

Brian C. Reeder, Ph.D.

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EDUCATION:

Ph.D., Environmental Biology, The Ohio State University, 1990

Dissertation Title: Primary Productivity, Sedimentation, and Phosphorus Cycling in a Lake Erie Coastal Wetland.

Committee—W.J. Mitsch (chair), P.A. Colinvaux, C.E. Herdendorf, D.A. Johnson

M.S., Environmental Biology, The Ohio State University, 1987.

M.A., Biology, (Psychology minor), Marshall University, West Virginia, 1985

Research: Effects of Temperature, Zooplankton Density, and Parasites on *Hydra* populations in Grayson Lake, KY.

B.S., Biology, (Chemistry minor), Youngstown State University, Ohio, 1983.

TEACHING EXPERIENCE

Morehead State University, Morehead, KY

Professor of Biology, Department of Biological and Environmental Science 1997-present

Assistant Professor, 1989-1994; Associate Professor, 1994-1997

- Only active faculty member to earn three of MSU's outstanding faculty achievement awards: Teaching, Research, and Service.
- Awarded over 3 million dollars in grants and contracts
- Produced over 100 scholarly works (articles, book chapters, abstracts, and presentations).
- Founder of the Environmental Education Center, and a co-founder of MSU's Program of Distinction, the Institute for Regional Analysis and Public Policy.(IRAPP)

Courses Taught (level):

- Introduction to Biology (freshman non-majors)
- Introduction to Environmental Science (freshman majors and non-majors)
- Principals of Biology (freshman majors)
- Environmental Testing Methods (junior)
- Populations, Resources, and the Environment (junior)
- Ecology (senior)
- Limnology (graduate and undergraduate)
- Environmental Education (graduate and undergraduate)
- Advanced Ecology (graduate)
- Wetland Ecology and Management (graduate)

AWARDS

- Distinguished Teacher Award, Morehead State University, 2007
- Faculty Service Award, Morehead State University 2004
- Licking River Watershed Watch Outstanding Service Award. 2002
- Kentucky Environmental Quality Commission Earth Day Award. 2002
- Taking Wing Award-Licking River Restoration Project. USDA 2001
- Award of Merit. American Fisheries Society Southern Division. 2001
- Paper of the Year. Ohio Journal of Science, Ohio Academy of Science. 1995.
- Distinguished Researcher Award, Morehead State University. 1994.

PROFESSIONAL MEMBERSHIPS:

- Ohio River Basin Consortium for Research and Education (*President 1999-2001; member, Board of Directors 1992-present; Executive Committee 1993-2001, Conference committee 1992, 1994, 1995, 1996, 2002; Chair and Organizer of 1997 Conference*)
- Society of Wetland Scientists (*Life Member*)
- Kentucky Society of Natural History (*Life Member*)
- Kentucky Ornithological Society (*Life Member*)
- Sigma Xi (*Former President of Morehead State Univ. Club*)
- Ohio Academy of Science
- North American Association of Environmental Education
- National Association for Interpretation

- American Institute of Biological Sciences

GRANTS AND CONTRACTS

Kentucky Environmental Education Council (HB 174)—\$111,838 Regional Environmental Education Center Support. 2008-2010.

Ashland Inc.—201,575 Landfill Assessment and Analysis Research Study Project. (with D. Smith and A. Haight). 2007-2012.

Kentucky Waterways Alliance—55,378 Analysis of Licking River Subbasin Watershed. (with A. Haight). 2007-2008.

Kentucky Environmental Education Council (HB 174)—\$111,000 Regional Environmental Education Center Support. 2006-2007.

U.S. Dept. of Education—\$7,000. Environmental Education Center Support of the North American Association for Environmental Education Meeting. Contract through Murray State Univ. 2005

USEPA (Clean Water Act Section 319 CCWEP Grant through Univ. of Louisville)—\$70,104. Reading the River Education Workshop. 2005-2006.

Kentucky Environmental Education Council (HB 174)—\$19,500 Regional Environmental Education Center Support. 2005-2006.

Ashland Inc.--\$27,299. Landfill Assessment and Analysis Research Study Project. (with D. Smith) 2005-2006.

National Oceanic and Atmospheric Administration (through Eastern Kentucky PRIDE)—\$612,100. The Upper Licking River Watershed: Teaching and Monitoring through PRIDE. 2005-2007.

Kentucky Department of Education—\$1,247,214. Bridging the Chasm: the MSU Mathematics and Science Partnership Tiered Mentoring Program (with DeMoss and Malphrus). 2004-2007.

Kentucky Environmental Education Council (HB 174)—\$5,000 Regional Environmental Education Center Support. 2004-2005

NASA--\$2,500. Enhancement of Environmental Education Course at MSU. (subcontract through WKU) 2003-2004.

US EPA Environmental Justice Small Grants Program --\$24,154. Environmental Justice Research: Assessment and Analysis of Electronic Component Waste in Appalachian Kentucky. (with Robbins). 2003-2004.

University of Kentucky--\$2,000. Elk fecal analysis training for Jennifer Schnieder. 2003.

Kentucky Council on Postsecondary Education--\$62,616. Reading the River. 2003-2004 (subcontract to NKU, KUPPEE collaborative grant)

Ashland Inc.--\$30,285. Landfill Assessment and Analysis Research Study Project. (with D. Smith) 2003-2004.

National Oceanic and Atmospheric Administration (through Eastern Kentucky PRIDE)—\$456,188. The Upper Licking River Watershed: Teaching and Monitoring through PRIDE. 2003-2004

U.S. Dept. of Education—\$73,768. Environmental Education Center. Contract through Murray State Univ. 2002-2004.

National Oceanic and Atmospheric Administration (through Eastern Kentucky PRIDE)—3,200. Watershed Watch Workshop for Teachers. 2002-2003.

Ashland Inc.--\$22,022. Landfill Assessment and Analysis Research Study Project. **Ashland Inc.** (with D. Smith) 2002-2003.

Kentucky Council on Postsecondary Education--\$57,098. Reading the River. 2002-2003.

Kentucky Council on Postsecondary Education--\$57,864 Life in the Universe.. (with E. Thomas and B. Malphrus). 2002-2003.

Ashland Inc.--\$23,219. Landfill Assessment and Analysis Research Study Project. **Ashland Inc.** (with D. Smith) 2001-2002.

USEPA --\$26,518. Environmental Education Workshop for Eastern Kentucky Teachers. 2000-2002

MSU Barbour Foundation.--\$800 Avifauna in the Beaver Creek Constructed Wetlands. (graduate student funding to Mike Kenawell) 2000-2001

US Forest Service, Daniel Boone Ranger District--\$500 Avifauna and Primary Production in the Beaver Creek Constructed Wetlands. (graduate student funding to Mike Kenawell) 2000-2001

Muskies Unlimited--\$5,000. Cave Run Lake Muskie Project, (with G. Gerner). 1999-2000.

Gateway Regional Health Department--\$7,800. Non-point pollution in Triplett Creek--Follow Up. 1998-2000.

Kentucky Council on Postsecondary Education--\$1,800,000 annually. MSU Center for Excellence Proposal: Institute for Regional Analysis and Public Policy, (with D. Rudy (PI), R. Mitchelson and R. Hunt). 1998-ongoing.

Commonwealth Technology--\$140. Fluorometric Analysis of Chlorophyll. 1999.

USEPA, Non-Point Source Discharge Elimination System (NPDES) Program--\$56,524. Water quality assessment and trophic status of Eastern Kentucky reservoirs. 1997-99.

USEPA, NPDES Program--\$42,486. Assessment of Kentucky Created Wetland Projects. 1996-98.

Kentucky Department of Fish and Wildlife--\$121,680. Effect of fertilization on plankton biogeochemistry in Grayson Lake, KY. 1993-1997.

US Forest Service--\$4,000. Ecosystem development in Eastern Kentucky wetlands. 1995-96.

USEPA, (through the Gateway Regional Health Department)--\$16,650, Non-point Source Pollution Study Demonstration Plan for Triplett Creek. 1994-2000.

USEPA, Clean Lakes Program--\$102,000. Evaluation of the trophic status of Eastern Kentucky Reservoirs. 1993-94.

National Science Foundation, EPSCoR--\$28,300. The role of primary producers in treating non-point phosphorus loading in a Great Lakes coastal wetland. 1992-1993.

National Science Foundation, Undergraduate Research Opportunity in Aquatic Ecology--\$3000. Sediment-Water Nutrient Flux in Tidal Creeks of North Inlet, SC. 1991-1992.

National Science Foundation Research Opportunity Award--\$46,370. Sediment-water nutrient flux in tidal creeks of North Inlet, SC (with F. Sklar). 1990-1992.

MSU Research and Creative Productions Committee--\$2,990. Preliminary Investigation of Hydrology, Productivity, and Phosphorus Cycling in an Eastern Kentucky Swamp 1991-92.

Barbour Fund--\$325. Benthic Community Structure and Diversity: A comparison of three wetlands. 1991

- MSU Research and Creative Productions Committee--\$4,000.** Hydrology, Productivity, and Phosphorus Cycling in an Eastern Kentucky Swamp: A Systems Approach. MSU Research and Creative Productions Committee. 4,000. 1990-91
- Barbour Fund--\$325.** Fishes of the North Fork of Triplett Creek. 1990.
- Ohio Dept. of Natural Resources Natural Areas and Preserves--\$1,800.** Primary productivity of a Great Lakes coastal wetland (with W. Mitsch). 1988.
- Ohio Sea Grant--\$2000.** Sediment core data from a Lake Erie coastal wetland (with W. Mitsch) 1988.

SCHOLARLY PUBLICATIONS

- Reeder, B.C. and B.M. Binion. Effect of Non-point pollution and *Nelumbo lutea* on algal communities in Old Woman Creek Wetland, Erie County, Ohio (accepted, in revision)
- Reeder, B.C. Primary productivity limitations in low nitrogen, low alkalinity, high phosphorus reservoirs. Lake and Reservoir Management (accepted, in revision)
- Schnieder, J., D.S. Maehr, K. Alexy, J.J. Cox, J.L. Larkin, and B.C. Reeder. 2006. Food habits of reintroduced elk in southeastern Kentucky. Southeastern Naturalist 5(3):535-546.
- Reeder, B.C. and Y. Meichtry. 2003. Immersion at the Watershed Level: Reading the River Teacher Development Program. 2003 Proceedings of the North American Association for Environmental Education
- Middleton, R.J., and B.C. Reeder. 2002. Dissolved oxygen fluctuations in organically and inorganically fertilized walleye (*Stizostedion vitreum*) hatchery ponds. Aquaculture 219:337-345
- Kenawell, M.E. and B.C. Reeder. 2002. Evidence of breeding pied-billed grebes in a restored Menifee County wetland. Kentucky Warbler 78(2):39-40
- Reeder, B.C., G.L. Buynak, A.W. Remley, and T.W. Spier. 2002. Effects of nitrogen and phosphorus fertilization on primary productivity: A case study of Grayson Lake, Kentucky. 2001 Proceedings of the Southeastern Association of Fish and Wildlife Agencies. 270-279.
- Davis, S.E. and B.C. Reeder. 2001. Spatial analysis of water quality in Eastern Kentucky reservoirs. Aquatic Ecosystem Health and Management 4(4):463-477
- Buynak, G.L., B. Mitchell, L. Kornman, A.F. Surmont, , B. Reeder., and S. Melvestuto 2001. Responses to Artificial Fertilization at Grayson Lake, Kentucky. North American Journal of Fisheries Management 21:393-403
- Reeder, B.C. and B.M. Binion. 2001. Comparison of methods to assess water column production in wetlands. Ecological Engineering 17:445-449.
- Reeder, B.C. 2000. Will more septic tanks improve rural Kentucky water quality? Waterworks 6(3) 4-6.
- Reeder, B.C. and T.L. Caudill. 2000. Effect of artificial nesting structure density on Canada goose reproductive success. Transactions of the Kentucky Academy of Science 61(1):46-49.
- Reeder, B.C. 1998. Using water quality monitoring as a University level teaching tool. Transaction of the Kentucky Academy of Science. 59(1):6-11.
- Haight, A. and B.C. Reeder. 1997. Avifauna use of constructed wetlands in the Cave Run Lake area. The Kentucky Warbler 73(1):24-27
- Reeder, B.C. 1996. "Science and Research: William J. Mitsch" National Wetlands Newsletter, May-June:14
- Reeder, B.C. 1996. Using environmental monitoring as a teaching tool: the Triplett Creek non-point pollution assessment project. Waterworks 2(1):1-4
- Reeder, B.C. 1994. The role of autotrophs in nonpoint phosphorus retention in a Great Lakes coastal wetland. Ecological Engineering 3: 161-170
- Reeder, B.C. and W.R. Eisner. 1994. Holocene biogeochemical and pollen history of a Lake Erie, Ohio, coastal wetland. Ohio Journal of Science 94(4):87-93. (winner of "paper of the year" award)
- Reeder, B.C. 1994. Book Review: Evaluation and Assessment for Conservation: Ecological Guidelines for Determining Priorities for Nature Conservation. Ian F. Spellerberg, Chapman Hall, London. 1992 Ecological Engineering. 3(2) 200-201.
- Mitsch, W.J., B.C. Reeder and D.M. Robb. 1994. Modeling ecosystem and landscape scales of Lake Erie coastal wetlands. pp. 563-574 In Mitsch, W. J. (ed.) Global Wetlands: Old World and New. Elsevier, Amsterdam
- Reeder, B.C., M.D. Quillen, and F.H. Sklar. 1993. Nutrient dynamics at the sediment water interface of tidal creeks in North Inlet, SC. pp. 383-389 In M.C. Landin (ed.), Wetlands: Proceedings of the 13th Annual Conference of the Society of Wetland Scientists, New Orleans.
- Reeder, B.C. and M.D. Hardin. 1992. A population of *Taphromysis louisiana* (Banner); (Crustacea:Mysidae) in a Clermont County Ohio River wetland. Ohio Journal of Science 92:11-13.
- Mitsch, W.J. and B.C. Reeder. 1992. Nutrient and hydrologic budgets of a Great Lakes coastal freshwater wetland during a drought year. Wetland Ecology and Management 1:211-222.
- Mitsch, W.J. and B.C. Reeder. 1991. Modeling nutrient retention of a freshwater coastal wetland: estimating the roles of primary productivity, sedimentation, resuspension, and hydrology. Ecological Modeling. 54:151-187.
- Magrane, D.M., B.C. Reeder, and C. Van Bell. 1990. Principals of biology laboratory manual. M.S.U. Department of Biological and Environmental Sciences.
- Reeder, B.C. and W.J. Mitsch. 1990. What is the value of a Great Lakes Coastal Wetland? a bibliography. Ohio Sea Grant, The Ohio State University, Columbus, Ohio.
- Reeder, B.C. 1989. Quaternary History of Old Woman Creek. pp. 97-110 In: Mitsch, W.J. (ed.) Wetlands of Ohio's Coastal Lake Erie: A hierarchy of systems. Ohio Sea Grant, The Ohio State University, Columbus, Ohio.

- Reeder, B.C. and W.J. Mitsch. 1989. Seasonal patterns of planktonic and macrophyte productivity of a freshwater coastal wetland. pp. 49-68 In: Mitsch, W.J. (ed.) Wetlands of Ohio's Coastal Lake Erie: A hierarchy of systems. Ohio Sea Grant, The Ohio State University, Columbus, Ohio.
- Reeder, B.C. and W.J. Mitsch. 1989. Bioavailable phosphorus and a phosphorus budget of a freshwater coastal wetland. pp. 81-96 In: Mitsch, W.J. (ed.) Wetlands of Ohio's Coastal Lake Erie: A hierarchy of systems. Ohio Sea Grant, The Ohio State University, Columbus, Ohio.
- Mitsch, W.J., and B.C. Reeder. 1989. Diurnal patterns of dissolved oxygen in a freshwater coastal wetland. pp. 19-48 In: Mitsch, W.J. (ed.) Wetlands of Ohio's Coastal Lake Erie: A hierarchy of systems. Ohio Sea Grant, The Ohio State University, Columbus, Ohio.
- Mitsch, W.J., and B.C. Reeder. 1989. Ecosystem modeling of a Lake Erie coastal wetland. pp. 161-174 In: Mitsch, W.J. (ed.) Wetlands of Ohio's Coastal Lake Erie: A hierarchy of systems. Ohio Sea Grant, The Ohio State University, Columbus, Ohio.
- Mitsch, W.J., B.C. Reeder, and C. Carlson. 1989. Hydrology of a freshwater coastal wetland during severe drought conditions. pp. 69-80 In: Mitsch, W.J. (ed.) Wetlands of Ohio's Coastal Lake Erie: A hierarchy of systems. Ohio Sea Grant, The Ohio State University, Columbus, Ohio.
- Mitsch, W.J., B.C. Reeder, and D.A. Klarer. 1989. The role of wetlands in the control of nutrients with a case study of western Lake Erie. pp. 129-157 In: Mitsch, W.J. and S.E. Jørgensen (eds.) Ecological Engineering: an Introduction to Ecotechnology. J. Wiley, New York.
- Mitsch, W.J., B.C. Reeder, and D.M. Robb. 1988. A systems approach to coastal freshwater wetlands on Lake Erie, U.S.A. Proceedings of the Third International Wetlands Conference, Rennes, France.

PRINTED SCHOLARLY ABSTRACTS

- Reeder, B.C., A. Haight, G.W. Gearner, J. Newton, D.P. Smith, E. Schuler, C. Richardson, T. Skaggs, T. Nolan, T. Platt, K. Lamb, E. Lotton, M. Armstrong, S. Adkins, M. Bowlds, M. Chafins. 2007. Surface Water Contamination: Third World Conditions in the Heart of Appalachia. Proceedings of the American Institute of Biological Sciences Meetings.
- Reeder, B.C., T.A. Leonard, and R.J. Middleton. 2007. Effects of Sunshine Bass (*Morone chrysops* X *M. saxatilis*) stocking density on Ponds, Minor Clark Fish Hatchery, Kentucky. Proceedings of the Joint Meeting of the American Fisheries Society, Kentucky Chapter, and the Kentucky Chapter of the American Wildlife Society.
- Nolan, T., G.W. Gearner, and B.C. Reeder. 2006. Comparative analysis of media used to detect fecal bacteria in environmental water samples. Journal of the Kentucky Academy of Sciences.
- Reeder, B.C. G.W. Gearner, D.P. Smith, A.D. Haight, J.D. Newton, T. Skaggs, E. Lotton, E. Schuler, T. Nolan. 2006. Identification of sources of water quality degradation in Triplett Creek, Rowan County, Kentucky. Proceedings of the 21st Annual Meeting of the Ohio River Basin Consortium for Research and Education. Murray, KY Oct. 25-26.
- Schnieder, J., B.C. Reeder, and D.S. Maehr. 2005. Feeding Habits of Introduced Eastern Kentucky Elk Population. Proceedings of the 20th Annual Meeting of the Ohio River Basin Consortium for Research and Education. Huntington, WV Oct. 26-28.
- B.C. Reeder, A.D. Haight, P.W. Whitley, R.C. Johnson, and D.P. Smith. Eastern Kentucky Illegal Dump Soil Metal Concentrations: Is there a potential for toxic contamination from e-waste leaching? Proceedings of the 20th Annual Meeting of the Ohio River Basin Consortium for Research and Education. Huntington, WV Oct. 26-28.
- Reeder, B.C., T.A. Leonard, J.W. Marion, P.W. Whitley, L. Crum, J. Hunt, C.C. Sheilds, and J. Thompson. Water Quality Trends in the Upper Licking River Watershed: Physical and Chemical Parameters 2003-2004. Proceedings of the 20th Annual Meeting of the Ohio River Basin Consortium for Research and Education. Huntington, WV Oct. 26-28.
- Reeder, B.C. 2005. Is fertilization a good strategy to increase fish production in low alkalinity, high total P, low chlorophyll reservoirs in eastern Kentucky? Proceedings of the 14th Annual Southeastern Lakes Management Conference, Asheville, NC, April 13-15.
- Reeder, B.C. 2004. Primary productivity limitations in three low nitrogen, low alkalinity, high phosphorus Kentucky reservoirs. Proceedings of the North American Lake Management Society 24th Annual Symposium. Victoria, BC, November 3-5
- Reeder, B.C. and Y. Meichtry. 2004. Reading the River: A watershed education program. Proceedings of the North American Association for Environmental Education 33rd Annual Conference, November 6-10.
- Reeder, B.C. and Y. Meichtry. 2003. A Watershed-Based Environmental Workshop Using the Environment to Integrate Kentucky Core Content Areas: Reading the River. 19th Annual Meeting of the Ohio River Basin Consortium for Research and Education. Marietta, OH Nov. 5-9.
- Leonard, T.A. and B.C. Reeder. 2003. Effect of Stocking Density on Sunshine Bass Production at Minor Clark Fish Hatchery, KY. . 19th Annual Meeting of the Ohio River Basin Consortium for Research and Education. Marietta, OH Nov. 5-9.
- Adrian, K., L. Haller and B. Reeder. 2002. Children's production of science metaphors. 88th Annual Meeting of the Kentucky Academy of Science. Highland Heights, KY, Nov. 7-9.
- Reeder, B. and Y. Meichtry. 2002. Reading the River: A collaborative approach to the professional development of science teachers. Proceedings of the 18th Annual Scientific Symposium of The Ohio River Basin Consortium for Research and Education, Highland Heights, KY, Nov. 6-8.
- Reeder, B.C. and N. K. Steele. 2002. Dissolved oxygen dynamics and primary production in constructed wetlands in the Beaver Creek Wetland Complex, Daniel Boone National Forest. Proceedings of the 18th Annual Scientific Symposium of The Ohio River Basin Consortium for Research and Education, Highland Heights, KY, Nov. 6-8.
- Steele, N.K. and B.C. Reeder. 2002. Relationship between fish hatchery pond sediments and fish production and Minor Clark Fish Hatchery. Proceedings of the 18th Annual Scientific Symposium of The Ohio River Basin Consortium for Research and Education, Highland Heights, KY, Nov. 6-8.

- Reeder, B.C., G.L. Buynak, A. Remley, and T.M. Spier, 2001. Effects of nitrogen and phosphorus fertilization on primary productivity: a case study of Grayson Lake, Kentucky. Abstracts of Fisheries Division, Annual Meeting of the Southeastern Association of Fish and Wildlife Agencies, Louisville, KY
- Reeder, B.C. and M. Thomas. 2001. Lake nutrient limitations: A case history of two low nitrogen, low alkalinity, high phosphorus Kentucky reservoirs. Abstracts of Fisheries Division, Annual Meeting of the Southeastern Association of Fish and Wildlife Agencies, Louisville, KY.
- Reeder, B.C., and M.E. Kennawell. 2001. Determining restoration success using bird communities in the Beaver Creek wetland complex, Kentucky. Society of Wetland Scientists Annual Conference Abstracts, Chicago, IL.
- Pass, T., R. Wright, L. Hawkins, A. Polaczyk, and B. Reeder. 2000. Assessment of Fecal Coliform in the Licking River Watershed. Kentucky nonpoint Source Conference, Bowling Green.
- Reeder, B.C., A.R. Remley, and R.W. Crawford. 1999. Will fertilization increase age-0 bass populations in Grayson Lake? Proceedings of the North American Lake Management Association. November 30-Dec 4, Reno, NV.
- Reeder, B.C., and P. Wood. 1999. The watershed approach to water quality improvements in Kentucky's Licking River basin. Ohio River Basin Consortium for Research and Education 15th Annual Scientific Symposium.
- Reeder, B.C., A.R. Remley, and R.W. Crawford. 1999. Will fertilization Increase Year-0 Bass Survival in Grayson Lake, KY? 45th Annual Tri-State Fisheries Conference. Ashland, KY
- Reeder, B.C. and R.W. McCall. 1998. Functional Assessment of restored Ohio River basin swamps. Society of Wetland Scientists 19th Annual Meeting, Anchorage, AK
- Middleton, R. and B.C. Reeder. 1998. Inorganic fertilization of walleye (*Stizostedion vitreum*) hatchery ponds. Southern Division of the American Fisheries Society Midyear Meeting, Lexington, Kentucky.
- Reeder, B.C. and R.W. McCall. 1997. Evaluating the functional success of reconstructed swamps. Proceedings of the 1997 Kentucky nonpoint Source Conference, Lexington
- R. Middleton and B.C. Reeder. 1997. Using inorganic fertilizer in walleye hatchery ponds. Proceedings of the 13th Annual Symposium of the Ohio River Basin Consortium for Research and Education. Ashland, KY
- McCall, R.W. and B.C. Reeder. 1997. Evaluation of Functional Status of six Ohio River basin reconstructed wetlands. Proceedings of the 13th Annual Symposium of the Ohio River Basin Consortium for Research and Education. Ashland, KY
- Caudill, T.L. and B.C. Reeder. 1996. Goose breeding success in artificial nesting structures of forty Ohio River basin constructed wetlands. Proceedings of the Twelfth Annual Symposium of the Ohio River Basin Consortium for Research and Education. Oxford, Oh.
- Haight, A.D. and B.C. Reeder. 1996. Evaluation of the Success of constructed wetlands in the Cave Run Lake watershed. Proceedings of the Twelfth Annual Symposium of the Ohio River Basin Consortium for Research and Education. Oxford, Oh.
- Remley, A.W. and B.C. Reeder. 1996. Effects of fertilization on water quality in Grayson Lake, Kentucky. Proceedings of the Twelfth Annual Symposium of the Ohio River Basin Consortium for Research and Education. Oxford, Oh.
- Thomas, M. and B.C. Reeder. 1996. Nutrient limitations in two eastern Kentucky reservoirs. Proceedings of the Twelfth Annual Symposium of the Ohio River Basin Consortium for Research and Education. Oxford, Oh.
- Davis, S.E. and B.C. Reeder. 1994. Water quality analysis of seven eastern Kentucky reservoirs. Tenth Annual Symposium of the Ohio River Basin Consortium for Research and Education. Huntington, WV.
- Spier, T.W., R.W. Crawford, and B.C. Reeder. 1994. Effect of nitrogen and phosphorus fertilization on Grayson Lake, KY. Tenth Annual Symposium of the Ohio River Basin Consortium for Research and Education. Huntington, WV.
- Reeder, B.C. and B.M. Binion. 1994. Comparison of methods of measuring water column production in a Great Lakes wetland. Tenth Annual Symposium of the Ohio River Basin Consortium for Research and Education. Huntington, WV.
- Fultz, D.A. and B.C. Reeder. 1994. A quick, accurate, inexpensive method to measure total Kjeldhal nitrogen and phosphorus in the college classroom. Tenth Annual Symposium of the Ohio River Basin Consortium for Research and Education. Huntington, WV.
- Reeder, B.C. 1994. Use and evolution of the Old Woman Creek phosphorus biogeochemistry model. 2nd Annual Coastal Wetland Ecology and Management Symposium. Key Largo, FL
- Reeder, B.C. and B.M. Binion. 1994. Water column primary production in Old Woman Creek. Program and Abstracts of the International Association for Great Lakes Research and the Estuarine Research Federation.
- Koepfler, E., D.L. Childers, R.F. Dame, and B.C. Reeder. 1993. The role of benthos in marsh estuarine ecosystem development: presentation of a new theory. North American Benthological Society.
- Reeder, B.C., and D.V. Brewster. 1993. Comparison of methods of measuring aquatic production in a Lake Erie coastal wetland. Proceedings of the Society of Wetlands Scientists and the American Society of Limnology and Oceanography. Edmonton, Alberta, Canada. June
- Reeder, B.C. and D.V. Brewster. 1993. Comparison of three methods of measuring water column production in a Great Lakes coastal wetland. Ohio Academy of Sciences. Youngstown, OH. May
- Reeder, B.C. and M.D. Hardin. 1992. Effect of hydrology on benthic invertebrate communities in four Ohio River basin wetlands. Meeting of the Ohio River Basin Consortium for Research and Education, Cincinnati, OH. November
- Reeder, B.C., M.D. Quillen, and F.H. Sklar. 1992. Nutrient dynamics at the sediment water interface of tidal creeks in North Inlet, SC. Abstracts of the Meeting of the Society of Wetland Scientist, New Orleans, LA. June
- Reeder, B.C., E.C. Webb, and D.M. Blevins. 1991. Evaluating the restoration status of an Eastern Kentucky wetland. Abstracts of the Ohio River Basin Consortium for Research and Education Seventh Annual Scientific Symposium. Kentucky's Lake Barkley State Park Resort, Cadiz. December 1-3

- Reeder, B.C. and W.J. Mitsch. 1991. Historical biogeochemistry of Old Woman Creek Wetland, Lake Erie, USA. Program and Abstracts of the 34th Conference on Great Lakes Research. University of Buffalo, NY June
- Mitsch, W.J. and B.C. Reeder. 1991. Modeling nutrient retention of a Great Lakes coastal wetland. Proceedings of the Society of wetland Scientists 12th Annual Meeting. May, University of Michigan, Ann Arbor, MI
- Reeder, B.C. and W.J. Mitsch. 1991. Modeling historical phosphorus biogeochemistry in Old Woman Creek Wetland. Abstracts of the 1st Wetland Biogeochemistry Meeting, Louisiana State University, Baton Rouge, LA
- Reeder, B.C. and D.M. Blevins. 1991. Nutrient dynamics in a restored Eastern Kentucky swamp. Proceedings of the Meeting of the Kentucky Water Resources Research Institute, Lexington, KY.
- Reeder, B.C. and W.J. Mitsch. 1990. The role of Great Lakes coastal wetlands in mitigating phosphorus runoff from non-point sources. Abstracts of the Association of Wetland Manager's Wetlands of the Great Lakes Conference, Niagara Falls, New York
- Reeder, B.C. and M.D. Hardin. 1990. Record of the first occurrence of *Taphromysis louisianae* (Banner) in the Ohio River Basin. Abstracts of the Meeting of the Ohio River Basin Consortium for Research and Education, Morgantown, WV.
- Howes, D.C. and B.C. Reeder. 1990. Planktonic primary productivity in a restored Eastern Kentucky swamp: a comparison of measurement techniques. Proceedings of the Kentucky Academy of Science, Highland Heights, KY
- Webb, E.C. and B.C. Reeder. 1990. Primary productivity and plant community structure of a restored Eastern Kentucky swamp. Proceedings of the Kentucky Academy of Science, Highland Heights, KY
- Reeder, B.C. and W.J. Mitsch. 1990. Primary productivity and phosphorus cycling in a Lake Erie coastal wetland. Proceedings of the Annual Meeting of the American Society of Limnology and Oceanography, Williamsburg, VA
- Reeder, B.C. and W.J. Mitsch. 1990. Spatial patterns of primary productivity in a Lake Erie coastal wetland. Proceedings of the 5th Annual Landscape Ecology Symposium, Miami Univ., Oxford, Ohio.
- Mitsch, W.J. and B.C. Reeder. 1990. Modeling nutrient retention in a coastal Lake Erie wetland. Proceedings of the 5th Annual Landscape Ecology Symposium, Miami Univ., Oxford, Ohio.
- Mitsch, W.J., B.C. Reeder, and D.M. Robb. 1988. The role of coastal wetlands along Lake Erie in nutrient retention. Proceedings of the Meeting of the Society of Wetland Scientists, Washington, D.C.
- Reeder, B.C. and W.J. Mitsch. 1987. Modeling a Lake Erie Coastal Wetland. Proceedings of the of the International Society for Ecological Modeling and American Institute of Biological Sciences, Columbus , Ohio.

SCHOLARLY PRESENTATIONS

2007

- Surface Water Contamination: Third World Conditions in the Heart of Appalachia (poster). American Institute of Biological Sciences Meeting. Washington, DC, May
- Biogeochemical Processes in Kentucky's Wetlands and Streams. Invited Speaker, The Ohio State University
- Licking River water quality changes over the past six years: trends and progress. Licking River Watershed Watch Annual Conference. Blue Licks Battlefield State Resort Park, February
- Effects of Sunshine Bass (*Morone chrysops* X *M. saxatilis*) stocking density on Ponds, Minor Clark Fish Hatchery , Kentucky. Rough River Lake State Resort Park, February.

2006

- Identification of sources of water quality degradation in Triplett Creek, Rowan County, Kentucky. Proceedings of the 21th Annual Meeting of the Ohio River Basin Consortium for Research and Education. Murray, KY
- Licking River water quality changes over the past six years: trends and progress. Licking River Watershed Watch Annual Conference. Blue Licks Battlefield State Resort Park, February

2005

- Feeding Habits of Introduced Eastern Kentucky Elk Population. Proceedings of the 20st Annual Meeting of the Ohio River Basin Consortium for Research and Education. Huntington, WV Oct. 26-28.
- Eastern Kentucky Illegal Dump Soil Metal Concentrations: Is there a potential for toxic contamination from e-waste leaching? Proceedings of the 20th Annual Meeting of the Ohio River Basin Consortium for Research and Education. Huntington, WV Oct. 26-28.
- Water Quality Trends in the Upper Licking River Watershed: Physical and Chemical Parameters 2003-2004. 20th Annual Meeting of the Ohio River Basin Consortium for Research and Education. Huntington, WV Oct. 26-28.
- Is fertilization a good strategy to increase fish production in low alkalinity, high total P, low chlorophyll reservoirs in eastern Kentucky? 14th Annual Southeastern Lakes Management Conference, Asheville, NC, April
- Volunteer data from the Licking River, where do we go from here? Licking River Watershed Watch Annual Conference. Blue Licks Battlefield State Resort Park, February

2004

- Primary productivity limitations in three low nitrogen, low alkalinity, high phosphorus Kentucky reservoirs. North American Lake Management Society 24th Annual Symposium. Victoria, BC, November
- Reading the River: A watershed education program. North American Association for Environmental Education 33rd Annual Conference, Biloxi, MS, November
- Trends in water quality in the upper Licking River after sewage upgrades. 20th Annual Meeting of the Ohio River Basin Consortium for Research and Education. Athens, OH August

Reading the River: An example of success in environmental education and teacher training. 20th Annual Meeting of the Ohio River Basin Consortium for Research and Education. Athens, OH August
Volunteer data from the Licking River, what does it mean? Licking River Watershed Watch Annual Conference. Blue Licks Battlefield State Resort Park, February

2003

PRIDE—Project Clean Streams a collaborative approach to teaching children about their local watersheds. 19th Annual Meeting of the Ohio River Basin Consortium for Research and Education. Marietta, OH November
A Watershed-Based Environmental Workshop Using the Environment to Integrate Kentucky Core Content Areas: Reading the River. 19th Annual Meeting of the Ohio River Basin Consortium for Research and Education. Marietta, OH November
Licking River Study Report. Licking River Watershed Wide Conference, Blue Licks, KY, November
Kentucky's EE Consortium—Universities Working Together. North American Association for Environmental Education, Anchorage, AK, October (with Baust, Eller, Wilson, Wicks, Javed, Hanley, Meichtry, and Alexander)
A collaborative approach to teacher training. North American Association for Environmental Education, Anchorage, AK, October (with Meichtry)
Kentucky University Partnership for Environmental Education-Morehead State University's Role. Meeting of the Kentucky Association for Environmental Education, Carrollton, KY September
My computer reminds me of a rock, it just sits there: Gender differences in children's production of metaphor about science topics. Posters at the Capital, Frankfort, February (with Adrian and Haller)

2002

Dissolved oxygen dynamics and primary production in constructed wetlands in the Beaver Creek Wetland Complex, Daniel Boone National Forest. 18th Annual Scientific Symposium of The Ohio River Basin Consortium for Research and Education, Highland Heights, KY, Nov. 6-8.
Reading the River: A collaborative approach to the professional development of science teachers. 18th Annual Scientific Symposium of The Ohio River Basin Consortium for Research and Education, Highland Heights, KY, Nov. 6-8.
Doing the numbers on sampling results. Licking River Watershed-wide Conference, Blue Licks Battlefield State Park, Nov.2-3.
My computer is like a rock, it just sits there: Children's use of metaphor about science topics. Poster presentations at the Conference on Human Development, Charlotte, NC. (with Haller).

2001

Determining restoration success using bird communities in the Beaver Creek wetland complex, Kentucky. Society of Wetland Scientists Annual Conference, May 27-June 1, Chicago, IL.
Licking River Kentucky Watershed Watch Program. Kentucky Water Resources Annual Symposium. Lexington, KY.
Effects of nitrogen and phosphorus fertilization on primary productivity: a case study of Grayson Lake, Kentucky. 55th Annual Meeting of the Southeastern Association of Fish and Wildlife Agencies, Louisville, KY.
Lake nutrient limitations: A case history of two low nitrogen, low alkalinity, high phosphorus Kentucky reservoirs. 55th Annual Meeting of the Southeastern Association of Fish and Wildlife Agencies, Louisville, KY.

2000

Fecal contamination in the Licking River Basin: Spatial Trends and the effects of sewage upgrades. Kentucky Water Resources Annual Symposium. Lexington, February 25.

1999

Will fertilization increase age-0 bass populations in Grayson Lake? Meeting of the North American Lake Management Association. November 30-Dec 4, Reno, NV.
The watershed approach to water quality improvements in Kentucky's Licking River basin. Ohio River Basin Consortium for Research and Education 15th Annual Scientific Symposium. Oct. 20-22. Cincinnati, Ohio.
Wetlands: Their Functions and Benefits; A Look at Current Wetland Laws. Kentucky Waterways Alliance Annual Conference. May 14-15. Pennyrile Forest State Resort Park. (invited speaker)
A look at what's in water, what's natural and what's not; consequences on human health. Kentucky Waterways Alliance Annual Conference. May 14-15, Pennyrile Forest State Resort Park. (invited speaker)
Will fertilization Increase Year-0 Bass Survival in Grayson Lake, KY? 45th Annual Tri-State Fisheries Conference. March 3-4, Ashland, KY (invited)
Tripplett Creek demonstration project. 1998 Kentucky nonpoint Source Conference, Somerset, KY (invited speaker, poster)

1998

Created wetland evaluation project. 1998 Kentucky nonpoint Source Conference, Somerset, KY (invited speaker)
Water quality assessment and trophic status of Eastern Kentucky reservoirs. 1998 Kentucky nonpoint Source Conference, Somerset, KY (invited speaker)
Ecological processes in watersheds. Council of State Governments Working at the Watershed Level Symposium, Lexington, KY.
Functional Assessment of restored Ohio River basin swamps. Society of Wetland Scientists 19th Annual Meeting, Anchorage, AK
Restoration: Meeting multiple objectives at multiple scales. Society of Wetland Scientists 19th Annual Meeting, Anchorage, AK (invited panel speaker)

1997

Phosphorus biogeochemistry of Old Woman Creek wetland. Miami University, Oxford, Oh (invited speaker)
Evaluating the functional success of reconstructed swamps. Kentucky nonpoint Source Conference, Lexington (invited speaker)

1996

Preliminary assessment of Grayson Lake fertilization. Ky Fisheries Conference, Frankfort (invited speaker)

1995

Effects of non-point pollution on lakes and wetlands. Ohio Lake Management Association Conference. Columbus, OH. (invited speaker)

Grayson Lake Fertilization: A Preliminary Assessment. Tri-State Fisheries Conference. Huntington, WV, March (invited speaker)

Role of autotrophs in nutrient cycling in wetlands. University of Louisville (invited speaker)

1994

Primary production research at Old Woman Creek. Old Woman Creek National Estuarine Research Reserve Meet the Researcher day (poster presentation).

Use and evolution of the Old Woman Creek phosphorus biogeochemistry model. 2nd Annual Coastal Wetland Ecology and Management Symposium. Key Largo, FL (invited speaker)

Water column primary production in Old Woman Creek. International Association for Great Lakes Research and the Estuarine Research Federation. Univ. of Windsor, June 5-9.

1993

Comparison of methods of measuring aquatic production in a Lake Erie coastal wetland. Meeting of the Society of Wetlands Scientists and the American Society of Limnology and Oceanography. Edmonton, Alberta, Canada. June

1992

Effect of hydrology on benthic invertebrate communities in four Ohio River basin wetlands. Meeting of the Ohio River Basin Consortium for Research and Education, Cincinnati, OH. November

Nutrient dynamics at the sediment water interface on tidal creeks in North Inlet, SC. Meeting of the Society of Wetland Scientist, New Orleans, LA. June

1991

North Inlet soil patterns and nutrient experiments. Landscape Modeling and Analysis Workshop II. Baruch Marine Lab, Georgetown, SC. October 7-9

Evaluating the restoration status of an Eastern Kentucky wetland. Abstracts of the Ohio River Basin Consortium for Research and Education Seventh Annual Scientific Symposium. Kentucky's Lake Barkley State Park Resort, Cadiz. December 1-3

Modeling the restoration status of an Eastern Kentucky Wetland. 42nd Annual Meeting of the American Institute of Biological Sciences. San Antonio, TX. August

Nutrient modeling in freshwater estuaries. Invited Speaker, Baruch Marine Lab Seminar Series, Georgetown, SC. July

Historical biogeochemistry of Old Woman Creek Wetland, Lake Erie, USA. 34th Conference on Great Lakes Research. University of Buffalo, NY June 2-6

Modeling historical phosphorus biogeochemistry in Old Woman Creek Wetland. Biogeochemistry of Wetlands Meeting, Louisiana State University, Baton Rouge, LA. February

Nutrient dynamics in a restored Eastern Kentucky swamp. Meeting of the Kentucky Water Resources Research Institute, Lexington, KY. January

1990

Record of the first occurrence of *Taphromysis louisianae* (Banner) in the Ohio River Basin. Meeting of the Ohio River Basin Consortium for Research and Education, Morgantown, WV. December

The role of Great Lakes coastal wetlands in mitigating phosphorus runoff from non-point sources. The Association of Wetland Manager's Wetlands of the Great Lakes Conference, Niagara Falls, NY (invited speaker)

Primary productivity and phosphorus cycling in a Lake Erie coastal wetland. The Annual Meeting of the American Society of Limnology and Oceanography, Williamsburg, VA June

Spatial patterns of primary productivity in a Lake Erie coastal wetland. The 5th Annual Landscape Ecology Symposium, Miami Univ., Oxford, OH. March

1989

Quaternary and Diurnal Patterns in a Coastal Wetland of Lake Erie. Invited Speaker, School of Natural Resources, The Ohio State University.

1988

Lake Erie Coastal Wetlands as Sinks and Transformers of Non-point Pollution. Invited Speaker, College of Biological Sciences, Youngstown State University.

1987

Modeling a Lake Erie Coastal Wetland. Meeting of the International Society for Ecological Modeling and The 37th Annual American Institute of Biological Sciences Meeting. Columbus, OH.

1986

Using STELLA for Ecological Modeling. Third annual conference of the Ohio River Basin Consortium and The Environmental Protection Agency, Wheeling, WV.

MS THESES DIRECTED

- Schnieder, Jennifer. 2004. Feeding Habits of Introduced Eastern Kentucky Elk Population
- Leonard, T.A. 2004. Effects of stocking density on sunshine bass (*Morone chrysops* X *M. saxatilis*) production and water quality at Minor Clark Fish Hatchery, Kentucky.
- Colwell, S.E. 2002. Effect of water quality on Sunshine Bass (*Morone chrysops* X *M. saxatilis*) production in two Kentucky hatcheries.
- Kennewell, M.E. 2002. Patterns of avifauna use of constructed wetlands in the Beaver Creek wetland complex, Menifee County, KY.
- Tewes, R.L. 2002. *Myriophyllum spicatum* invasion in Cave Run Lake, Kentucky
- McCall, Ryan. 1999. Functional assessment of six restored swamps in the Ohio River basin.
- Bryan, Terry. 1999. Restoration of Outer Loop wetland in Louisville, KY.
- Middleton, Rodney. 1998. Inorganic fertilization of Kentucky walleye hatchery ponds.
- Remley, Albert. 1997. Fertilization of Grayson Lake, KY embayments.
- Caudill, Teresa. 1996. Effects of artificial nesting structure density on Canada Goose (*Branta canadensis*) reproduction in 40 constructed wetlands in the Cave Run Lake watershed.
- Haight, April. 1996. Functional assessment of the success of constructed wetlands in the Cave Run Lake watershed.
- Binion, Brian. 1995. Effects of non-point nutrient loading on planktonic community structure and function in a Great Lakes coastal wetland.
- Spier, Timothy. 1995. The effect of nitrogen and phosphorus fertilization on Grayson Lake, KY.
- Crawford, Russell. 1995. The feasibility of trophic manipulation in Grayson Lake, KY.
- Davis, Steven. 1995. Water quality analysis of eastern Kentucky reservoirs.
- Huff, Julia. 1995. Designing an outdoor classroom at the Grayson Lake spillway.
- Quillen, Michael. 1992. Sediment-water nutrient flux in tidal creeks of North Inlet, SC.
- Hardin, Michael. 1992. A comparison of benthic invertebrate distributions in four Ohio River basin wetlands.
- Blevins, David. 1991. Nutrient chemistry of a reconstructed forested wetland in Rowan County, KY.
- Webb, Eric. 1991. Primary productivity and species composition of a reconstructed wetland in eastern Kentucky.
- Lane, Nancy. 1990. Development of Teacher Units to Teach Ecology at the Secondary Level.
- Slone, Tim. 1989. Fishes of the North Fork of Triplett Creek.

MS Committee Service

- Marion, Jason. 2006. A novel approach to biomonitoring in the Ohio River basin.
- Hopkins, Robert. 2005. Hybridization of *Lythrurus fasciolaris* (Cope) and *Lythrurus umbratilis* (Girard) (Cypriniformes: Cyprinidae) in the Ohio River basin.
- Newton, Jonnie. 2003. Comparison of two water treatment systems in their removal of microbial contaminants using M-Endo, MMO-MUG, MADAV and standard plate agar counts.
- Hamilton, Misty. 2003. Developmental toxicity of atrazine and copper sulfate using the frog embryo teratogenesis assay-*Xenopus* (FETAX)
- Garrett, Michael. 2002. Feeding preference of big-eared bats.
- McCafferty, Katherine. 2000. Historical and spatial analysis of the fishes of Triplett Creek, Rowan County, Kentucky
- Sexton, Lisa. 1994. A survey of source and finished water supplies for *Gardia* cyst and *Cryptosporidium* oocyst.
- McLoney, James. 1994. Analysis techniques for *Gardia* cyst.

CONSULTING

- Lake Lewman Association, KY. Developed aquatic plant and fisheries management plans. Measured and assessed water quality. 1994-2005.
- U.S. Army Corps of Engineers Waterways Experiment Station, MS. Consultant on revising wetland evaluation techniques and developing a regional hydrogeomorphic model (HGM). 1996-1998
- Law Firm of Huddleston, Bolen, Beatty, Porter, and Copen, Ashland, KY. Consultant on fish kill.
- Geo-Logic Consultants, Morehead, KY. Consultant on wetland and lake issues in the region. Assessment of Fern Lake. **Obtained the second stop-mining order ever issued by the Commonwealth of Kentucky** for the watershed of a critical water supply reservoir. 1994-95
- Challenge Engineering, Morehead, KY. Consultant on wetland issues in eastern Kentucky area. 1992.
- Law Firm of Gibson, Dunn, and Crutcher, Los Angeles, CA. Consultant on toxicological effects of industrial emissions. 1991
- Waterway Survey and Engineering, Kill Devil Hills, NC. Consultant on construction of wetlands to treat sewage discharge, constructing wetlands as mitigation for development, and other mitigation projects. 1990-1992
- Environmental Risk Management Inc., Cincinnati, OH. Consultant on wetland delineations. 1992
- Chemical Abstract Services, Columbus, OH. Provided expert advice on categorization of chemical pollutants to aid in the production of a new computer-based reference program. 1988
- Herdendorf and Associates, Huron, OH. Technical assistance and advice on the bathymetric analysis of the first marina in Western Lake Erie that does not utilize an existing embayment. 1988-1989
- Mitsch and Associates, Columbus, OH. Provided services to aid with the development of a research agenda for the Des Plains River Wetland Reconstruction Demonstration Project. 1987
- Tarter and Associates, Huntington, WV. Technical assistant on a number of acid mine drainage areas in terms of environmental impact on benthic invertebrate communities. 1984-85