 69) Woods[§], J., J.C. Waller[†], D.J. Janetski, **C.R. Ruetz III**, and J.M. McNair. 2013. Settling rates of stream invertebrates. Poster presentation at the West Michigan Regional Undergraduate Science Research Conference, Grand Rapids, Michigan. November 16.
 - 70) Janetski, D.J., and **C.R. Ruetz III.** 2013. Connectivity and metacommunity dynamics: insights from a lake network in Michigan, USA. Oral presentation at the 98th Annual Meeting of the Ecological Society of America (ESA), Minneapolis, Minnesota. August 4-9.
 - 71) **Ruetz, C.R., III**, B.S. Harris[†], J.M. McNair, and J.J. Homola[§]. 2013. Mark-recapture and removal methods for estimating sculpin abundance in streams. Oral presentation at the Annual Meeting of the Society for Freshwater Science, Jacksonville, Florida. May 19-23.
 - 72) Homola[§], J.J., **C.R. Ruetz III**, R.A. Thum, S.L. Kohler. 2013. Landscape genetics of mottled sculpin: insights into historic stream colonization. Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, Gaylord, Michigan. February 19-21.
 - 73) Janetski, D.J., **C.R. Ruetz III**, Y. Bhagat, and D.F. Clapp. 2013. Yellow perch recruitment dynamics in Muskegon Lake and nearshore Lake Michigan. Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, Gaylord, Michigan. February 19-21.
 - 74) Harris[§], B.S., A.C. Wieten[§], M.E.L. Altenritter[§], **C.R. Ruetz III**, and K.M. Smith. 2013. Population status of lake sturgeon in the Muskegon River, Michigan. Poster presentation at the Annual Meeting of the Michigan Chapter of the AFS, Gaylord, Michigan. February 19-21.
 - 75) McNair, J.N., **C.R. Ruetz III**, and B.S. Harris[†]. 2012. How much bias does migration cause in 2-sample mark-recapture estimators of stream fish abundance? Oral

- presentation at the Annual Meeting of the American Water Resources Association, Jacksonville, Florida. November 12-15.
- 76) **Ruetz, C.R., III.** 2012. Fish population assessment for the White Lake AOC (Focused discussion on approaches to assess and remove BUIs). *Invited* panelist at the U.S. Areas of Concern Program Annual Meeting (Setting Priorities in the AOC Program), Cleveland, Ohio. September 12-13.
 - 77) Comben, J.N., **C.R. Ruetz III**, K.M. Smith, and E. Binoniemi-Smith. 2012. Distribution of age-0 lake sturgeon in the lower section of a Lake Michigan tributary. Poster presentation at the 142nd Annual Meeting of the AFS, St. Paul, Minnesota. August 19-23.
 - 78) Homola[§], J.J., **C.R. Ruetz III**, and S.L. Kohler. 2012. Environmental and fish community influences on presence of a microsporidian parasite in mottled sculpin. Poster presentation at the 142nd Annual Meeting of the AFS, St. Paul, Minnesota. August 19-23.
 - 79) Harris[†], B.S., **C.R. Ruetz III**, J.J. Homola[§], and J.N. McNair. 2012. Evaluating removal and mark-recapture methods for estimating abundance of a small, non-game fish. Oral presentation at the 142nd Annual Meeting of the AFS, St. Paul, Minnesota. August 19-23.
 - 80) Wieten[§], A., **C.R. Ruetz III**, M.E. Altenritter[§], and K.M. Smith. 2012. Movement and spatial distribution of lake sturgeon in Muskegon Lake, Michigan. Poster presentation at the 142nd Annual Meeting of the AFS, St. Paul, Minnesota. August 19-23.
 - 81) **Ruetz, C.R., III**, A.C. Wieten[§], M.E. Altenritter[§], and K.M. Smith. 2012. Movements and spatial distribution of juvenile lake sturgeon in a Great Lakes tributary. Oral presentation at the International Conference on Ecology and Conservation of Freshwater Fish, Vila Nova de Cerveira, Portugal. May 28-June 2.
 - 82) **Ruetz, C.R., III**, A.C. Wieten[§], M.E. Altenritter[§], and K.M. Smith. 2012. Lake sturgeon research in the Muskegon River system. *Invited* oral presentation at the Great Lakes Acoustic Telemetry Observation System, Second Annual Project Coordination Meeting, Rogers City, Michigan. February 14-15.
 - 83) **Ruetz, C.R., III.** 2012. Muskegon Lake AOC—evaluating targets for two BUIs: loss of fish habitat and degradation of fish populations. *Invited* oral presentation at the Muskegon Lake Watershed Partnership, Muskegon, Michigan. February 9.
 - 84) Comben, J.N., **C.R. Ruetz III**, K.M. Smith, and E. Binoniemi-Smith. 2012. Abundance and habitat use of lake sturgeon in two Lake Michigan tributaries. Poster presentation at the Joint Annual Meeting of the Michigan and Wisconsin Chapters of the AFS, Marinette, Wisconsin. February 7-9.
 - 85) Homola[§], J.J., **C.R. Ruetz III**, and S.L. Kohler. 2012. Population- and individual-level effects of a microsporidian infection on mottled sculpins in Michigan streams. Oral presentation at the Joint Annual Meeting of the Michigan and Wisconsin Chapters of the AFS, Marinette, Wisconsin. February 7-9.
 - 86) Wieten[§], A., M.E. Altenritter[§], **C.R. Ruetz III**, and K.M. Smith. 2012. Movement and spatial distribution of lake sturgeon in Muskegon Lake, Michigan. Oral presentation at the Joint Annual Meeting of the Michigan and Wisconsin Chapters of the AFS, Marinette, Wisconsin. February 7-9.
 - 87) **Ruetz, C.R., III.** 2012. White Lake AOC—evaluating targets for delisting two BUIs: loss of fish habitat and degradation of fish populations. *Invited* oral presentation at the White Lake Public Advisory Council Meeting, Whitehall, Michigan. January 5 and March 15 (public meeting).

- 88) Harris[†], B.S., J.J. Homola[§], and **C.R. Ruetz III**. 2011. Evaluating removal and mark-recapture methods for estimating abundance of a small, non-game fish. Oral presentation at the 72nd Midwest Fish and Wildlife Conference (MFWC), Des Moines, Iowa. December 4-7.
- 89) Comben, J.N., **C.R. Ruetz III**, K.M. Smith, and E. Binoniemi-Smith. 2011. Abundance and habitat use of lake sturgeon in two Lake Michigan tributaries. Poster presentation at the 72nd MFWC, Des Moines, Iowa. December 4-7.
- 90) Wieten[§], A., **C.R. Ruetz III**, M.E. Altenritter[§], and K.M. Smith. 2011. Population dynamics of lake sturgeon in the Muskegon River system, Michigan, USA. Poster presentation at the 72nd MFWC, Des Moines, Iowa. December 4-7.
- 91) Kneisel[†], A., **C.R. Ruetz III**, A.D. Steinman, and S.L. Cooke. 2011. Is phytoplankton sufficient to support bighead and silver carps in Muskegon Lake? Poster presentation at the 72nd MFWC, Des Moines, Iowa. December 4-7.
- 92) Homola[§], J.J., **C.R. Ruetz III**, and S.L. Kohler. 2011. Individual-level effects of a microsporidian disease on mottled sculpins in Michigan streams. Poster presentation at the 72nd MFWC, Des Moines, Iowa. December 4-7.
- 93) Harris[†], B.S., J.J. Homola[§], and **C.R. Ruetz III**. 2011. Comparing two common methods for estimating stream fish abundance. Poster presentation at the West Michigan Regional Undergraduate Science Research Conference, Grand Rapids, Michigan. November 12.
- 94) Kneisel[†], A., **C.R. Ruetz III**, A.D. Steinman, and S.L. Cooke. 2011. Is phytoplankton sufficient to support bighead and silver carps in Muskegon Lake? Poster presentation at the West Michigan Regional Undergraduate Science Research Conference, Grand Rapids, Michigan. November 12.
- 95) Provo[†], S., J.J. Homola[§], **C.R. Ruetz III**, and S.L. Kohler. 2011. Effects of disease relative to infection intensity on stream fish. Poster presentation at the West Michigan Regional Undergraduate Science Research Conference, Grand Rapids, Michigan. November 12.
- 96) **Ruetz, C.R., III**. 2011. Factors influencing fish communities in drowned river mouth systems of Lake Michigan. Oral presentation at the 2011 State of Lake Michigan Conference, Michigan City, Indiana. September 26-28.
- 97) Bhagat, Y., **C.R. Ruetz III**, and D.F. Clapp. 2011. Yellow perch recruitment dynamics in a coastal lake of Lake Michigan. Oral presentation at the 141st Annual Meeting of the AFS, Seattle, Washington. September 4-8.
- 98) **Ruetz, C. R., III**, and D. G. Uzarski. 2011. Intensive site assessment and Michigan IBIs. *Invited* oral presentation at the Michigan Wetlands Association Annual Conference, Traverse City, Michigan. August 31-September 1.
- 99) LaRue[†], E. A., **C. R. Ruetz III**, M. B. Stacey[†] and R. A. Thum. 2011. Population structure of the invasive round goby in Lake Michigan: implications for dispersal of invasive species. Poster presentation at Evolution 2011, Norman, Oklahoma. June 17-21.
- 100) Bhagat, Y., and **C.R. Ruetz III**. 2011. Determinants of fish community assemblages in drowned river mouth systems of Lake Michigan. Oral presentation at the 54th Annual Meeting of the International Association for Great Lakes Research (IAGLR), Duluth, Minnesota. May 30-June 3.

- 101) Allison[§], J.R., **C.R. Ruetz III**, E.S. Rutherford, J. Elliott, and J. Nohner. 2011. Factors limiting walleye reproduction in the Muskegon River. Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, Petoskey, Michigan. April 6-7.
- 102) Comben, J.N., **C.R. Ruetz III**, K.M. Smith, E. Binoniemi-Smith, and W.D. Keiper. 2011. Abundance and habitat use of juvenile lake sturgeon in two Lake Michigan tributaries. Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, Petoskey, Michigan. April 6-7.
- 103) Wieten[§], A., M.E. Altenritter[§], **C.R. Ruetz III**, and K.M. Smith. 2011. Age and growth of lake sturgeon in the Muskegon River system. Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, Petoskey, Michigan. April 6-7.
- 104) Homola[§], J.J., **C.R. Ruetz III**, M.J. Breen[§], and S.L. Kohler. 2011. Apparent seasonal survival of a disease-infected population of mottled sculpin in a Michigan stream. Poster presentation at the Annual Meeting of the Michigan Chapter of the AFS, Petoskey, Michigan. April 6-7.
- 105) Koster[†], A., Y. Bhagat, and **C.R. Ruetz III**. 2011. Round goby density and diet at pierheads and adjacent drowned river mouth lakes of Lake Michigan. Poster presentation at the Annual Meeting of the Michigan Chapter of the AFS, Petoskey, Michigan. April 6-7.
- 106) Koster[†], A., Y. Bhagat, and **C.R. Ruetz III**. 2010. Diet of round gobies in coastal areas of Lake Michigan. Poster presentation at the 71st MFWC, Minneapolis, Minnesota. December 12-15.
- 107) Comben, J.N., **C.R. Ruetz III**, K.M. Smith, E. Binoniemi-Smith, and W.D. Keiper. 2010. Abundance and habitat use of juvenile lake sturgeon in two Lake Michigan tributaries. Oral presentation at the 71st MFWC, Minneapolis, Minnesota. December 12-15.
- 108) **Ruetz, C.R., III**. 2010. Population status & juvenile ecology of lake sturgeon in Lake Michigan tributaries. *Invited* oral presentation at Ottawa County's Fifth Annual Water Quality Forum, West Olive, Michigan. November 1.
- 109) **Ruetz, C.R., III**. 2010. Current research projects. *Invited* oral presentation at the Biologists Conference, Michigan Department of Natural Resources and Environment, Fisheries Division, Traverse City, Michigan. October 6.
- 110) **Ruetz, C.R., III**. 2010. Population status and juvenile ecology of lake sturgeon in the Muskegon River system. *Invited* oral presentation at the Muskegon River Watershed Assembly Meeting, Muskegon, Michigan. September 30.
- 111) Allison[§], J.R., **C.R. Ruetz III**, and E.S. Rutherford. 2010. Factors limiting walleye reproduction in a Lake Michigan tributary. Oral presentation at the 140th Annual Meeting of the AFS, Pittsburgh, Pennsylvania. September 12-16.
- 112) Altenritter[§], M.E., **C.R. Ruetz III**, and K.M. Smith. 2010. Movement and habitat use of juvenile lake sturgeon (*Acipenser fulvescens*) in a Lake Michigan tributary. Oral presentation at the 140th Annual Meeting of the AFS, Pittsburgh, Pennsylvania. September 12-16.
- 113) Bhagat, Y., and **C.R. Ruetz III**. 2010. Spatio-temporal distribution patterns and relationships with environmental variables in a Michigan coastal lake. Oral presentation at the 140th Annual Meeting of the AFS, Pittsburgh, Pennsylvania. September 12-16.
- 114) Rutherford, E.S., J.R. Allison[§], **C.R. Ruetz III**, J. Elliot, J. Nohner, S. Upton, and R. O'Neal. 2010. Early life dynamics of walleyes (*Sander vitreus*) in a Great Lakes

- tributary. Poster presentation at the 140th Annual Meeting of the AFS, Pittsburgh, Pennsylvania. September 12-16.
- 115) **Ruetz, C.R., III.** 2010. Asian carp. *Invited* oral presentation at the West Michigan Regional Meeting of the Michigan Environmental Council, Holland, Michigan. July 27.
 - 116) **Ruetz, C.R., III,** and M.J. Breen[§]. 2010. Intraspecific variation in leaf litter quality: importance of leaf size. Oral presentation at the Joint Meeting of the American Society of Limnology and Oceanography and the North American Benthological Society (NABS), Santa Fe, New Mexico. June 6-11.
 - 117) **Ruetz, C.R., III,** M.R. Reneski[†], and D.G. Uzarski. 2010. Round goby predation on *Dreissena* in drowned river mouth lakes: evidence for spatial heterogeneity? *Invited* oral presentation at the 53rd Annual Meeting of the IAGLR, Toronto, Ontario. May 17-21.
 - 118) Bhagat, Y., and **C.R. Ruetz III.** 2010. Assessing patterns of spatial and temporal variation of fish assemblages in a drowned river mouth (DRM) system of Lake Michigan. Oral presentation at the 53rd Annual Meeting of the IAGLR, Toronto, Ontario. May 17-21.
 - 119) Allison[§], J., **C.R. Ruetz III,** and E. Rutherford. 2010. Assessment of walleye reproduction in the Muskegon River. Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, Grayling, Michigan. February 24-25.
 - 120) Altenritter[§], M., **C.R. Ruetz III,** and K. Smith. 2010. Reproductive status and juvenile ecology of lake sturgeon in the Muskegon River. Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, Grayling, Michigan. February 24-25.
 - 121) Bhagat, Y., and **C.R. Ruetz III.** 2010. Fish community composition and environmental influences over a 7-year time scale in Muskegon Lake. Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, Grayling, Michigan. February 24-25.
 - 122) Keiper[§], W.D., and **C.R. Ruetz III.** 2010. Stormwater runoff in an urban stream: impacts on central mudminnows. Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, Grayling, Michigan. February 24-25.
 - 123) LaRue[†], E., **C.R. Ruetz III,** and R.A. Thum. 2010. Population structure of the invasive round goby in Lake Michigan. Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, Grayling, Michigan. February 24-25.
 - 124) Prichard[†], C., **C.R. Ruetz III,** and J.N. McNair. 2010. A dynamic programming model of patch selection by stream invertebrates. Poster presentation at the Annual Meeting of the Michigan Chapter of the AFS, Grayling, Michigan. February 24-25.
 - 125) Altenritter[§], M.E., **C.R. Ruetz III,** and K.M. Smith. 2009. Reproductive status and juvenile ecology of lake sturgeon in the Muskegon River. Oral presentation at the 70th MFWC, Springfield, Illinois. December 6-9.
 - 126) Keiper[§], W.D., and **C.R. Ruetz III.** 2009. Stormwater runoff in an urban stream: impacts on central mudminnows. Oral presentation at the 70th MFWC, Springfield, Illinois. December 6-9.
 - 127) Allison[§], J., **C.R. Ruetz III,** E. Rutherford. 2009. Factors limiting walleye recruitment and success in the Muskegon River. Oral presentation at the 70th MFWC, Springfield, Illinois. December 6-9.
 - 128) LaRue[†], E.A., R.A. Thum, and **C.R. Ruetz III.** 2009. Population structure of the invasive round goby in Lake Michigan. Oral presentation at the 70th MFWC, Springfield, Illinois. December 6-9.
 - 129) LaRue[†], E.A., R.A. Thum, and **C.R. Ruetz III.** 2009. Population structure of the invasive round goby in Lake Michigan. Poster presentation at the West Michigan

- Regional Undergraduate Science Research Conference, Grand Rapids, Michigan. October 31.
- 130) Prichard[†], C., **C.R. Ruetz III**, and J.N. McNair. 2009. A dynamic programming model of patch selection by stream invertebrates. Poster presentation at the West Michigan Regional Undergraduate Research Conference, Grand Rapids, Michigan. October 31.
 - 131) Altenritter[§], M.E., **C.R. Ruetz III**, and K.M. Smith. 2009. Reproductive status and early life history of lake sturgeon in the Muskegon River. Poster presentation at the 57th Annual Meeting of the NABS, Grand Rapids, Michigan. May 17-22.
 - 132) **Ruetz, C.R., III**, and M.J. Breen[§]. 2009. Consumption of leaf litter by stream invertebrates: evaluating leaf size. Poster presentation at the 57th Annual Meeting of the NABS, Grand Rapids, Michigan. May 17-22.
 - 133) Keiper[§], W.D., and **C.R. Ruetz III**. 2009. Stormwater runoff in an urban stream: impacts on central mudminnows. Oral presentation at the 57th Annual Meeting of the NABS, Grand Rapids, Michigan. May 17-22.
 - 134) Cooper, M.J., **C.R. Ruetz III**, D.G. Uzarski, and B.M. Shafer[†]. 2009. Habitat use and diets of round gobies in coastal areas of Lakes Michigan and Huron. Oral presentation at the 57th Annual Meeting of the NABS, Grand Rapids, Michigan. May 17-22.
 - 135) Murry, B.A., M.J. Cooper, D.G. Uzarski, J.M. Farrell, D. Clapp, **C.R. Ruetz III**, K. Kapuscinski, and D.P. Coulter. 2009. Increasing prevalence of the non-indigenous round goby, *Apollonia melanostomus*, in coastal wetlands of the Laurentian Great Lakes: are wetlands really resistant to invasion? Oral presentation at the Annual Meeting of the NABS, Grand Rapids, Michigan. May 17-22.
 - 136) Nelson[§], K.M., **C.R. Ruetz III**, and D.G. Uzarski. 2009. Distribution of dreissenids in Great Lakes coastal ecosystems: Are wetlands resistant to invasion? Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, Dundee, Michigan. March 18-19.
 - 137) Altenritter[§], M.E., **C.R. Ruetz III**, and K.M. Smith. 2009. Status of lake sturgeon reproduction in the Muskegon River. Poster presentation at the Annual Meeting of the Michigan Chapter of the AFS, Dundee, Michigan. March 18-19.
 - 138) Keiper[§], W., and **C.R. Ruetz III**. 2009. Storm water runoff in a Michigan urban stream: impacts on central mudminnows. Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, Dundee, Michigan. March 18-19.
 - 139) Stacey[†], M. B., R.A. Thum, **C.R. Ruetz III**, and T. Armstrong. 2008. Population structure of the invasive round goby in Lake Michigan. Oral presentation at the 69th MFWC, Columbus, Ohio. December 14-17.
 - 140) Altenritter[§], M.E., **C.R. Ruetz III**, and K.M. Smith. 2008. Recruitment and movement patterns of lake sturgeon in the Muskegon River system. Poster presentation at the 69th MFWC, Columbus, Ohio. December 14-17.
 - 141) Keiper[§], W., and **C.R. Ruetz III**. 2008. Storm water runoff in a Michigan urban stream: impacts on central mudminnows. Poster presentation at the 69th MFWC, Columbus, Ohio. December 14-17.
 - 142) Altenritter[§], M.E., **C.R. Ruetz III**, and K.M. Smith. 2008. Status of lake sturgeon reproduction in the Muskegon River, Michigan. Poster presentation at the Great Lakes Lake Sturgeon Coordination Meeting, Port Huron, Michigan. December 3-4.
 - 143) Stacey[†], M. B., R.A. Thum, **C.R. Ruetz III**, and T. Armstrong. 2008. Population structure of the invasive round goby in Lake Michigan. Poster presentation at the West

- Michigan Regional Undergraduate Science Research Conference, Grand Rapids, Michigan. November 1.
- 144) Altenritter[†], M.E., and **C.R. Ruetz III**. 2008. Risk of predation across a gradient of habitat structure: Are results scale dependent? Oral presentation at the 56th Annual Meeting of the NABS, Salt Lake City, Utah. May 25-30.
 - 145) Breen[§], M.J., **C.R. Ruetz III**, and S.L. Kohler. 2008. Prey availability as a predictor of mottled sculpin foraging behavior in a small Michigan stream. Oral presentation at the 56th Annual Meeting of the NABS, Salt Lake City, Utah. May 25-30.
 - 146) Nelson[§], K.M., **C.R. Ruetz III**, and D.G. Uzarski. 2008. Distribution of dreissenids in Great Lakes coastal ecosystems: Are wetlands resistant to invasion? Oral presentation at the 56th Annual Meeting of the NABS, Salt Lake City, Utah. May 25-30.
 - 147) **Ruetz, C.R., III**. 2008. Modeling the catch of fish in entrapment gear: evaluating bias. Poster presentation at the Annual Meeting of the Michigan Chapter of the AFS, Sault Ste. Marie, Michigan. March 4-5.
 - 148) Altenritter[†], M.E., and **C.R. Ruetz III**. 2008. Risk of predation across a gradient of habitat structure: Are results scale dependent? Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, Sault Ste. Marie, Michigan. March 4-5.
 - 149) **Ruetz, C.R., III**. 2007. Modeling the catch of fish in entrapment gear: evaluating bias. Poster presentation at the 68th MFWC, Madison, Wisconsin. December 9-12.
 - 150) Altenritter[†], M., and **C.R. Ruetz III**. 2007. Risk of predation to stream invertebrates across a gradient of habitat complexity. Poster presentation at the West Michigan Regional Undergraduate Science Research Conference, Grand Rapids, Michigan. October 20.
 - 151) **Ruetz, C.R., III**, and D.G. Uzarski. 2007. Setting targets for fish populations and habitats in two Areas of Concern. Oral presentation at the Lake Michigan: State of the Lake Conference, Traverse City, Michigan. October 3-5.
 - 152) Nelson[§], K.M., **C.R. Ruetz III**, and D.G. Uzarski. 2007. Distribution of zebra mussels in Great Lakes coastal ecosystems: Are wetlands resistant to invasion? Oral presentation at the Lake Michigan: State of the Lake Conference, Traverse City, Michigan. October 3-5.
 - 153) Cookingham[†], M.N., and **C.R. Ruetz III**. 2007. Evaluating passive integrated transponder tags for tracking movements of round gobies. Poster presentation at the Lake Michigan: State of the Lake Conference, Traverse City, Michigan. October 3-5.
 - 154) Breen[§], M.J., **C.R. Ruetz III**, and K.J. Thompson. 2007. Movement patterns of mottled sculpins in a small stream: evaluating PIT equipment. Oral presentation at the 137th Annual Meeting of the AFS, San Francisco, California. September 2-6.
 - 155) Nelson[§], K.M., D.G. Uzarski, and **C.R. Ruetz III**. 2007. Distributions of zebra mussels in Great Lakes coastal ecosystems: Are wetlands resistant to invasion? Oral presentation at the 50th Annual Meeting of the IAGLR, University Park, Pennsylvania. May 28-June 1.
 - 156) Cookingham[†], M.N., and **C.R. Ruetz III**. 2007. Evaluating passive integrated transponder tags for tracking movements of round gobies. Poster presentation at the Indiana-Michigan-Ohio Chapters Joint Annual Meeting of the AFS, Angola, Indiana. February 14-15.
 - 157) Breen[§], M.J., **C.R. Ruetz III**, and K.J. Thompson. 2007. Relocation of PIT-tagged mottled sculpins: evaluating diel and seasonal recapture probabilities in a small Michigan

- stream. Oral presentation at the Indiana-Michigan-Ohio Chapters Joint Annual Meeting of the AFS, Angola, Indiana. February 14-15.
- 158) **Ruetz, C.R., III**, D.G. Uzarski, and A.D. Parker. 2006. Index of biotic integrity for Muskegon and White lakes. *Invited* oral presentation at the Fall Work Session: Setting Local Criteria for Removal of Loss of Fish and Wildlife Habitat and Degradation of Fish and Wildlife Populations Beneficial Use Impairments, Michigan Statewide Public Advisory Council, Dearborn, Michigan. November 13-14.
 - 159) **Ruetz, C.R., III**, J.C. Trexler, N.J. Dorn, J.H. Chick, and W.L. Loftus. 2006. Seasonal use of alligator ponds by wetland fishes: dealing with drought. Oral presentation at the 91st Annual Meeting of the ESA, Memphis, Tennessee. August 6-11.
 - 160) Breen[§], M.J., and **C.R. Ruetz III**. 2006. Consumption of leaf litter by stream invertebrates: evaluating effects of leaf size. Poster presentation at the 91st Annual Meeting of the ESA, Memphis, Tennessee. August 6-11.
 - 161) **Ruetz, C.R., III**, D.G. Uzarski, M.J. Cooper, and T.M. Burton. 2006. Distribution of round gobies in coastal areas of Lake Michigan: Are wetlands resistant to invasion? Poster presentation at the Workshop on Computational Science for Natural Resource Managers, University of Tennessee, Knoxville. April 19-22.
 - 162) **Ruetz, C.R., III**. 2006. Distribution of round gobies in Lake Michigan drowned river mouths. *Invited* oral presentation at the Michigan Sea Grant Regional Fishery Workshop, Grand Haven, Michigan. March 25.
 - 163) Cooper, M.J., **C.R. Ruetz III**, D.G. Uzarski, and T.M. Burton. 2006. Distribution of round gobies in Lake Michigan drowned river mouth lakes and wetlands: Do coastal wetlands provide refugia for native species? Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, East Lansing, Michigan. March 6-7.
 - 164) Reneski[†], M.R., **C.R. Ruetz III**, and D.G. Uzarski. 2006. Round goby predation on zebra mussels: Experimental evidence from coastal lakes. Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, East Lansing, Michigan. March 6-7.
 - 165) VanHaitsma[§], D.L., and **C.R. Ruetz III**. 2006. Round gobies as prey: Are they equivalent to native fish species? Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, East Lansing, Michigan. March 6-7.
 - 166) **Ruetz, C.R., III**, B.M. Earl, and S.L. Kohler. 2005. Evaluating PIT tags for marking sculpins. Poster presentation at the 66th MFWC, Grand Rapids, Michigan. December 11-14.
 - 167) Breen[†], M.J., and **C.R. Ruetz III**. 2005. Gear bias in fyke nets: evaluating soak time, fish density, and predators. Poster presentation at the 66th MFWC, Grand Rapids, Michigan. December 11-14.
 - 168) Reneski[†], M.R., **C.R. Ruetz III**, and D.G. Uzarski. 2005. Examining the role of water quality and round goby predation on zebra mussels. Poster presentation at the 66th MFWC, Grand Rapids, Michigan. December 11-14.
 - 169) Parker, A.D., D.G. Uzarski, **C.R. Ruetz III**, and T.M. Burton. 2005. Comparison of Great Lakes yellow perch diets in nearshore and coastal wetland habitats. Oral presentation at the 66th MFWC, Grand Rapids, Michigan. December 11-14.
 - 170) Uzarski, D. G., T. M. Burton, **C.R. Ruetz III**, M.J. Cooper, and K. Gyekis. 2005. Fish habitat use in Great Lakes coastal wetlands. *Invited* oral presentation at the Conference on Coastal Wetlands, Delta Marsh Field Station, University of Manitoba. September 12-15.

- 171) Trexler, J.C., T. McElroy, and **C.R. Ruetz III**. 2005. Extinction, recolonization, and spatial genetic structure in ecological time. Oral presentation at the 90th Annual Meeting of the ESA, Montreal, Canada. August 7-12.
- 172) **Ruetz, C.R., III**, D.L. VanHaitsma[§], and M.J. Breen[†]. 2005. Habitat complexity of stream leaf packs: effects on benthic macroinvertebrates and leaf litter breakdown. Oral presentation at the 53rd Annual Meeting of the NABS, New Orleans, Louisiana. May 22-27.
- 173) Uzarski, D.G., **C.R. Ruetz III**, T.M. Burton, and M.J. Cooper. 2005. Fish community structure across a natural environmental gradient: implications for drowned river mouth ecosystems. Oral presentation at the Annual Meeting of the IAGLR, Ann Arbor, Michigan. May 23-27.
- 174) Parker, A.D., D.G. Uzarski, **C.R. Ruetz III**, and T.M. Burton. 2005. Yellow perch (*Perca flavescens*) diets in wetlands vs. open water habitats of Saginaw Bay. Oral presentation at the IAGLR, Ann Arbor, Michigan. May 23-27.
- 175) Breen[†], M.J., and **C.R. Ruetz III**. 2005. Gear bias in fyke nets: evaluating soak time, fish density, and predators. Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, Roscommon, Michigan. February 7-9.
- 176) Parker, A., D.G. Uzarski, and **C.R. Ruetz III**. 2005. Yellow perch (*Perca flavescens*) diets in wetlands vs. open water habitats of Saginaw Bay. Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, Roscommon, Michigan. February 7-9.
- 177) VanHaitsma[§], D.L., and **C.R. Ruetz III**. 2005. Round gobies as prey: energetically are they on the same playing field as native species? Oral presentation at the Annual Meeting of the Michigan Chapter of the AFS, Roscommon, Michigan. February 7-9.
- 178) Trexler, J.C., T. McElroy, **C.R. Ruetz III**, and W.F. Loftus. 2004. Extinction, recolonization, and metacommunity structure in Everglades wetlands: spatial dynamics of aquatic communities driven by recurrent disturbance. Oral presentation at the 1st National Conference on Ecosystem Restoration, Lake Buena Vista, Florida. December 6-10.
- 179) Wolski, W.F., J.C. Trexler, J. Knouft, **C.R. Ruetz III**, and W.F. Loftus. 2004. Patterns of movement of Florida gar (*Lepisosteus platyrhincus*) in the Everglades revealed by radio telemetry. Poster presentation at the 1st National Conference on Ecosystem Restoration, Lake Buena Vista, Florida. December 6-10.
- 180) **Ruetz, C.R., III**, L.C. Nemeth, and B.A. Biddanda. 2004. Initiating long-term fish monitoring in a Michigan lake. Poster presentation at the 134th Annual Meeting of the AFS, Madison, Wisconsin. August 22-26.
- 181) Trexler, J.C., T. McElroy, and **C.R. Ruetz III**. 2004. Extinction, recolonization, and spatial genetic structure in ecological time. The Evolution Conference 2004, Ft. Collins, Colorado. June 26-30.
- 182) **Ruetz, C.R., III**, L.C. Nemeth, and B.A. Biddanda. 2003. Fish monitoring in Muskegon Lake: preliminary results. Oral presentation at the Lake Michigan: State of the Lake Conference, Muskegon, Michigan. October 21-22.
- 183) **Ruetz, C.R., III**, J.C. Trexler, F. Jordan, W.F. Loftus, and S. Perry. 2003. Spatial and temporal patterns of fish population dynamics in the Florida Everglades. Oral presentation at the 51st Annual Meeting of the NABS, Athens, Georgia. May 27-31.
- 184) **Ruetz, C.R., III**, J.C. Trexler, F. Jordan, W.F. Loftus, and S. Perry. 2003. Spatial and temporal patterns of fish population dynamics in the Everglades. Oral presentation at the

- Joint Conference on the Science and Restoration of the Greater Everglades and Florida Bay Ecosystems, Palm Harbor, Florida. April 13-18.
- 185) Trexler, J.C., F. Jordan, **C.R. Ruetz III**, J.H. Chick, W.F. Loftus, and S. Perry. 2003. Use of long-term monitoring data for fishes and macroinvertebrates in the development of performance measures for the modified water-delivery project. Oral presentation at the Joint Conference on the Science and Restoration of the Greater Everglades and Florida Bay Ecosystems, Palm Harbor, Florida. April 13-18.
 - 186) Wolski, L.F., J.C. Trexler, J. Knouft, **C.R. Ruetz III**, and W.F. Loftus. 2003. Patterns of movement of Florida gar (*Lepisosteus platyrhincus*) in the Everglades revealed by radio telemetry. Oral presentation at the Joint Conference on the Science and Restoration of the Greater Everglades and Florida Bay Ecosystems, Palm Harbor, Florida. April 13-18.
 - 187) **Ruetz, C.R., III**, A.L. Hurford[†], and B. Vondracek. 2001. Interspecific interactions between brown trout and slimy sculpin: a test of competition and facilitation. Poster presentation at the 131st Annual Meeting of the AFS, Phoenix, Arizona. August 19-23.
 - 188) **Ruetz, C.R., III**, R.M. Newman, and B. Vondracek. 2001. Complex trophic interactions in a coldwater stream: fish, benthic macroinvertebrates, and periphyton. Oral presentation at the 86th Annual Meeting of the ESA, Madison, Wisconsin. August 5-10.
 - 189) **Ruetz, C.R., III**, R.M. Newman, and B. Vondracek. 2001. Top-down control in a detritus-based food web: fish, shredders, and leaf breakdown in a coldwater stream. Oral presentation at the 49th Annual Meeting of the NABS, La Crosse, Wisconsin. June 3-8.
 - 190) Vondracek, B., **C.R. Ruetz III**, and A.L. Hurford[†]. 2001. Interactions between brown trout and slimy sculpin: a test of competition and facilitation. Oral presentation at the 49th Annual Meeting of the NABS, La Crosse, Wisconsin. June 3-8.
 - 191) **Ruetz, C.R., III**, A.L. Hurford[†], and B. Vondracek. 2001. Interactions between brown trout and slimy sculpin: a test of competition and facilitation. Oral presentation at the 34th Annual Meeting of the Minnesota Chapter of the AFS, Fargo, North Dakota. March 5-7.
 - 192) Schrader[†], D.A., **C.R. Ruetz III**, B. Vondracek, and R.M. Newman. 2001. Brown trout and slimy sculpin consumption of *Gammarus pseudolimnaeus*: a laboratory test of interspecific interactions. Poster presentation at the 34th Annual Meeting of the Minnesota Chapter of the AFS, Fargo, North Dakota. March 5-7.
 - 193) Hurford[†], A.L., B. Vondracek, and **C.R. Ruetz III**. 2000. Interactions between brown trout and slimy sculpin in Valley Creek, Minnesota. Poster presentation at the 12th Annual St. Croix River Research Rendezvous (St. Croix River Watershed Research Station, Science Museum of Minnesota), Marine on St. Croix, Minnesota. October 17.
 - 194) **Ruetz, C.R., III**, R.M. Newman, and B. Vondracek. 2000. Effects of fish on grazers and periphyton in a coldwater Minnesota stream. Oral presentation at the 130th Annual Meeting of the AFS, St. Louis, Missouri. August 20-24.
 - 195) **Ruetz, C.R., III**, and D.W. Stephens. 2000. A behavioral model of stream drift: effects of multiple predators and habitat quality. Oral presentation at the 48th Annual Meeting of the North American Benthological Society, Keystone Resort, Colorado. May 28-June 1.
 - 196) **Ruetz, C.R., III**, R.M. Newman, and B. Vondracek. 2000. Fish effects on shredders and leaf litter decay in a coldwater Minnesota stream. Oral presentation at the 33rd Annual Meeting of the Minnesota Chapter of the AFS, Saint Cloud, Minnesota. January 20-21.
 - 197) **Ruetz, C.R., III**, R.M. Newman, and B. Vondracek. 1999. Do fish affect leaf litter decay in Valley Creek, Minnesota? Oral presentation at the 11th Annual St. Croix River

- Research Rendezvous (St. Croix River Watershed Research Station, Science Museum of Minnesota), Marine on St. Croix, Minnesota. October 19.
- 198) Jennings, C.A., **C.R. Ruetz III**, and R.E. Cull. 1999. An assessment of robust redhorse reproductive and recruitment success in the Oconee River, Georgia. Oral presentation at the 129th Annual Meeting of the AFS, Charlotte, North Carolina. August 29-September 2.
 - 199) **Ruetz, C.R., III**, B. Vondracek, and R.M. Newman. 1999. Top-down effects of slimy sculpin in Valley Creek, Minnesota. Oral presentation at the 47th Annual Meeting of the NABS, Duluth, Minnesota. May 25-28.
 - 200) **Ruetz, C.R., III**, B. Vondracek, and R.M. Newman. 1998. Potential top-down effects of slimy sculpin in Valley Creek, Minnesota. Oral presentation at the 10th Annual St. Croix River Research Rendezvous (St. Croix River Watershed Research Station, Science Museum of Minnesota), Marine on St. Croix, Minnesota. October 20.
 - 201) **Ruetz, C.R., III**, and C.A. Jennings. 1997. Swimming performance of larval and juvenile robust redhorse: implications for recruitment in the Oconee River, Georgia. Oral presentation at the 127th Annual Meeting of the AFS, Monterey, California. August 24-28.
 - 202) **Ruetz, C.R., III**, and C.A. Jennings. 1997. Instantaneous growth and mortality of alevin channel catfish in the Oconee River, Georgia. Poster presentation at the 127th Annual Meeting of the AFS, Monterey, California. August 24-28.
 - 203) **Ruetz, C.R., III**, and C.A. Jennings. 1997. Growth and mortality of alevin channel catfish in the Oconee River, Georgia. Poster presentation at the AFS Southern Division Midyear Meeting, San Antonio, Texas. February 13-16.
 - 204) **Ruetz, C.R., III**, and C.A. Jennings. 1997. Swimming performance of larval and juvenile robust redhorse: implications for recruitment in the Oconee River, Georgia. Oral presentation at the AFS Southern Division Midyear Meeting, San Antonio, Texas. February 13-16.
 - 205) **Ruetz, C.R., III**, and C.A. Jennings. 1997. Growth and mortality of alevin channel catfish in the Oconee River, Georgia. Oral presentation at the Annual Meeting of the Georgia Chapter of the AFS, Helen, Georgia. January 28-30.
 - 206) **Ruetz, C.R., III**, and C.A. Jennings. 1997. Swimming performance of larval and juvenile robust redhorse: implications for recruitment success in the Oconee River, Georgia. Oral presentation at the Annual Meeting of the Georgia Chapter of the AFS, Helen, Georgia. January 28-30.
 - 207) **Ruetz, C.R., III**, and C.A. Jennings. 1996. Reproductive and recruitment success of robust redhorse in the Oconee River, Georgia. Poster presentation at the AFS Southern Division Midyear Meeting, Mobile, Alabama. February 22-26.
 - 208) **Ruetz, C.R., III**, and C.A. Jennings. 1996. Reproductive and recruitment success of robust redhorse in the Oconee River. Oral presentation at the Annual Meeting of the Georgia Chapter of the AFS, Brunswick, Georgia. January 23-25.

Invited Academic Seminars:

- *Connectivity and movement of fishes inhabiting Lake Michigan drowned river mouths*, Graduate Seminar Series, Department of Forestry and Natural Resources, Purdue University (West Lafayette, Indiana), 2018

- *Patterns of fish distribution in drowned river mouths*, Central Michigan University Biological Station (Beaver Island, Michigan), 2017
- *Using fish to assess restoration success in Muskegon Lake*, Great Lakes Environmental Research Laboratory, National Oceanic & Atmospheric Administration (Ann Arbor, Michigan), 2012
- *Patterns of fish distribution in drowned river mouth lakes*, Graduate Student Organization, Department of Fisheries and Wildlife, Michigan State University (East Lansing, Michigan), 2011
- *Ecology of the invasive round goby: implications for the Great Lakes food web*, Department of Geology, Geography and Environmental Studies, Calvin College (Grand Rapids, Michigan), 2010
- *Fish monitoring in Muskegon Lake: gear bias and ecological effects of round gobies*, Great Lakes Environmental Research Laboratory, National Oceanic & Atmospheric Administration (Ann Arbor, Michigan), 2005
- *Top-down control by fish in stream food webs*, Departments of Biology and Chemistry, Lake Superior State University (Sault Ste. Marie, Michigan), 2004
- *Top-down control by fish in stream food webs*, Biology Department, Eastern Michigan University (Ypsilanti, Michigan), 2003
- *Top-down control by fish in stream food webs*, Kellogg Biological Station, Michigan State University (Hickory Corners, Michigan), 2003
- *Effects of trout and sculpins on benthic macroinvertebrates, periphyton, and leaf litter decay in Valley Creek, Minnesota*, Department of Biological Sciences, Florida International University (Miami, Florida), 2002

Invited Public Seminars:

- *Invasive fish species in the Great Lakes*, Owashtanong Islands Audubon Society (Grand Haven, Michigan), 2008
- *Distribution and ecological impacts of round gobies*, West Michigan Walleye Club (Grand Rapids, Michigan), 2006

PROFESSIONAL ORGANIZATIONS

- International Association of Great Lakes Research, 2006-present
- Ecological Society of America (Sections: Aquatic Ecology), 1998-present
- Society for Freshwater Science (formerly known as North American Benthological Society), 1998-present
- American Institute of Fishery Research Biologists (Associate 1997, Member 2004), 1997-present
- American Fisheries Society (Education Section, Michigan Chapter), 1993-present
Offices held in Michigan Chapter of the American Fisheries Society: President (2008), President-Elect (2007), and Past-President (2009)

GRANTS & CONTRACTS

External:

- 1) U.S. Environmental Protection Agency, Sub-award from Central Michigan University, 2021-2025, PI, Continuate of the GLCWMP: 2020-2025 (Total: \$245,000)

- 2) Grand Traverse Band of Ottawa and Chippewa Indians, 2020-2022, PI, Ecological monitoring and assessment of the Boardman River (\$35,000)
- 3) National Oceanic & Atmospheric Administration, Subcontract from West Michigan Shoreline Regional Development Commission, 2020-2022, PI, Little Cedar Creek fish passage restoration: pre-restoration monitoring (\$9500)
- 4) National Oceanic and Atmospheric Administration, Michigan Space Grant Consortium, 2020-2021, co-PI (M. Mader, co-PI), Something fishy is going on: effects of shoreline development and landcover on fish communities along a north-south latitudinal gradient in eastern Lake Michigan (\$5000)
- 5) Little River Band of Ottawa Indians, 2019, PI, Muskegon River lake sturgeon “rescue” (\$2700)
- 6) Ottawa County Parks and Recreation, 2018-2020, PI, Aquatic surveys at Riverside Park (\$16,421)
- 7) National Oceanic & Atmospheric Administration, Subcontract from West Michigan Shoreline Regional Development Commission, 2018-2020, PI, Lower Muskegon River habitat restoration project: fish and invertebrate monitoring (\$26,000)
- 8) Little River Band of Ottawa Indians, 2018-2019, PI, Evaluating remote site incubators: implications for reintroduction of Arctic grayling to Michigan (Total: \$31,000)
- 9) Michigan Department of Natural Resources, 2017-2020, PI, Monitoring lake sturgeon spawning success in the Kalamazoo River (Total: \$24,232)
- 10) U.S. Army Corps of Engineers, 2017, PI, White Lake fish sampling (Total: \$2,126)
- 11) Little River Band of Ottawa Indians, 2017, PI, Evaluating remote site incubators in tributary streams of the Manistee River (Total: \$15,000)
- 12) Milton and Susan Meston Environmental Fund of the Community Foundation for Muskegon County, 2016-2017, co-PI (S. LaGory, co-PI), Seasonal ecology of brown trout and mottled sculpin in a Michigan stream (Total: \$1,000)
- 13) U.S. Environmental Protection Agency, Sub-award from Central Michigan University, 2016-2020, PI, Coastal wetland monitoring: continued implementation by the GLCWC (Total: \$257,620)
- 14) Consumers Energy, 2015-2018, PI, Movements and habitat use of adult lake sturgeon in Muskegon Lake and the Muskegon River (Total: \$17,697)
- 15) National Oceanic & Atmospheric Administration, Subcontract from West Michigan Shoreline Regional Development Commission, 2015-2018, PI, Muskegon River Veterans Memorial Park fisheries and water quality monitoring (Total: \$20,000)
- 16) Great Lakes Fishery Trust, 2014-2019, PI (D.J. Janetski, R.A. Thum, T. Höök, D. Clapp, co-PIs), Yellow perch stock assessment in drowned river mouth lakes and nearshore Lake Michigan (Total: \$196,310; Ruetz: \$111,018)
- 17) Outdoor Discovery Center, 2014-2018, PI, Project Clarity monitoring plan: fish (Total: \$14,000)
- 18) U.S. Fish & Wildlife Service, Subcontract from Gun Lake Tribe, 2014-2017, Principal Investigator (PI), Spawning habitat restoration and egg and larval surveys in the Kalamazoo River (Total: \$10,089)
- 19) Illinois Department of Natural Resources, Sub-award from University of Illinois, 2013-2015, PI, Survey of Lake Michigan microzooplankton community: critical information for understanding the risk from aquatic nuisance species (Total: \$19,048)
- 20) Gun Lake Tribe, 2012-2013, co-PI (R.A. Thum, co-PI), Lake sturgeon population dynamics in the Kalamazoo River (Total: \$50,000)

- 21) U.S. Environmental Protection Agency, Sub-award from Muskegon Conservation District, 2011, PI, Fish monitoring for White Lake (Total: \$8,860)
- 22) Michigan Department of Environmental Quality, 2011, co-PI (R.R. Rediske, PI), Fish contaminant assessment of Muskegon, White, and Pentwater lakes (Total: \$24,950; Ruetz: \$5,176)
- 23) Consumers Energy, Subcontract from URS, Inc., 2011, co-PI (R.R. Rediske, co-PI), Fish contaminant monitoring: Webber hydroelectric project (Total: \$4,743; Ruetz: \$1,743)
- 24) U.S. Environmental Protection Agency, Sub-award from Central Michigan University, 2010-2015, PI, GLIC: Implementing a Great Lakes Basin Wide Coastal Wetland Monitoring Program (Total: \$232,910)
- 25) Michigan Department of Natural Resources, 2010-2014, PI (K.M. Smith, co-PI), Demographic and reproductive status of lake sturgeon in the Muskegon River (Total: \$100,264)
- 26) Consumers Energy, Subcontract from URS, Inc., 2010-2014, PI (K.M. Smith, co-PI), Demographic and reproductive status of lake sturgeon in the Muskegon River (Total: \$99,940)
- 27) Tribal Wildlife Grant, U.S. Fish & Wildlife Service, Subcontract from Gun Lake Tribe, 2009-2011, PI, Juvenile lake sturgeon (*Acipenser fulvescens*) assessments in the Kalamazoo and Grand rivers, Michigan (Total: \$98,490)
- 28) National Oceanic & Atmospheric Administration (American Recovery and Reinvestment Act), Subcontract from West Michigan Shoreline Regional Development Commission, 2009-2012, co-PI (A. Steinman, co-PI), Muskegon Lake Area of Concern habitat restoration (Total: \$166,021; Ruetz: \$33,232)
- 29) Michigan Department of Natural Resources, 2009-2011, PI (E. Rutherford, co-PI), Reproductive and recruitment success of walleye in the Muskegon River (Total: \$157,817; Ruetz: \$75,085)
- 30) Consumers Energy, Subcontract from URS, Inc., 2008-2010, PI (K.M. Smith, co-PI), Recruitment and juvenile ecology of lake sturgeon in the Muskegon River (Total: \$92,348)
- 31) U.S. Department of Transportation, 2007-2011, co-PI (A. Steinman, PI; R.R. Rediske, X. Chu, co-PIs), A study of surface run-off from US 31/Seaway on Little Black Creek, Muskegon County, Michigan (Total: \$277,440)
- 32) Consumers Energy, Subcontract from URS, Inc., 2006-2008, PI, Impingement and entrainment monitoring of fishes at the B.C. Cobb Plant located on Muskegon Lake (Total: \$36,500)
- 33) South Florida Water Management District, Subcontract from Malcolm Pirnie, Inc., 2006-2007, PI (A. Steinman, co-PI), Fish relationships to plant community structure and habitat in Lake Okeechobee, Florida (Total: \$31,627)
- 34) National Fish & Wildlife Foundation, Subcontract from Muskegon Conservation District, 2006-2007, PI, Setting delisting targets for fish population and habitat beneficial use impairments for the White Lake Area of Concern (\$11,119)
- 35) Great Lakes National Program Office, Environmental Protection Agency, Subcontract from Timberland Resource Conservation and Development Area Council, Inc., 2006-2007, co-PI (M. Luttenton, co-PI), Restoring fish and wildlife to Muskegon Lake (Total: \$21,411; Ruetz: \$12,050)
- 36) Coastal Management Program, Michigan Department of Environmental Quality, 2006-2007, co-PI (D.G. Uzarski, PI; T.M. Burton, co-PI), Great Lakes coastal wetlands as refuge for

native fishes: Are wetlands resistant to invasion by recent exotics? (Total: \$40,000; Ruetz: \$16,400)

- 37) Water Quality Monitoring Grant (Emerging Issues), Michigan Department of Environmental Quality, 2006-2007, co-PI (R.R. Rediske, PI; D.G. Uzarski, co-PI), Assessment of persistent bioaccumulative toxic chemicals in Michigan fish from several trophic levels (Total: \$68,143; Ruetz: \$6,843)
- 38) Michigan Space Grant Consortium, National Aeronautics & Space Administration, 2006-2007, PI, Movement of the round goby: Understanding the spread of an invasive species (\$5,000)
- 39) Great Lakes Coastal Program, U.S. Fish & Wildlife Service, 2004-2006, PI (D.G. Uzarski, T.M. Burton, co-PIs), Distribution of round gobies in coastal ecosystems of Lake Michigan: effects of human disturbance (\$10,000)

Internal:

- 40) The Graduate School, GVSU, 2021-2022 (Academic year), PI, Ecological condition of the Boardman River: special project graduate assistantship (\$20,636 [Stipend: \$8,000, Tuition waiver: \$12,636])
- 41) Center for Scholarly and Creative Excellence Mini-Grant Program, GVSU, 2021, Evaluating remote site incubators in Michigan streams: implications for Arctic Grayling reintroduction (\$500)
- 42) The Graduate School, GVSU, 2020-2021 (Academic year), PI, Ecological condition of the Boardman River: special project graduate assistantship (\$20,636 [Stipend: \$8,000, Tuition waiver: \$12,636])
- 43) Student Summer Scholars (Office of Undergraduate Research and Scholarship), 2020, PI, Evaluating an environmental gradient along eastern Lake Michigan (\$7,750)
- 44) Center for Scholarly and Creative Excellence Mini-Grant Program, GVSU, 2019, Yellow perch genetic structure and habitat use among connected habitats in eastern Lake Michigan (\$400)
- 45) The Graduate School, GVSU, 2018-2019 (Academic year), PI, Native Arctic grayling research: special project graduate assistantship (\$19,394 [Stipend: \$8,000, Tuition waiver: \$11,826])
- 46) The Graduate School, GVSU, 2017-2018 (Academic year), PI, Native Arctic grayling research: special project graduate assistantship (\$19,826 [Stipend: \$8,000, Tuition waiver: \$11,394])
- 47) Student Summer Scholars, GVSU, 2014, PI, Spatial patterns of fish communities in Lake Michigan tributaries (\$6000)
- 48) Office of Graduate Studies, GVSU, 2013-2014 (Academic year), PI, Fisheries biology and population genetics: special project graduate assistantship (\$17,846 [Stipend: \$8,000, Tuition waiver: \$9,846])
- 49) Summer Target Inquiry Teachers' Program, College of Liberal Arts and Science, GVSU, 2013, PI, Transport of benthic macroinvertebrates in streams (\$3,000)
- 50) Interdisciplinary Research Initiative, GVSU, 2012, co-PI (J. McNair, PI; F. Alayont, D. Bergman, D. Frobish, E. Synder, co-PIs), An integrated empirical, theoretical, and statistical study of turbulent particle transport in streams (\$8,195)
- 51) Student Summer Scholars, GVSU, 2011, PI, Comparing two methods for estimating stream fish abundance (\$6,000)

- 52) Student Summer Scholars, GVSU, 2009, co-PI (R.A. Thum, co-PI), Population structure of the invasive round goby in Lake Michigan (\$6,000)
- 53) Student Summer Scholars, GVSU, 2008, co-PI (R.A. Thum, co-PI), Dispersal and gene flow of an invasive fish in Lake Michigan (\$6,000)
- 54) Student Summer Scholars, GVSU, 2007, PI, Risk of multiple predators to stream invertebrates across a gradient of habitat complexity (\$5,929)
- 55) Student Summer Scholars, GVSU, 2006, PI, Evaluating tagging methods and movement patterns of round gobies (\$5,420)
- 56) Student Summer Scholars, GVSU, 2004, PI, What factors control fyke-net catch? Implications for fish monitoring in Muskegon Lake (\$3,500)

HONORS & AWARDS

- Best Student Poster Award, Annual Meeting of the Michigan Chapter of the American Fisheries Society (Student: B.S. Harris; Co-authors: C.R. Ruetz III, A.C. Wieten, M.E.L. Altenritter & K.M. Smith), 2014
- Distinguished Graduate Mentoring Award, Center for Scholarly and Creative Excellence, Grand Valley State University, 2013
- President, Michigan Chapter of the American Fisheries Society, 2008
- Outstanding Faculty Mentor Award, Graduate and Professional Student Organization, GVSU, Fall 2007
- Best Student Paper, Annual Meeting of the Michigan Chapter of the American Fisheries Society (Student: M.J. Breen; Co-authors: C.R. Ruetz III & K.J. Thompson), 2007
- Certified Fisheries Professional (Associate, 1998; Professional, 2005), American Fisheries Society, 2011(expires Dec. 2016)
- Best Student Poster Award, Honorable Mention, American Fisheries Society, 2001
- Doctoral Dissertation Fellowship, Graduate School, University of Minnesota, 2001
- John E. Skinner Memorial Award [Travel grant to annual meeting], American Fisheries Society, 2000
- Olson-Wallace Award in Zoology, University of Minnesota Chapter, Sigma Xi, 2000
- Research Assistance Award [Travel grant to a conference], American Institute of Fishery Research Biologists, 1999 & 2001
- Cargill Fellowship, Department of Fisheries and Wildlife, University of Minnesota, 1997-2001

TEACHING & MENTORING

Courses Taught:

- BIO 362 Fisheries Biology (4 credits), Biology Department, GVSU, Fall (every year) 2003-present
- NRM 552 (formerly NRM 580/680) Fisheries Management (3 credits), Biology Department, GVSU, Winter 2005, 2007, 2009, 2011, 2013, 2015, 2017, 2019 (taught as NRM699), 2021
- NRES 3000 Colloquium in Natural Resources: Aquatic Ecology (1 credit), College of Natural Resources, University of Minnesota, Fall 1999

Guest Lectures:

- Invasive Sea Lamprey, Native Lake Sturgeon, and Reintroduction of Arctic Grayling, HNR280 Water in a Changing World (Fall 2020), GVSU

- Great Lakes Fishes: Invasive Sea Lamprey and Native Lake Sturgeon, HNR280 Water in a Changing World (Fall 2019), GVSU
- Fish Sampling Methods and Abundance Estimation (1-hr lecture & 2-hr backpack electrofishing demonstration), BIO 580 Field Techniques (Fall 2017), GVSU
- Fish Ecology of the Great Lakes, BIO 580 Advanced Aquatic Ecology (Fall 2017), GVSU
- Aquatic Community Ecology (two 3-hr lectures), BIO 580 Advanced Aquatic Ecology (Fall 2015), GVSU
- A personal perspective on being a fisheries scientist, NRM 150 Introduction to Natural Resources (Fall 2009, Winter 2010, Winter 2011, Spring/Summer 2012, Winter 2014, Fall 2016), GVSU
- Research opportunities in the Ruetz lab, CHM 610 Graduate Research Seminar (Winter 2013), GVSU
- Marine Fisheries Management, NRM 380 Marine Conservation (Fall 2011), GVSU
- Experimental design and pseudoreplication, BIO 610 Scientific Methodology (Fall 2006), GVSU
- Ecology of the Everglades: fish population dynamics, BIO 418 Regional Field Biology (Winter 2004) and BIO 440 Limnology (Fall 2004), GVSU
- Competition, BIO 442 Fish Ecology (Winter 2003), GVSU
- Density-independent Population Growth, PCB 5423 Advanced Ecology: Populations and Communities (Fall 2002), Florida International University
- Modeling Stream Drift, FW 8459 Stream and River Ecology (Fall 2000), University of Minnesota
- Stream Trophic Interactions, FW 8460 Fish Habitats and Restoration (Fall 1999), University of Minnesota

Mentoring of Undergraduate Students:

- 1) Brendan May, Annis Foundation Intern, AWRI, Summer 2021
- 2) Haley Kuhnle, Student Summer Scholars, AWRI, Summer 2020
- 3) Matthew Silverhart, Annis Foundation Intern, AWRI, Summer 2020
- 4) Christian Yap, Wipperfurth Student Research Scholarship, AWRI, Fall 2019
- 5) Bert Carey, Annis Foundation Internship, AWRI, Summer 2018
- 6) Maria Scarborough, Annis Foundation Internship, AWRI, Summer 2017
- 7) Ellen James, National Science Foundation Research Experience for Undergraduates in Quantitative Environmental Science and Technology (NSF-REU QUEST), Summer 2017
- 8) Alan Mock, NSF-REU QUEST, AWRI, Summer 2016
- 9) Michael MacEachron, Annis Foundation Internship, AWRI, Summer 2016
- 10) Samantha Morsches, Student Summer Scholars, AWRI, Summer 2014
- 11) Jennifer Waller, Annis Internship, AWRI, Summer 2013
- 12) Allison Kneisel, Sciencetech Internship, AWRI, Summer 2011
- 13) Brandon Harris, Student Summer Scholars, GVSU, Summer 2011; Wipperfurth Student Research Scholarship, AWRI, Fall 2011
- 14) Andrea (Koster) Akins, Annis Summer Internship, AWRI, Summer 2010
- 15) Elizabeth LaRue (Co-mentor with R. Thum), Student Summer Scholars, GVSU, 2009; Wipperfurth Student Research Scholarship, AWRI, Fall 2009
- 16) Alex Wieten, Sciencetech Internship, AWRI, Summer 2009

- 17) Carson Prichard, Allen Hunting Internship, AWRI, Summer 2008; BIO 499 Research in Biology, GVSU, Winter 2009
- 18) Michael B. Stacey (Co-mentor with R. Thum), Student Summer Scholars, GVSU, 2008; Wipperfurth Student Research Scholarship, AWRI, Fall 2008
- 19) Matthew Altenritter, Student Summer Scholars, GVSU, 2007; Wipperfurth Student Research Scholarship, AWRI, Fall 2007
- 20) Megan N. Cookingham, Student Summer Scholars, GVSU, 2006; VanderMey Internship, AWRI, Winter 2008
- 21) Betsy Shafter (Co-mentor with D. Uzarski), Sciencetech Internship, AWRI, Summer 2006
- 22) Melissa Reneski (Co-mentor with D. Uzarski), Allen Hunting Internship, AWRI, Summer 2005
- 23) Matthew J. Breen, Student Summer Scholars, GVSU, 2004; VanderMey Internship, AWRI, Winter 2005
- 24) Rita M. Evans, Summer Internship, GVSU, 2004

Mentoring of Graduate Students:

- 1) Jennifer Woods, Summer Target Inquiry Teachers' Program, College of Liberal Arts and Science, GVSU, 2013

Graduate Committee Chair:

- 1) Nicholas Vander Stelt, MS Student, Biology, GVSU, 2020-present
- 2) Megan Mader, MS Student, Biology, GVSU, 2019-present
- 3) Alan Mock, MS Student, Biology, GVSU, 2017-2019 [*Honors*: Graduate Dean's Citation for Academic Excellence in the Degree Program]; *Thesis*: Evaluating remote site incubators: implications for reintroduction of Arctic grayling in Michigan; *Current Position*: PhD student, Florida International University
- 4) Kaitlyn (Emelander) Dykstra, MS Student, Biology, GVSU, 2016-2018; *Thesis*: Distribution of yellow perch in Great Lakes coastal wetlands; *Current Position*: Farm Manager, Revolutions Farms (Caledonia, MI)
- 5) Jason Lorenz, MS Student, Biology, GVSU, 2015-2021; *Thesis*: Evaluation of newly added lake sturgeon spawning habitat in the Kalamazoo River, Michigan
- 6) Susanna LaGory, MS Student, Biology, GVSU, 2015-2017 [*Honors*: Excellence-in-a-Discipline Award, Biology]; *Thesis*: Seasonal ecology of mottled sculpin and brown trout in a coldwater Michigan stream; *Current Position*: PhD student, Purdue University
- 7) Gregory Chorak, MS Student, Biology, GVSU, 2015-2017; *Thesis*: Yellow perch genetic stock structure in eastern Lake Michigan: what is the importance of drowned river mouth lakes? *Current Position*: PhD student, Montana State University
- 8) Travis Ellens, MS Student, Biology, GVSU, 2014-present; *Thesis*: Seasonal top-down effects of fish in a Michigan stream
- 9) Brandon Harris, MS Student, Biology, GVSU, 2012-2014; *Thesis*: Population status and movements of lake sturgeon in the Muskegon River system, Michigan, USA; *Current Position*: Fish Biologist, U.S. Fish & Wildlife Service (New Franken, WI)
- 10) Jessica (Comben) Wesolek, MS Student, Biology, GVSU, 2012-2014; *Thesis*: Genetic structure of yellow perch populations in coastal areas of eastern Lake Michigan; *Current Position*: Biological Laboratory Technician, Lake Superior State University
- 11) Jared Homola, MS Student, Biology, GVSU, 2011-2013 [*Honors*: Graduate Dean's Citation for Academic Excellence in the Major & Graduate Dean's Citation for Outstanding Thesis,

- Fall 2013]; *Thesis*: Disease ecology of a microsporidian parasite and its effects on mottled sculpin; *Current Position*: Postdoc, Michigan State University
- 12) Alex Wieten, MS Student, Biology, GVSU, 2010-2013; *Thesis*: Status of lake sturgeon in the Muskegon River; *Current Position*: Water Resources Specialist, Gun Lake Tribe
 - 13) Jordan Allison, MS Student, Biology, GVSU, 2009-present; *Thesis*: Reproductive success of walleye in the Muskegon River; *Current Position*: Fisheries Biologist, Pennsylvania Fish & Boat Commission
 - 14) Matthew Altenritter, MS Student, Biology, GVSU, 2008-2010 [*Honors*: Graduate Dean's Citation for Academic Excellence in a Major, Fall 2010]; *Thesis*: Recruitment and juvenile ecology of lake sturgeon in the Muskegon River; *Current Position*: Postdoc, Illinois Natural History Survey, Illinois River Biological Station
 - 15) William D. Keiper, MS Student, Biology, GVSU, 2007-2011; *Thesis*: Stormwater runoff in an urban stream: impacts on stream biota; *Current Position*: Aquatic Biologist, Water Resources Division, Michigan Department of Environmental Quality
 - 16) Kristin (Nelson) Thomas, MS Student, Biology, GVSU, 2006-2008; *Thesis*: Distribution of dreissenid mussels in Great Lakes coastal ecosystems: Are wetlands resistant to invasion? *Current Position*: Aquatic Ecologist, Michigan Council of Trout Unlimited
 - 17) Matthew J. Breen, MS Student, Biology, GVSU, 2005-2008 [*Honors*: Graduate Dean's Citation for Outstanding Master's Thesis in a Major, Winter 2008]; *Thesis*: Movement, habitat use, and foraging behavior of mottled sculpins in a coldwater stream; *Current Position*: Native Aquatics Biologist, Utah Division of Wildlife Resources
 - 18) Dana L. (VanHaitsma) Strouse, MS Student, Biology, GVSU, 2003-2006; *Thesis*: Selective predation by yellow perch: Are round gobies equivalent to native prey? *Current Position*: Environmental Quality Analyst, Water Resources Division, Michigan Department of Environmental Quality

Graduate Committee Member:

- 1) Maggie Petersen, MS Student, Biology, GVSU, 2021-present
- 2) Frederick Glassen, MS Student, Biology, GVSU, 2018-2020
- 3) Taylor Senegal, MS Student, Forestry & Natural Resources, Purdue University, 2018-2019
- 4) Justin Wegner, MS Student, Biology, GVSU, 2015-2017
- 5) Graeme Zaparynski, MS Student, Biology, GVSU, 2015-2016
- 6) Anthony Weinke, MS Student, Biology, GVSU, 2015-2016
- 7) Lindsey Schulte, MS Student, Biology, GVSU, 2014-2015
- 8) Bryan Giordano, MS Student, Biology, GVSU, 2013-2015
- 9) Nicholas Albrecht, MS Student, Biology, GVSU, 2012-2014
- 10) Nathan Evans, PhD Student, Biological Sciences, University of Notre Dame, 2012-2016
- 11) Kathryn Page, MHS Student, Biomedical Sciences, GVSU, 2011-2013
- 12) Neal Swanson, MS Student, Biology, GVSU, 2011-present
- 13) Amanda (Oracz) Potter, MS Student, Biology, GVSU, 2010-2017
- 14) Elizabeth H. Tromp, MS Student, Biology, GVSU, 2010-
- 15) Megan N. Cookingham, Biology, GVSU, 2008-present
- 16) Julie A. Ryan, PhD Student, Biological Sciences, Western Michigan University, 2008-
- 17) Kelli A. Johnson, MS Student, Biology, GVSU, 2007-2010
- 18) Kristofor N. Nault, MS Student, Biology, GVSU, 2007-2011
- 19) T. Garrison Sanders, MS Student, Biology, GVSU, 2007-2009
- 20) Melissa S. Conte, MS Student, Biology, GVSU, 2006-

- 21) Michael Shoemaker, MS Student, Biology, GVSU, 2006-
- 22) Dan Mayes, MS Student, Biology, GVSU, 2006-2007
- 23) Grant Poole, MS Student, Biology, GVSU, 2005-
- 24) Nicholas Gressick, MS Student Biology, GVSU, 2005-2009
- 25) Nicole Y. Stout, MS Student, Biology, GVSU, 2003-2007
- 26) Aaron Parker, MS Student, Biology, GVSU, 2003-2007
- 27) Keto Gyekis, MS Student, Biology, GVSU, 2003-2006

Post-Doctoral Advising:

- David Jenetski, AWRI, GVSU, 2011-2014
- Yakuta Bhagat, AWRI, GVSU, 2009-2011

WORKSHOPS & TRAINING

- Adult CPR/AED Certification, American Red Cross, 2021 (valid for 2 years)
- Data Carpentry Workshop (Ecology), Data Carpentry, 2017
- Introduction to Electrofishing, Smith-Root, Inc., 2008
- America's Boating Course, U.S. Coast Guard Auxiliary, 2007

University Training/Workshops:

- Balancing act: engaging students before and during class. Faculty Teaching & Learning Center (FTLC), GVSU, 2012
- Responsible Conduct of Research Workshop, Center for Scholarly and Creative Excellence, GVSU, 2/25/2012
- Teaching Roundtables (Table topic: Getting them involved), College of Liberal Arts and Sciences, GVSU, 2011
- Inclusion and Diversity, FTLC, GVSU, 2011
- 17th Annual Fall Conference on Teaching & Learning (Workshops: Developing Professionalism in Graduate Students, Psychological Research in Student Learning: Basic Principles and Classroom Strategies), FTLC, GVSU, 2011
- 16th Annual Fall Conference on Teaching & Learning (Workshops: The Problem-Inquiry Method, Interdisciplinary Team-Teaching in Environmental Education), FTLC, GVSU, 2010
- Bias Incident Protocol Training, GVSU, 2009
- News and Views on the ADA Amendments Act of 2008: What faculty need to know, GVSU, 2009
- Inclusion Advocate Training for Employment Searches, GVSU, 2007
- Strategies for Building Inclusive Classrooms, FTLC, GVSU, 2007

SERVICE TO UNIT, COLLEGE, UNIVERSITY, & PROFESSION

Unit:

- Awards Committee (Chair), AWRI, GVSU, 2015-2016
- Graduate Program Committee (AWRI representative), Biology, GVSU, 2011-present
- Space Committee (Chair, beginning July 2013), AWRI, GVSU, 2003-present
- Marketing Committee, AWRI, GVSU, 2008-present
- Safety Committee, AWRI, GVSU, 2010-present

- Search Committee, AWRI, GVSU
Office Coordinator, Fall 2019
Aquatic Ecologist—Assistant Professor (75% Biology, 25% AWRI), 2017
Adjunct Research Assistant – Coastal Wetlands (chair), 2014
Assistant/Associate Professor of Climate Modeling/Climatology, 2011
Assistant/Associate Research Scientist in Aquatic Environmental Sciences, 2008
Assistant Research Scientist (Aquatic Ecologists/Limnologists), 2007
Research Assistant II, 2006

College:

- Attendee-Facilitator, Super STAT-urday (event to expose middle-school students to applications of statistics), Regional Math and Science Center, GVSU, Nov. 2013
- Research/Scholarship Committee, Science and Mathematics Cluster, College of Liberal Arts and Sciences, GVSU, 2004-2005

University:

- Task Force for Development of New Program Proposal: Fisheries and Aquatic Sciences, B.S., 2019-2021
- Faculty-Staff Campaign Volunteer, GVSU, 2010-present
- Transitions Fall Orientation Program, Faculty Discussion Leader, GVSU, 2010, 2011, 2012, 2013
- Honors College Council, GVSU, 2010-2011
- Student Scholarship Day Planning Committee, GVSU, 2007
- Awards of Distinction Scholarship Competition, Interviewer, GVSU, 2007, 2008, 2009, 2013
- Freshman Orientation, Faculty Advisor, GVSU, 2007

Community:

- Panelist, Issues & Ale Forum on Asian carp, Michigan Public Radio, Grand Haven, Michigan, 2012
- Muskegon Lake Watershed Partnership, 2005-present

Profession:

- Book Editorial Advisory Board, American Fisheries Society, 2008-present
- Associate Editor, American Midland Naturalist, 2011-present
- Council of Fellows, Cooperative Institute for Limnology and Ecosystem Research, 2011-2016
- Minnesota Sea Grant Technical Advisory Committee (tasked with reviewing research proposals), 2015.
- Editorial Board, ISRN Ecology, 2011-2012
- Student Paper Judging Committee for the Annual Meeting, American Fisheries Society, 2011
- Michigan Chapter of the American Fisheries Society
 - Executive Committee, 2009 (Past-President), 2008 (President), 2007 (President-Elect)
 - Panelist, Panel Discussion: *Finding, applying, and preparing for a job or graduate school*, Annual Meeting (Petoskey, Michigan), 6 April 2011
 - Nominations Committee, 2007-2008 (Member), 2009 (Chair)

- Auditing Committee, Co-chair, 2006-2008
- Student Presentation/Poster Judge
 - Michigan Chapter of the American Fisheries Society, 2014, 2016
 - Society for Freshwater Science (formerly North American Benthological Society), 2003, 2013, 2018, 2019
 - International Association of Great Lakes Research, 2010
 - Midwest Fish and Wildlife Conference, 2005, 2007
 - Ecological Society of America, 2006
- Program Committee (Posters), 2009 Annual Meeting (Grand Rapids, Michigan), North American Benthological Society, 2008-2009
- Awards Committee, Michigan Chapter Representative, North Central Division of the American Fisheries Society, 2008
- Skinner Award Selection Committee, Education Section, American Fisheries Society, 2008
- Panelist, Graduate Panel, *Beginning Your Professional Journey Workshop*, 68th Midwest Fish and Wildlife Conference (Madison, Wisconsin), 2007
- *Transaction of the American Fisheries Society* Best Paper Subcommittee, Publication Awards Committee American Fisheries Society, 2004 (Member), 2006 (Chair)
- Moderator, Midwest Fish and Wildlife Conference, 2005
- Resolutions Committee, American Fisheries Society, 2004
- Graduate Resources Committee, North American Benthological Society, 1999-2001
- Program Committee, Posters Session, 62nd Midwest Fish and Wildlife Conference (Minneapolis, Minnesota), 1999-2000
- Student Committee Chairperson, Minnesota Chapter, American Fisheries Society, 1998-2000
- Peer Reviewer for: *Book Chapters*—American Fisheries Society Books Department; *Journals*—Acta Zoologica Sinica, American Midland Naturalist, Aquatic Biology, Aquatic Sciences, Archiv für Hydrobiologie, Biological Conservation, Canadian Journal of Fisheries and Aquatic Sciences, Canadian Journal of Zoology, Ecography, Ecological Modelling, Ecological Research, Ecology, Ecology of Freshwater Fish, Ecosphere, Environmental Biology of Fishes, Environmental Practice, Fisheries, Fisheries Management and Ecology, Freshwater Biology, Hydrobiologia, Journal of Fish Biology, Journal of Fish and Wildlife Management, Journal of Great Lakes Research, Journal of the North American Benthological Society, Journal of the World Aquaculture Society, New Zealand Journal of Marine and Freshwater Research, North American Journal of Fisheries Management, Oecologia, Oikos, PLOS ONE, Proceeding of the Southeastern Fish and Wildlife Association, Transactions of the American Fisheries Society, Western North American Naturalist, Wetlands; *Grant Proposals*—Great Lakes Fishery Trust, Great Lakes Protection Fund, Minnesota Sea Grant, U.S. Fish & Wildlife Service's Great Lakes Fish and Wildlife Restoration Act Grant Program, Wisconsin Sea Grant