

# JESSE R. FISCHER

## CURRICULUM VITAE

SEPTEMBER 2017

### ADDRESS

Department of Applied Ecology  
North Carolina State University  
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Raleigh, North Carolina 27695  
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### EDUCATION

- 2008-2012 Ph.D. Iowa State University  
Major: Fisheries Biology  
Dissertation title: Characterizing lentic fish assemblages and community-environment relationships: an evaluation of natural lakes and reservoirs in Iowa, USA
- 2005-2007 M.S. Kansas State University  
Major: Biology  
Thesis title: Structural organization of Great Plains stream fish assemblages: implications for sampling and conservation
- 1999-2004 B.S. University Nebraska-Lincoln  
Major: Fisheries and Wildlife

### EMPLOYMENT

- 2016-present Research Assistant Professor, Department of Applied Ecology, North Carolina State University
- 2013-2016 Postdoctoral Research Scholar, North Carolina Cooperative Fish and Wildlife Research Unit, Department of Applied Ecology, North Carolina State University
- 2012-2013 Visiting Lecturer, Department of Fisheries and Wildlife Sciences, University of Missouri
- 2008-2012 Graduate Research Assistant (Ph.D.), Department of Natural Resource Ecology and Management, Iowa State University
- 2007-2008 Fisheries Conservation Technician II, Nebraska Game and Parks Commission
- 2005-2007 Graduate Research Assistant (M.S.), Kansas Cooperative Fish and Wildlife Research Unit, Division of Biology, Kansas State University

2003-2005 Stream Monitoring Technician (2003-04) and Crew Leader (2004-05), Nebraska Statewide Stream Fisheries Inventory, University of Nebraska/Nebraska Game and Parks Commission

### **PROFESSIONAL ASSOCIATIONS**

American Fisheries Society (AFS), 2004-present  
Education Section, 2005-present  
Fisheries Management Section, 2005-present  
Student Subsection, 2005-2012  
North Carolina Chapter of the AFS, 2013-present

### **PROFESSIONAL SERVICE**

#### *Professional Society:*

2017-present Southern Division Representative, Education Section of the American Fisheries Society  
2016 Best Student Paper Award Committee, Education Section of the American Fisheries Society, 147<sup>th</sup> Annual Meeting, Tampa, Florida  
2017 Best paper in *North American Journal of Fisheries Management* 2017 Award Committee, American Fisheries Society, 147<sup>th</sup> Annual Meeting, Tampa, Florida  
2016 Best Student Poster Award Committee, Education Section of the American Fisheries Society, 146<sup>th</sup> Annual Meeting, Kansas City, Missouri  
2014-present Professional Development Subcommittee of the American Fisheries Society Board of Professional Certification  
2012-2014 Membership Committee, Education Section of the American Fisheries Society, Co-chair  
2011 Student Colloquium and Student-Mentor Lunch, 141<sup>st</sup> Annual AFS meeting, Seattle, Washington, Co-chair  
2010-2011 Student Subsection of Education Section, American Fisheries Society, President  
2010 Student Colloquium, 140<sup>th</sup> Annual AFS meeting, Pittsburgh, Pennsylvania, Co-coordinator and Moderator  
2010 Excellence in Fisheries Education Award Committee, Education Section of the American Fisheries Society  
2009-2010 Student Subsection of Education Section, American Fisheries Society, President Elect  
2008-2012 Education Section of the American Fisheries Society, Newsletter Editor  
2006 Best Student Poster Award, 136<sup>th</sup> Annual AFS Meeting, Lake Placid, New York, Volunteer Judge  
2005-2007 Fundraising Committee, Kansas Chapter of the American Fisheries Society, Co-chair

- 2005-2007 Webpage Committee, Kansas State Student Subunit of the American Fisheries Society, Chair
- 2005-2007 T-Shirt Design Committee, Kansas State Student Subunit of the American Fisheries Society, Chair
- 2005-2006 Student Subsection, Education Section of American Fisheries Society, North Central Division Representative
- 2005-2006 Kansas State Student Subunit of the American Fisheries Society, President

*Academic:*

- 2017-present Safety Committee, College of Agriculture and Life Sciences North Carolina State University
- 2011 Faculty Search Committee. Graduate Student Representative, Iowa Cooperative Fish and Wildlife Research Unit, Department of Natural Resource Ecology and Management, Iowa State University
- 2009-2010 Graduate and Professional Student Senator, Graduate Student Organization of the Department of Natural Resource Ecology and Management
- 2005-2006 Travel Grant Committee, Biology Graduate Student Association, Kansas State University

*Other Professional Service:*

Reviewed book chapter for:

*Inland Fisheries Management in North America, Third Edition*

Reviewed manuscripts for:

*Acta Ichthyologica et Piscatoria, Aquatic Living Resources, Endangered Species Research, Environmental Management and Assessment, Endangered Species Research, Environmental Monitoring and Assessment, Fisheries, Hydrobiologia, ICES Journal of Marine Biology, Journal of Fish Biology, Journal of Freshwater Science, Neotropical Ichthyology, North American Journal of Fisheries Management, Prairie Naturalist, Transactions of the American Fisheries Society*

**AWARDS AND HONORS**

- 2016 Early Career Professional Award, Education Section of the American Fisheries Society, 146<sup>th</sup> Annual Meeting, Kansas City, Missouri
- 2012 Iowa State University Graduate College Student Marshall, Fall 2012 Commencement
- 2012 Kenneth Carlander Memorial Graduate Scholarship, Department of Natural Resource Ecology and Management, Iowa State University
- 2011 Education Section Certification of Appreciation, American Fisheries Society, 141<sup>st</sup> Annual Meeting, Seattle, Washington

- 2011 Jay N. “Ding” Darling Scholarship, Iowa Natural Heritage Foundation – Department of Natural Resource Ecology and Management, Iowa State University
- 2011 Best Student Poster Presentation, Iowa Chapter American Fisheries Society Iowa Meeting, Lake Rathbun, Iowa
- 2010 Education Section Certification of Appreciation, American Fisheries Society, 140<sup>th</sup> Annual Meeting, Pittsburgh, Pennsylvania
- 2010 Best Student Presentation Finalist, American Fisheries Society, 140<sup>th</sup> Annual Meeting, Pittsburgh, Pennsylvania
- 2010 Kenneth Carlander Memorial Graduate Scholarship, Department of Natural Resource Ecology and Management, Iowa State University
- 2010 Best Student Paper Presentation, Iowa Chapter American Fisheries Society Iowa Meeting, Ames, Iowa
- 2009 Joan Duffy Student Travel Award, 70<sup>th</sup> Midwest Fish and Wildlife Conference, Springfield, Illinois
- 2009 Best Student Presentation Finalist, American Fisheries Society, 139<sup>th</sup> Annual Meeting, Nashville, Tennessee
- 2009 Jay N. “Ding” Darling Scholarship, Iowa Natural Heritage Foundation – Department of Natural Resource Ecology and Management, Iowa State University
- 2009 Best Student Paper Presentation, Iowa Chapter American Fisheries Society Iowa Meeting, Ames, Iowa
- 2009 Best Professional Paper Presentation (awarded to co-author Michael Quist), Iowa Chapter American Fisheries Society Meeting, Ames, Iowa
- 2008 Iowa Chapter American Fisheries Society support for continuing education scholarship, American Fisheries Society, 138<sup>th</sup> Annual Meeting, Ottawa, Ontario
- 2007 John E. Skinner Memorial Award, American Fisheries Society, 137<sup>th</sup> Annual Meeting, San Francisco, California
- 2007 Best Student Paper Presentation, Kansas Chapter of the American Fisheries Society, Iowa-Kansas-Nebraska Chapter AFS Meeting, Council Bluffs, Iowa
- 2007 Best Student Poster Presentation, Kansas Chapter American Fisheries Society, Iowa-Kansas-Nebraska Chapter AFS Meeting, Council Bluffs, Iowa
- 2007 Best Professional Paper Presentation (co-author with Advisor Craig Paukert), Kansas Chapter American Fisheries Society, Iowa-Kansas-Nebraska Chapter AFS Meeting, Council Bluffs, Iowa
- 2007 Otto Tiemeier-Frank Cross Graduate Student Award, Kansas Chapter American Fisheries Society

- 2006 Outstanding Cooperative Research Unit Graduate Student, Kansas Cooperative Fish and Wildlife Research Unit, Kansas State University
- 2006 Janice Lee Fenske Memorial Award, 67<sup>th</sup> Midwest Fish and Wildlife Conference, Omaha, Nebraska
- 2006 Terry C. Johnson Center for Basic Cancer Research Biology Graduate Student Travel Award

#### **AWARDS AND HONORS OF STUDENTS**

- 2017 North Carolina Chapter of the American Fisheries Society Student Travel Award (awarded to advised North Carolina State University graduate student Stephen Parker) American Fisheries Society, 147<sup>th</sup> Annual Meeting, Tampa, Florida
- 2016 Best Student Paper Presentation (awarded to co-author and North Carolina State University graduate student, Casey Grieshaber), American Fisheries Society, 146<sup>th</sup> Annual Meeting, Kansas City, Missouri
- 2016 Best Student Paper Presentation Finalist (awarded to co-author and North Carolina State University graduate student, Gus Engman), American Fisheries Society, 146<sup>th</sup> Annual Meeting, Kansas City, Missouri
- 2012 Best Student Poster Presentation Finalist (awarded to co-author and Iowa State University undergraduate student, Chris Smith), American Fisheries Society, 142<sup>nd</sup> Annual Meeting, St. Paul, Minnesota
- 2010 Best Student Poster Presentation (awarded to co-author and Iowa State University undergraduate student, Nick Johnson), Iowa Chapter American Fisheries Society Meeting, Ames, Iowa
- 2009 Best Student Poster Presentation (awarded to co-authors and Iowa State University undergraduate students, Matt Mork and Scott Bisping), Iowa Chapter American Fisheries Society Meeting, Ames, Iowa
- 2006 Best Poster Presentation (awarded to co-author and Kansas State University undergraduate student, Phil Brinkley), Kansas Chapter American Fisheries Society, Kansas Chapter AFS Meeting, Hays, Kansas

#### **TEACHING**

##### *Primary Instructor:*

- 2017 Introduction to Fisheries Science AEC 420 – North Carolina State University, (Spring semester – 3 credits)
- 2017 Introduction to Fisheries Science Laboratory AEC 423 – North Carolina State University, (Spring semester – 1 credit)

- 2016 Management of Small Impoundments AEC 495/592 – North Carolina State University, Co-instructor with T. Kwak (Fall semester – 2 credits)
- 2014 Management of Small Impoundments AEC 495/592 – North Carolina State University, Co-instructor with T. Kwak (Fall semester – 2 credits)
- 2013 Ecology of Fishes FW 3900 – University of Missouri (Spring semester – 3 credits)
- 2012 Fisheries Management FW 4300 – University of Missouri (Fall semester – 3 credits)

*Teaching Assistant:*

- 2008 Fisheries Techniques AECL 441/541 – Iowa State University
- 2007 Principles of Biology BIO 198 – Kansas State University
- 2006 Fisheries Management and Techniques BIO 696 – Kansas State University
- 2006 Principles of Biology BIO 198 – Kansas State University
- 2005 Principles of Biology BIO 198 – Kansas State University
- 2004 Fisheries Techniques – University of Nebraska-Lincoln

*Workshop Instructor:*

- 2014-present Shad in the Classroom, Intro to Fish Anatomy, Instructed or Co-instructed fish dissections for 30 classes and over 500 students at East Wake Middle School, Raleigh; Lakewood Montessori Middle School, Durham; and the Expedition School, Hillsborough, North Carolina.
- 2014 Developing Standard Fish Sampling Techniques for Reservoirs, Puerto Rico Department of Natural and Environmental Resources, San Juan, Puerto Rico, Co-instructor
- 2014 North Carolina Museum of Natural Sciences, Shad in the Classroom Teacher workshop, Raleigh, North Carolina, Co-instructor
- 2012 American Fisheries Society Continuing Education Course: Otolith and Aging Workshop – Pymatuning Laboratory of Ecology, Organized by the Pennsylvania Chapter of the American Fisheries Society, Instructor
- 2011 American Fisheries Society Continuing Education Course: Age and Growth Workshop – Ames, Iowa, Organized by Iowa State University and the Iowa Chapter of the American Fisheries Society, Assistant Instructor
- 2006 American Fisheries Continuing Education Course: Basic GIS Techniques for Fish Biologists, 31<sup>st</sup> Annual Meeting of the Kansas Chapter, American Fisheries Society, Co-instructor

## RESEARCH MENTORING

### *Graduate students advised:*

- Stephen Parker Thesis title: Population dynamics of Striped Bass in North Carolina Reservoirs. Expected graduation 2019
- April Lamb Thesis title: Resource selection, movement, and an assessment of individualistic stable isotope analysis of invasive Common Carp in Lake Mattamuskeet, North Carolina. Expected graduation 2019

### *Graduate student committee service:*

- Emilee Wooster MS, Stream fish ecology across an urban-rural environmental gradient. Expected graduation 2018

### *Undergraduate students advised:*

- Carl Hintz 2016, Population characteristics of American Eel above and below a migration barrier in the Roanoke River, North Carolina, North Carolina State University
- Mary Keilhauer 2015, Temporal and spatial fish assemblage dynamics of the lower Rio Grande de Arecibo in Puerto Rico. Doris Duke Conservation Scholars Program, North Carolina State University
- Devon Wilcox 2015, Abundance dynamics of migrating amphidromous post-larvae into the Rio Grande de Arecibo in Puerto Rico. Doris Duke Conservation Scholars Program, North Carolina State University
- Tamara Wells 2015, Estimating harvest of an artisanal post-larval goby fishery in Puerto Rico. Doris Duke Conservation Scholars Program, North Carolina State University
- Selena Ibarra 2015, Dynamics of estuarine predator diets associated with return migrations of amphidromous post-larval fishes in the Rio Grande de Arecibo in Puerto Rico. Doris Duke Conservation Scholars Program, North Carolina State University
- Wilson Xiong 2015, Characterizing the estuarine fish diets of Rio Grande de Arecibo in Puerto Rico. Doris Duke Conservation Scholars Program, North Carolina State University
- Eanas Alia 2014, Salinity profile characterization of the lower Rio Grande de Arecibo in Puerto Rico. Doris Duke Conservation Scholars Program, North Carolina State University
- Malory Gyovai 2014, Creel survey of anglers and cetí fisherman of the Rio Grande de Arecibo in Puerto Rico. Doris Duke Conservation Scholars Program, North Carolina State University

Sakshi Handa 2014, Estimation of *in situ* post-larval Sirajo goby *Sicydium plumier* swimming speeds during return migrations in the Rio Grande de Arecibo in Puerto Rico. Doris Duke Conservation Scholars Program, North Carolina State University

James LaPlante 2014, Characterization of near-shore larval fish assemblages in Puerto Rico. Doris Duke Conservation Scholars Program, North Carolina State University

Demetrius Tillery 2014, Characterizing the estuarine fish assemblage of the Rio Grande de Arecibo in Puerto Rico. Doris Duke Conservation Scholars Program, North Carolina State University

Cole Harty 2012-2013, Evaluating age and growth of sympatric fragile papershell *Leptodea fragilis* and scaleshell mussel *L. leptodon* from the Meramec River, Missouri. Iowa State University

Michael Sundberg 2011-2012, Evaluating the effects low-dose rotenone toxicity on fish, benthic invertebrates, freshwater mussels, and zooplankton. Iowa State University

Grant Scholten 2011-2012, Evaluating the effects of low-dose rotenone toxicity on fish, benthic invertebrates, freshwater mussels, and zooplankton. Iowa State University

Collin Hinz 2011, Assessment of historical changes in Nebraska's fish fauna. Iowa State University

Christopher Smith 2011, Assessment of historical changes in Nebraska's fish fauna. Iowa State University

Rebecca (Burch) Krogman 2009-2010, Relative effects of native and nonnative benthivorous fishes on the structure of benthic macroinvertebrate assemblages: A mesocosm experiment. Iowa State University

————— 2009-2010, Historical trends in Ictalurid catfish commercial harvest in the Upper Mississippi River. Iowa State University

Nick Johnson 2009-2010, A comparison of two different modified fyke nets to sample fish assemblages in Iowa lakes. Iowa State University

Andrew Schaefer 2009, Population characteristics of central stoneroller in central Iowa streams. Iowa State University

Scott Bisping 2008-2009, Black bullhead population dynamics in Iowa natural lakes. Iowa State University

————— 2009, Population characteristics of central stoneroller in central Iowa streams. Iowa State University

Matthew Mork 2008-2009, Black bullhead population dynamics in Iowa natural lakes. Iowa State University

Philip Brinkley 2005-2007, Fixative effects on total length of adult stream fishes. Kansas State University



*Post-undergraduate mentoring:*

- Spencer Gardner 2016-2017, A review of age and growth techniques for American Eel. North Carolina State University
- Dale Klingenberg 2010, Design and development of a boat-mounted radio frequency identification antenna for monitoring freshwater mussel populations. Iowa State University

**PUBLICATIONS**

† denotes undergraduate students mentored

*Peer-reviewed journal articles:*

- Engman, A.C., T.J. Kwak, and J.R. Fischer. *Pre-issue online*. Recruitment phenology and pelagic larval duration in Caribbean amphidromous fishes. *Freshwater Science*.  
<http://www.journals.uchicago.edu/doi/pdfplus/10.1086/694176>
- Ivasauskas, T.J., W.N. Xiong, A.C. Engman, J.R. Fischer, T.J. Kwak, and K.R. Rundle. 2017. Relationships among catch, angler satisfaction, and the fish assemblage of an urban small impoundment fishery. *Journal of the Southeastern Association of Fish and Wildlife Agencies* 4:31–38.
- Fischer, J.R. and M.C. Quist. 2014. Gear and seasonal bias associated with abundance and size structure estimates for lentic freshwater fishes. *Journal of Fish and Wildlife Management* 5:394–412.
- Fischer, J.R. and M.C. Quist. 2014. Characterizing lentic freshwater fish assemblages using multiple sampling methods. *Environmental Monitoring and Assessment* 186:4461–4474.
- Smith, C.D.†, J.R. Fischer, and M.C. Quist. 2014. Historical changes in Nebraska's lotic fish assemblages: a spatiotemporal assessment. *American Midland Naturalist* 172:160–184.
- Fischer, J.R., R.M. Burch†, and M.C. Quist. 2013. Influences of native and non-native benthivorous fishes on aquatic ecosystem degradation. *Hydrobiologia* 711:187–199.
- Dzul, M.C., D.B. Gaines, J.R. Fischer, M.C. Quist, and S.J. Dinsmore. 2012. Evaluation of Salt Creek Pupfish (*Cyprinodon salinus salinus*) otoliths for use in age and growth analyses. *Southwestern Naturalist*. 57:412–416.
- Fischer, J.R., T.E. Neebling, and M.C. Quist. 2012. Development and evaluation of a boat-mounted RFID antenna for monitoring freshwater mussel populations. *Freshwater Science (formerly Journal of the North American Benthological Society)* 31:148–153.
- Fischer, J.R., N.P. Johnson†, R.D. Schultz, and M.C. Quist. 2010. A comparison of modified fyke nets to sample fish assemblages and population structure. *Journal of Freshwater Ecology* 25:555–563.

- Bisping†, S.M., M.C. Quist, J.R. Fischer, and A.J. Schaefer†. 2010. Population characteristics of central stonerollers in Iowa streams. *Prairie Naturalist* 42:109–115.
- Fischer, J.R., M.C. Quist, S.L. Wigen, A.J. Schaefer†, T.W. Stewart, and T.M. Isenhardt. 2010. Assemblage and population level responses of stream fish to riparian buffers at multiple spatial scales. *Transactions of the American Fisheries Society* 139:185–200.
- Mork†, M.D., S.M. Bisping†, J.R. Fischer, and M.C. Quist. 2009. Population characteristics of black bullhead in Iowa natural lakes. *Journal of Freshwater Ecology* 24:635–644.
- Fischer, J.R., and C.P. Paukert. 2009. Effects of sampling effort, assemblage similarity, and habitat heterogeneity on estimates of species richness and relative abundance of stream fishes. *Canadian Journal of Fisheries and Aquatic Sciences* 66:277–290.
- Dodds, W.K., J.J. Beaulieu, J.J. Eichmiller, J.R. Fischer, N.R. Franssen, D.A. Gudder, A.S. Makinster, M.J. McCarthy, J.N. Murdock, J.M. O'Brien, J.L. Tank, and R.W. Sheibley. 2008. Nitrogen cycling and metabolism in the thalweg of a prairie river. *Journal of Geophysical Research – Biogeosciences*. 113, G04029, doi:10.1029/2008JG000696.
- Fischer, J.R., and C.P. Paukert. 2008. Habitat relationships with fish assemblages in minimally disturbed Great Plains regions. *Ecology of Freshwater Fish* 17:597–609.
- Paukert, C.P., J. Schloesser, J. Fischer, J. Eitzmann, K. Pitts, and D. Thornbrugh. 2008. Effect of instream sand dredging on fish communities in the Kansas River USA: Current and historical Perspectives. *Journal of Freshwater Ecology*. 23:623–634.
- Brinkley†, P.B., J.R. Fischer, and C.P. Paukert. 2008. The effect of fixative on total length of small-bodied stream fishes. *Journal of Freshwater Ecology*. 23:471–473.
- Fischer, J.R., and C.P. Paukert. 2008. Historical and current environmental influences on an endemic Great Plains fish. *American Midland Naturalist* 159: 364–377.

*Book chapters:*

- Fischer, J.R. and J. D. Koch. *In Press*. Spines and Fin Rays. Pages xx–xx in M.C. Quist and D.A. Isermann, editors. Age and growth of fishes: Principles and techniques. American Fisheries Society, Bethesda, Maryland.
- Kwak, T.J., A.C. Engman, J.R. Fischer, and C.G. Lilyestrom. 2016. Drivers of Caribbean freshwater ecosystems and fisheries. Pages 219–232 in W.W. Taylor, D.M. Bartley, C.I. Goddard, N.J. Leonard, and R. Welcomme, editors. Freshwater, fish and the future: proceedings of the global cross-sectoral conference. Food and Agriculture Organization of the United

Nations, Rome; Michigan State University, East Lansing; and American Fisheries Society, Bethesda, Maryland.

- Krogman†, R.M., J.R. Fischer, M.C. Quist, M.J. Steuck, and M.M. Marron. 2011. Historical trends in ictalurid catfish commercial harvest in the upper Mississippi River. Pages 127–140 in P. Michaletz and V. Travnichek, editors. Conservation, ecology and management of worldwide catfish populations and habitats: Proceedings of the 2<sup>nd</sup> international catfish symposium. American Fisheries Society, Bethesda, Maryland.
- Sindt, A.R., J.R. Fischer, M.C. Quist, and C.L. Pierce. 2011. The status, distribution, and relationship with biotic integrity of ictalurids in Iowa's streams and rivers. Pages 335–347 in P. Michaletz and V. Travnichek, editors. Conservation, ecology and management of worldwide catfish populations and habitats: Proceedings of the 2<sup>nd</sup> international catfish symposium. American Fisheries Society, Bethesda, Maryland.

*In review or revision:*

- Fischer, J.R. and M.C. Quist. *In Revision*. Understanding fish assemblage structure in lentic ecosystems: Relative effects of abiotic factors and management legacies. *Lake and Reservoir Management*.
- Engman, A.C., J.R. Fischer, T.J. Kwak, and M.J. Walter. *In Review*. Diurnal feeding behavior of the American Eel *Anguilla rostrata*. *Food Webs*.
- Fischer, J.R., B.D. Bakevich, C.P. Shea, C.L. Pierce, and M.C. Quist. *In Revision*. Floods, drying, habitat connectivity and fish occupancy dynamics in restored and unrestored oxbows of West-Central Iowa, USA. *Aquatic Conservation*.

*In preparation (only manuscripts with completed drafts):*

- Scholten†, G.M., M.D. Sundberg†, J.R. Fischer, M.C. Quist, G.D. Scholten, R.D. Schultz, M. Flamming, and G. Sobotka. Selective eradication of Gizzard Shad with low-dose rotenone applications. *To be submitted to Fisheries*.
- Fischer, J.R., T.J. Kwak, H.J. Flowers, W.G. Cope, J.M. Rash, D.A. Besler. Condition, diet, and trophic relations of stocked trout in North Carolina streams. *To be submitted to North American Journal of Fisheries Management*.
- Flowers, H.J., T.J. Kwak, J.R. Fischer, W.G. Cope, J.M. Rash, D.A. Besler. Behavior and survival of stocked trout in Appalachian mountain streams. *To be submitted to North American Journal of Fisheries Management*.
- Belyaeva, A., J.R. Fischer, C.T. Filstrup, C.J. Williams, M.C. Quist, and J.A. Downing. An evaluation of ecological integrity for lentic ecosystems using multiple taxonomic indices. *To be submitted to Freshwater Biology*.

## **ADDITIONAL PUBLICATIONS**

- Meyer, H., Q. Phelps, J. Fischer, M. Fincel, M. Hamel, R. Krogman, T. Lang, T. Neebling, L. Pierce, and T. Stubbs. 2015 Aiming to support young professionals. *Fisheries* 40:108.
- Carlson, A.K., J.R. Fischer, L.L. Pierce, D.J. Dembkowski, M.E. Colvin, J.A. Kerns, J.D. Fore. 2015. Purpose, history, and importance of the Student Angle. *Fisheries* 40:81-83.

## **TECHNICAL REPORTS**

- Kwak, T.J., H.J. Flowers, J.R. Fischer, and W. G. Cope. 2016. Stocked trout survival, behavior, and ecology in North Carolina Streams. Federal Aid in Sport Fish Restoration Project F-98-R Final Report to Division of Inland Fisheries North Carolina Wildlife Resources Commission.
- Fischer, J.R., A. Belyaeva, C.T. Filstrup, C.J. Williams, M.C. Quist, and J.A. Downing. 2014. Benchmarks of biological integrity for lake restoration success: Fish, invertebrate, and plankton communities in Iowa lakes. Final Report to Iowa Department of Natural Resources.
- Fischer, J.R., M.C. Quist, and J.A. Downing. 2008. Benchmarks of biological integrity for lake restoration success: fish, invertebrate, and plankton communities in Iowa lakes. Annual Report to Iowa Department of Natural Resources.
- Fischer, J.R., and C.P. Paukert. 2006. Nebraska and Kansas Turner Properties stream inventory. Final Report to Turner Properties, Inc., Bozeman, Montana.

## **TECHNICAL PAPERS PRESENTED**

† denotes undergraduate students mentored and ‡ denotes post-undergraduates mentored

- Fischer, J.R., T.J. Kwak, C. Hintz, R.W. Laney. 2017. Ecology of American Eel in the Roanoke River above and below a hydroelectric dam. 147th Annual Meeting of the American Fisheries Society. Tampa, Florida. PAPER
- Gardner‡, S.T., J.R. Fischer, T.J. Kwak, R.W. Laney. 2017. Towards standardization of age and growth methods and terminology for American Eel: a review and comparison of historical and contemporary approaches. 147th Annual Meeting of the American Fisheries Society. Tampa, Florida. PAPER
- Shea, C.P., J.R. Fischer, B.D. Bakevich, C.L. Pierce, M.C. Quist. 2017. Combining dynamic occupancy models and trait-based approaches to assess the response of stream assemblages to hydrological and hydrothermal variability. Annual Meeting of the Society of Freshwater Science. Raleigh, North Carolina. PAPER
- Engman, A.C., T.J. Kwak, J.R. Fischer, and W.G. Cope. 2017. The ecological role of amphidromous fish recruitment in Caribbean freshwater-marine

- ecotones. Annual Meeting of the Society of Freshwater Science. Raleigh, North Carolina. PAPER
- Engman, A.C., T.J. Kwak, and J.R. Fischer. 2017. Una Jartera Bajo la Luz de la Luna Menguante: The Trophic Function of Postlarval Amphidromous Goby Recruitment. Annual Meeting of the Puerto Rico Chapter of the American Fisheries Society. San Juan, Puerto Rico. PAPER
- Wooster, E.B., C.A. Layman, and J.R. Fischer. 2017. Stream fish ecology across an urban-rural environmental gradient. Annual Meeting of the North Carolina Chapter of the American Fisheries Society. New Bern, North Carolina. PAPER
- Grieshaber, C.A., T.N. Penland, T.J. Kwak, W.G. Cope, R.J. Heise, F.W. Sessions, J.R. Fischer, J.M. Law, and D. Shea. 2017. Intersex, contaminants, and fish in a regulated, Southeastern river. Annual Meeting of the North Carolina Chapter of the American Fisheries Society. New Bern, North Carolina. PAPER
- Fischer, J.R., T.J. Kwak, and A.C. Engman. 2016. Growth, pelagic larval duration, and exploitation of Caribbean amphidromous gobies. 146th Annual Meeting of the American Fisheries Society. Kansas City, Missouri. PAPER
- Kwak, T.J., H.J. Flowers, J.R. Fischer, W.G. Cope, J.M. Rash, and D.A. Besler. 2016. Behavior and survival of stocked trout in southern Appalachian Mountain streams. 146th Annual Meeting of the American Fisheries Society. Kansas City, Missouri. PAPER
- Grieshaber, C.A., T.N. Penland, T.J. Kwak, W.G. Cope, R.J. Heise, F.W. Sessions, J.R. Fischer, J.M. Law, and D. Shea. 2016. Relation of intersex and fish health to contaminants in riverine fishes. 146th Annual Meeting of the American Fisheries Society. Kansas City, Missouri. PAPER (**Best Student Poster Presentation**)
- Engman, A.C., T.J. Kwak, J.R. Fischer, and W.G. Cope. 2016. A half-moonlight feast: trophic function of postlarval amphidromous goby recruitment in Caribbean freshwater-marine ecotones. 146th Annual Meeting of the American Fisheries Society. Kansas City, Missouri. PAPER (**Best Student Poster Presentation Finalist**)
- Iberra†, S., J.R. Fischer, A.C. Engman, A.O. Gill, C.S. Lee Pow, H.V. Daniels, T.J. Kwak, and J.A. Collazo. 2016. Shifts in the diet of Caribbean riverine predators during amphidromous fish migrations. Annual Meeting of the Ecological Society of America. Fort Lauderdale, Florida. POSTER
- Keilhauer†, M., J.R. Fischer, A.C. Engman, A.O. Gill, C.S. Lee Pow, H.V. Daniels, T.J. Kwak, and J.A. Collazo. 2016. Characterization of a Caribbean riverine fish assemblage: potential effects of postlarval amphidromous migration. Annual Meeting of the Ecological Society of America. Fort Lauderdale, Florida. POSTER
- Wells†, T., M. Gyovai†, E. Diaz, J.R. Fischer, A.C. Engman, A.O. Gill, C.S. Lee Pow, H.V. Daniels, T.J. Kwak, and J.A. Collazo. 2016. Estimation of

- harvest for a Caribbean artisanal postlarvae goby fishery. Annual Meeting of the Ecological Society of America. Fort Lauderdale, Florida. POSTER
- Wilcox†, D., A.C. Engman, J.R. Fischer, A.O. Gill, C.S. Lee Pow, H.V. Daniels, T.J. Kwak, and J.A. Collazo. 2016. Diel patterns, abundance, and biomass of a goby postlarval migration in a Caribbean river. Annual Meeting of the Ecological Society of America. Fort Lauderdale, Florida. POSTER
- Xiong†, W., A.C. Engman, J.R. Fischer, A.O. Gill, C.S. Lee Pow, H.V. Daniels, T.J. Kwak, and J.A. Collazo. 2016. The diet composition of Caribbean estuarine predatory fishes. Annual Meeting of the Ecological Society of America. Fort Lauderdale, Florida. POSTER
- Fischer, J.R., T.J. Kwak, H.J. Flowers, W.G. Cope, J.M. Rash, D.A. Besler. 2016. Condition, diet, and trophic relations of stocked trout in Appalachian Streams. Joint meeting of North Carolina and Virginia Chapters of the American Fisheries Society. Danville, Virginia. PAPER
- Flowers, H.J., T.J. Kwak, J.R. Fischer, W.G. Cope, J.M. Rash, D.A. Besler. 2016. Behavior and Survival of Stocked Trout in Southern Appalachian Mountain Streams. Joint meeting of North Carolina and Virginia Chapters of the American Fisheries Society. Danville, Virginia. PAPER
- Xiong†, W.N., T.J. Ivasauskas, J.R. Fischer, T.J. Kwak, J.D. Wehbie, S.T. Gardner, and K.R. Rundle. 2016. Recreational angler catch, effort, and satisfaction in an urban setting. Joint Meeting of the North Carolina and Virginia Chapters of the American Fisheries Society. Danville, Virginia. PAPER
- Engman, A.C., T.J. Kwak, and J.R. Fischer. 2016. Temporal and spatial patterns of recruitment in Caribbean amphidromous fishes. Annual Meeting of the Puerto Rico Chapter of the American Fisheries Society. Cerillos, Puerto Rico. PAPER
- Alia†, E.W., J.R. Fischer, A.C. Engman, A.O. Gill, C.S. Lee Pow, H.V. Daniels, T.J. Kwak, and J.A. Collazo. 2015. Characterization of the salinity profile of the Arecibo River estuary, a Caribbean island ecosystem. Annual Meeting of the Ecological Society of America. Baltimore, Maryland. POSTER
- Gyovai†, M.N., J.R. Fischer, A.C. Engman, A.O. Gill, C.S. Lee Pow, H.V. Daniels, T.J. Kwak, and J.A. Collazo. 2015. Characterization of a Caribbean estuarine fishery by use of a creel survey. Annual Meeting of the Ecological Society of America. Baltimore, Maryland. POSTER
- Handa†, S., J.R. Fischer, A.C. Engman, A.O. Gill, C.S. Lee Pow, H.V. Daniels, T.J. Kwak, and J.A. Collazo. 2015. Estimation of return migration swimming speed of the sirajo goby, a Caribbean diadromous fish. Annual Meeting of the Ecological Society of America. Baltimore, Maryland. POSTER
- LaPlante†, J.J., J.R. Fischer, A.C. Engman, A.O. Gill, C.S. Lee Pow, H.V. Daniels, T.J. Kwak, and J.A. Collazo. 2015. Nearshore larval fish assemblages in a Caribbean estuary. Annual Meeting of the Ecological Society of America. Baltimore, Maryland. POSTER

- Tillery†, D.S., J.R. Fischer, A.C. Engman, A.O. Gill, C.S. Lee Pow, H.V. Daniels, T.J. Kwak, and J.A. Collazo. 2015. Fish assemblages in Arecibo, Puerto Rico. Annual Meeting of the Ecological Society of America. Baltimore, Maryland. POSTER
- Grieshaber, C., T. Penland, T. Kwak, G. Cope, R. Heise, F. Sessions, J. Fischer, J. Leonard, C. Lee Pow, J. Archambault, F. Weber, D. Shea, M. Law, J. Rice, S. Kullman, and D. Aday. 2015. Water quality and intersex fish in the Yadkin-Pee Dee River. Annual Meeting of the North Carolina Chapter of the American Fisheries Society. Carolina Beach, North Carolina. PAPER
- Fischer, J.R., T.J. Kwak, A.C. Engman, and W. Smith. 2015. Use of post-larval otoliths to compare age, growth, and pelagic larval durations of Caribbean Amphidromous gobies. 145<sup>th</sup> American Fisheries Society Annual Meeting, Portland, Oregon. PAPER
- Kwak, T.J., J.R. Fischer, H.J. Flowers, W.G. Cope, J.M. Rash, D.A. Besler. 2015. Condition, diet, and trophic relations of stocked trout in Appalachian Streams. 145<sup>th</sup> American Fisheries Society Annual Meeting, Portland, Oregon. PAPER
- Engman, A.C., T.J. Kwak, and J.R. Fischer. 2015. Patterns and drivers of recruitment in Caribbean amphidromous fishes. 145<sup>th</sup> American Fisheries Society Annual Meeting, Portland, Oregon. PAPER
- Fischer, J.R., T.J. Kwak, A.C. Engman, C.A. Grieshaber, and W. Smith. 2015. Determination of pelagic larval duration and growth of Caribbean amphidromous fishes. Southern Division of the American Fisheries Society Annual Meeting, Savannah, Georgia. PAPER
- Engman, A.C., T.J. Kwak, J.R. Fischer, C.G. Lilyestrom, D.J. Padilla Rivera, A.S. Maurer, R.J. Benítez Joubert, and C.A. Grieshaber. 2015. Life history and ecological research to inform the management of Puerto Rico riverine fisheries. Estudios del ciclo de vida y ecologicos con el fin de informar al manejo de las pesquerías ribereñas de Puerto Rico. Annual Meeting of the Puerto Rico Chapter of the American Fisheries Society. Cerillos, Puerto Rico. PAPER
- Fischer, J.R., T.J. Kwak, A.C. Engman, C.A. Grieshaber, and W. Smith. 2014. Early life age and growth of Caribbean amphidromous fishes. 144<sup>th</sup> Annual Meeting of the American Fisheries Society, Quebec City, Quebec. PAPER
- Engman, A.C., T.J. Kwak, J.R. Fischer, C.A. Grieshaber. 2014. Recruitment phenology of Caribbean amphidromous fishes. 144<sup>th</sup> Annual Meeting of the American Fisheries Society, Quebec City, Quebec. PAPER
- Engman, A.C., T.J. Kwak, J.R. Fischer, and C.A. Grieshaber. 2014. Lunar influences on recruitment phenology of Caribbean amphidromous fishes. Southern Division of the American Fisheries Society Annual Meeting, Charleston, South Carolina. PAPER
- Fischer, J.R. and M.C. Quist. 2013. Understanding fish assemblage structure in lentic ecosystems: Relative effects of abiotic factors and management

- legacies. 143<sup>rd</sup> Annual Meeting of the American Fisheries Society, Little Rock, Arkansas. PAPER
- Flammang, M., G. Sobotka, B. Dodd, J.R. Fischer, G.M. Scholten†, G.D. Scholten, and R. Schultz. 2013. Selective eradication of Gizzard Shad from southern Iowa impoundments. 143<sup>rd</sup> Annual Meeting of the American Fisheries Society, Little Rock, Arkansas. PAPER
- Fischer, J.R., and M.C. Quist. 2012. Evaluation of multiple sampling techniques for characterizing fish assemblages in standing waters. 142<sup>nd</sup> Annual Meeting of the American Fisheries Society, St. Paul, Minnesota. PAPER
- Scholten†, G.M., M.D. Sundberg†, J.R. Fischer, and M.C. Quist. 2012. Eradication of Gizzard Shad *Dorosoma Cepedianum* with low-dose rotenone applications. 142<sup>nd</sup> Annual Meeting of the American Fisheries Society, St. Paul, Minnesota. POSTER
- Smith†, C.D., J.R. Fischer, and M.C. Quist. 2012. Historical changes in Nebraska's lotic fish assemblages: A spatiotemporal assessment. 142<sup>nd</sup> Annual Meeting of the American Fisheries Society, St. Paul, Minnesota. POSTER (***Best Student Poster Presentation Finalist***)
- Quist, M.C., and J.R. Fischer. 2012. Evaluation of standard sampling techniques for estimating abundance and size structure of fishes in standing waters. 142<sup>nd</sup> Annual Meeting of the American Fisheries Society, St. Paul, Minnesota. PAPER
- Sundberg†, M.D., G.M. Scholten†, J.R. Fischer, and M.C. Quist. 2012. Effects of low-dose rotenone toxicity on benthic invertebrates. 142<sup>nd</sup> Annual Meeting of the American Fisheries Society, St. Paul, Minnesota. POSTER
- Flammang, M., G. Sobotka, B. Dodd, R. Schultz, and J.R. Fischer. 2012. Selective eradication of gizzard shad from southern Iowa impoundments. 142<sup>nd</sup> Annual Meeting of the American Fisheries Society, St. Paul, Minnesota. POSTER
- Fischer, J.R., C.D. Smith†, and M.C. Quist. 2012. Historical changes in Nebraska's stream fish assemblages. 24<sup>th</sup> Annual meeting of the North Central Division of the American Fisheries Society - Rivers and Streams Technical Committee, Milan, Illinois. PAPER
- Smith†, C.D., J.R. Fischer, and M.C. Quist. 2012. Temporal changes in Nebraska's stream fish assemblages. Annual Meeting of the Idaho Chapter of the American Fisheries Society, Coeur d' Alene, Idaho. PAPER
- Fischer, J.R., and M.C. Quist. 2011. Seasonal influences on fish sampling data for standing waters: A case study for Bluegill population assessments in Iowa lakes and Impoundments. 72<sup>nd</sup> Midwest Fish and Wildlife Conference, Des Moines, Iowa. POSTER
- Smith†, C.D., J.R. Fischer, C.J. Hinz†, M.C. Quist. 2011. Changes in Nebraska's lotic fish assemblages. 72<sup>nd</sup> Midwest Fish and Wildlife Conference, Des Moines, Iowa. POSTER



- Fischer, J.R., and M.C. Quist. 2011. Seasonal influences on fish sampling data for standing waters: A case study for Bluegill population assessments in Iowa Lakes and Impoundments. 141<sup>st</sup> Annual Meeting of the American Fisheries Society, Seattle, Washington. POSTER
- Dodd, B., R. Schultz, A. Otting, A. Fowler, M. Richardson, J. Euchner, J.R. Fischer, and M.C. Quist. 2011. Harvest patterns and exploitation of walleye at Big Creek Lake. Joint meeting of the Iowa Chapters of the American Fisheries Society and Wildlife Society, Rathbun Lake, Iowa. POSTER
- Fischer, J.R., T.E. Neebling, D.A. Klingenberg‡, and M.C. Quist. 2011. Feasibility of a boat-mounted RFID antenna for monitoring freshwater mussels. Joint meeting of the Iowa Chapters of the American Fisheries Society and Wildlife Society, Rathbun Lake, Iowa. POSTER (***Best Student Poster Presentation***)
- Fischer, J.R., T.E. Neebling, D.A. Klingenberg‡, and M.C. Quist. 2010. Design and development of a boat-mounted RFID antenna for monitoring freshwater mussels. 71<sup>st</sup> Midwest Fish and Wildlife Conference, Minneapolis, Minnesota. POSTER
- Fischer, J.R., R.M. Burch†, and M.C. Quist. 2010. Guilty by association: are all benthivorous fish created equal? 140<sup>th</sup> Annual Meeting of the American Fisheries Society, Pittsburgh, Pennsylvania. PAPER (***Best Student Paper Presentation Finalist***)
- Burch†, R.M., J.R. Fischer, M.C. Quist, M.J. Stueck, and M.M. Marron. 2010. Historical trends in ictalurid catfish commercial harvest in the Upper Mississippi River. Catfish 2010 - Conservation, Ecology, and Management of Catfish: The Second International Symposium, St. Louis, Missouri. PAPER
- Sindt, A.R., J.R. Fischer, M.C. Quist, and C.L. Pierce. 2010. The status, distribution, and relationship with biotic integrity of ictalurids in Iowa's streams and rivers. Catfish 2010 - Conservation, Ecology, and Management of Catfish: The Second International Symposium, St. Louis, Missouri. PAPER
- Fischer, J.R., R.M. Burch†, and M.C. Quist. 2010. An evaluation of native black bullhead and non-native common carp on aquatic ecosystems. 3<sup>rd</sup> Annual Midwest Student Fisheries Colloquium, Manhattan, Kansas. PAPER
- Burch†, R.M., J.R. Fischer, and M.C. Quist. 2010. Commercial harvest of ictalurid catfish: historical trends in the Upper Mississippi River. 3<sup>rd</sup> Annual Midwest Student Fisheries Colloquium, Manhattan, Kansas. PAPER
- Fischer, J.R., R.M. Burch†, and M.C. Quist. 2010. Relative impacts of a native and non-native benthivorous fish on aquatic ecosystems. Joint meeting of the Iowa Chapters of the American Fisheries Society and Wildlife Society, Ames, Iowa. PAPER (***Best Student Paper Presentation***)
- Johnson‡, N.P., J.R. Fischer, R.D. Schultz, and M.C. Quist. 2010. A comparison of two different modified fyke nets to sample fish assemblages in Iowa lakes.

- Joint meeting of the Iowa Chapters of the American Fisheries Society and Wildlife Society, Ames, Iowa. POSTER (***Best Student Poster Presentation***)
- Burch†, R.M., J.R. Fischer, and M.C. Quist. 2010. Historical trends in ictalurid catfish commercial harvest in the upper Mississippi River. Joint meeting of the Iowa Chapters of the American Fisheries Society and Wildlife Society, Ames, Iowa. PAPER
- Fischer, J.R., R.M. Burch†, and M.C. Quist. 2009. Effects of black bullhead and common carp on aquatic ecosystems of experimental mesocosms. 70<sup>th</sup> Midwest Fish and Wildlife Conference, Springfield, Illinois. PAPER
- Fischer, J.R., M.C. Quist, S.L. Wigen, A.J. Schaefer†, T.W. Stewart, and T.M. Isenhardt. 2009. Assemblage and population level responses of stream fish to riparian buffers at multiple spatial scales. 139<sup>th</sup> Annual Meeting of the American Fisheries Society, Nashville, Tennessee. PAPER (***Best Student Paper Presentation Finalist***)
- Fischer, J.R., M.C. Quist, and J.A. Downing. 2009. A comparison of methods to sample fish in Iowa lakes and impoundments. 139<sup>th</sup> Annual Meeting of the American Fisheries Society, Nashville, Tennessee. PAPER
- Fischer, J.R., M.C. Quist, and J.A. Downing. 2009. A preliminary comparison of methods to sample fish in Iowa lakes and impoundments. Joint meeting of the Iowa Chapters of the American Fisheries Society and Wildlife Society, Ames, Iowa. PAPER (***Best Student Paper Presentation***)
- Quist, M.C., J.R. Fischer, S.L. Wigen, A.J. Schaefer†, T.W. Stewart, and T.M. Isenhardt. 2009. Effects of riparian buffers on instream habitat, fish assemblage, and growth rates of fishes in Iowa streams. Joint meeting of the Iowa Chapters of the American Fisheries Society and Wildlife Society, Ames, Iowa. PAPER (***Best Professional Paper Presentation***)
- Mork†, M.D., S.M. Bisping†, J.R. Fischer, and M.C. Quist. 2009. Population characteristics of black bullhead in Iowa natural lakes. Joint meeting of the Iowa Chapters of the American Fisheries Society and Wildlife Society, Ames, Iowa. POSTER (***Best Student Poster Presentation***)
- Schaefer†, A.J., S.M. Bisping†, J.R. Fischer, and M.C. Quist. 2009. Population characteristics of central stoneroller in central Iowa streams. Joint meeting of the Iowa Chapters of the American Fisheries Society and Wildlife Society, Ames, Iowa. POSTER
- Fischer, J.R., M.C. Quist, T.W. Stewart, and T.M. Isenhardt. 2008. Response of stream fish assemblage and instream habitat structure to riparian buffers at multiple spatial scales in central Iowa, USA. 69<sup>th</sup> Midwest Fish and Wildlife Conference, Columbus, Ohio. POSTER
- Fischer, J.R., and C.P. Paukert. 2008. Habitat relationships with fish assemblages in minimally disturbed Great Plains regions. 138<sup>th</sup> Annual Meeting of the American Fisheries Society, Ottawa, Ontario. POSTER

- Fischer, J.R., M.C. Quist, T.W. Stewart, and T.M. Isenhardt. 2008. Response of fishes and habitat to riparian buffers in central Iowa. 2008 Iowa Water Center Poster Symposium, Cedar Falls, Iowa. POSTER
- Fischer, J.R., and C.P. Paukert. 2008. Habitat relationships with fish assemblages in minimally disturbed Great Plains regions. Joint meeting of the Iowa and Dakota Chapters of the American Fisheries Society, Sioux Falls, South Dakota. POSTER
- Fischer, J.R., and C.P. Paukert. 2007. Spatial scale of stream fish assemblage and abundance estimates: effects of sampling effort, community structure, and habitat heterogeneity. 137<sup>th</sup> Annual Meeting of the American Fisheries Society, San Francisco, California. PAPER
- Fischer, J.R., and C.P. Paukert. 2007. Sampling effort required to estimate species richness in wadable Great Plains streams with a towed electrofisher. Joint meeting of Iowa-Kansas-Nebraska Chapters of the American Fisheries Society Meeting, Council Bluffs, Iowa. PAPER (***Best Student Paper Presentation***)
- Fischer, J.R., and C.P. Paukert. 2007. Historical and environmental influence on an endemic Great Plains fish. Joint meeting of Iowa-Kansas-Nebraska Chapters of the American Fisheries Society, Council Bluffs, Iowa. POSTER (***Best Student Poster Presentation***)
- Paukert, C.P., J. Eitzmann, J. Fischer, K. Pitts, J. Schloesser, and D. Thornbrugh. 2007. Fish community and habitat differences in dredges and undredged sites on the Lower Kansas River. Joint meeting of Iowa-Kansas-Nebraska Chapters of the American Fisheries Society, Council Bluffs, Iowa. PAPER (***Best Professional Paper Presentation***)
- Fischer, J.R., and C.P. Paukert. 2006. Environmental influences structuring Great Plains stream fish assemblages. 67<sup>th</sup> Midwest Fish and Wildlife Conference, Omaha, Nebraska. PAPER
- Fischer, J.R., and C.P. Paukert. 2006. Historical and environmental influence on an endemic Great Plains fish. 67<sup>th</sup> Midwest Fish and Wildlife Conference, Omaha, Nebraska. POSTER
- Fischer, J.R., and C.P. Paukert. 2006. Factors influencing lotic fish-habitat relationships in the Great Plains. 136<sup>th</sup> Annual Meeting of the American Fisheries Society, Lake Placid, New York. PAPER
- Dodds, W.K., J.M. O'Brien, J.R. Fischer, N.R. Franssen, J.J. Eichmiller, A. Makinster, J.N. Murdock, W.S. Gardner, M.J. McCarthy, J.L. Tank, and J. Bealieu. 2006. Nitrogen cycling and metabolism in a large prairie river. 54<sup>th</sup> Annual Meeting of the North American Benthological Society, New Orleans, Louisiana. PAPER
- Fischer, J.R., and C.P. Paukert. 2006. Habitat use of stream fishes in South Central Kansas. Kansas State University Biology Graduate Student Forum, Manhattan, Kansas. PAPER

- Fischer, J.R., and C.P. Paukert. 2006. Environmental influences on stream fish in the Nebraska Sandhills. 37<sup>th</sup> Annual Meeting of the Nebraska Chapter of the American Fisheries Society, Gretna, Nebraska. PAPER
- Brinkley†, P.B., J.R. Fischer, and C.P. Paukert. 2006. The effect of fixative on total length of small-bodied stream fish. 31<sup>st</sup> Annual Meeting of the Kansas Chapter, American Fisheries Society, Hays, Kansas. POSTER (*Best Student Poster Presentation*)
- Fischer, J.R., and C.P. Paukert. 2006. Fish-habitat relationships in south central Kansas. 31<sup>st</sup> Annual Meeting of the Kansas Chapter of the American Fisheries Society, Hays, Kansas. PAPER

### INVITED PRESENTATIONS

† denotes undergraduate students mentored

- Kwak, T.J., A.C. Engman, J.R. Fischer, and C.G. Lilyestrom. 2017. Ecology and conservation of the American Eel in the Caribbean. First International Eel Science Symposium: Science into Management. London Zoo, Zoological Society of London. June 13-15, 2017
- Fischer, J.R., T.J. Kwak, J.M. Law, and R.W. Laney. 2016. Population characteristics of American Eel in the Roanoke, River North Carolina. Invited speaker to the Roanoke Rapids and Gaston Hydropower Relicensing Project, FERC Project No. 2009, American Eel Working Group Meeting, Roanoke Rapids, North Carolina. PAPER
- Grieshaber, C.A., T.N. Penland, T.J. Kwak, W.G. Cope, R.J. Heise, F.W. Sessions, D. Shea, J.M. Law, C. Lee Pow, J.R. Fischer, J.A. Leonard, and J.M. Archambault. 2015. Water quality and intersex fish in the Yadkin-Pee Dee River. 21st Annual Robust Redhorse Conservation Committee Meeting, Mansfield, Georgia. PAPER
- Fischer, J.R., T.J. Kwak, J.D. Wehbie, J.M. Law, and R.W. Laney. 2015. American eel age and growth assessment in the Roanoke, River North Carolina. Invited speaker to the Roanoke Rapids and Gaston Hydropower Relicensing Project, FERC Project No. 2009, American Eel Working Group Meeting, Roanoke Rapids, North Carolina. PAPER
- Engman, A.C., T.J. Kwak, J.R. Fischer and C.A. Grieshaber. 2015. Temporal dynamics and the ecological role of recruitment in Caribbean amphidromous fishes. Invited speaker to a symposium entitled “Do macro-consumers matter? Researching the effects of large-bodied biota on aquatic ecosystems” at the Annual Meeting of the Southern Division of the American Fisheries Society, Savannah, Georgia. PAPER
- Kwak, T.J., A.C. Engman, J.R. Fischer, and C.G. Lilyestrom. 2015. Ecological drivers, functions, and services of Caribbean freshwater fishes. Invited speaker to a symposium entitled “Do macro-consumers matter? Researching the effects of large-bodied biota on aquatic ecosystems” at

- the Annual Meeting of the Southern Division of the American Fisheries Society, Savannah, Georgia. PAPER
- Kwak, T.J., A.C. Engman, J.R. Fischer, and C.G. Lilyestrom. 2015. Ecological services and drivers of Caribbean freshwater fisheries. Global conference on inland fisheries. Freshwater, fish, and the future: Cross-sectional approaches to sustain livelihoods, food security, and aquatic ecosystems. United Nations, Food and Agriculture Organization Headquarters, Rome, Italy. PAPER
- Grieshaber, C.A., T.N. Penland, T.J. Kwak, W.G. Cope, R.J. Heise, F.W. Sessions, D. Shea, J.M. Law, C. Lee Pow, J.R. Fischer, J.A. Leonard, and J.M. Archambault. 2014. Water quality, intersex fish, and robust redhorse. 20th Annual Robust Redhorse Conservation Committee Meeting, Mansfield, Georgia. PAPER
- Fischer, J.R., and M.C. Quist. 2013. Characterizing fish assemblages in Iowa natural lakes and reservoirs. Invited speaker to the Iowa Department of Natural Resources Statewide Fisheries Meeting, Moravia, Iowa. PAPER
- Fischer, J.R. 2012. Fish ecology and limnology. Invited lecturer for Limnology, Department of Fisheries and Wildlife Sciences, University of Missouri, Columbia, Missouri. PAPER
- Fischer, J.R. 2011. Use of native fish species as an indicator of non-native species effects on aquatic ecosystem degradation. Invited speaker the Department of Fish and Wildlife Resources, 501 Seminar Series, University of Idaho, Moscow, Idaho. PAPER
- Fischer, J.R. and M.C. Quist. 2011. Benchmarks of Biological Integrity for Lake Restoration Success: Fish Communities in Iowa Lakes. Invited speaker to the Ames Anglers, Ames, Iowa. PAPER
- Fischer, J. R. 2011. Impacts of a native and non-native benthivorous fish species on aquatic ecosystems. Invited lecturer for Fish Biology, Department of Natural Resource Ecology and Management, Iowa State University, Ames, Iowa. PAPER
- Fischer, J.R., R.M. Krogman†, and M.C. Quist. 2010. An experimental evaluation of native black bullhead and non-native common carp effects on aquatic ecosystems. Invited speaker to the Ames Anglers, Ames, Iowa. PAPER

## **TRAINING AND CERTIFICATION**

Associate Fisheries Professional, American Fisheries Society (Certificate Number A441; recertification pending)

Department of Interior Motorboat Operator Certification Course (MOCC: completed April 2013)

American Red Cross, Adult First Aid/CPR/AED (completed March 2015)

## GRANTS AWARDED

- Fischer, J.R. 2017-2019. Population dynamics of reservoir Striped Bass in North Carolina Reservoirs. North Carolina Wildlife Resource Commission, \$210,257.
- Reading, B.J. and J.R. Fischer, 2017-2019. Egg Yolk, Egg Buoyancy, and Striped Bass Recruitment: A Common Link? North Carolina Division of Marine Fisheries, \$205,495.
- Kwak, T.J., and J.R. Fischer 2014-2018. American eel age and growth assessment in the Roanoke River, North Carolina. U.S. Fish and Wildlife Service, \$60,000.
- Fischer, J.R. 2013. Development of standardized fish sampling protocols. National Ecological Observatory Network, \$21,767.
- Fischer, J.R., and M.C. Quist. 2009-2010. Relative impacts of common carp *Cyprinus carpio* and black bullhead *Ameiurus melas* on water quality characteristics. Iowa Department of Natural Resources, \$13,701.
- Fischer, J.R., T.E. Neebling, and M.C. Quist. 2009-2010. Feasibility of a boat-mounted radio frequency identification (RFID) antenna for monitoring freshwater mussel populations. Iowa Chapter of the American Fisheries Society \$500.
- Fischer, J.R., and R.D. Schultz. 2011-2012. Effects low-dose rotenone toxicity on fish, benthic invertebrates, freshwater mussels, and zooplankton. Iowa Department of Natural Resources, \$11,700.

## GRANTS PENDING

- Fischer, J.R. 2017-2019. Common Carp *Cyprinus carpio* movement, habitat selection, and population characteristics in Lake Mattamuskeet: establishing baseline biological information to inform removal feasibility assessment. U.S. Fish and Wildlife Service/North Carolina Wildlife Resource Commission, \$159,689.

## REFERENCES

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