

**MATT R. WHILES**

**Soil and Water Sciences Department  
Institute of Food and Agricultural Sciences  
University of Florida  
Gainesville, FL 32611-0290  
Phone: (352) 294-3151**

EDUCATION

University of Georgia, Athens, Georgia; **Ph.D. Ecology.**

Dissertation: Disturbance, recovery, and invertebrate communities in southern Appalachian headwater streams.

University of Georgia, Athens, Georgia; **M.S. Entomology.**

Thesis: First-year recovery of a southern Appalachian headwater stream following an insecticide induced disturbance.

Kansas State University, Manhattan, Kansas; **B.S. Biology.**

AREAS OF SPECIALIZATION

Freshwater ecosystem ecology with an emphasis on the structure and function of streams and wetlands, the roles of consumers in biogeochemical processes, ecological consequences of declining biodiversity, linkages between aquatic and terrestrial ecosystems, disturbance ecology, stream and wetland restoration, and bioassessment of freshwater habitats.

PROFESSIONAL EXPERIENCE

2019 - **Professor and Chair**, Soil and Water Sciences Dept., University of Florida  
Leading a department of forty eight faculty members, including sixteen at Research and Extension Centers located throughout the state. Duties include fostering excellence in soil and water related research, teaching, outreach, and graduate and undergraduate mentoring.

2014-18 **Interim Director**, SIU Cooperative Wildlife Research Laboratory  
Led a research center consisting of 6 full time faculty members, 2 full time office staff, ~40 graduate students, and numerous undergraduates. Duties include working with faculty members and students to enhance funding and research productivity, liaising with federal, state, and private resource managers and funding agencies, and promoting the unit with the SIU administration.

PROFESSIONAL EXPERIENCE (continued)

- 2011-18 **Director**, SIU Center for Ecology  
Leading development of the SIUC Center for Ecology, a research center facilitating multidisciplinary ecological research and education across 4 colleges and 8 departments. Duties include developing and overseeing operations of the Middle Mississippi River Wetlands Field Station.
- 2008-18 **Professor of Zoology**, Southern Illinois University  
Teaching Freshwater Invertebrates, Stream Ecology, and General Ecology. Advising graduate research in freshwater ecosystem ecology.
- 2005-11 **Director**, Middle Mississippi River Wetlands Field Station  
Led development of a field station for research and education on large river floodplain ecology.
- 2003-08 **Associate Professor of Zoology**, Southern Illinois University  
Teaching Freshwater Invertebrates, Stream Ecology, and General Ecology. Advising graduate research in freshwater ecosystem ecology.
- 2000-03 **Assistant Professor of Zoology**, Southern Illinois University  
Teaching Freshwater Invertebrates, Stream Ecology, and General Ecology. Advising graduate research in freshwater ecosystem ecology.
- 2000-15 **Adjunct Assistant Professor of Entomology**, Kansas State University  
Serving as a graduate committee member for students pursuing studies in the area of aquatic invertebrate ecology
- 1997-00 **Assistant Professor of Entomology** (non-tenure track), Kansas State University  
Taught Insect Ecology, Insects and People, Economic Entomology, and an interdisciplinary Environmental Concerns course. Advised graduate research in invertebrate ecology.
- 1996-01 **Adjunct Graduate Faculty**, University of Memphis  
Graduate committee member for students working in aquatic ecology.
- 1995-97 **Assistant Professor of Biology**, Wayne State College  
Taught Introductory Zoology, Invertebrate Zoology, Entomology, Vertebrate Zoology, Ecology, and General Biology (majors and non-majors). Advised undergraduate research in freshwater invertebrate ecology.

## FUNDING

- 2019-22 Collaborative Research: TERRG: Thresholds in ecosystem responses to rainfall gradients. C. Patrick, J. Hogan, A. Ulseth, and **M. R. Whiles**. Amount **\$926,680**. Source: National Science Foundation.
- 2016-19 Monitoring ecological responses to partial hydrologic connection of the Cache River. **M. R. Whiles**. Amount: **\$253,000**. Source: USFWS and IDNR.
- 2016-19 Ecology of mudpuppies in the Chicago Lake Michigan shoreline region. **M. R. Whiles** and R. Warne. Amount: **\$84,000**. Source: Shedd Aquarium.

## FUNDING (continued)

- 2015-20 Stream invertebrate and forest cicada studies on Konza Prairie. **M. R. Whiles**. Amount: **\$149,000**. Source: NSF – Konza LTER subcontract.
- 2014-19 RCN: the stream resiliency research coordination network. J. Jones and **M. R. Whiles**. Amount: **\$499,000, SIU Amount \$143,339**. Source: NSF Ecosystems.
- 2014-15 Intensive basin survey assistance with the Illinois EPA. **M. R. Whiles**, S. Baer, J. Groninger, and C. Nielsen. Amount: **\$36,600**, Source: IEPA
- 2014-16 Population estimates and habitat associations of mudpuppies in the Illinois Lake Michigan shoreline region. **M. R. Whiles** and R. Warne. Amount: **\$56,000**. Source: Shedd Aquarium.
- 2013-15 Assessing recovery of tallgrass prairie headwater streams following experimental patch burn grazing treatments. **M. R. Whiles**. **\$72,000**. Source: Missouri Department of Conservation.
- 2012 Center for Ecology/IDNR Undergraduate student internships 2012. C. Nielson, S. G. Baer, J. Groninger, and **M. R. Whiles**. Amount: **\$12,353** Source: Illinois Department of Natural Resources.
- 2011-16 Scale, Consumers and Lotic Ecosystem Rates (SCALER): Centimeters to continents. Dodds, W.K., K. Gido, F. Ballantyne, A. Rosemond, J. Kominoski, **M. R. Whiles**, M. B. Flinn, B. Bowden, W. McDowell. Amount: **\$3,304,097, SIU amount \$267,469**. Source: NSF macrosystems
- 2011-12 RAPID: A massive floodplain reconnects: physical and biotic responses of the Birds Point levee breach in the Mississippi River. Garvey, J. E., D. Glover, **M. R. Whiles**, N. Pinter. Amount: **\$74,994**. Source: NSF Ecosystems
- 2011-12 Stream biomonitoring program for the Shawnee National Forest. **M. R. Whiles**. Amount: **\$3,000**, source: USDA Forest Service
- 2011 Development of a moveable bed river model campus-wide curriculum: enhancing graduate education in river science and engineering. Garvey, J, **M. R. Whiles**, L. Chevalier, and N. Pinter. Amount: **\$3,000**. Source: SIU Graduate Technology Enhancement Grant.
- 2011 Center for Ecology/IDNR Undergraduate student internships 2011. Groninger, J., S. G. Baer, D. Gibson, and **M. R. Whiles**. Amount: **\$12,353** Source: Illinois Department of Natural Resources.
- 2010-11 Workshop: Use of <sup>15</sup>N tracer addition datasets to quantify and synthesize relationships between stream biodiversity and ecosystem function across environmental and hydrologic gradients. **M. R. Whiles**, W. K. Dodds, and S. Johnson. Amount: **\$47,790** Source: NSF
- 2010-13 Intensive basin survey assistance with the Illinois EPA. **M. R. Whiles**. Amount: **\$54,747**, Source: IEPA
- 2010-14 Demonstrating the benefits of stream restoration to aquatic communities in the Cache River basin. H. Rantala, **M. R. Whiles**, and G. Wilkerson. Amount: **\$399, 218** Source: IL State Wildlife Grant (US Fish and Wildlife Service).
- 2010-12 Training Illinois' future natural resource managers through a statewide natural areas internship Program. Baer, S. G., J. Groninger, D. Gibson, and **M. R. Whiles**. Amount: **\$33,320** Source: Illinois Clean Energy Foundation.

FUNDING (continued)

- 2010 Center for Ecology/IDNR Undergraduate student internships 2010. Groninger, J., S. G. Baer, D. Gibson, and **M. R. Whiles**. Amount: **\$12,353** Source: Illinois Department of Natural Resources.
- 2009-14 IGERT: Multidisciplinary, team-based training in watershed science and policy. N. Pinter, M. Davenport, **M. Whiles**, L. Chevalier, and C. Lant. Amount: **\$3,179,181**. Source: NSF.
- 2009-14 Riparian influences on macroinvertebrate production in streams on the Konza Prairie Biological Station. **M. R. Whiles**. Amount: **\$150,327**. Source: NSF: Konza Long Term Ecological Research (LTER) program subcontract.
- 2008-11 Demonstrating the benefits of in-stream restoration to riparian wildlife in the Cache River Basin. **M. R. Whiles** and C. Roy. Amount: **\$111,786**. Source: IL State Wildlife Grant (US Fish and Wildlife Service).
- 2008-11 Illinois Conservation Opportunity Areas: Coordination and planning in support of the Illinois Wildlife Action Plan. **M. R. Whiles** and D. M. Day. Amount: **\$383, 320**. Source: IL State Wildlife Grant (US Fish and Wildlife Service and Illinois Nature Conservancy).
- 2008-12 Biotic integrity of prairie streams as influenced by patch burn grazing and riparian protection. W. K. Dodds and **M. R. Whiles**. Total amount: **\$267,294**, **SIU amount: \$102,500**. Source: Missouri Department of Conservation.
- 2008-10 Continuation of a statewide natural land management internship program. S. G. Baer, D. J. Gibson, J. Groninger, and **M. R. Whiles**. Amount: **\$56,266**. Source: Illinois Clean Energy Foundation.
- 2008-09 Center for Ecology IDNR internships. **M. R. Whiles**, D. Gibson, S. G. Baer. Amount: **\$10,000**. Source: Illinois Department of Natural Resources.
- 2007-12 Collaborative research: Ecosystem level consequences of extinction: Quantifying the ecological effects of catastrophic amphibian declines in neotropical streams. **M. R. Whiles**, K. R. Lips, C. Pringle, and S. Kilham. **Total amount: \$710,000, SIU amount: \$364,900**. Source NSF Ecosystems
- 2006-07 Assessing the ecological consequences of amphibian declines: emergency sampling along a moving disease front in Panama. **M. R. Whiles** and K. R. Lips. Amount: **\$75,136**. Source: NSF Ecosystems
- 2006-08 Evaluation of soils and associated belowground resources in central Platte River slough wetland restorations. **M. R. Whiles**, S. G. Baer, and C. K. Meyer. Amount **\$33,500**. Source: NE Game and Parks and USFWS.
- 2006-07 Analysis of water quality and quantity in the Kaskaskia River watershed K. Williard, **M. R. Whiles**, and J. Schoonover. Amount: **\$30,000**. Source: Illinois Southwest Resource Conservation and Development Area, Inc.
- 2006-07 Center for Ecology IDNR internships. D. Gibson, **M. R. Whiles**, S. G. Baer. Amount: **\$10,000**. Source: Illinois Department of Natural Resources.

FUNDING (continued)

- 2006-09 Statewide natural land management internship program. D. Gibson, **M. R. Whiles**, and S. G. Baer. Amount: **\$43,734**. Source: Illinois Clean Energy Foundation
- 2006-08 Development of a hydrologic monitoring network for the Middle Mississippi River Wetland Field Station. **M. R. Whiles**, S. G. Baer, L. Battaglia, J. E. Garvey, E. Hellgren, K. Williard, and G. Whittedge. Amount: **\$54,554**. Source: SIU Office of Research and Development (interdisciplinary seed grant).
- 2005 Center for Ecology/IDNR undergraduate internships. D. Gibson, **M. R. Whiles**, and S. G. Baer. Amount: **\$10,000**. Source: Illinois Dept. of Natural Resources.
- 2004-08 Interactive effects of disturbance frequency and species composition on ecosystem functioning of intermittent streams: a test of future climate change scenarios. K. Gido, W. K. Dodds, and **M. R. Whiles**. **Total: \$320,000, SIU: \$138,700**. Source: NSF Ecology.
- 2004-08 Cycling of novel allochthonous carbon in midwestern agricultural streams. J. Tank, E. Rosi-Marshall, T. V. Royer, and **M. R. Whiles**. **Total amount: \$530,000. SIU: \$117,700**. Source NSF Ecosystems.
- 2003-07 Collaborative research: response of tropical stream ecosystem structure and function to amphibian declines. **M. R. Whiles**, K. Lips, C. Pringle, S. Kilham. **Total: \$800,000, SIU: \$400,000**. Source: NSF Ecosystems.
- 2003-04 Distribution, abundance, and dynamics of stream macroinvertebrates: metapopulation dynamics and metacommunity structure. D. J. Gibson, **M. R. Whiles**, and S. L. Collins. Amount: **\$6,000**. Source: NSF LTER.
- 2003-06 Spatial and temporal relationships among nutrients, dissolved oxygen, and biotic integrity and controls on dissolved reactive phosphorus and particulate phosphorus in Illinois streams. M. B. David, T. V. Royer, **M. R. Whiles**, R. G. Darmody, G. F. McIssac. **Total: \$475,000, SIU: \$91,494**. Source: Illinois Council For Agricultural Research.
- 2003-06 Biological evaluation of central Platte River slough wetland restorations. **M. R. Whiles**, B. S. Goldowitz, S. G. Baer, and C. K. Meyer. Amount: **\$41,332**. Source: US Fish and Wildlife Service
- 2003-04 Conservation assessment of sensitive reptiles and amphibians in the Shawnee National Forest. K. Lips and **M. R. Whiles**. Amount: **\$20,000**. Source: USDA Forest Service.
- 2002-04 Fitting metapopulation models of community structure to stream macroinvertebrate data: issues and problems of taxonomic resolution. D. Gibson and **M. R. Whiles**. Amount: **\$6,000**. Source: National Science Foundation LTER program.
- 2002-05 Demonstrating the biological benefits of stream channel restoration in the Cache River, southern Illinois. M. Geutersloh, **M. R. Whiles**, and D. Hankla. **Total: \$320,000, SIU: \$58,000**. Source: Illinois C2000 Ecosystems Program.
- 2002-08 Riparian influences on macroinvertebrate production in Kings Creek. **M. R. Whiles**. Amount: **\$140,927**. Source: NSF: Konza Long Term Ecological Research (LTER) program subcontract.

FUNDING (continued)

- 2002-04 Environmental assessment of the Sparta Illinois National Guard training facility. J. E. Garvey, R. C. Heidinger, **M. R. Whiles**, and M. Lydy. Amount: **\$230,406**. Source: Illinois Dept. of Military Affairs.
- 2002-03 Evaluation of macroinvertebrate diversity and productivity in central Platte River slough restorations. **M. R. Whiles**. Amount: **\$20,000**. Source: Platte River Trust and USFWS.
- 2002-03 Evaluation of Environmental Pool Management in Mississippi River Navigation Pool 25. R. Sheehan, **M. R. Whiles**, B. Dugger, B. Burr. Amount: **\$67,000**. Source: US Army Corps of Engineers.
- 2001-02 Assessment of the aquatic resources of the Shawnee and Hoosier National Forests. B. M. Burr and **M. R. Whiles**. Amount: **\$30,000**. Source: USDA Forest Service.
- 2001-02 Fish, invertebrate, and water quality responses to environmental pool management: Mississippi River pool 25. R. J. Sheehan, B. Dugger, B. M. Burr, S. Reid Adams, and **M. R. Whiles**. Amount: **\$66,446**. Source: US Army Corps of Engineers.
- 2000-02 Biological response to Newbury Weir construction in Big Creek, Illinois. **M. R. Whiles**. Amount: **\$10,808**. Source: Illinois Dept. of Natural Resources.
- 2001-02 Diets of larval and adult *Ambystoma cingulatum*. **M. R. Whiles**. Source: USFWS. Amount: **\$3,000**.
- 2000-01 Land management influences on biological diversity of the Smoky Hills KSARNG training facility. Charlton, R. E., **M. R. Whiles**, and J. Cully. Amount: **\$98,000**. Source: Kansas Army National Guard.
- 2000-01 Influence of riparian forests on water quality, in-stream habitat, and biotic integrity in agriculturally impacted southern Illinois streams. **M. R. Whiles** and K. Williard. Amount: **\$20,000**. Source: SIU Research and Development.
- 2000-01 Aquatic insect diversity and productivity in Cache River wetlands. **M. R. Whiles**. Amount: **\$3,000**. Source: Illinois Nature Conservancy.
- 1999-01 Quantity and quality of suspended particles in the Kansas River system: demonstrating the influence of land management practices. W. K. Dodds and **M. R. Whiles**. Amount: **\$31,323**. Source: Kansas Dept. of Health and Environ.
- 1999-00 Assessment of physicochemical, biological, and landscape features influencing Topeka shiner distribution in Kansas streams. Guy, C., and **M. R. Whiles**. Amount: **\$18,000**. Source: USFWS.
- 1999-00 Integrated natural resource plan and land condition trend analysis for the Smoky Hills KSARNG training facility. Charlton, R. E., **M. R. Whiles**, J. Cully, and D. Kaufman. Amount: **\$119,206**. Source: Kansas Army National Guard
- 1998-00 Influence of golf course construction and management on aquatic invertebrate, amphibian, and fish communities of the Colbert Hills area. **M. R. Whiles** and R. Charlton. Amount: **\$62,000**. Source: KSU Institutional Advancement
- 1998-01 Influence of military training activities on aquatic communities in Fort Riley streams. R. E. Charlton and **M. R. Whiles**. Amount: **\$77,000**. Source: Oak Ridge Institute for Science and Education.
- 1997-98 Biotic inventory in support of land condition trend analysis on KSARNG training area, Salina KS. R. Charlton, J. Cully, G. Kaufman, D. Kaufman, and **M. R. Whiles**. Amount: **\$114,909**. Source: Kansas National Guard

- 1997 Development of an Aquatic Entomology/Bioassessment teaching and research laboratory. **M. R. Whiles** and R. Charlton. Amount: **\$2,615**, Source: KSU Agricultural Experiment Station
- 1996-98 Hydrologic connectivity between river discharge, aquatic habitats, and biota of the middle Platte River. B. S. Goldowitz and **M. R. Whiles**. Amount: **\$50,000**. Source: USEPA
- 1996-97 Use of invertebrate bioassessment techniques for assessing aquatic ecosystem health in the Willow Creek Reservoir drainage system. **M. R. Whiles** and R. Wozniak. Amount: **\$15,000**. Sources: USEPA and Nebraska DEQ

#### HONORS AND AWARDS

- 2018 Named a Fellow of the Society for Freshwater Science
- 2018 Environmental Stewardship Award – Society for Freshwater Science
- 2018 Kaplan Award Lecturer for the SIU chapter of Sigma Xi
- 2015 President - Society for Freshwater Science
- 2012 Invited Keynote Speaker, Odum School of Ecology Graduate Student Symposium, University of Georgia
- 2011 Outstanding Scholar, SIUC College of Science
- 1997 Professor of the Year, Math and Sciences Division, Wayne State College.
- 1996 Professor of the Year, Math and Sciences Division, Wayne State College.
- 1995 Outstanding Teaching Assistant, University of Georgia.
- 1994-1995 University-Wide Assistantship Award, University of Georgia.
- 1994-1995 Merit Assistantship Award; Outstanding Teaching and Research, Univ. of GA.
- 1987 Hydrolab Award; best poster, North American Benthological Society meetings

#### PROFESSIONAL PUBLICATIONS – PEER REVIEWED ARTICLES (127 total)

- Whiles M. R.**, B. A. Snyder, B. L. Brock, S. Bonjour, M. A. Callaham, Jr., C. K. Meyer, and A. Bell. 2019. Periodical Cicada Emergence Resource Pulse Tracks Forest Expansion in a Tallgrass Prairie Landscape. *Ecosphere* 10: e02779.10.1002/ecs2.2779.
- Fritz, K. A., **M. R. whiles**, and J. T. trushenski. 2019. Subsidies of long-chain polyunsaturated fatty acids from aquatic to terrestrial environments via amphibian emergence. *Freshwater Biology* 64: 832-842.
- C. J. Patrick, D. J. McGarvey, J. H. Larson, W. F. Cross, D. C. Allen, A. C. Benke, T. Brey, A. D. Huryn, J. Jones, C. A. Murphy, C. Ruffing, P. Saffarinia, **M. R. Whiles**, J. B. Wallace, and G. Woodward. 2019. Precipitation and temperature drive continental-scale patterns in stream invertebrate production. *Science Advances* 5: eaav2348.
- Coulter, A. A., S. R. Adams, M. B. Flinn, B. M. Burr, **M. R. Whiles**, R. J. Sheehan, and J. E. Garvey. *In press*. Extended water level drawdowns in dammed rivers enhance fish abundance: Environmental pool management in the Upper Mississippi River. *Environmental Management*:

#### PROFESSIONAL PUBLICATIONS (continued)

- Song, C., W. K. Dodds, J. Ruegg, A. Argerich, C. L. Baker, W. Bowden, M. M. Douglas, K. J. Farrell, M. B. Flinn, E. A. Garcia, A. M. Helton, T. K. Harms, S. Jiaz, J. B. Jones, L. E.

- Koenig, J. S. Kominoski, W. H. McDowell, D. McMaster, S. P. Parker, A. D. Rosemond, C. M. Ruffing, K. R. Sheehan, M. T. Trentman, **M. R. Whiles**, W. M. Wollheim, and F. Ballantyne IV. 2018. Continental-scale decreases in net primary productivity in streams due to climate warming. *Nature Geoscience* 11: 415-417.
- Tank, J. L., E. Martí, T. Riis, W.K. Dodds, **M.R. Whiles**, D. von Schiller, L.R. Ashkenas, W.B. Bowden, B.M. Norman, S.M. Collins, C.L. Crenshaw, T.A. Crowl, N.A. Griffiths, N.B. Grimm, S.K. Hamilton, S.L. Johnson, W.H. McDowell, E.J. Rosi-Marshall, K.S. Simon, S.A. Thomas, and J.R. Webster. 2018. Partitioning assimilatory nitrogen uptake in streams: an analysis of stable isotope tracer additions across continents. *Ecological Monographs* 88: 120-138.
- Norman, B., **M. R. Whiles**, M. R., S. Collins, A. Flecker, S. Hamilton, S. Johnson, E. Rosi-Marshall, L. Ashkenas, W. Bowden, C. Crenshaw, T. Crowl, W. K. Dodds, R. O. Hall Jr., R. El-Sabaawi, N. Griffiths, E. Martí, W. McDowell, S. Peterson, H. Rantala, T. Riis, K. Simon, J. Tank, S. Thomas, D. von Schiller, and J. Webster, Jackson. 2018. Drivers of nitrogen transfer efficiencies in stream food webs across continents. *Ecology* 98: 3044-3055.
- Fritz, K. A. and **M. R. Whiles**. 2018. Amphibian mediated nutrient fluxes across aquatic-terrestrial boundaries of temporary wetlands. *Freshwater Biology* 63: 1250-1259.
- Bonjour, S. M., H. M. Rantala, M. G. Bennett, and **M. R. Whiles**. 2018. Fish community structure and diet responses to Newbury weirs in a low-gradient river. *Environmental Management*: 61: 928-938.
- DiRenzo, G. V. R. Brenes, **M. R. Whiles**, C. M. Pringle, S. S. Kilham, and K. R. Lips. 2017. Dissassembly of a tadpole community by a multi-host fungal pathogen with limited evidence of recovery. *Ecological Applications* 27: 309-320.
- Griffiths, N. A., J. L. Tank, T. V. Royer, E. J. Rosi, A. J. Shogren, T. C. Frauendorf, and **M. R. Whiles**. 2017. Occurrence, leaching, and degradation of Cry1Ab protein from transgenic maize detritus in agricultural streams. *Science of the Total Environment*: 592: 97-105
- Vanni, M. J. with 74 co-authors including **M. R. Whiles**. 2017. A global database of nitrogen and phosphorus excretion rates of aquatic animals. *Ecology*: 98: 1475, doi: 10.1002/ecy.1792
- Fritz, K. A., L. J. Kirschman, S. D. McCay, J. T. Trushenski, R. W. Warne, and **M. R. Whiles**. 2017. Subsidies of essential nutrients from aquatic environments increase immune function in terrestrial consumers. *Freshwater Science* 36: 893-900.
- Beattie, A. M. **M. R. Whiles**, and P. W. Willink. 2017. Diets, population, structure, and seasonal activity patterns of mudpuppies (*Necturus maculosus*) in an urban Great Lakes coastal habitat. *Journal of Great Lakes Research*: 43: 132-143.
- Larson, D. M., W. K. Dodds, **M. R. Whiles**, T. Thompson, and J. Fulgoni. 2016. A before-and-after assessment of patch-burn grazing and riparian fencing along headwater streams. *Journal of Applied Ecology* 53: 1543-1553.

#### PROFESSIONAL PUBLICATIONS (continued)

- Bennett, M. G., **M. R. Whiles**, and G. W. Whitedge. 2016. Population-level responses of life history traits to flow regime in three common stream fish species. *Ecohydrology* 9: 1388-1399.

- Rantala, H. E., D. Glover, J. E. Garvey, Q. Phelps, D. Herzog, R. Hrabik, J. Crites, and **M. R. Whiles**. 2016. Ecological responses to a floodplain reconnection during the 2011 Mississippi River flood. *River Research and Applications*:32: 1018-1039.
- Mountjoy, N. J., **M. R. Whiles**, G. Spyreas, J. Lovvorn, and E. Seekamp. 2016. Assessing the efficacy of community-based natural resource management planning with a multi-watershed approach. *Biological Conservation*: 201: 120-128
- Kirschman, L. J., S. Haslett, K. A. Fritz, **M. R. Whiles**, and R. W. Warne. 2016. Influence of physiological stress on nutrient stoichiometry in larval amphibians. *Physiological and Biochemical Zoology* 89:313-321.
- Scholl, E. A., H. M. Rantala, **M. R. Whiles**, and G. V. Wilkerson. 2016. Influence of flow on community structure and production of snag-dwelling macroinvertebrates in an impaired low gradient river. *River Research and Applications*: 32: 677-688.
- Barnum, T. R., J. M. Drake, C. Colón-Gaud, A. T. Rugenski, T. C. Frauendorf, S. Connelly, S. S. Kilham, **M. R. Whiles**, K. R. Lips, and C. M. Pringle. 2015. Evidence for the persistence of food web structure after amphibian extirpation in a Neotropical stream. *Ecology* 96: 2106-2116.
- Murria, C., A. Rugenski, **M. R. Whiles**, and A. P. Vogler. 2015. Evolutionary history of aquatic insects constrains community responses to amphibian declines in Neotropical highland streams. *Diversity and Distributions*: 8: 938-949
- Rüegg, J., W.K. Dodds, M.D. Daniels, C.L. Baker, W.B. Bowden, K.J. Farrell, M.B. Flinn, T.K. Harms, J.B. Jones, L.E. Koenig, J.S. Kominoski, W.H. McDowell, S.P. Parker, A.D. Rosemond, K.R. Sheehan, M.T. Trentman, **M.R. Whiles** and W.M. Wollheim. 2015. Baseflow physical stream characteristics differ at multiple spatial scales in stream networks across diverse biomes. *Landscape Ecology* 31: 119-136.
- Rantala, H.M., A.M. Nelson, J.N. Fulgoni, **M.R. Whiles**, R.O. Hall, Jr., W.K. Dodds, P. Verburg, A.D. Huryn, C.M. Pringle, S.S. Kilham, K.R. Lips, C. Colon-Gaud, A.T. Rugenski, S.D. Peterson, K. Fritz, K.E. McLeran and S. Connelly. 2015. Long-term changes in structure and function of a tropical headwater stream following a disease-driven amphibian decline. *Freshwater Biology* 60: 575-589.
- Vanderymyde, J. M. and **M. R. Whiles**. 2015. Effects of woody vegetation encroachment and experimental forest removal on macroinvertebrate production and functional structure in tallgrass prairie streams. *Freshwater Science*: 34: 519-534.
- Jackson, K. E., **M. R. Whiles**, W. K. Dodds, J. D. Reeve, J. M. Vanderymyde, and H. M. Rantala. 2015. Patch-Burn Grazing Effects on the Ecological Integrity of Tallgrass Prairie Streams. *Journal of Environmental Quality* 44:1148-1159.
- Dodds, W. K., K. Gido, **M. R. Whiles**, M. D. Daniels, and B. P. Grudzinski. 2015. The stream biome gradient concept: controlling factors of lotic systems across broad biogeographic scales. *Freshwater Science* 34:1-19

#### PROFESSIONAL PUBLICATIONS (continued)

- Dodds, W. K., Collins, S.M., Hamilton, S.K., Tank, J. L., Johnson, S., Webster, J. R., Simon, K. S., **Whiles, M. R.**, Rantala, H. M., McDowell, W. H., Peterson, S.D., Riis, T., Crenshaw, C. L., Thomas, S. A., Kristensen, P. B., Cheever, B. M., Flecker, A. S., Griffiths, N.A., Crowl, T., Rosi-Marshall, E. J., and El-Sabaawi, R. 2014. You are not always what we

- think you eat: selective assimilation across multiple whole-stream isotopic tracer studies. *Ecology*: 2757-2767.
- Connelly, S., C. M. Pringle, M. Hunte-Brown, T. Barnum, S. Kilham, **M. R. Whiles**, K. R. Lips, and C. Colon-Gaud. 2014. Initial versus long-term effects of tadpole extirpations on algal resources and nitrogen cycling in a neotropical stream. *Freshwater Biology* 59: 1113-1122.
- Mountjoy, N. J., **M. R. Whiles**, M. Davenport, and E. Seekamp. 2014. Identifying the Top Ten Capacity Indicators for Community-based Natural Resource Management Initiatives: Focus Group Results from Conservation Practitioners across Illinois. *Journal of Environmental Planning and Management*: 57: 329-348.
- Heinrich, K. K., **M. R. Whiles**, and C. Roy. 2014. Cascading ecological responses to an in-stream restoration project in a Midwestern River. *Restoration Ecology* 22: 72-80
- Wilkerson, G. V., D. R. Kandel, L. A. Perg, W. E. Dietrich, P. R. Wilcock, and **M. R. Whiles**. 2014. Continental-scale relationships between bankfull width and drainage area for single-thread alluvial channels. *Water Resources Research*: 919-936
- Mountjoy, N. J., E. Seekamp, M. Davenport, and **M. R. Whiles**. 2013. The best laid plans: CBNRM group capacity and resource management planning success. *Environmental Management*: 52: 1547-1561
- Whiles, M. R.** 2013. *Freshwater Invertebrate Ecology*. Oxford Bibliographies in Ecology, Oxford University Press. DOI: 10.1093/OBO/9780199830060-0132
- Frauendorf T. C., C. Colon-Gaud, **M. R. Whiles**, T. R. Barnum, K. R. Lips, C. M. Pringle, and S. S. Kulham. 2013. Energy flow and trophic basis of macroinvertebrate and amphibian production in a neotropical headwater stream. *Freshwater Biology*:58:1340-1352.
- Griffiths, N. A., J. L. Tank, T. V. Royer, S. S. Roley, E. J. Rosi-Marshall, **M. R. Whiles**, J. J. Beaulieu, and L. T. Johnson. 2013. Inter- and intra-system variation in whole-stream metabolism in an agricultural landscape. *Limnology and Oceanography* 58: 1513-1529.
- Whiles, M. R.**, R. O. Hall, Jr., W. K. Dodds, P. Verburg, A. D. Huryn, C. M. Pringle, K. R. Lips, S. S. Kilham, C. Colón-Gaud, A. T. Rugenski, S. Peterson, S. Connelly. 2013. Disease-driven amphibian declines alter ecosystem functioning in tropical streams. *Ecosystems* 16: 146-157.
- McPherson, J. E., J. M. Turner, and **M. R. Whiles**. 2013. Diversity and community structure of stream insects in a minimally-disturbed forested watershed in southern Illinois. *Great Lakes Entomologist* 46: 42-88.
- Bertrand, K., **M. R. Whiles**, K. Gido, and J. Murdock. 2013. Influence of macroconsumers and stream position on invertebrate community development following flooding in intermittent prairie streams. *Hydrobiologia*: 714: 169-182.

#### PROFESSIONAL PUBLICATIONS (continued)

- Barnum, T. R., P. Verburg, S. S. Kilham, **M. R. Whiles**, K. R. Lips, C. Colón-Gaud, and C. M. Pringle. 2013. Use of stable isotope ratios to characterize potential shifts in the isotopic niches of algal-grazing insects following an amphibian decline in a Neotropical stream. *Journal of Tropical Ecology* 29: 291-299

- Rugenski, A. T., C. Muria, and **M. R. Whiles**. 2013. Tadpoles enhance microbial activity and leaf decomposition in a neotropical stream. *Freshwater Biology* 57: 1904-1913.
- Pinter, N., S. G. Baer, L. Chevalier, R. Kowalchuk, C. Lant, and M. R. Whiles. 2013. An IGERT model for interdisciplinary doctoral education in water-related science and policy. *Journal of Contemporary Water Research & Education*. 15:
- Russell, D. M., W. K. Dodds, K. E. Jackson, **M. R. Whiles**, and K. Wynders. 2013. Ecosystem characteristics of remnant, headwater tallgrass prairie streams. *Journal of Environmental Quality* 42: 239-249.
- Griffiths, N. A., J. L. Tank, T. V. Royer, T. J. Warnner, T. C. Frauendorf, E. J. Rosi-Marshall, and **M. R. Whiles**. 2012. Temporal variation in organic carbon spiraling in Midwestern agricultural streams. *Biogeochemistry* 108: 149-169.
- Myers, D.J., G.W. Whitledge, and **M.R. Whiles**. 2012. Evaluation of  $\delta D$  and  $\delta^{18}O$  as natural markers of invertebrate source environment and dispersal in the middle Mississippi River-floodplain ecosystem. *River Research and Applications* 28: 135-142.
- Benke, A. C., and **M. R. Whiles**. 2011. Life table vs secondary production analysis – which is more fundamental for animal ecology? *Journal of the North American Benthological Society*: 30: 1024-1032
- Walther, D. A., and **M. R. Whiles**. 2011. Secondary production in a southern Illinois headwater stream: relationships between organic matter standing stocks and invertebrate productivity. *Journal of the North American Benthological Society* 30: 357-373
- Whiting, D. P., **M. R. Whiles**, and M. L. Stone. 2011. Patterns of macroinvertebrate production, trophic structure, and energy flow along a tallgrass prairie stream continuum. *Limnology and Oceanography* 56:887-898.
- Meyer, C. K, Peterson, S. D., and **M. R. Whiles**. 2011. Quantitative assessment of yield, precision, and cost-effectiveness of three wetland macroinvertebrate sampling techniques. *Wetlands* 31: 101-112.
- Hopkins, R., and **M. R. Whiles**. 2011. The importance of land use/land cover data in fish and mussel conservation planning. *International Journal of Limnology* 47: 199-209.
- Connelly, S., C. M. Pringle, **M. R. Whiles**, K. R. Lips, S. Kilham, and R. Brenes. 2011. Experimental comparison of leaf litter decomposition dynamics in neotropical streams with and without tadpoles: do tadpoles affect leaf decomposition dynamics? *Freshwater Biology* 59: 1863-1875.
- Whiles, M. R.**, M. I. Gladyshev, S. D. Peterson, N. N. Sushchik, O. N. Makhutova, G. S. Kalachova, and K. J. Regester. 2010. Fatty acid analyses reveal high degrees of omnivory and dietary plasticity in pond-dwelling tadpoles. *Freshwater Biology* 55: 1533-1547.
- Murdock, J. N., W. K. Dodds, K. B. Gido, and **M. R. Whiles**. 2011. Dynamic influences of nutrients and grazing fish on periphyton during recovery from flood. *Journal of the North American Benthological Society* 30: 331-345.
- PROFESSIONAL PUBLICATIONS (continued)

Colón-Gaud, C., **M. R. Whiles**, S. S. Kilham, K. R. Lips, C. M. Pringle, S. Connelly, and S. D. Peterson. 2010. Macroinvertebrate community responses to catastrophic amphibian declines in neotropical streams. *Journal of the North American Benthological Society* 29: 1185-1198

- Tank, J. L., E. Rosi-Marshall, T. V. Royer, **M. R. Whiles**, N. A. Griffiths, T. Frauendorf, and D. Treering. 2010. Occurrence of maize detritus and a transgenic insecticidal protein (Cry1Ab) within the stream network of an agricultural landscape. *Proceedings of the National Academy of Science of the United State of America* 107:17645-17650
- Chambers, C., **M. R. Whiles**, E.J. Rosi-Marshall, J.L. Tank, T.V. Royer, N.A. Griffiths, M.A. Evans-White, and A. Stojak. 2010. Responses of stream macroinvertebrates to Bt maize leaf detritus. *Ecological Applications* 20: 1949-1960.
- Colón-Gaud, C., **M. R. Whiles**, R. Brenes, S. S. Kilham, K. R. Lips, C. M. Pringle, S. Connelly, and S. D. Peterson. 2010. Potential functional redundancy and resource facilitation between tadpoles and insect grazers. *Freshwater Biology* 55: 2077-2088.
- Murdock, J. N., K. B. Gido, W. K. Dodds, K. N. Bertrand, and **M. R. Whiles**. 2010. Consumers alter the recovery trajectory of stream ecosystem structure and function following drought. *Ecology* 91: 1048-1062.
- Meyer C. K, **M. R. Whiles**, and S. G. Baer. 2010. Plant community recovery following restoration in temporally variable riparian wetlands. *Restoration Ecology* 18: 52-64.
- Whiles, M. R.**, A. D. Huryn, J. D. Reeve, and B. W. Taylor. 2009. Influence of handling stress and fasting on estimates of ammonium excretion by tadpoles and fish: recommendations for designing excretion experiments: *Limnology and Oceanography Methods* 7: 1-7.
- Warrner, T. J., T. V. Royer, J. L. Tank, N. A. Griffiths, E. J. Rosi-Marshall, and **M. R. Whiles**. 2009. Dissolved organic carbon in streams from artificially drained and intensively farmed watersheds in Indiana, USA. *Biogeochemistry* 95: 295-307.
- Colon-Gaud, C., **M. R. Whiles**, S. S. Kilham, K. R. Lips, C. M. Pringle, S. Connelly, and S. D. Peterson. 2009. Assessing ecological responses to catastrophic amphibian declines: Changes in macroinvertebrate production and food web structure in upland Panamanian streams. *Limnology and Oceanography* 54: 331-343.
- Griffiths, N. A., J. L. Tank, T. V. Royer, E. J. Rosi-Marshall, **M. R. Whiles**, C. P Chambers, T. C. Frauendorf, and M. A. Evans-White. 2009. Rapid decomposition of maize detritus in agricultural headwater streams. *Ecological Applications* 19:133-142
- Bertrand, K. N., K. B. Gido, W. K. Dodds, J. N. Murdock, and **M. R. Whiles**. 2009. Disturbance frequency and functional identity mediate ecosystem processes in prairie streams. *Oikos* 118: 917-933.
- Kilham, S. S., M. Hunte-Brown, P. Verburg, C. M. Pringle, **M. R. Whiles**, K. R. Lips and E. Zandona. 2009. Challenges for interpreting stable isotope fractionation of carbon and nitrogen in tropical aquatic ecosystems. *Verhandlungen Internationale Vereinigung für theoretische und angewandte Limnologie* 30 (5): 749-753.
- Connelly, S., C. M. Pringle, R. J. Bixby, R. Brenes, **M. R. Whiles**, K. R. Lips, S. Kilham, and A. D. Huryn. 2008. Changes in stream primary producer communities resulting from loss of tadpoles: can small-scale experiments predict the effects of large-scale catastrophic amphibian declines? *Ecosystems* 11: 1262-1276.

PROFESSIONAL PUBLICATIONS (continued)

- Meyer, C. K. and **M. R. Whiles**. 2008. Macroinvertebrate communities in restored and natural Platte River slough wetlands. *Journal of the North American Benthological Society* 27: 626-639.

- Regeher, K. J., **M. R. Whiles**, and K. R. Lips. 2008. Variation in the trophic basis of production and energy flow associated with emergence of larval salamander assemblages (Ambystomatidae) among forest ponds. *Freshwater Biology* 53: 1754-1767
- Walther, D. A. and **M. R. Whiles**. 2008. Macroinvertebrate responses to constructed riffles in a small temperate river. *Environmental Management* 41: 516-527.
- Meyer, C. K., S. G. Baer, and **M. R. Whiles**. 2008. Ecosystem recovery across a chronosequence of restored prairie wetlands in the Platte River valley. *Ecosystems* 11: 193-208.
- Stagliano, D. M. and **M. R. Whiles**. 2008. Life history and production of the riffle beetle, *Stenelmis crenata* (Say) (Elmidae), in a tallgrass prairie stream. *Aquatic Insects* 30:197-204.
- Colon-Gaud, C., S. Peterson, **M. R. Whiles**, S. S. Kilham, K. R. Lips, and C. M. Pringle. 2008. Allochthonous litter inputs, organic matter standing stocks, and organic seston dynamics in upland Panamanian streams: Potential effects of larval amphibians on organic matter dynamics. *Hydrobiologia* 603:301-312.
- Royer, T. V. M. B. David, L. E. Gentry, C. A. Mitchell, K. M. Starks, T. Heatherly II, and **M. R. Whiles**. 2008. Assessment of chlorophyll-*a* as a criterion for establishing nutrient standards in the streams and rivers of Illinois. *Journal of Environmental Quality* 37: 437-447.
- Flinn, M. B., S. R. Adams, **M. R. Whiles**, and J. E. Garvey. 2008. Biological responses to backwater hydrologic gradients in an Upper Mississippi River navigation pool. *Environmental Management* 41: 468-486.
- Rosi-Marshall, E. J., J. L. Tank, T.V. Royer, **M.R. Whiles**, M. Evans-White, C. Chambers, N.A. Griffiths, J. Pokelsek, and M.L. Stephen. 2007. Toxins in transgenic crop byproducts affect headwater streams. *Proceedings of the National Academy of Sciences of the United States of America* 104: 16204-16208.
- Heatherly, T. II, **M. R. Whiles**, D. J. Gibson, S. L. Collins, A. D. Huryn, J. K. Jackson, and M. A. Palmer. 2007. Stream insect distributional patterns and metapopulation models: effects of spatial scale and sampling intensities. *Oecologia* 151: 313-321
- Garvey, J. E., **M. R. Whiles**, and D. Striecher. 2007. A hierarchical model for oxygen dynamics in streams. *Canadian Journal of Fisheries and Aquatic Sciences* 64: 1816-1827.
- Altig, R. **M. R. Whiles**, and C. L. Taylor. 2007. What do tadpoles really eat? Assessing the trophic status of an understudied and imperiled consumer group in freshwater habitats. *Freshwater Biology* 52: 386-395.
- Heatherly, T. H. II, **M. R. Whiles**, T. V. Royer, and M. B. David. 2007. Relationships between water quality, habitat quality, and macroinvertebrate assemblages in Illinois streams. *Journal of Environmental Quality*: 1653-1660.
- Whiles, M. R.**, K. R. Lips, C. M. Pringle, S. S. Kilham, R. Brenes, S. Connelly, J. C. Colon Gaud, M. Hunte-Brown, A. D. Huryn, C. Montgomery, S. Peterson. 2006. The consequences of amphibian population declines to the structure and function of Neotropical stream ecosystems. *Frontiers in Ecology and the Environment* 4: 27-34.

#### PROFESSIONAL PUBLICATIONS (continued)

- Regeher, K. J. and **M. R. Whiles**. 2006. Decomposition rates of salamander (*Ambystoma maculatum*) life stages and associated energy and nutrient fluxes in ponds and adjacent forest in southern Illinois. *Copeia* 2006: 640-649.

- Maul, J. D., L. J. Schuler, J. B. Belden, **M. R. Whiles**, and M. J. Lydy. 2006. Effects of the fluoroquinolone antibiotic ciproflaxin on stream microbial communities and detritivorous macroinvertebrates. *Env. Toxicology and Chemistry* 25: 1598-1606.
- Regeister, K. J., K. R. Lips, and **M. R. Whiles**. 2006. Energy flow through early life history stages of ambystomatid salamanders in midwestern forest ponds. *Oecologia* 147: 303-314.
- Whiles, M. R.**, and R. E. Charlton. 2006. The ecological significance of tallgrass prairie arthropods. *Annual Review of Entomology* 51: 387-412.
- Adams, S. R., M. B. Flinn, B. M. Burr, **M. R. Whiles**, and J. E. Garvey. 2006. Ecology of larval blue sucker (*Cypleptus elongatus*) in the Mississippi River. *Ecology of Freshwater Fish* 15: 291-300.
- Maul, J. D., J. B. Belden, B. A. Schwab, **M. R. Whiles**, B. Spears, and M. J. Lydy. 2006. Bioaccumulation and trophic transfer of polychlorinated biphenyls (PCBs) by aquatic and terrestrial insects to tree swallows (*Tachycineta bicolor*). *Environmental Toxicology and Chemistry* 25: 1017-1025.
- Walther, D. A., **M. R. Whiles**, M. B. Flinn, and D. W. Butler. 2006. Assemblage-level estimation of nontanypodine chironomid growth and production in a southern Illinois stream. *Journal of the North American Benthological Society* 25: 444-452.
- Roberts, M. E., B. M. Burr, **M. R. Whiles**, and V. J. Santucci, Jr. 2006. Reproductive Ecology and Food Habits of the Blacknose Shiner, *Notropis heterolepis*, in Northern Illinois. *American Midland Naturalist* 155: 70-83.
- Heatherly, T. II, **M. R. Whiles**, D. Knuth, and J. E. Garvey. 2005. Diversity and community structure of littoral zone macroinvertebrates in southern Illinois reclaimed surface mine lakes. *American Midland Naturalist*: 154: 67-77.
- Whiles, M. R.** and B. S. Goldowitz. 2005. Macroinvertebrate communities in central Platte River wetlands: patterns across a hydrologic gradient. *Wetlands* 25: 462-472.
- Stone, M. L., **M. R. Whiles**, J. A. Webber, and K. W. J. Williard. 2005. Macroinvertebrate communities in agriculturally impacted Illinois streams: patterns with riparian vegetation, water quality, and in-stream habitat. *Journal of Environmental Quality*: 34: 907-917.
- Flinn, M. B., **M. R. Whiles**, S. R. Adams, and J. E. Garvey. 2005. Macroinvertebrate and zooplankton responses to water-level management and moist-soil plant production in upper Mississippi River backwater wetlands. *Archiv fur Hydrobiologie* 162: 187-210.
- Dodds, W. K., K. Gido, **M. R. Whiles**, K. M. Fritz, and W. J. Matthews. 2004. Life on the Edge: Ecology of Prairie Streams. *Bioscience* 54: 205-216.
- Dodds, W. K., and **M. R. Whiles**. 2004. Factors related to quality and quantity of suspended particles in rivers: general continent-scale patterns in the United States. *Environmental Management* 33: 355-367.
- Whiles, M. R.**, and J. E. Garvey. 2004. Freshwater resources within the Shawnee-Hoosier Ecological Assessment Region. Pages 81-108 in Thompson, F. R. III (ed.). The Hoosier-Shawnee ecological assessment. USDA Forest Service General Technical Report NC-244, North Central Research Station, Saint Paul, MN.

PROFESSIONAL PUBLICATIONS (continued)

- Whiles, M. R.**, J. B. Jensen, J. G. Palis, and W. G. Dyer. 2004. Diets of larval flatwoods salamanders, *Ambystoma cingulatum*, from Florida and South Carolina. *Journal of Herpetology*: 38: 208-214.

- Webber, J. A., K. W. J. Williard, **M. R. Whiles**, M. L. Stone, J. J. Zaczek, and K. D. Davie. 2004. Watershed scale assessment of the impact of forested riparian zones on stream water quality. Pages 114-120 in: Van Sambeek, J.W.; J.O. Dawson; F. Ponder, Jr. et al. eds. Proceedings, 13th Central Hardwood Forest Conference; Urbana, IL. Gen. Tech. Rep. NC-234. St. Paul, MN: USDA Forest Service, North Central Research Station.
- Ranvestel, A. W., K. R. Lips, C. M. Pringle, **M. R. Whiles**, and R. J. Bixby. 2004. Neotropical tadpoles influence stream benthos: evidence for ecological consequences of amphibian declines. *Freshwater Biology* 49: 274-285.
- Evans-White, M. A., W. K. Dodds, and **M. R. Whiles**. 2003. Ecosystem significance of crayfishes and central stonerollers in a tallgrass prairie stream: functional differences between co-occurring omnivores. *Journal of the North American Benthological Society*: 22: 423-441.
- Callaham, M. A., Jr., J. M. Blair, T. C. Todd, D. J. Kitchen, and **M. R. Whiles**. 2003. Macroinvertebrates in North American tallgrass prairie soils: Effects of fire, mowing, and fertilization on density and biomass. *Soil Biology and Biochemistry* 35:1079-1093.
- Whiles, M. R.**, and W. K. Dodds. 2002. Relationships between stream size, suspended particles, and filter-feeding macroinvertebrates in a Great Plains drainage network. *Journal of Environmental Quality* 31: 1589-1600.
- Jonas, J., **M. R. Whiles**, and R. E. Charlton. 2002. Aboveground invertebrate responses to land management differences in a central Kansas grassland. *Environmental Entomology* 31: 1142-1152.
- Stagliano, D. M., and **M. R. Whiles**. 2002. Macroinvertebrate production and trophic structure in a tallgrass prairie headwater stream. *Journal of the North American Benthological Society* 21: 97-113.
- Callaham, M. A., **M. R. Whiles**, and J. M. Blair. 2002. Annual fire, mowing, and fertilization effects on two annual cicadas (Homoptera: Cicadidae) in tallgrass prairie. *American Midland Naturalist* 148: 90-101.
- Meyer, C. K., **M. R. Whiles**, and R. E. Charlton. 2002. Life history, secondary production, and ecosystem significance of acridid grasshoppers in annually burned and unburned tallgrass prairie. *American Entomologist* 48: 52-61.
- Whiles, M. R.**, and B. S. Goldowitz. 2001. Hydrologic influences on insect emergence production from central Platte River wetlands. *Ecological Applications* 11: 1829-1842.
- Whiles, M. R.** M. A. Callaham, C. K. Meyer, B. L. Brock, and R. E. Charlton. 2001. Emergence of periodical cicadas from a Kansas riparian forest: densities, biomass, and nitrogen flux. *American Midland Naturalist* 145: 176-187.
- Schrank, S. J., C. S. Guy, **M. R. Whiles**, and B. L. Brock. 2001. Assessment of Physicochemical and watershed features influencing Topeka shiner *Notropis topeka* distribution in Kansas streams. *Copeia* 2001: 413-421.

#### PROFESSIONAL PUBLICATIONS (continued)

- Dodds, W. K., M. A. Evans-White, N. M. Gerlanc, L. J. Gray, D. A. Gudder, M. J. Kemp, A. L. López, D. Stagliano, E. A. Strauss, J. L. Tank, **M. R. Whiles**, W. M. Wollheim. 2001. Quantification of the nitrogen cycle in a prairie stream. *Ecosystems*: 3: 574-589.

- Whiles, M. R.**, B. L. Brock, A. C. Franzen, and S. Dinsmore II. 2000. Stream invertebrate communities, water quality, and land use patterns in an agricultural drainage basin of northern Nebraska. *Environmental Management*: 26: 563-576.
- Jensen, J. B., and **M. R. Whiles**. 2000. Diets of sympatric *Plethodon petraeus* and *Plethodon glutinosus*. *Journal of the Elisha Mitchell Scientific Society* 116: 245-250.
- Callahan, M. A., Jr., **M. R. Whiles**, C. K. Meyer, B. L. Brock, and R. E. Charlton. 2000. Feeding ecology and emergence production of annual cicadas (Homoptera: Cicadidae) in tallgrass prairie. *Oecologia* 123: 535-542.
- Alexander, K. A., and **M. R. Whiles**. 2000. A new species of *Ironoquia* Banks (Trichoptera: Limnephilidae) from the central Platte River, Nebraska. *Entomological News*: 111: 1-7.
- Whiles, M. R.**, B. S. Goldowitz, and R. Charlton. 1999. Life history and production of a semi-terrestrial limnephilid caddisfly in a Platte River wetland. *Journal of the North American Benthological Society* 18: 533-544.
- Goldowitz, B. S., and **M. R. Whiles**. 1999. Investigations of fish, amphibians, and aquatic invertebrates within the middle Platte River system. Published final Report, Platte Watershed Program, Cooperative Agreement X99708101, USEPA.
- Whiles, M. R.**, and B. S. Goldowitz. 1998. Biological responses to hydrologic fluctuation in wetland sloughs of the central Platte River. In Lingle, G. (ed.) *Proceedings of the Ninth Platte River Basin Ecosystem Symposium*. USFWS and USEPA Region VII.
- Whiles, M. R.**, and J. B. Wallace. 1997. Litter decomposition and macroinvertebrate communities in headwater streams draining pine and hardwood catchments. *Hydrobiologia* 353: 107-119.
- Wallace, J. B., T. F. Cuffney, S. L. Eggert, and **M. R. Whiles**. 1997. Stream organic matter inputs, storage, and export for Satellite Branch at Coweeta Hydrologic Laboratory, North Carolina, USA. *Journal of the North American Benthological Society* 16: 67-74.
- Whiles, M. R.** and J. B. Wallace. 1996. Macroinvertebrate production in a headwater stream during recovery from anthropogenic disturbance and hydrologic extremes. *Canadian Journal of Fisheries and Aquatic Sciences* 52: 2402-2422.
- Wallace, J. B., J. W. Grubaugh, and **M. R. Whiles**. 1996. The influence of coarse woody debris on stream habitats and invertebrate biodiversity. In McMinn, J. W. and D. A. Crossley, Jr. (eds.). *Biodiversity and coarse woody debris in southern forests*. Gen. Tech. Rept. SE-94. USDA Forest Service, Southeastern Forest Experiment Station.
- Whiles, M. R.** and J. W. Grubaugh. 1996. Coarse woody debris and amphibian and reptile biodiversity in southern forests. In McMinn, J. W. and D. A. Crossley, Jr. (eds.). *Biodiversity and coarse woody debris in southern forests*. Gen. Tech. Rept. SE-94. USDA Forest Service, Southeastern Forest Experiment Station.
- Wallace, J. B., J. W. Grubaugh, and **M. R. Whiles**. 1996. Biotic indices and stream ecosystem processes: results from an experimental study. *Ecological Applications* 6: 140-151

#### PROFESSIONAL PUBLICATIONS (continued)

- Wallace, J. B., **M. R. Whiles**, S. Eggert, T. F. Cuffney, G. J. Lugthart, and K. Chung. 1995. Long-term dynamics of coarse particulate organic matter in three Appalachian Mountain streams. *Journal of the North American Benthological Society* 14: 217-232.

- Whiles, M. R.**, K. Chung, and J. B. Wallace. 1993. Influence of *Lepidostoma* (Trichoptera: Lepidostomatidae) on leaf litter processing in disturbed streams. *American Midland Naturalist* 130: 356-363.
- Wallace, J. B., **M. R. Whiles**, J. R. Webster, T. F. Cuffney, G. J. Lugthart, and K. Chung. 1993. Dynamics of particulate inorganic matter in headwater streams: linkages with invertebrates. *Journal of the North American Benthological Society* 12: 112-125.
- Whiles, M. R.** and J. B. Wallace. 1992. First-year benthic recovery of a southern Appalachian stream following three years of insecticide treatment. *Freshwater Biology* 28: 81-91.
- Hooker, K. L. and **M. R. Whiles**. 1988. A technique for collection and study of subterranean invertebrates. *Southwestern Naturalist* 33: 375-376.

## BOOKS

- Dodds, W. K. and **M. R. Whiles**. 2019. *Freshwater Ecology: Concepts and Environmental Applications*, 3<sup>rd</sup> edition. Academic Press.
- Garvey, J. E. and **M. R. Whiles**. 2016. *Trophic Ecology*. CRC Press, Taylor and Francis Group. Boca Raton, FL.
- Dodds, W. K. and **M. R. Whiles**. 2010. *Freshwater Ecology: Concepts and Environmental Applications*, 2<sup>nd</sup> edition. Academic Press.

## BOOK CHAPTERS/SECTIONS, BOOK REVIEWS, & OTHER PROFESSIONAL PUBLICATIONS

- Batzer, D. Gallardo, B., Boulton, A., and **M. R. Whiles**. 2016. Invertebrates of temperate-zone river floodplains. Pages 451-492 in Batzer, D. and Boix, D. (eds). *Invertebrates in freshwater wetlands: An international perspective on their ecology*. Springer, NY.
- Whiles, M. R.** 2013. Invited book review: *Wetland Habitats of North America: Ecology and Conservation Concerns*, by D.P. Batzer and A. H. Baldwin. *Freshwater Science*: 32: 359-360.
- Gido, K. B., K. N. Bertrand, J. N. Murdock, W. K. Dodds, and **M. R. Whiles**. 2010. Disturbance mediated effects of stream fishes on ecosystem processes. Pages 520-541 in Gido, K. and D. Jackskon (eds.) *Community Ecology of Stream Fishes: Concepts, Approaches and Techniques*. American Fisheries Society Symposium 73.
- Whiles, M. R.** and J. W. Grubaugh. 2009. Benthic invertebrate fauna: river and floodplain ecosystems. Pages 205-215 in Likens, G. E. (ed.), *Encyclopedia of Inland Waters*. Elsevier Ltd., London, UK.
- Whiles, M. R.** and R. Altig. 2009. Dietary assessments of larval amphibians. Pages 71-86 in Dodd, C. K, jr. (Ed.). *Ecology and Conservation of Amphibians: A Handbook of Techniques*. Oxford University Press
- Rosi-Marshall, E. J., J. L. Tank, T.V. Royer, **M.R. Whiles**. 2008. Reply to Beachy et al. and Parrott: study indicates Bt corn may affect caddisflies. *Proceedings of the National Academy of Sciences of the United States of America* 105: E11.
- Whiles, M. R.** and R. E. Ricklefs. 2006. Measuring ecosystem productivity: using dissolved oxygen changes to estimate stream metabolism. Data Analysis Module 1 (pp. DA 1-1 – DA 1-6) in R. E. Ricklefs. *The Economy of Nature*, 5<sup>th</sup> ed., Data analysis update. W. H. Freeman, NY.

- Whiles, M. R.** and R. E. Ricklefs. 2006. Consumer populations and energy flow: estimating secondary production. Data Analysis Modules 2 (pp. DA 2-1 – DA 2-4) in R. E. Ricklefs. *The Economy of Nature*, 5<sup>th</sup> ed. Data analysis update. W. H. Freeman, NY.
- Whiles, M. R.** and R. E. Ricklefs. 2006. Landscape ecology: abundance and distribution of northern spotted owls in habitat patches. Data Analysis Module 8 (pp. DA 8-1 – DA 8-3) in R. E. Ricklefs. *The Economy of Nature*, 5<sup>th</sup> ed. Data analysis update. W. H. Freeman, NY.
- Whiles, M. R.** and R. E. Ricklefs. 2006. Sustainable yield: applying basic ecological concepts to fisheries management. Data Analysis Module 10 (pp. DA 10-1 – DA 10-3) in R. E. Ricklefs. *The Economy of Nature*, 5<sup>th</sup> ed. Data analysis update. W. H. Freeman, NY.
- Whiles, M. R.** and R. E. Ricklefs. 2006. Quantifying biodiversity: alternatives for estimating species richness. Data Analysis Module 12 (pp. DA 12-1 – DA 12-4) in R. E. Ricklefs. *The Economy of Nature*, 5<sup>th</sup> ed. Data analysis update. W. H. Freeman, NY.

### POPULAR ARTICLES

- Secchi, S. J. E. Garvey, and **M. R. Whiles**. 2012. Multifunctional floodplain management: Looking ahead from the 2011 Mississippi floods. *National Wetlands Newsletter* Sept.-Oct. pages 21-24.
- Myers, D., **M. R. Whiles**, and J. Cross. 2009. Creating local links to the Illinois wildlife action plan: conservation opportunity areas in Illinois. *Outdoor Illinois*, August, 2009.

### MANUSCRIPTS SUBMITTED OR IN REVISION

- Baumann, K. A., **M. R. Whiles**, E. A. Scholl, and H. M. Rantala. *Submitted*. Community responses to disturbance in a fragmented river with a legacy of hydrologic alteration. Submitted to: *River Research and Applications*.
- Rüegg, J., K. Sheehan, Baker, W. B. Bowden, M. D. Daniels, W. K. Dodds, K. J. Farrell, M. B. Flinn, T. K. Harms, J. Jones, L. E. Koenig, J. Kominoski, W. H. McDowell, S. P. Parker, A. D. Rosemond, M. Trentman, **M. R. Whiles**, and W. M. Wollheim. *Submitted*. Multi-scale comparison of baseflow geomorphic heterogeneity in stream networks across diverse biomes. Submitted to: *Landscape Ecology*
- Rüegg, J., K. B. Gido, K. J. Farrell, M. B. Flinn, A. Argerich, E. Garcia, A. D. Rosemond, B. Penaluma, C. Song, **M. R. Whiles**, C. L. Baker, W. B. Bowden, M. Douglas, T. K. Harms, J. B. Jones, J. S. Kominoski, W. H. McDowell, D. McMaster, S. P. Parker, M. T. Trentman, W. M. Wollheim. *Submitted*. Aquatic Consumer Biomass, Richness, and Trophic Composition Depends on Stream Network Position and Biome. Submitted to: *Global Ecology and Biogeography*.

### ORAL PRESENTATIONS (since 2015 only)

- Whiles, M. R.** 2019. Use of trophic basis of production analyses and stable isotopes tracer additions to quantify energy flow and nutrient cycling in tropical stream food webs. Invited special session speaker, Annual Meetings of the Society for Freshwater Science, Salt Lake City, Utah.

- Whiles M. R.** 2018. Assessing the ecological consequences of biodiversity losses: Impacts of tropical amphibian declines on stream ecosystem structure and function. Invited seminar speaker, Alma College, Alma Michigan.
- Fritz, K., J. Trushenski, and **M. R. Whiles**. 2017. Subsidies of essential nutrients from aquatic to terrestrial environments via amphibian emergence. Annual Meetings of the Society for Freshwater Science, Raleigh, NC.
- Bonjour, S., **M. R. Whiles**, and K. Gido. 2017. Influence of fishes on insect emergence from prairie stream permanent water refugia. Annual Meetings of the Society for Freshwater Science, Raleigh, NC.
- Farrell, K., A. Rosemond, J. Ruegg, K. Gido, M. Flinn, **M. R. Whiles**, E. Garcia, A. Argerich, B. Penaluna, and M. Douglas. 2017. Testing effects of large consumers on stream ecosystem structure and function: synthesis across the scaler project. Annual Meetings of the Society for Freshwater Science, Raleigh, NC.
- Whiles, M. R.** 2017. Assessing the ecological consequences of declining freshwater biodiversity: impacts of catastrophic amphibian declines on Central American streams. Invited seminar speaker, Eastern Illinois University.
- Fulgoni, J. N., K. E. Jackson, D. M. Larson, **M. R. Whiles**, and W. K. Dodds. 2017. Effects of Patch-Burn Grazing on Remnant Tallgrass Prairie Streams. Society for Freshwater Science, Raleigh, NC, 4-9 June 2017.
- Callaham, M. S. Bonjour, B. Brock, C. K. Meyer, B. Snyder, and **M. R. Whiles**. 2017. Periodical cicada expansion lags, but matches, woody plant encroachment in tallgrass prairie landscapes. Soil Ecology Society Biennial Meeting, Fort Collins, CO.
- Whiles, M. R.** 2016. Society for Freshwater Science – What’s the point? Presidential Address, Annual meetings of the Society for Freshwater Science, Sacramento, CA.
- Shoup, L., **M. R. Whiles**, and J. Fulgoni. 2016. Variability in macroinvertebrate assemblages among prairie headwater streams of the central Great Plains. Annual meetings of the Society for Freshwater Science, Sacramento, CA.
- Wollheim, W. W. Dodds, **M. R. Whiles**, K. Sheehan, R. Stewart, F. Ballantyne, C. Baker, W. Bowden, K. J. Farrell, M. Flinn, K. Gido, T. Harms, A. Helton, J. Jones, L. Koenig, W. McDowell, S. Parker, A. Rosemond, J. Ruegg, C. Song, M. Trentman, and J. S. Kominoski. 2016. Scaling laws for aquatic metabolism vs. watershed size. Annual meetings of the Society for Freshwater Science, Sacramento, CA.
- Dodds, W. K., W. Wollheim, A. Argerich, C. Baker, F. Ballantyne, B. Bowden, M. Evans-White, K. Farrell, M. Flinn, B. Frenette, E. Garcia, J. Guinnip, T. Harms, S. Hedden, S. Higgs, D. Hoinghaus, J. Jones, L. Koenig, J. S. Kominoski, D. Larson, R. Lehrter, R. Mapes, W. McDowell, D. McMaster, S. Parker, B. Penaluna, A. Rosemond, J. Ruegg, J. Scott, K. Sheehan, A. Siders, C. Song, M. Spangler, R. Taylor, M. Trentman, **M. R. Whiles**. 2016. Implications of spatial heterogeneity for scaling lotic metabolism. Annual meetings of the Society for Freshwater Science, Sacramento, CA.
- Bennett, M. D. Harlan, J. Bergan, G. Whitledge, **M. R. Whiles**, M. Eddy, J. Allen, and B. Piazza. 2016. Hydrologic filtering of fish life histories: effects of downscaling on the generality of patterns in Louisiana fish communities. Annual meetings of the Society for Freshwater Science, Sacramento, CA.
- Fritz, K., L. Kirschman, and **M. R. Whiles**. 2016. Nutrient flows and subsidies across aquatic-terrestrial boundaries of temporary ponds via amphibian migrations. Annual meetings of the Society for Freshwater Science, Sacramento, CA.

- Bonjour, S. **M. R. Whiles**, and K. Gido. 2016. Influences of fishes on macroinvertebrate and algal colonization of prairie stream pool mesocosms. Annual meetings of the Society for Freshwater Science, Sacramento, CA.
- Baumann, K., E. Scholl, H. Rantala, and **M. R. Whiles**. 2016. Temporal patterns of macroinvertebrate community structure through record flooding and drought in a fragmented river. Annual meetings of the Society for Freshwater Science, Sacramento, CA.
- Fulgoni, J., S. Bonjour, K. McLeran, and **M. R. Whiles**. 2016. Limited influence of Midwestern stream restorations on macroinvertebrate communities. Annual meetings of the Society for Freshwater Science, Sacramento, CA.
- Beattie, A., P. Willink, and **M. R. Whiles**. 2016. Population characteristics, capture success, and feeding ecology of mudpuppies (*Necturus maculosus*) in an urban lake. Annual meetings of the Society for Freshwater Science, Sacramento, CA.
- Johnson, S., B. Penaluna, A. Argerich, J. Larson, E. Garcia, C. Murphy, C. Ruffing, S. Cooper, D. Allen, J. Jones, and M. R. Whiles. 2016. Exploring linkages in headwater food webs before and after forest harvest using structural equation and mechanistic models. Annual meetings of the Society for Freshwater Science, Sacramento, CA.
- Holland, A., E. Hellgren, and **M. R. Whiles**. 2016. Stream community responses to river otter reintroductions in Illinois. Annual meetings of the Society for Freshwater Science, Sacramento, CA.
- Allen, D., W. Cross, A. Benke, T. Brey, A. Huryn, J. Jones, D. McGarvey, C. Murphy, C. Patrick, C. Ruffing, P. Saffarinia, **M. R. Whiles**, and G. Woodward. 2016. Towards understanding drivers of community-level invertebrate production using structural equation modeling. Annual meetings of the Society for Freshwater Science, Sacramento, CA.
- Ruffing, C., J. Jones, **M. R. Whiles**, D. Allen, K. Anderson, A. Argerich, A. Chara-Serna, S. Cooper, W. Cross, N. Galic, E. Garcia, J. Grace, A. Holland, S. Johnson, J. Larson, D. McGarvey, C. Murphy, R. Nisbet, C. Patrick, B. Penaluna, and P. Saffarinia. 2016. Challenges and opportunities for advancing food web theory and analysis in stream ecosystems through modeling. Annual meetings of the Society for Freshwater Science, Sacramento, CA.
- Fulgoni, J. N., K. E. Jackson, **M. R. Whiles**, D. M. Larson, and W. K. Dodds. 2016. Effects of Patch-Burn Grazing on Southwestern Missouri Tallgrass Prairie Streams. Missouri Natural Resources Conference, Osage Beach, MO, 3-5 February 2016.
- Fulgoni, J. N., A. M. Beattie, S. M. Bonjour, K. E. McLeran, **M. R. Whiles**, and H. M. Rantala. 2016. Influence of Restoration on Ecosystem Function and Macroinvertebrate Communities in Midwestern Streams. Ecological Society of America, Fort Lauderdale, FL, 7-12 August 2016.
- Connelly, S., T. Barnum, C. Colon-Gaud, S. S. Kilham, K. R. Lips, C. M. Pringle, H. Rantala, A. T. Rugenski, and **M. R. Whiles**. 2015. Ten years of TADS: Lessons learned from the long-term Tropical Amphibian Declines in Streams Project. Oral presentation at the annual meetings of the Ecological Society of America, Baltimore, Maryland.
- Fulgoni, J. N., K. E. McLeran, **M. R. Whiles**, A. M. Beattie, and H. M. Rantala. 2015. Beyond Trout: Stream restorations in the Midwestern US alter ecosystem processes. Society of Ecological Restoration, Manchester, England, 23-27 August 2015.

- Bennett, M., **M. R. Whiles**, and G. Whitley. 2015. An assemblage-level trait model predicts population level life history variation and response to flow regime in three stream fishes. Oral presentation at the annual meetings of the Society for Freshwater Science, Milwaukee, WI.
- Baumann, K. E. Scholl, H. Rantala, and **M. R. Whiles**. 2015. Macroinvertebrate responses to climatic extremes following a legacy of stream hydrologic restoration. Poster presentation at the annual meetings of the Society for Freshwater Science, Milwaukee, WI.
- Fritz, K., L. Kirschman, and **M. R. Whiles**. 2015. Energy flows and subsidies across aquatic-terrestrial boundaries of temporary ponds via amphibian migrations. Oral presentation at the annual meetings of the Society for Freshwater Science, Milwaukee, WI.
- Bonjour, S., L. King, H. Rantala, K. Baumann, M. Bennett, and **M. R. Whiles**. 2015. Effects of a common in-stream restoration practice on dissolved oxygen and ecosystem metabolism in a low gradient Midwestern river. Poster presentation at the annual meetings of the Society for Freshwater Science, Milwaukee, WI.
- Rueegg, J. Sheehan, K., Baker, C., Daniels, M., Dodds, W., Farrell, K., Flinn, M. Gido, K., Harms, T., Jones, J., Koenig, L., Kominoski, J., McDowell, W. H., Bowden, W., Rosemond, A. D., Trentman, **M., Whiles, M., Wollheim, W., and S. Parker**. 2015. Baseflow patterns of geomorphic heterogeneity in stream networks across biomes. Oral presentation at the annual meetings of the Society for Freshwater Science, Milwaukee, WI.
- Vega, S., Fritz, K., Kirschman, L., **Whiles, M. R.**, and J. Trushenski. 2015. Emerging amphibians as a potential source of essential fatty acids for riparian predators. Oral presentation at the annual meetings of the Society for Freshwater Science, Milwaukee, WI.
- Rantala, H., Rugenski, A., Barnum, T., Colon-Gaud, C., Múrria, C., and **M. R Whiles**. 2015. Long-term effects of disease-driven amphibian declines on macroinvertebrate communities in tropical streams. Oral presentation at the annual meetings of the Society for Freshwater Science, Milwaukee, WI.
- Shoup, L., and **M. R. Whiles**. 2015. Variability in macroinvertebrate assemblages among tallgrass and mixed grass prairie headwater streams. Oral presentation at the annual meetings of the Society for Freshwater Science, Milwaukee, WI.
- Fulgoni, J. N., K. E. Jackson, **M. R. Whiles**. 2015. Land Management: Effects of Patch-Burn Grazing on Macroinvertebrate Assemblages in Headwater Streams on Osage Prairie, MO. Missouri Natural Resource Conference, Osage Beach, MO.

#### POSTER PRESENTATIONS (since 2011 only)

- Bilak, J., **M. R. Whiles**, P. Willink, R. Warne, and A. Beattie. 2017. Capture efficiency, population dynamics, and habitat use of mudpuppies (*Necturus maculosus*) in a disturbed urban lake. Annual Meetings of the Society for Freshwater Science, Raleigh, NC.
- Song, C., W. K. Dodds, J. Ruegg, A. Argerich, C. L. Baker, W. Bowden, M. M. Douglas, K. J. Farrell, M. B. Flinn, E. A. Garcia, A. M. Helton, T. K. Harms, S. Jiaz, J. B. Jones, L. E.

- Koenig, J. S. Kominoski, W. H. McDowell, D. McMaster, S. P. Parker, A. D. Rosemond, C. M. Ruffing, K. R. Sheehan, M. T. Trentman, **M. R. Whiles**, W. M. Wollheim, and F. Ballantyne IV. 2017. Interaction between physiology and environmental heterogeneity determines discrepancy in stream metabolism across spatial scales. Annual Meetings of the Society for Freshwater Science, Raleigh, NC.
- Brooks, J., K. A. Fritz, J. N. Fulgoni, K. E. McLeran, R. Goldkuhl, and **M. R. Whiles**. 2016. Effects of an in-stream restoration project on mobile riparian consumers. Society for Freshwater Science, Sacramento, CA, 21-26 May 2016.
- Baumann, K., E. Scholl, H. Rantala, and **M. Whiles**. 2014. Macroinvertebrate community responses to hydrologic extremes in a southern Illinois river. Joint Aquatic Sciences Meeting, Portland, OR, 18-23 May 2014.
- \*Baumann, K. E., Scholl, H. Rantala, and **M. Whiles**. 2014. Impacts of hydrologic extremes on macroinvertebrate communities in the Cache River, southern Illinois. Mississippi River Research Consortium, La Crosse, WI, 23-25 April 2014. **Best student poster award**.
- Bonjour, S. M., H. M. Rantala, M. G. Bennett, and **M. R. Whiles**. 2014. Effects of an in-stream restoration project on fish community structure and diets. St. Louis Area Undergraduate Research Symposium, Carbondale, IL.
- \*Frauendorf, T., **M. R. Whiles**, A. T. Rugenski, J. C. Colon-Gaud. 2012. Ontogenetic diet shifts among neotropical stream macroinvertebrates. Annual meetings of the Society for Freshwater Science, Louisville, KY. **\*best student poster presentation in basic research**
- Vandermyde, J. and **M. R. Whiles**. 2012. Effects of riparian forest removal on macroinvertebrate functional structure and production along tallgrass prairie streams. LTER All Scientists Meeting, Estes Park, CO.
- Jackson, K. E. and **M. R. Whiles**. 2012. Establishing seasonal baseline conditions for benthic macroinvertebrates and organic matter in remnant tallgrass prairie streams. Annual meetings of the Society for Freshwater Science, Louisville, KY.
- Erndt, K. C., **M. R. Whiles**, and W. K. Dodds. 2012. Terrestrial insect inputs to tallgrass prairie headwater streams. Annual meetings of Society for Freshwater Science, Louisville, KY.
- Kennington, A. K., E. A. Scholl, G. Garcia, H. M. Rantala, G. Wilkerson, and **M. R. Whiles**. 2012. Predicting ecological responses to a proposed river restoration: influence of enhanced flow on duckweed cover, light penetration, and dissolved oxygen in an Illinois river. Annual meetings of the Society for Freshwater Science, Louisville, KY.
- Egdorf, T. C., H. M. Rantala, and **M. R. whiles**. 2012. The effects of stream diversion on leaf litter breakdown in the Cache River, IL. Annual meetings of the Society for Freshwater Science, Louisville, KY.

#### PROFESSIONAL SERVICE and AFFILIATIONS

2017	Illinois Endangered Species Technical Advisory Committee -
Invertebrates	
2017	Illinois Endangered Species Technical Advisory Committee - Fishes
2017	Past President – Society for Freshwater Science
2016-18	Illinois Nutrient Science Advisory Committee
2015	President – Society for Freshwater Science
2014-16	Consortium of Scientific Society Presidents member

2014	President Elect, Society for Freshwater Science
2012	Chair, SIUC Honorary Degree & Distinguished service award committee
2011	Platte River Caddisfly federal endangered species listing review
2010-13	SIU Graduate Council
2009	Salt Creek Tiger beetle federal endangered species listing review
2009	Luquillo Long-Term Ecological Research Site review panel member
2009	Platte River Ecosystem Monitoring Program review panel Member
2008-11	SIU Judicial Review Board
2008-10	NEON/STREON steering committee
2006-18	Organization of Biological Field Stations member
2006-08	SIU Faculty Senate
2005-10	American Institute of Biological Sciences member
2004-18	Associate Editor, <i>Freshwater Science</i>
2004-05	Co-chair, 2005 annual meetings of the North American Benthological Society, New Orleans, LA
2004-05	Treasurer, SIU chapter of Sigma Xi
2002-03	Program Committee, North American Benthological Society
2000-10	Entomological Society of America member
1997- 2005	Sigma Xi member
1986-	Society for Freshwater Science member

#### GRADUATE STUDENTS

C. K. Meyer	MS	2000	KSU	Professor, Simpson College
D. M. Stagliano	MS	2001	KSU	MT Natural Heritage Biologist
J. L. Jonas	MS	2001	KSU	Post doc. Colorado State Univ.
M. L. Stone	MS	2003	SIU	USGS Biologist
M. Roberts	MS	2004	SIU	Research Coordinator, Miss. Museum Natural Sciences
A. Davis	MS	2005	SIU	(co-advise) Env. Consultant
M. B. Flinn	PhD	2006	SIU	Assoc. Prof., Murray State Univ.
T. Heatherly	MS	2006	SIU	Postdoc, Univ. of Rio de Janeiro
K. Register	PhD	2006	SIU	(co-advise) Professor, Clarion Univ.
C. K. Meyer	PhD	2007	SIU	Assoc. Professor, Simpson College
D. A. Walther	PhD	2007	SIU	USFWS Biologist
C. Chambers	MS	2008	SIU	Director, Univ. Westfjords, Iceland
J. C. Colon-Gaud	PhD	2008	SIU	Assoc. Prof. Georgia Southern Univ.
D. Whiting	MS	2009	SIU	Technician, Univ. of Missouri
A. Rothert	MS	2010	SIU	(co-advise) Technician, SIU
D. Myers	MS	2010	SIU	(co-advise) WY Game and Fish
D. Grulkowski	MS	2010	SIU	(co-advise) Env. Consultant
K. Heinrich	MS	2011	SIU	Asst. Prof., Univ. Mary Hardin Baylor
T. Frauendorf	MS	2011	SIU	PhD student, U. British Columbia
J. Turner	MS	2012	SIU	(co-advise), Florida Park Service
J. Vandermyde	MS	2012	SIU	Streams Specialist, Illinois EPA

E. Scholl	MS	2012	SIU	PhD student, Montana State Univ.
K. Jackson	MS	2013	SIU	Water Resources Agent, Clemson
A. Rugenski	PhD	2013	SIU	Assistant Professor, Univ. of GA
N. Mountjoy	PhD	2014	SIU	Assistant Prof., W. Kentucky Univ.
M. Bennet	PhD	2015	SIU	Post doc. USEPA
K. Bauman	MS	2016	SIU	Western Kentucky CC
A. Beattie	MS	2016	SIU	Watershed Coordinator - Ohio
K. Fritz	PhD	2017	SIU	Post doc, Murray State Univ.
L. Kirschman	PhD	2017	SIU	(co-advise) Postdoc U of AK
S. Bonjour	MS	2017	SIU	lab manager, AZ State Univ.
J. Fulgoni	PhD	2018	SIU	River Ecologist, MO. Dept. Cons.
K. Heiden	MS	2019	SIU	Lab Manager, Univ. FL
J. Bilak	PhD	current	SIU	(co-advise)
K. Fralick	MS	current	SIU	
K. Bove	MS	current	SIU	
A. Siders	PhD	current	UF	

#### POSTDOCTORAL ASSOCIATES

C. Montgomery		2004-06	SIU	
P. Verburg		2006-08	UGA/SIU	
C. Colon-Gaud		2008-10	SIU	
H. Rantala		2009-14	SIU	
C. Ruffing		2015-17	UAF/SIU	