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# CURRICULUM VITAE – MATT HERBERT

# AQUATIC ECOLOGIST, THE NATURE CONSERVANCY IN MICHIGAN

101 EAST GRAND RIVER AVE LANSING, MI 48906

# **EDUCATION**

### Texas A&M University - College Station, Texas

M.S., Wildlife and Fisheries Sciences, 1999

Thesis: Fish assemblage structure along environmental gradients in a coastal plain drainage: influences from a reservoir.

# <u>Iowa State University – Ames, Iowa</u>

B S., Fisheries and Wildlife Biology, 1992

### PROFESSIONAL EXPERIENCE

Aquatic Ecologist – The Nature Conservancy, Michigan Chapter – 2007-present

Wildlife Biologist - Michigan Department of Natural Resources, Wildlife Division - 2003-2007

Aquatic Ecologist – The Nature Conservancy, Illinois Chapter – 1999-2003

Technical Research Scientist – Illinois Natural History Survey, Center of Aquatic Ecology – 1998-1999

Graduate Assistant - Texas A&M, Department of Wildlife and Fisheries - 1996-1998

Research Technician – Illinois Natural History Survey, Kaskaskia Biological Station – 1993-1996

Bioaid – Idaho Fish and Game, Sawtooth Fish Hatchery – 1992, 1993

Research Technician – Iowa State University, Dr. Robert Summerfelt – 1991-1993

#### GRANTS AND AWARDS

Chadderton, W.L., **M. Herbert**, R. Claramunt, T. Galarowicz, J. Gross, and E. Olsen. 2011. Invasive Predator Suppression on Critical Spawning Reefs. \$667,971 from the U.S. Environmental Protection Agency, Great Lakes Restoration Initiative.

- **Herbert, M**. and M. Khoury. 2010. Development of conservation priorities for migratory, river-spawning fishes in Lake Huron. \$74,144 from the Michigan Department of Natural Resources and Environment, Coastal Management Program.
- May, C., M. Herbert, D. Pearsall, and S. Mackey. 2010. Development of a comprehensive management plan for coastal wetlands in North Maumee Bay with emphasis on scientifically-based management prescription for diked wetland complexes. \$44,922 from the Michigan Department of Natural Resources and Environment, Coastal Management Program.

- Herkert, J., W.L. Perry, M.E. Herbert. 2001. Annual primary producer dynamics in Mackinaw River headwater streams: response of an energetic food web base to watershed management. \$13,500 from The Nature Conservancy's Freshwater Initiative matching grants program
- Herkert, J., K.D. Blodgett, J. Nicklow, and M.E. Herbert. 2001. A Management Model for Controlling Hydrologic Alteration in the Illinois River. \$13,500 from The Nature Conservancy's Freshwater Initiative matching grants program
- Tear, T.H., K.D. Blodgett, J. Nicklow, and M.E. Herbert. 2000. Hydrologic alteration and its relation to water level management: A systems approach to managing the Illinois River. \$25,000 from The Nature Conservancy's Freshwater Initiative matching grants program
- Tear, T.H. and M.E. Herbert. 2000. Status and patterns in mussel distribution in the Mackinaw River Basin and the feasibility of reintroduction as a conservation strategy. \$7,500 from The Rodney Johnson/ Katharine Ordway Stewardship Endowment.

# REFEREED PUBLICATIONS

- Ross, J.A., M.E. Herbert, S.P. Sowa, J.R. Frankenberger, K.W. King, S.F. Christopher, J.L. Tank, J.G. Arnold, M.J. White, H. Yen. In Press. A synthesis and comparative evaluation of drainage water management. Agricultural Water Management
- Sowa, S.P., Herbert, M., Mysorekar, S., Annis, G., Hall, K., Nejadhashemi, A.P., Woznicki, S.A., Wang L., Doran, P., In Press. How much conservation is enough? Defining implementation goals for healthy fish communities. Journal of Great Lakes Research.
- Haw, Y., M.J. White, J.G. Arnold, S.C. Keitzer, M.V. Johnson, J.D. Atwood, P. Daggupati, M.E. Herbert, S.P. Sowa, S.A. Ludsin, D.M. Robertson, R. Srinivasan, C.A. Rewa. 2016. Western Lake Erie Basin: Soft-dataconstrained, NHDPlus resolution watershed modeling and exploration of applicable conservation scenarios. Science of the Total Environment 569: 1265-1281.
- Keitzer, S., Ludsin, S.A., Sowa, S., Annis, G., Daggupati, P., Froelich, A.M., Herbert, M.E., Johnson, M.V., Yen, H., White, M.J., Arnold, J.G., Sasson, A.M., Rewa, C.A., In Press. Thinking outside of the lake: can controls on nutrient inputs into Lake Erie benefit stream conservation in its watershed? Journal of Great Lakes Research. http://dx.doi.org/10.1016/j.jglr.2016.05.012.
- Sampath, P.V., H.S. Liao, Z.K. Curtis, M.E. Herbert, P.J. Doran, C.A. May, D.A. Landis, S.G. Li. 2016. Understanding fen hydrology across multiple scales. Hydrological Processes.
- Sampath, P.V., Liao, H.S., Curtis, Z.K., Doran, P.J., Herbert, M.E., May, C.A. and Li, S.G., 2015. Understanding the groundwater hydrology of a geographically-isolated prairie fen: implications for conservation. PloS One, 10(10), p.e0140430.
- Legge, J.T., P.J. Doran, M.E. Herbert, J. Asher, G. O'Neil, S. Mysorekar, S. Sowa, and K. Hall. 2013. From model outputs to conservation action: Prioritizing locations for implementing agricultural best management practices in a Midwestern watershed. Journal of Soil and Water Conservation 68:22-33.

- B.L. Gruber, S.A. Alderstein Gonzalez, P.J. Badra and **M.E. Herbert**. 2012. Distribution of habitat of unionid mussels and invasive sea lamprey larvae in the Paw Paw River, a tributary of Lake Michigan. Freshwater biology 57: 1293–1305.
- D. A Landis, A.K. Fiedler; C.A. Hamm; D.L. Cuthrell; E.H. Schools; D.R. Pearsall; **M.E. Herbert**; P.J. Doran. 2012. Insect conservation in Michigan prairie fen: addressing the challenge of global change. Journal of Insect Conservation. 16:131-142.
- Lemke, AM., K.G. Kirkham, T.T. Lindenbaum, **M.E. Herbert**, T.H. Tear, W.L. Perry, and J.R. Herkert. 2011. Evaluating agricultural best management practices in tile-drained subwatersheds of the Mackinaw River, Illinois, USA. Journal of Environmental Quality 40:1215-28.
- **Herbert, M.E.**, P.B. McIntyre, P. Doran, J.D. Allan, and R. Abell. 2010. Terrestrial reserve networks do not adequately represent aquatic ecosystems. Conservation Biology 24:1002-1011.
- Lemke, A.M., T.T. Lindenbaum, W.L. Perry, **M.E. Herbert**, T.H. Tear, and J.R. Herkert. 2010. Effects of outreach on the awareness and adoption of conservation practices by farmers in two agricultural watersheds of the Mackinaw River, Illinois. Journal of Soil and Water Conservation 65:304-315.
- Pegg, M.A., **M.E. Herbert**, A.M. Lemke. 2007. Fish community development during wetland restoration of an agriculturally impacted floodplain system, 1999-2003. Pages 23-24 in Heske, E.J., J.R. Herkert, K.D. Blodgett, and A.M. Lemke. Spunky Bottoms: restoration of a big-river floodplain. Proceedings of the Spunky Bottoms Restoration Symposium, May 2003. Illinois Natural History Survey Special Publication 29. (SP29) Illinois Natural History Survey, Champaign, IL.
- **Herbert, M.E.** and F.P. Gelwick. 2003. Spatial variation of headwater fish assemblages explained by hydrologic variability and upstream effects of an impoundment. Copeia 2003(2): 273-284.

# **REPORTS**

- Calabro, E.J., **M.E. Herbert**, R.M. Claramunt, S.K. Hanshue, T.L. Galarowicz. (In Review). Status and history of Cisco (*Coregonus artedi*) in Michigan inland waters. Michigan Department of Natural Resources Special Report, Lansing, MI.
- S.C. Keitzer, S.A. Ludsin, S.P. Sowa, A.M. Sasson, G. Annis, J.G. Arnold, A. Brennan, P. Daggupati, A.M. Froehlich, **M.E. Herbert**, C. Vollmer-Sanders, M.J. White, C.J. Winslow, and H. Yen. 2016. Quantifying the potential water quality benefits of agricultural conservation practices for stream fish conservation in the western Lake Erie Basin. Final Report Submitted to the US Department of Agriculture, Natural Resources Conservation Service.
- Chadderton, L., A. Tucker, M. Herbert, R. Claramunt, T. Galarowicz, J. Gross. 2015. Invasive predator suppression on critical spawning reefs. Final Report submitted to the US Environmental Proetection Agency, Great Lakes National Program Office, EPA Project Number: GL00E00811-0, Chicago, IL.
- Clapp, D.F., W.W. Fetzer, **M. Herbert**, and T. Zorn. 2013. A comprehensive plan for addressing gaps in understanding of near-shore fish communities in the Great Lakes. Michigan Department of Natural Resources, Lansing, MI.

- Herbert, M., M. Khoury, T. Bowe, and L. Cole. 2012. Development of Conservation Priorities for Migratory, River-spawning Fishes in the Michigan Waters of Lake Huron. Final Report submitted to the Michigan Coastal Management Program (MCMP) Of the Michigan Department of Environmental Quality. http://www.michigan.gov/documents/deq/deq-ogl-cmp-TNC-ConservationPriorities-SpawningFish-LakeHuron 389155 7.pdf
- Pearsall, D., P. Carton de Grammont, C. Cavalieri, C. Chu, P. Doran, L. Elbing, D. Ewert, K. Hall, M. Herbert, M. Khoury, D. Kraus, S. Mysorekar, J. Paskus, and A. Sasson. 2012a. Returning to a Healthy Lake: An International Biodiversity Conservation Strategy for Lake Erie. Technical Report. The Nature Conservancy, Nature Conservancy of Canada, and Michigan Natural Features Inventory, Lansing, MI, 340 pp. with appendices. Available at: http://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/michigan/projects/biodiversity/Pages/default.aspx ~accessed May 18, 2013!.
- Pearsall, D., P. Carton de Grammont, C. Cavalieri, P. Doran, L. Elbing, D. Ewert, K. Hall, **M. Herbert**, M. Khoury, S. Mysorekar, S. Neville, J. Paskus, and A. Sasson. 2012b. Michigami: Great Water—Strategies to Conserve the Biodiversity of Lake Michigan. Technical Report. The Nature Conservancy and Michigan Natural Features Inventory, Lansing, MI, 313 pp. with appendices. Available at: http://www.conservationgateway.org/ConservationByGeography/NorthAmerica/UnitedStates/michigan/projects/biodiversity/Pages/default.aspx ~accessed May 18, 2013.
- Sowa, S.P., **M. Herbert**, K.R. Hall, L. Cole, S. Mysorekar, M. Fales, T. Bowe, G. Annis, A. Nejadhashemi, and L. Wang. 2011. Assessing the Ability of Conservation Practices to Restore Biological Communities in Agricultural Watersheds. Final Report submitted to NRCS Conservation Effects Assessment Project. 69 pp.
- Sowa, S. P., **M. Herbert**, L. Cole, S. Mysorekar, J. Legge, T. Bowe, A. Nejadhashemi, M. Einheuser, and L. Wang. 2011. Assessing benefits of conservation practices to the biological integrity of agricultural streams in MI and WI. Final Report submitted to NRCS Conservation Effects Assessment Project. 56 pp.
- Franks Taylor, R., A. Derosier, K. Dinse, P. Doran, D. Ewert, K. Hall, **M. Herbert**, M. Khoury, D. Krause, A. Lapenna, G. Mayne, D. Pearsall, J. Read, B. Schroeder. 2010. The Sweetwater Sea: An International Biodiversity Conservation Strategy for Lake Huron Technical Report. A joint publication of The Nature Conservancy, Environment Canada, Ontario Ministry of Natural Resources Michigan Department of Natural Resources and Environment, Michigan Natural Features Inventory Michigan Sea Grant, and The Nature Conservancy of Canada. 264 pp. with Appendices.
- **Herbert, M**, S. Sowa, and J. Draper. 2009. An Evaluation of a Stream Power Tool and a Rapid Field Assessment for Prioritizing the Siting of Two-Stage Ditches to Improve Bank Stability and Reduce Bank Erosion. A Final Report to The Joyce Foundation. The Nature Conservancy, Lansing, Michigan.
- Cleveland, K. and **M. Herbert**. 2005. Literature review of the impacts of wind power facilities on wildlife. Wildlife Division, Michigan Department of Natural Resources. 17pp.
- Eagle, A.C., E.M. Hay-Chmielewski, K. Cleveland, A. Derosier, **M. Herbert** R. Rustem. 2005. Michigan's Wildlife Action Plan. Michigan Department of Natural Resources, Lansing, MI.

- Herbert, M.E. and T.H. Tear. 2003. A hydrologic assessment of the major tributaries of the Illinois River System. A report to The Nature Conservancy's Freshwater Initiative. The Nature Conservancy, Illinois Chapter, Peoria, IL.
- Herbert, M.E. and J. Herkert. 2002. Mackinaw River Ecological Integrity Assessment. A report to The Nature Conservancy's Freshwater Initiative. The Nature Conservancy, Illinois Chapter.
- Tear, T.H. and M.E. Herbert. 2000. The Mackinaw River Project scientific assessment grant. Final report to the US Environmental Protection Agency #X995714-02-0. The Nature Conservancy, Peoria, IL.
- Soluk, D.A., D.S. Zercher, L.M. Pintor, M.E. Herbert, A.B. Hults, E.J. Gittinger, and S.A. Stalzer. 2000. Evaluation of habitat and ecology of the larvae of Hine's emerald dragonfly (Somatochlora hineana) in Wisconsin and Illinois. Illinois Natural History Survey. 86 pp.
- Tear, T.H. and M.E. Herbert. 1999. The hydrology and water quality of the Upper Mackinaw River. A preliminary report on the Mackinaw River Paired Watershed Study. The Nature Conservancy, Illinois Chapter.

## **PRESENTATIONS**

- Herbert, M.E., E.J. Calabro, R.M. Claramunt, T.L. Galarowicz, W.L. Chadderton, and A.J. Tucker. 2016. "Restoration of critical Coregonid and Lake Trout reef spawning habitat in northern Lake Michigan." International Association for Great Lakes Research, Hamilton, Guelph, Ontario.
- Calabro, E.J., R. Claramunt, M.E. Herbert, T. Galarowicz, W.L. Chadderton, and A.J. Tucker. 2016. "Effectiveness of critical lake trout and coregonid reef spawning habitat restoration in norther Lake Michigan: Mitigating environmental and invasive egg predator impacts (Part 2)." Midwest Fish and Wildlife Conference, Grand Rapids, Michigan.
- Claramunt, R.M., E.J. Calabro, M.E. Herbert, T. Galarowicz, W.L. Chadderton, and A.J. Tucker. 2016. "Effectiveness of critical lake trout and coregonid reef spawning habitat restoration in norther Lake Michigan: Mitigating environmental and invasive egg predator impacts (Part 1)." Midwest Fish and Wildlife Conference, Grand Rapids, Michigan.
- O'Hanley, J., T. Neeson, A. Moody, M. Guyette, M. Diebel, M. Herbert, M. Khoury, E. Yacobson, P. Doran, M. Ferris, P. McIntyre. 2015. Priorizing barrier removals in Great Lakes tributaries: balancing tradeoffs bwetween native and invasive fish species. Fish Passage 2015, Groningen, The Netherlands.
- Moody, A.T., T.M. Neeson, M.Q. Guyette, M.W. Diebel, M. Herbert, M. Khoury, E. Yacobson, P.J. Doran, M. Ferris, J. O'Hanley, P.B. McIntyre. Rules of thumb for prioritizing barrier removals emerging from comprehensive analysis of Great Lakes tributaries. Ecological Society of America Annual Meeting, Baltimore, Maryland.
- Christopher, S.F., Sowa, S., Herbert, M., Arnold, J. 2014. Watershed-scale assessment of stacked drainage practices in the Western Lake Erie Basin to improve water quality. Great Lakes SWAT modeling workshop, March 18-19, 2014. Ann Arbor, MI.

- http://graham.umich.edu/media/files/watercenter/Christopher-et-al Watershed-scale-assessmentstacked-drainage-practices-in-WBLE.pdf
- Claramunt, R.M., M.E. Herbert, T. Galarowicz, W.L. Chadderton, and J. Gross. 2014. The effects of pulse pressure water gun technology on rusty crayfish (Orconectes rusticus) and round goby (Neogobius melanostomus) non-native egg predators in Lake Michigan. 144<sup>th</sup> Annual Meeting of the American Fisheries Society, Quebec City, Quebec.
- Buckley, J., T. Galarowicz, W.L. Chadderton, R. Claramunt, M. Herbert, and A.Tucker. 2014. Monitoring invasive Rusty Crayfish on critical Lake Michigan spawning reefs. International Association for Great Lakes Research, Hamilton, Ontario, Canada.
- Cole, K.G, T. Galarowicz, R. Claramunt, W. L. Chadderton, M. Herbert, and J. Gross. 2014. Offshore movement of the invasive round goby (Neogobius melanostomus) in northern Lake Michigan: critical implications for native fish restoration. International Association of Great Lakes Research, Hamilton, Ontario, Canada.
- Cole, K., T. Galarowicz, R. Claramunt, W.L. Chadderton, M. Herbert, and J. Gross. 2014. Offshore movement of the invasive round goby (Neogobius melanostomus) in northern Lake Michigan: critical implications for native fish restoration. Michigan Chapter of the American Fisheries Society, Holland, Michigan.
- Herbert, M., M. Khoury, E. Yacobson, M. Guyette, T. Neeson, P. Doran, M. Diebel, P. McIntyre. 2014. Accounting for the benefits: mapping the key tributaries for migratory fish. Fish Passage 2014, Madison, WI.
- McIntyre, P., Diebel, M., Doran, P., Neeson, T., Januchowski-Hartley, S., Hartley, M., Guyette, M., Ferris, M., O'Hanley, J., Herbert, M. and Khoury, M., 2014. Using optimization models to support barrier removal decisions for native migratory fishes in Great Lakes tributaries. Fish Passage 2014, Madison, WI.
- Neeson, T., M. Guyette, M. Diebel, M. Herbert, M. Khoury, P. Doran, M. Ferris, D. Burkett, P. McIntyre. 2014. Accounting for sea lampreys in a Great Lakes barrier removal decision support tool. Fish Passage 2014, Madison, WI.
- Gross, J., R.M. Claramunt, M.E. Herbert, T.L. Galarowicz, W.L., Chadderton. 2014. The effects of pulse pressure water gun technology on Rusty Crayfish (Orconectes rusticus) and Round Goby (Neogobius melanostomus) non-native egg predators in Lake Michigan. American Fisheries Society, Quebec, Canada.
- Herbert, M.E. 2014. Shiawassee River Wildlife. Invited Speaker for the Friends of the Shiawassee River, Owosso, MI.
- Buckley, J., T. Galarowicz, W L. Chadderton, R. Claramunt, M. Herbert, and A.Tucker. 2014. [Poster] Monitoring invasive Rusty Crayfish on critical Lake Michigan spawning reefs. Michigan Chapter of the American Fisheries Society, Holland, Michigan.

- Herbert, M.E., M. Khoury, P.J. Doran. 2013. Migratory, River-Spawning Fishes in the Great Lakes: Conserving the Whole Guild and Not Just the Megafauna. American Fisheries Society, Little Rock, AR.
- Buckley, J., R. Moser, T. Galarowicz, R. Claramunt, W.L. Chadderton, M. Herbert, and A. Tucker. 2013. Crayfish suppression on critical spawning reefs by intensive trapping. Michigan Chapter of the American Fisheries Society, Gaylord, Michigan.
- Cole, K., T. Galarowicz, R.M. Claramunt, W.L. Chadderton, M. Herbert, and J. Gross. 2013. [Poster] Offshore movement of the invasive round goby in northern Lake Michigan: critical implications for native fish restoration. International Association for Great Lakes Research, West Lafayette, Indiana.
- Herbert, M.E., M. Khoury, T. Bowe, L. Cole. 2012. Development of tributary conservation priorities for Great Lakes migratory fishes in Western Lake Huron. American Fisheries Society, Minneapolis-St. Paul, MN.
- Clapp, D. and M.E. Herbert. 2012. Measuring fish species richness for conservation action planning. American Fisheries Society, Minneapolis-St. Paul, MN.
- Doran, P.J., K. Hall, S.P. Sowa, M.E. Herbert, L. Cole, S. Mysorekar, T. Bowe, A.P. Nejadhashemi, L. Wang, C. Rewa. 2012. Protecting fish from agricultural impacts as climate changes: How much conservation is enough? American Fisheries Society, Minneapolis-St. Paul, MN.
- Sowa, S.P., M. Herbert, S. Mysorekar, L. Wang, A. Nejadhashemi, C. Fen, J. Bartholic, Y. Shi, P. Mantha, C. Rewa. 2010. Assessing benefits of agricultural best management practices to fish communities across MI and WI through integration of multiple geospatial datasets and physicochemical models. American Fisheries Society Annual Meeting.
- Herbert, M.E., P.J. Doran, J.T. Legge, S.P. Sowa, J. Asher, G. O'Neil. 2010. Prioritization of BMPs to maximize water quantity and quality benefits in the Paw Paw River Watershed, Michigan. American Fisheries Society Annual Meeting.
- Hohner, B., S. Alderstein, P. Badra, M. Herbert. 2009. Freshwater mussel habitat use in the Paw Paw River. Midwest Fish and Wildlife Conference.
- Herbert, M., P. Doran, J. Legge, S. Sowa, J. Asher, J. Bartholic, G. O'Neil. 2009. A sustainable approach to water use in Southwestern Michigan's Paw Paw River watershed. North American Benthological Society.
- Herbert, M., B. Schroeder, D. Pearsall, P. Doran, R. Franks Taylor, G. Mayne, A. Derosier, M. Khoury, D. Krause, J. Read, K. Hall, and D. Ewert. 2009. Developing a Lake Huron Biodiversity Conservation Strategy. Great Lakes Fishery Commission Annual Lake Committee Meeting.
- Herbert, M. 2009. Utilizing a natural channel design to rehabilitate headwater streams. The Stewardship Network.
- Herbert, M., B. Schroeder, D. Pearsall, P. Doran, R. Franks Taylor, G. Mayne, A. Derosier, M. Khoury, D. Krause, J. Read, K. Hall, and D. Ewert. 2009. Developing a Lake Huron Biodiversity Conservation Strategy. Great Lakes Fishery Commission Lake Huron Tech Committee Meeting.

- Allan, J.D., R. Abell, P. Doran, M. Herbert, P.B. McIntire. 2008. Are terrestrial reserve networks sufficient to protect aquatic biodiversity? North American Benthological Society.
- Lemke, A.M., M. Herbert, W.J. Perry, and J.R. Herkert. 2006. Effectiveness of agricultural best management practices on freshwater conservation in an agricultural subwatershed of the MackinawRiver, Illinois. North American Benthological Society, Anchorage, AK.
- Lemke, A.M., M. Herbert, W.J. Perry, and J.R. Herkert. 2006. Effectiveness of agricultural best management practices on the ecological integrity of the Mackinaw River subwatershed, Illinois. Managing Agricultural Landscapes for Environmental Quality: Strengthening the Science Base. Soil and Water Conservation Society, Kansas City, MO.
- Lemke, M., M. Herbert, D. Kovacic, W. Perry. 2005. Effectiveness of agricultural best management practices on the ecological integrity of a Mackinaw River subwatershed, Illinois. Mississippi River Basin Nutrient Workshop.
- Gelwick, F., M. Herbert, N. Dictson, B. Healy, M. Morgan, C. Burgess, R. Li. September 2005. Fish assemblages from the shortgrass steppes, to the prairies and savannas in Texas: Evidence of shifting ecosystems? Ecology and Management of North American Prairie Streams Symposium, American Fisheries Society.
- Gelwick, F., M. Herbert, B. Healy, D. Peterson, M. Webb. 2005. Fish and Invertebrate Assemblages along Hydraulic and Land Use Gradients in the San Jacinto River: Coastal Perspectives on Instream Flow and Habitat Protection. North American Benthological Society
- Gelwick, F., M. Herbert, B. Healy, D. Peterson, M. Webb. 2005. Fish and Invertebrate Assemblages along Hydraulic and Land Use Gradients in the San Jacinto River: Coastal Perspectives on Instream Flow and Habitat Protection. American Geophysical Union.
- Lemke, M., J. Herkert, M. Herbert, T. Lindenbaum. October 2004. Effects of agricultural best management practices on water quality and biota in the Mackinaw River (IL) watershed. Natural Areas Conference.
- Herbert, M E. and T H. Tear. 2003. Temporal trends in the hydrologic regime of the major tributaries of the Illinois River: implications for ecological restoration. Society for Conservation Biology.
- Herbert, M.E. 2003. Restoration of streams and rivers at multiple scales. Central Michigan University, Restoration Ecology course (guest lecture)
- Herbert, M.E. and T.H. Tear. 2000. Are rivers products of their watershed: complexity in the relationship between land use and stream ecosystems? Natural Areas Conference
- Herbert, M.H., T.H. Tear, M. Goodwin, K. Billo. 2000. A monitoring program to evaluate the impact of conservation practices on aquatic resources in an agriculturally dominated watershed. Natural Areas Conference

- **Herbert, M.E.** and F.P. Gelwick. 1998. Upstream effects of a reservoir on spatial and temporal patterns of fish distributions and assemblage structure. Southwest Association of Naturalists Annual Meeting, Albuquerque, NM.
- **Herbert, M.E.** and F.P. Gelwick. 1998. Spatial and temporal variation in fish distributions and assemblage structure in the Upper San Jacinto River System. Southern Division American Fisheries Society Midyear Meeting, Lexington, KY.
- **Herbert, M.E.** and F.P. Gelwick. 1998. Spatial and temporal variation in a fish assemblage influenced by seasonal changes in stream discharge. Texas A&M Wildlife and Fisheries Symposium, College Station, TX.
- **Herbert, M.E**. and F.P. Gelwick. 1998. Spatial and temporal variation in fish distributions and assemblage structure in the Upper San Jacinto River System. Texas Chapter of the American Fisheries Society Annual Meeting, Athens, TX.

## PROFESSIONAL SERVICE AND DEVELOPMENT

#### Committees

- Lake Michigan Technical Committee, Habitat Working Group, 2015-Present
- Lake Michigan Committee, Native Planktivore Restoration Task Group, 2013-Present
- Western Lake Erie Basin Conservation Effects Assessment Project Team, 2014-Present
- Michigan Wildlife Action Plan, Mini-Plan contributor for Great Lakes Ciscoes, Inland Lake Ciscoes, and Headwaters and Warmwater Streams, 2014-2015
- Michigan Mollusk and Crayfish Technical Advisory Committee, 2014
- Lake Erie Biodiversity Conservation Plan Core Team, 2011-2012
- Lake Michigan Biodiversity Conservation Plan Core Team, 2011-2012
- Lake Huron Biodiversity Conservation Plan Core Team, 2009-2010
- Saginaw Bay Coastal Resource Guide Steering Committee, 2009-2010
- Michigan Inland Lakes Partnership Coordinating Council Member, 2007-2010
- Michigan Wildlife Action Plan Core Team, 2004-2005

#### Memberships

- American Fisheries Society
- Society for Conservation Biology
- Society of Freshwater Science
- International Association of Great Lakes Research

### Reviewer for:

- Marine and Freshwater Research 2014
- Journal of Applied Ecology 2013
- Orvx 2010
- River Research and Applications 2008, 2009
- American Midland Naturalist 2005, 2008
- Transactions of the American Fisheries Society 2004
- North American Journal of Fisheries Management 1998
- Fisheries 1998
- (Grant Review) National Fish and Wildlife Foundation 2004

Aquatic Ecologist, The Na

• (Grant Review) University of Michigan Water Center – 2013

### Honors:

- Michigan United Conservation Club's 2006 Special Conservation Award
- American Fisheries Society Southern Division, Warmwater Streams Committee's 1998 Outstanding Student Research Award
- Texas A&M University, Wildlife and Fisheries Science Department 1997-1998 Outstanding Master's Student
- American Fisheries Society, Texas A&M Chapter 1997-98 scholarship recipient

#### Additional service

- Central Michigan University Graduate Faculty 2010–2013, 2015–Present
- Presenter for Chippewa Nature Center's BioBlitz 2003, 2006, 2014, 2016
- Presenter for Pathways to Research in Biology class at Central Michigan University about science at The Nature Conservancy, 2010, 2011, 2013
- Compiled the Conservation Biology section for the annual North American Benthological Society Bibliography, 1999-2004
- Organization Committee for the Texas A&M Wildlife and Fisheries Symposiums, 1997, 1998
- Editor of the Texas A&M, Wildlife and Fisheries Departmental Newsletter, The Osprey, 1996-98 Secretary of the Association of Graduate Wildlife and Fisheries Scientists, Texas A&M, 1997-98