Hope R. Dodd National Park Service Heartland Inventory and Monitoring Network Hope\_Dodd@nps.gov

<u>Mailing Address</u> : Wilson's Creek National 6424 W Farm Road 182 Republic, MO 65738	Battlefield	<u>Office Location</u> : Missouri State University Biology Dept. 901 S National Ave Springfield, MO 65897 417-836-3163
<u>Education</u> May 1999	M.S. Fisheries and Wildlife Michigan State University	
May 1996	B.S. Department Honors in Biology: Minor in Computer Science Ball State University	Aquatic Biology
Experience June 2021 – Present	<ul> <li>Aquatic Program Leader National Park Service, Heartland I&amp; Adjunct Faculty, Missouri State Univ</li> <li>Project lead for all aquatic monitoring p aquatic vegetation and spring commun quality monitoring, and metal contamin of all aquatic monitoring programs in 1° in Central Plains, Ozark Highlands, and</li> <li>Ensure effective and efficient monitorin revisions, point of contact for aquatics- projects at parks within the network, we maintain data integrity across all aquati</li> <li>Direct, facilitate, or consult on additionan network parks. Examples: assessment stream habitat, invertebrates, and fish of flooding on sedimentation, stream char fish communities</li> <li>Supervise NPS Biologists (GS-9), full-ti Research Specialists, and student inter</li> <li>Develop cooperative agreements, men research proposals to sustain and enha aquatic resources in parks</li> <li>Point of contact for Missouri State Univ which includes overseeing the budget, assisting with agreement modifications administrative staff and biology departre employees for NPS projects.</li> <li>Conduct park education and outreach p elementary to high school students. Me and high school students in aquatic eco</li> </ul>	versity, Biology Dept. programs: aquatic invertebrate, ities, fish communities, water ants. This includes coordination 1 Midwest national parks located d Ouachita Mountains region. In of aquatic resources, protocol related resource questions or porking with data manager to ics program databases. al monitoring or research in of stream remediation effects on communities; assessment of nnel morphology, mussels, and ime Missouri State University rns. norandums of understanding, and ance long-term monitoring of versity cooperative agreement performing budget estimates, , working with university ment staff in hiring of university programs ranging from entor graduate, undergraduate

	<ul> <li>Serve as graduate adjunct faculty at Missouri State university and give guest lectures in the Biology Department.</li> </ul>
Feb 2021 – June 2021	Acting Aquatic Program Leader National Park Service, Heartland I&M Network Adjunct Faculty, Missouri State University, Biology Dept.
Jul 2005 – Jan 2021	Fisheries Biologist National Park Service, Heartland I&M Network Adjunct Faculty, Missouri State University, Biology Dept.
	<ul> <li>Project lead for all fish community monitoring and protocol development in 11 Midwest national parks located in Central Plains, Ozark Highlands, and Ouachita Mountains region.</li> <li>Evaluated the status and trends of fish communities including federally threatened or endangered fish and species of conservation concern.</li> <li>Conducted monitoring of water quality, stream habitat, aquatic vegetation, macroinvertebrates, and metal contaminants and assist with protocol development.</li> <li>Directed and facilitate additional monitoring and research to assist parks in assessing potential shifts in aquatic communities due to climate change, land use changes, and park management strategies.</li> <li>Developed cooperative agreements, memorandums of understanding, and research proposals to sustain fish community monitoring and conducted additional data analysis of long-term monitoring data and facilitated partnerships among universities, state, and federal agencies.</li> <li>Published results of aquatic monitoring programs and research in NPS reports and journal articles. Presented monitoring results to park staff and at professional scientific meetings.</li> <li>Conducted park education and outreach programs ranging from elementary to high school students. Mentored graduate, undergraduate and high school students in aquatic ecology.</li> <li>Served as graduate adjunct faculty at Missouri State University and served on graduate committees at Missouri State University student American Fisheries Society subunit.</li> <li>Taught Ichthyology course at Missouri State University, gave guest lectures and led field trips at Missouri State University, and South Dakota State University.</li> </ul>
May 1999 – Jun 2005	Assistant Research Scientist, Illinois Natural History Survey Faculty/Staff, University of Illinois
	<ul> <li>Investigator and research coordinator for studies that evaluated responses of macroinvertebrates, mussels, fish assemblages, and physical/chemical habitat quality to best management strategies and restoration practices</li> <li>Developed a monitoring team and protocols</li> <li>Despensible for texenemic identification of equation invertebrates and</li> </ul>

• Responsible for taxonomic identification of aquatic invertebrates and fish.

- Wrote grant proposals and developed budgets for funding of two research projects to support graduate students and research technicians.
- Published reports and journal articles regarding significant results of the research and presented results at professional scientific meetings and to agency staff.
- Managed a laboratory and supervised two full-time technicians on invertebrate and fish identification, sampling methodology, and data entry.
- Supervised/mentored graduate students and undergraduate interns hired to work on research projects I supervised.

May 1996 – May 1999 Graduate Research Assistant, Michigan State University

- **Thesis**: Low-head lamprey barrier dam impacts on habitat and fish communities in the Great Lakes Basin.
- Conducted a study to assess the effects of low-head lamprey barrier dams on stream communities across the Great Lakes Basin. The objectives of this study were to assess impacts of barrier dams on stream fish community composition and size distribution, identify fish species whose abundance and size were negatively affected by these dams, determine the impacts of low-head dams on the age structure, growth, and mortality of Rainbow trout and White suckers, and assess limitations of fish movement (mark/recapture) in streams with low-head dams.
- Other responsibilities included: writing reports and journal articles, presenting results at professional meetings and to the Great Lakes Fishery Commission, and supervision of student interns.
- May 1993 May 1996 Student Research Assistant, Ball State University
  - Undergraduate Thesis: Water clarity trends in the Indiana waters of Lake Michigan: pre (1970 1972) and post (1983 1994) Zebra mussel introduction
  - Conducted a study on the water clarity of the Indiana waters of Lake Michigan using secchi depth data. The objective of the study was to clarify possible trends in water clarity among the years of 1970 - 1972 (pre Zebra mussel introduction) and 1983 – 1994 (post- Zebra mussel introduction) and suggest causative factors for these trends

## Grants, Cooperative Agreements, Partnerships (selected)

2023 Inventory, Monitoring, and Research of Aquatic Resources within and Adjacent to the Ozark National Scenic Riverways. **Memorandum of Understanding** between Heartland Network NPS and Missouri Department of Conservation. Hope Dodd: NPS Project Manager, Andy Turner and Blake Stephens: MDC Project Managers, 5-year MOU.

## 2022 Partnership for Ecological Monitoring in the NPS-HTLN. Cooperative Agreement

between Heartland Network NPS and Missouri State University, Hope Dodd: NPS Project Manager, Mike DeBacker: NPS Agreements Technical Representative, Alicia Mathis: MSU Investigator, 5 year (2022-2027).

- 2021 Partnership for Ecological Monitoring in the NPS-HTLN. **Cooperative Agreement** between Heartland Network NPS and Missouri State University, Hope Dodd: NPS Project Manager, Mike DeBacker: NPS Agreements Technical Representative, Alicia Mathis: MSU Investigator, 5 year (2018-2023).
- 2015 Aquatic Resource Monitoring at Pipestone National Monument. **Cooperative Agreement** between Heartland Network NPS and South Dakota State University, Hope Dodd : NPS Project Manager, Mike DeBacker: NPS Agreements Technical Representative, Katie Bertrand/Brian Graeb: SDSU Investigator, 5 year.
- 2014 Inventory, Monitoring, and Research of Aquatic Resources within and Adjacent to the Ozark National Scenic Riverways. **Memorandum of Understanding** between Heartland Network NPS and Missouri Department of Conservation. Hope Dodd: NPS Project Manager, John Ackerson and Andy Turner: MDC Project Managers, 5 year MOU.
- 2013 Fish Community Monitoring and Topeka shiner assessment at Pipestone National Monument. **Partnership** between Hope Dodd, Heartland Network NPS and Drs. Katie Bertrand and Brian Graeb, South Dakota State University.
- 2013 Developing Measures of Vulnerability to Climate Change and Disturbance of Aquatic Communities in Heartland Network Parks. **USGS National Parks Monitoring Program**, Hope Dodd: NPS Investigator, Craig Paukert: USGS Investigator, 3 year.
- 2010 **Hutton Jr Fisheries Biology Scholarship Program** funded by American Fisheries Society. Zachary Morris: Student Intern, Hope Dodd: Mentor, 3 month.
- 2009 **Hutton Jr Fisheries Biology Scholarship Program** funded by American Fisheries Society. Myranda Clark: Student Intern, Hope Dodd: Mentor, 3 month.
- 2005 Development of a Multi-metric Habitat Index for Illinois Streams. Illinois State Wildlife Grant, Ann Holtrop: Primary Investigator; Robert Fischer, Hope Dodd, John Epifanio: Co-investigators, 3 year.
- 2005 Evaluation of Newbury Weirs (Rock Riffles) for Improving Habitat Quality and Biotic Diversity in Illinois Streams. Illinois Wildlife Preservation Fund – Small Project Grant, Hope Dodd: Primary Investigator, David Wahl: Co-investigator, 1 year.
- 2004 Evaluation of Newbury Weirs (Rock Riffles) for Improving Habitat Quality and Biotic Diversity in Illinois Streams. **R. Weldon Larimore Research Grant** from R. Weldon Larimore/Jordan Creek Endowment Fund, Hope Dodd: Primary Investigator, 1 year.
- 2002 Evaluation of Modification of the Upper Batavia Dam on the Fox River, Illinois Department of Natural Resources – Office of Water Resources Grant,

David Wahl: Primary Investigator, Hope Dodd: Co-investigator, 4 year.

2001 Evaluation of Management Practices in Illinois Watersheds, Illinois Department of Natural Resources – Division of Fisheries Grant, David Wahl: Primary Investigator, Hope Dodd: Co-investigator, 3 year.

# Awards and Honors

2020	NPS Fifteen Years of Service Certificate
2018	Letter of Recognition, Missouri Chapter of the American Fisheries Society
2015	NPS Ten Years of Service Certificate
2014	Letter of Recognition, Missouri Chapter of the American Fisheries Society
2009 & 2010	Mentor for the American Fisheries Society Hutton Jr Fisheries Program
2008	Service-wide Inventory and Monitoring Program Team Award, US Dept of Interior, National Park Service
2008	US Dept of Interior, National Park Service Star Award
2005	US Dept of Interior, National Park Service On-the-Spot Award
2001	Mentor for Special Undergraduate Research Experience Program
2000	Associate Fisheries Professional Certification – American Fisheries Society
1999	Michigan Chapter of the American Fisheries Society Albert S. Hazzard Award for recognition of thesis research
1999	American Fisheries Society / Sea Grant Outstanding Student Paper Award at the 129 <sup>th</sup> Annual American Fisheries Society meeting
1996	Indiana Chapter of the American Fisheries Society Exceptional New Member
Professional Society Affiliations1996 - presentAmerican Fisheries Society (AFS) – National Chapter2016 - presentNational Education Section of AFS 2016-2018, North Central Division representative to Education Section	
2005 - preser	nt Missouri Chapter of AFS 2017-present, Newsletter editor 2012- 2021, Faculty co-advisor for Missouri State University Student Subunit 2018, Publicity Chair for Missouri Natural Resources Conference 2014-2016, Treasurer

2014, Program Chair for Missouri Natural Resources Conference

2000 - present	North Central Division Rivers and Streams Technical Committee member
1999 - 2005	Illinois Chapter of AFS 2001-2005, Continuing Education Committee Chair
1996 - 1999	Michigan Chapter of AFS
1994 - 1996	Indiana Chapter of AFS Ball State University Student Chapter of Indiana AFS President, Charter member, Executive Committee, Planning Committee
1999 – 2001	North American Benthological Society (currently known as Society for Freshwater

## Protocols and Technical Reports (selected)

Science)

- **Dodd, H.R.,** D.E. Bowles, J.T. Cribbs, J.M. Williams, and C.R Cheri. 2024 (in publication). Aquatic Community Monitoring at Herbert Hoover National Historic Site: 2008-2017. NPS/HTLN/NRDS-2023. National Park Service, Fort Collins, Colorado.
- Dodd, H.R., J.T. Cribbs, D.E. Bowles, C.R Cheri and J.M. Williams. 2023. Aquatic Community Monitoring at Effigy Mounds National Monument: 2008-2017. NPS/HTLN/NRDS-2023/2562. National Park Service, Fort Collins, Colorado. https://doi.org/10.36967/nrr-2300634.
- Dodd, H.R., D.G. Peitz, G.A. Rowell, J.A. Hinsey, D.E. Bowles, L.W. Morrison, M.D. DeBacker, J.L. Haack-Gaynor, and J.M. Williams. 2021. Protocol for monitoring fish communities in small streams in the Heartland Inventory and Monitoring Network: Version 2.0. Natural Resource Report NPS/HTLN/NRR—2021/2235. National Park Service, Fort Collins, Colorado. https://doi.org/10.36967/nrr-2284726.
- Dodd, H.R., D.E. Bowles, J.A. Hinsey, J.T. Cribbs, L.W. Morrison, M.D. DeBacker, G.A. Rowell, J.L. Haack-Gaynor, and J.M. Williams. 2021. Protocol for monitoring spring communities at Ozark National Scenic River-ways, Missouri: Version 2.0. Natural Resource Report NPS/HTLN/NRR—2021/2231. National Park Service, Fort Collins, Colorado. https://doi.org/10.36967/nrr-2284630.
- Bowles, D. E., M.H. Williams, H.R. Dodd, L.W. Morrison, J.A. Hinsey, J.T. Cribbs, G A. Rowell, M.D. DeBacker, J.L. Haack-Gaynor, and J.M. Williams. 2021. Protocol for monitoring aquatic invertebrates of small streams in the Heartland Inventory & Monitoring Network: Version 2.1. Natural Resource Report NPS/HTLN/NRR—2021/2229. National Park Service, Fort Collins, Colorado. https://doi.org/10.36967/nrr-2284622.
- Bowles, D.E., L.W. Morrison, H.R. Dodd, G.A. Rowell, M.D. DeBacker, J.A. Hinsey, J.T. Cribbs, J.L. Haack- Gaynor, and J.M. Williams. 2020. Protocol for monitoring aquatic invertebrates at Ozark National Scenic Riverways, Missouri, and Buffalo National River, Arkansas. Natural Resource Report NPS/HTLN/NRR—2020/2077. National Park Service, Fort Collins, Colorado.
- **Dodd, H.R**. and J.M. Williams. 2018. Fish community monitoring at Wilson's Creek National Battlefield, 2006-2016 status report. Natural Resource Data Series NPS/HTLN/NRDS—2018. National Park Service, Fort Collins, Colorado.

- **Dodd, H.R**. and J.M. Williams. 2018. Fish community monitoring at George Washington Carver National Monument, 2006-2016 status report. Natural Resource Data Series NPS/HTLN/NRDS—2018. National Park Service, Fort Collins, Colorado.
- Dodd, H.R., J.C. Petersen, B.G. Justus, D.E. Bowles, L.W. Morrison, G.A. Rowell, J.A. Hinsey, and J.M. Williams. 2018. Methods for monitoring fish communities of Buffalo National River and Ozark National Scenic Riverways in the Ozark Plateaus of Arkansas and Missouri, Version 2.0. Natural Resource Report NPS/HTLN/ NRR—2018/1633. National Park Service, Fort Collins, Colorado.
- Bowles, D.E., J.A. Hinsey, J.T. Cribbs, H.R. Dodd. 2017. Aquatic invertebrate community structure in springs at Ozark National Scenic Riverways, Missouri, 2007-2016. Natural Resource Report NPS/HTLN/NRR—2017. National Park Service, Fort Collins, Colorado.
- Dodd, H.R., D.G. Peitz, J. T. Cribbs, M.D. Wagner, R. Johnston, A. DeGoei, K. Henderson, D. Mecham, M. Perrion, B. Schall, S. Sabo, S. Cole, B. Miller, and B. D. S. Graeb. 2015. Fish community monitoring at Pipestone National Monument: 2001 – 2014 trend report. Natural Resource Report NPS/HTLN/NRR—2015/1066. National Park Service, Fort Collins, Colorado.
- Dodd, H.R. 2013. Fish community monitoring at Ozark National Scenic Riverways: 2005-2010 summary report. Natural Resources Data Series NPS/HTLN/NRDS—2013/599. National Park Service, Fort Collins, Colorado.
- DeBacker, M.D., D.E. Bowles, H.R. Dodd, and L.W. Morrison. 2012. Five-year review and recommendations for revision of aquatic sampling protocols at Buffalo National River and Ozark National Scenic Riverways. Natural Resource Report NPS/HTLN/NRR – 2012/563. National Park Service, Fort Collins, Colorado.
- **Dodd, H.R.** and J.T. Cribbs. 2012. Fish community monitoring at Homestead National Monument of America: 2004-2011 status report. Natural Resource Data Series NPS/HTLN/NRDS—2012/276. National Park Service, Fort Collins, Colorado.
- **Dodd, H.R**. and S.K. Mueller. 2012. Fish community monitoring at Hot Springs National Park: 2009 report. Natural Resource Data Series NPS/HTLN/NRDS—2012/235. National Park Service, Fort Collins, Colorado.
- Bowles, D.E. H.R. Dodd, J.A. Hinsey, J.T. Cribbs, and J.A. Luraas. 2011. Spring communities monitoring at Ozark National Scenic Riverways, Missouri: 2007-2009 status report. Natural Resources Technical Report NPS/OZAR/NRTR – 2011/511. National Park Service, Fort Collins, Colorado.
- Dodd, H.R., J.A. Hinsey, and S.K. Mueller. 2011. Fish community monitoring at Pea Ridge National Military Park: 2009 report. Natural Resource Data Series NPS/HTLN/NRDS— 2011/217. National Park Service, Fort Collins, Colorado.
- Dodd, H.R., L.W. Morrison, D.G. Peitz. 2010. Fish community monitoring at Tallgrass Prairie National Preserve: 2001-2008 trend report. Natural Resource Technical Report NPS/HTLN/NRTR—2010/325. National Park Service, Fort Collins, Colorado.

- **Dodd, H.R.** 2009. Fish community monitoring at Buffalo National River: 2006-2007 status report. Natural Resource Technical Report NPS/HTLN/NRTR—2009/185. National Park Service, Fort Collins, Colorado.
- Dodd, H.R., D.G. Peitz, G.A. Rowell, D.E. Bowles, and L.M. Morrison. 2008. Protocol for monitoring fish communities in small streams in the Heartland Inventory and Monitoring Network. Natural Resource Report NPS/HTLN/NRR—2008/052. National Park Service, Fort Collins, Colorado.
- Bowles, D. E., M. H. Williams, H. R. Dodd, L. W. Morrison, J. A. Hinsey, C. E. Ciak, G. A. Rowell, M. D. DeBacker, and J. L. Haack. 2008. Monitoring Protocol for Aquatic Invertebrates of Small Streams in the Heartland Inventory & Monitoring Network. Natural Resource Report NPS/HTLN/NRR—2008/042. National Park Service, Fort Collins, Colorado.
- Petersen, J.C., B.J. Justus, H.R. Dodd, D.E.Bowles, L.W. Morrison, M.H. Williams, G.A. Rowell. 2008. Methods for monitoring fish communities of Buffalo National River and Ozark National Scenic Riverways in the Ozark Plateaus of Arkansas and Missouri: Version 1.0. US Geological Survey Open-File Report 2007-1302, 94 p.
- Bowles, D.E., H.R. Dodd, M.H. Williams, L.W. Morrison, K. James, M.D. DeBacker, C.E. Ciak, J.A. Hinsey, G.A. Rowell, J.L. Haack. 2008. Protocol for monitoring spring communities and Ozark National Scenic Riverways, Missouri. Natural Resources Report NPS/HTLN/NRR-2008/029, National Park Service, Fort Collins, Colorado.
- Bowles, D. E., J. A. Luraas, L. W. Morrison, H. R. Dodd, M. H. Williams, G. A. Rowell, M. D. DeBacker, J. A. Hinsey, F. D. Usrey, J. L. Haack. 2007. Protocol for Monitoring Aquatic Invertebrates at Ozark National Scenic Riverways, Missouri, and Buffalo National River, Arkansas. Natural Resource Report NPS/HTLN/NRR—2007/009. National Park Service, Fort Collins, Colorado.
- Day, D., A.M. Holtrop, H.R. Dodd, R. Smogor, R. Fischer, M. Short. 2005. A guide to operation and assembly of an electric seine. Illinois Natural History Survey Publication (technical report 2172).
- **Dodd, H.R.,** J.W. Neisler, D.H. Wahl. 2005. Evaluation of Watershed Management Practices for Improving Stream Quality in the Illinois Watershed Program. Final Report, Division of Fisheries, Illinois DNR, Springfield, IL.
- **Dodd, H.R.,** S.E. Butler, D.H. Wahl. 2004. Evaluation of Modification of the Upper Batavia Dam on the Fox River, Illinois. Progress Report, Office of Water Resources, Illinois DNR, Springfield, IL.
- Phillips A., M. Miller, G. Pociask, L. Smith, R. Cahill, J. Miner, M. Pegg, H. Dodd, P. Hubert, A. Holtrop, D. Wahl, P. Brown, M. Demissie, H. Knapp, D. Crowder, J. Slowikowski. 2004.
   Illinois River Ecosystem Restoration Monitoring and Watershed Assessment Framework, Final Report, U.S. Army Corps of Engineers Rock Island District, Rock Island, IL.
- **Dodd, H.R.**, D.Wahl. 1999-2000. Watershed Restoration: Illinois Pilot Watershed Program. Illinois Natural History Survey Annual Report, Champaign, IL.

Noakes, D., J. Baylis, D. Hayes, H. Dodd, L. Porto, and J. Goldstein. 1999. Biological Impact of

Low-head Barrier Dams Final Report to the Great Lakes Fishery Commission, Ann Arbor, MI.

# **Publications**

- C.P. Paukert, Schwoerer, J.M, **H. Dodd**, and R.W. Tingley III. In prep. Relationships among biotic indices and their responses to ecological gradients in least-disturbed Ozark streams. Journal of Environmental Management.
- Clark, M.K. and **H.R. Dodd**. 2016. Influence of a spring on fish communities and habitat in an Ozark stream. Natural Areas Journal 36:72-80.
- Westhoff, J.T., C. Paukert, S. Ettinger-Dietzel, H. Dodd, M. Siepker. 2016. Behavioural thermoregulation and bioenergetics of riverine smallmouth bass associated with ambient cold-period thermal refuge. Ecology of Freshwater Fish. 25:72-85, Published Wiley Online Library Oct 2014, DOI: 10.1111/eff.12192.
- Bowles, D.E. and **H.R. Dodd**. 2015. Floristics and community ecology of aquatic vegetation occurring in seven large springs at Ozark National Scenic Riverways, Missouri, 2007-2012. Journal of the Botanical Research Institute of Texas 9 (1): 235-249.
- Ettinger-Dietzel, S.A., **H.R. Dodd**, J.T. Westhoff, and M.J. Siepker. 2015. Movement and habitat selection patterns of smallmouth bass (*Micropterus dolomieu*) in an Ozark river. Journal of Freshwater Ecology, Published online DOI: 10.1080/02705060.2015.1025867.
- Maloney, K.O., **H.R. Dodd**, S.E. Butler, and D.H.Wahl. 2008. Changes in macroinvertebrate and fish assemblages in a medium sized river following a breach of a low-head dam. Freshwater Biology 53: 1055-1068.
- Tiemann, J.S., **H.R. Dodd**, N. Owens, D.H. Wahl. 2007. Effects of Lowhead Dams on Unionids in the Fox River, Illinois. Northeastern Naturalist 14(1): 125-138.
- McLaughlin, R.L., L. Porto, D.L.G. Noakes, J.R. Baylis, L.M. Carl, H.R. Dodd, J.D. Goldstein, D.B. Hayes, R. Randall. 2006. Effects of Low-head Dams on Stream Fishes: Taxonomic Affiliations and Morphological Correlates of Sensitive Species. Canadian Journal of Fisheries and Aquatic Sciences 63(4):766-769.
- Hayes, D.B., H.R. Dodd, J. Lessard. 2005. Effects of Small Dams on Cold-water Stream Fish Communities. Proceedings from 4th World Fisheries Conference, Vancouver, BC, Canada.
- Dodd, H.R., D.B. Hayes, J.R. Baylis, L.M. Carl, J.D. Goldstein, R. L. McLaughlin, D.L.G. Noakes, L.M. Porto, R.G. Randall, M.L. Jones. 2003. Low-head Lamprey Barrier Dam Impacts on Stream Habitat and Fish Communities in the Great Lakes Basin. Journal of Great Lakes Fisheries Research 29 (Supplement 1): 386-402.
- D.B. Hayes, J.R. Baylis, L.M. Carl, H.R. Dodd, J.D. Goldstein, R. L. McLaughlin, D.L.G. Noakes, L.M. Porto, R.G. Randall. 2003. Biological effect of low-head lamprey barriers: insights from an extensive survey and intensive process-oriented research. SLIS II Symposium proceedings, Journal of Great Lakes Fisheries Research 29 (Supplement 1): 373-385.

# Professional and Public Presentations (selected)

- A.L. VandenBerg and **H.R. Dodd**. 2024. Assessment of long-term fish community data of the Buffalo National River, Arkansas. Midwest Fish and Wildlife Conference, January 28-31, 2024.
- H.R. Dodd. Biology 302 Seminar Guest Lecture, Spring 2023, Spring 2022, Fall 2021.
- H.R. Dodd. 2022. Fish community monitoring and the potential recovery of Topeka Shiner within streams at Tallgrass Prairie National Preserve. Joint Aquatic Sciences Meeting. May 14-20, 2022.
- J.M Williams and **H.R. Dodd**. 2022. Long-term monitoring of fish communities in springs at Ozark National Scenic Riverways. Joint Aquatic Sciences Meeting. May 14-20, 2022.
- C.R. Cheri and **H.R. Dodd**. 2022. Long-term monitoring reveals temporal and environmental impacts on macrophyte communities in spring streams. Joint Aquatic Sciences Meeting. May 14-20, 2022.
- **H.R. Dodd**. Topeka Shiner Monitoring and Recovery at Tallgrass Prairie National Preserve. 2020 National NPS At-Risk Species Annual Meeting. June 9-10, 2020.
- Williams, J.M., **H.R. Dodd**, D.S. Finn. 2018. A low-water crossing impacts longitudinal movement of knobfin sculpin (*Cottus immaculatus*) and Northern Hog Sucker (*Hypentilium nigricans*) in an Ozark river. Society for Freshwater Science Annual Meeting. May 18-25, 2018.
- Gross, C.S., G.A. Rowell, **H.R. Dodd**, and M.D. DeBacker. 2017. Improving access to natural resource monitoring on National Park web pages. Midwest Fish and Wildlife Conference, Lincoln, NE. February 5 8, 2017.
- **Dodd, H.R**., M.J. Siepker, J. Haack-Gaynor. 2016. Springs as thermal refugia: movement and habitat use patterns of smallmouth bass in an Ozark River. American Fisheries Society Annual Meeting, Kansas City, MO. August 21-25, 2016.
- Williams, J.M., H.R. Dodd, D.G. Peitz, J.T. Cribbs, K.N. Bertrand, B.D.S. Graeb. 2016. Long-term Fish Community Monitoring and Status of Topeka Shiner (Notropis topeka) at Pipestone National Monument, Minnesota. American Fisheries Society Annual Meeting, Kansas City, MO. August 21-25, 2016.
- Schwoerer, J.M., C.P. Paukert, and H.R. Dodd. 2016. Stream community vulnerability to climate and landuse change with-in National Park Services' Heartland Inventory and Monitoring Network. Missouri Natural Resources Conference, Osage Beach, MO, February 3-5, 2016.
- **Dodd, H.R**., M. J. Siepker, J. Haack-Gaynor. 2015. Springs as thermal refugia: movement and habitat use patterns of smallmouth bass in an Ozark River. American Fisheries Society Annual Meeting, Portland, OR, August 16-21, 2015.
- Schwoerer. J.M., C.P. Paukert, and **H.R. Dodd**. 2015. Consistency among biotic indices to represent environmental conditions: implications for biotic assessments. American Fisheries Society Annual Meeting, Portland, OR, August 16-21, 2015.

- Schwoerer, J.M., S.H. Schlick, J.L. Ridgway, C.J. Rice, H.R. Dodd, and C.P. Paukert. 2014. Factors influencing the abundance of smallmouth bass and largemouth bass in the Ozark National Scenic Riverways. 144<sup>th</sup> Annual American Fisheries Society Conference, Quebec City, Quebec, August 17-21, 2014.
- Siepker, M. J., **H. R. Dodd**, and J. L. Haack. 2013. Springs as thermal refugia: movement and habitat use patterns of an indicator species. Black bass diversity symposium: multidisciplinary science for conservation. Southern Division of the American Fisheries Society, Annual Meeting, Nashville, TN.
- Clark, M.K. and **H.R. Dodd**. 2013. Influence of a spring on Fish Communities in a small Ozark Stream. Missouri Natural Resources Conference, Osage Beach, MO, January 30 -February 1, 2013.
- Morrison, L.W. and **H.R. Dodd**. 2012. Spatiotemporal variation in community structure of fish assemblages in two river systems. 97<sup>th</sup> Annual Meeting of the Ecological Society of America, Portland, OR, August 5-10, 2012.
- Bowles, D.E. and **H.R. Dodd**. 2012. Aquatic vegetation monitoring at Ozark National Scenic Riverways, Missouri, 2007-2011. Ozark Summit, Springfield, MO, June 12-14, 2012.
- **Dodd, H.R**., L.W. Morrison, D.E. Bowles. 2011. Fish community and habitat relationships in the Buffalo National River, Arkansas and Ozark National Scenic Riverways, Missouri. 141st American Fisheries Society Annual Meeting, Seattle, WA, September 4-8, 2011.
- Hinsey, J.A., D.E. Bowles, H.R. Dodd, J.A. Luraas and J.T. Cribbs. 2011. Aquatic invertebrate community dynamics of large springs at Ozark National Scenic Riverways, Missouri, 2007-2009. Annual Meeting of the Entomological Society of America, San Diego, CA, Dec 12-15, 2010.
- Hinsey, J.A., D.E. Bowles, J.T. Cribbs, and H. R. Dodd. 2011. Geologic influence on aquatic invertebrate community structure and integrity in Ozark tributaries at Buffalo National River and Ozark National Scenic Riverways. Annual Meeting of the North American Benthological Society, Providence RI, May 22-26, 2011.
- Bowles, D.E. **H.R. Dodd**, J.A. Hinsey. 2009. Aquatic invertebrate inventory and monitoring at six large springs at Ozark National Scenic Riverways, Missouri. Annual Meeting of the Entomological Society of America, Indianapolis, IN, Dec. 13-16, 2009.
- **Dodd H.R.**, D.G. Peitz, L.W. Morrison. 2009. Monitoring of fish communities and evaluation of habitat in prairie streams of Tallgrass Prairie National Preserve, Kansas. Midwest Fish and Wildlife Conference, Springfield, IL, Dec. 6-9, 2009.
- Morrison, L.W. and **H.R. Dodd**. 2009. Reporting the results of long-term monitoring: Control charts and information theoretic modeling. 36<sup>th</sup> Annual Natural Areas Conference, Vancouver, WA, Sept. 15-18, 2009.

- **Dodd, H.R.** and D.E. Bowles. 2009. Fish community and habitat assessment of six large springs at Ozark National Scenic Riverways. 139<sup>th</sup> Annual Meeting of the American Fisheries Society, Nashville, TN, Aug. 30 Sept. 3, 2009.
- Ciak, C.E., **H.R. Dodd** and D.E. Bowles. 2008. Development of a Long-term Monitoring Protocol for Large Spring Ecosystems at Ozark National Scenic Riverways, Missouri. North American Benthological Society, Salt Lake City, UT, May 26-30, 2008.
- Dodd, H.R. and D.E. Bowles. 2007. Importance of Gear Selection and Consistency in Establishing a Long-term Monitoring Program. 68<sup>th</sup> Midwest Fish and Wildlife Conference, Madison, WI, Dec. 9-12, 2007.
- Tiemann, J.S., **H.R. Dodd**, N. Owens, D.H. Wahl. 2007. Damn those Dams Their Effects on Freshwater Mussels. 137<sup>th</sup> Annual American Fisheries Society Conference. San Francisco, CA.
- **Dodd, H.R.** and D. Peitz. 2006. Long-term Monitoring of Habitat and Fish Communities in two Prairie Ecosystems. 136<sup>th</sup> Annual Amercian Fisheries Society Conference. Lake Placid, NY, Sept. 13, 2006.
- Malony, K., **H.R. Dodd**, S.E. Butler, D.H. Wahl. 2006. Dam Removal and It's Effects on Physical and Biological Conditions in the Fox River, IL. Ecological Society of America Conference. Memphis, TN. Aug. 6-11, 2006.
- Keefer, L., H.R. Dodd, D.H. Wahl. 2005. Watershed Research: Watershed Monitoring and Evaluation of Best Management Practices in Illinois Streams. Illinois American Fisheries Society Annual Meeting, Moline, IL, March 5, 2005.
- Butler, S.E., **H.R. Dodd**, D.H. Wahl. 2004. Movement and Habitat Utilization of Smallmouth Bass, Channel Catfish, and Common Carp in a River with Multiple Low-head Dams. 134<sup>th</sup> Annual American Fisheries Society Conference, Madison, WI, Aug. 25, 2004.
- **Dodd, H.R.,** J.W. Neisler, D.H. Wahl. 2004. Relationships Between Abiotic and Biotic Indicators of Stream Quality to Evaluate Watershed Remediation in Practices in Illinois. 134<sup>th</sup> Annual American Fisheries Society Conference, Madison, WI, Aug. 23, 2004.
- Hayes, D.B., H.R. Dodd, J. Lessard. 2004. Conservation Considerations for Small Dams on Cold-water Streams. 4<sup>th</sup> World Fisheries Conference, Vancouver, BC, Canada, May 2-6, 2004.
- **Dodd, H.R**., A.M. Holtrop, D.H.Wahl, and D. Day. 2001. Evaluation of Transect-Scale Habitat Methods for Detecting Changes in Illinois Stream Conditions. 63rd Midwest Fish and Wildlife Conference, DesMoines, Iowa, Dec. 11, 2001.
- **Dodd, H.** and D. Wahl. 2000. Evaluation of Watershed Management Practices for Improving Illinois Streams. 62<sup>nd</sup> Midwest Fish and Wildlife Conference, Minneapolis, MN, Dec. 5, 2000.
- Dodd, H., D. Hayes, D. Noakes, J. Baylis, L. Carl, R. Randall, J. Goldstein, and L. Porto. 1999. Biological Impacts of Low-head Barrier Dams on Stream Fish Communities. 129<sup>th</sup> Annual American Fisheries Society Conference, Charlotte, NC, Aug. 31, 1999.

## <u>References</u>

Michael DeBacker (supervisor) Heartland Inventory and Monitoring Network National Park Service Wilson's Creek National Battlefield 6424 W Farm Road 182 Republic, MO 65738 (417) 732-6438

David Bowles (former supervisor, retired in January 2021) Heartland Inventory and Monitoring Network National Park Service Biology Department Missouri State University 901 S National Ave Springfield, MO 65897 Personal mobile: (417) 459-6665

Craig Paukert USGS, Missouri Cooperative Fish and Wildlife Unit Dept of Fisheries and Wildlife 302 Anheuser-Busch Natural Resources Bldg University of Missouri Columbia, MO 65211 (573) 882-3524

Mike Siepker Iowa Dept of Natural Resources Decorah Fish Hatchery 2325 Siewers Spring Road Decorah, IA 52101 (563) 382-8324