

**CURRICULUM VITAE**  
**PETER C. SMILEY JR. (ROCKY)**  
**ECOLOGIST**

**EDUCATION**

Mississippi State University: **Ph.D. in Forest Resources with an emphasis in Applied Ecology, December 2002.**

Dissertation advisor: Dr. Eric Dibble. Title: "Influence of stream habitat alterations on dynamics of aquatic communities" **GPA 4.0**

University of Mississippi: **M.S. in Biological Sciences, December 1993.**

Thesis advisor: Dr. Glenn Parsons. Title: "The effect of photoperiod, temperature, and time of day on the critical swimming speed of white crappie, *Pomoxis annularis*" **GPA 3.7**

Hiram College: **B.A. in Art and Biology, June 1991. GPA 3.4**

**GRANTS RECEIVED AND HONORS**

Phi Kappa Phi (National academic honor society), 2003

Xi Sigma Pi (National forestry honor society), 2002

Best Student Paper Award, Mississippi Chapter – American Fisheries Society, 2000

Student Travel Award, Mississippi Chapter – American Fisheries Society, 2000

Co-investigator, Evaluation of Twentymile Creek Restoration Project, funded by U.S. Army Corps of Engineers, Mobile District, 1998 (\$24,394)

USDA Certificate of Merit and cash award, 1996

Best Student Paper Award, Mississippi Chapter - American Fisheries Society, 1995

James Garfield Scholarship (Academic scholarship), 1987-1991

Omicron Delta Kappa, 1990

Dean's List (Sophomore honor society), 1989

Alpha Lambda Delta (Freshman honor society), 1988

**RESEARCH EXPERIENCE**

**Research Ecologist:** USDA, Agricultural Research Service, Soil Drainage Research Unit (February 2005 - present). Evaluate the influence of conservation practices on aquatic habitats in agricultural watersheds.

- 1) Design and conduct research examining the influence of conservation practices on physical habitat and stream communities in headwater streams of agricultural watersheds.
- 2) Design and conduct research examining community dynamics within created wetlands
- 3) Write manuscripts for publication in peer review journals
- 4) Conduct statistical analyses (univariate and multivariate) and database management. Provide other scientists guidance on statistical analysis and experimental design issues.
- 5) Supervise technicians and student interns in field and laboratory research activities.

**Postdoctoral Research Associate:** Mississippi State University, Department of Wildlife and Fisheries (January 2003 – October 2004). Evaluated the influence of watershed alterations (clear cut timber harvesting and forestry best management practices) on water quality, geomorphology, instream habitat, fish communities, and macroinvertebrate communities in first-order streams within pine plantations. Evaluate feasibility of planting aquatic macrophytes for shoreline restoration projects within a lake in the Mississippi Delta.

- 1) Wrote manuscripts for publication in peer review journals and prepare reports documenting research activities for funding agencies.
- 2) Conducted statistical analyses (univariate and multivariate) and database management.
- 3) Established GIS database and collect landscape data to document the intensity of timber harvesting among first order streams
- 4) Supervised undergraduate and graduate students in field and laboratory research activities, and trained students in field sampling techniques, data entry, use of GIS, and identification of fish and macroinvertebrate samples.

**Dissertation Research:** Mississippi State University, Department of Wildlife and Fisheries (August 1998 – December 2002). Designed and performed research to assess the influence of stream restoration and channelization projects on stream communities.

- 1) Conducted natural experiment to examine interrelationships among channel form, instream habitat, and stream communities and the influence of spatial resolution and community extent on observed patterns of community structure within a channelized stream.
- 2) Performed literature review to assess the spatial, temporal, and community scales that were utilized by past assessments of the influence of stream restoration and channelization projects on fish and macroinvertebrate communities.

**Graduate Research Assistant:** Mississippi State University, Department of Wildlife and Fisheries (August 1998 – December 2002). Assessed ecological impacts of stream restoration and channelization projects.

- 1) Designed and conducted research project examining fish and habitat responses to a stream restoration project in Twentymile Creek, Mississippi
- 2) Designed and conducted study assessing responses of macroinvertebrate communities to channelization of Luxapalila Creek, Mississippi
- 3) Assisted with research examining the influence of introduced fish predators on stream communities
- 4) Conducted statistical analyses of the relationship between fish communities and instream habitat characteristics to assist with studies examining fish habitat use in various Mississippi streams.
- 5) Assisted with fish sampling and macroinvertebrate identifications from research assessing influence of timber harvesting and forestry best management practices on low order streams
- 6) Supervised a freshwater ecology laboratory and trained undergraduate and graduate student workers in field sampling techniques, data entry, and identification of fish and macroinvertebrate samples.

*(Research Experience continued)*

**Biologist:** USDA-ARS-National Sedimentation Laboratory, Oxford, MS (February 1994 – September 1998). Evaluated the effectiveness of watershed and channel erosion control/restoration practices.

- 1) Designed and conducted study of riparian communities and physical habitat characteristics of terrestrial and wetland riparian habitats created by installation of field-scale grade control structures (drop pipes).
- 2) Designed and collected fish and habitat data to obtain baseline data prior to a riverine restoration project to be conducted on the Yalobusha River, MS
- 3) Assisted in fish and habitat data collection for assessing restoration projects within deeply incised streams.

**Ichthyologist:** Indian Creek Fish Survey, collaboration with researchers from the University of Mississippi (October 1995 – December 1996). Baseline assessment of fish communities and habitat conditions in a second-order stream within Mississippi and Tennessee.

**Independent Contractor:** U.S. Army Corps of Engineers (October - December 1993). Assisted with writing grant proposal and capture of fish for study examining the swimming performance of smallmouth buffalo.

**Master's Research:** University of Mississippi, Biology Department (September 1991- December 1993). Designed and conducted research examining the influence of photoperiod, temperature, and time of day on swimming performance of white crappie.

**Graduate Research Assistant:** University of Mississippi, Biology Department (January 1992 – December 1993). Conducted swimming performance tests to determine the effect of body size, temperature, acute temperature change, and tagging on white crappie.

- 1) Supervised and trained undergraduate assistant in fish collecting techniques, experimental protocol for determining swimming performance, data management, and boat handling skills.

**Graduate Research Assistant:** University of Mississippi, Biology Department (Summer 1991). Collected and rough sorted macroinvertebrate samples as part of a study examining macroinvertebrate communities in freshwater wetlands at the University of Mississippi Field Station.

**Graduate Research Assistant:** University of Mississippi, Biology Department (July 1991). Assisted with capture of bonnethead sharks for swimming performance study. Identified common inshore fishes captured in gillnets and during and independent snorkeling trips in mangrove swamp and sea grass beds.

**Internship:** James H. Barrow Biological Field Station, in cooperation with the Ohio Department of Health (1990 - 1991). Compared small mammal communities from two terrestrial habitat types and collected and identified ectoparasites from captured small and medium sized mammals.

## TEACHING EXPERIENCE

**Adjunct Assistant Professor - School of Environment and Natural Resources and Affiliated Scientist – Environmental Sciences Graduate Program:** February 1, 2006 to present. the Ohio State University. Contribute to the teaching mission of SENR and ESGP by serving on graduate student committees, teaching, guest lecturing, and informal graduate student education through interaction with the Stream Ecology Laboratory and Watershed Ecology Group. Notable contributions include:

**Methods in Aquatic Ecology.** September 2007. Developed and taught two week section of lectures and laboratories on methods stream ecology as part of this team taught course.

**Stream Ecology Lab Brown Bag Lunch Series.** April 2007. Prepared and taught lecture on preparing job applications.

**Strategies for Conducting Field Research Safely.** April 2007. Developed one hour safety course that focuses on safety concepts applicable when conducting field research in environmental, natural resources, and agricultural sciences.

**Survey of Environmental Science Careers.** April 2007. Prepare and teach lecture on career as a Research Ecologist with the Agricultural Research Service.

**Multi-scaled Complexity in the Ecology of Lotic Ecosystems.** January to March 2007. Developed and taught graduate level independent study course (3 hours) designed to introduce student to concepts and issues in evaluating the influence of differently scaled factors on stream communities and ecosystems.

**Stream Ecology Lab Brown Bag Lunch Series.** March 2007. Prepared and taught lecture on designing ecological assessments.

**Natural Resource Management for Forestry, Fisheries, and Wildlife.** September 2006. Prepared and taught two lectures on stream habitat assessment and analyzing habitat and fish community data.

**Watershed Ecology Brown Bag Lunch Seminar Series.** April 2006. Prepared and taught lecture on strategies for effective presentations at scientific meetings.

**Methods in Aquatic Ecology.** October 2005. Prepared and taught lecture on structure and function of lotic ecosystems.

**Natural Resource Management for Forestry Fisheries and Wildlife (Guest Instructor).** September 2006. the Ohio State University, School of Environment and Natural Resources. Prepared and taught two lectures on stream habitat assessment and analyzing habitat data.

**Watershed Ecology Brown Bag Lunch Seminar Series (Guest Speaker).** April 2006, the Ohio State University, School of Environment and Natural Resources. Prepared and taught lecture on strategies for effective presentations.

**Methods in Aquatic Ecology (Guest Instructor).** October 2005. the Ohio State University, School of Environment and Natural Resources. Prepared and taught lecture on structure and function of lotic ecosystems.

**Applied Aquatic and Terrestrial Ecology (Guest Instructor).** September 2004, Mississippi State University, Department of Wildlife and Fisheries. Prepared and taught lecture on population ecology and evaluated graduate student lectures.

*(Teaching Experience continued)*

**Conceptual Ecology and Resource Management (Guest Instructor).** April 2004, Mississippi State University, Department of Wildlife and Fisheries. Administered oral examination designed to assess graduate students' knowledge of basic concepts in ecology.

**Applied Aquatic and Terrestrial Ecology (Instructor).** Fall semester 2003, Mississippi State University, Department of Wildlife and Fisheries. Designed and taught ecology course intended to introduce Forestry, Wildlife, and Fisheries majors to basic concepts of Ecology and their application to natural resource management. Prepared and taught lectures, developed course syllabus, proctored exams, and graded exams.

**Applied Aquatic and Terrestrial Ecology Laboratory (Instructor).** Fall semester 2003, Mississippi State University, Department of Wildlife and Fisheries. Taught three sections of laboratory course designed to introduce undergraduate students to the scientific method and provide experience in conducting ecological research. Developed and taught field and lab-based ecology laboratories, developed course syllabus, advised independent research projects, evaluated student presentations, graded laboratory reports, maintained record of grades, and supervised teaching assistant.

**Introduction to Wildlife and Fisheries (Teaching Assistant).** Spring Semester 2002, Mississippi State University, Department of Wildlife and Fisheries. Proctored exams, graded exams, and maintained record of grades. Prepared and taught lecture on physical and biological characteristics of lentic and lotic ecosystems.

**Wildlife and Fisheries Practices (Teaching Assistant).** Spring Semester 2002, Mississippi State University, Department of Wildlife and Fisheries. Evaluated student presentations and written management plans.

**Introduction to Environmental Sciences (Guest Instructor).** November 2001, Mississippi State University, Interdisciplinary Studies. Prepared and taught lecture on Community & Restoration Ecology.

**Applied Aquatic and Terrestrial Ecology (Guest Instructor).** October 2001, Mississippi State University, Department of Wildlife and Fisheries. Prepared and presented three lectures on population growth, population regulation, and life history strategies.

**Introduction to Wildlife and Fisheries Practices (Co-Instructor).** June 14-15, 2001, Mississippi State University, Department of Forestry and Department of Wildlife and Fisheries. Taught undergraduate forestry majors field sampling techniques for assessing fishes, macroinvertebrates, and physical habitat in streams, lakes, and wetlands as part of the aquatic ecology component of this team taught course.

**Wildlife and Fisheries Practices (Guest Instructor).** April 2001, Mississippi State University, Department of Wildlife and Fisheries. Discussed expectations and responsibilities of graduate students and evaluated graduate student presentation.

**Applied Aquatic and Terrestrial Ecology (Guest Instructor).** September 2000, Mississippi State University, Department of Wildlife and Fisheries. Taught three lectures on plant adaptations, animal adaptations, and population ecology.

*(Teaching Experience continued)*

**Applied Aquatic and Terrestrial Ecology Laboratory (Guest Instructor).** November 1999, Mississippi State University, Department of Wildlife and Fisheries. Taught methods of sampling fish in streams.

**Introduction to Wildlife and Fisheries Practices (Co-Instructor).** July 1-2, 1999, Mississippi State University, Department of Forestry and Department of Wildlife and Fisheries. Taught undergraduate forestry majors techniques for sampling fishes, macroinvertebrates, and physical habitat in lentic and lotic systems as part of the aquatic ecology component of this team taught course.

**Wildlife and Fisheries Practices (Guest Instructor).** January 1999, Mississippi State University, Department of Wildlife and Fisheries. Presented summary of research involving terrestrial and wetland habitat creation in agroecosystems as part of a lecture on adaptive management.

**Introduction to Biology (Guest Instructor).** September 1993, University of Mississippi, Biology Department.

**Human Physiology (Guest Instructor).** April 1992, University of Mississippi, Biology Department.

**Biology for Non-majors Laboratory (Teaching Assistant).** Fall semester 1991, University of Mississippi, Biology Department. Taught basic concepts of Biology and laboratory skills.

## **OTHER TEACHING EXPERIENCE AND EDUCATIONAL WORKSHOPS**

**Instructor: ARS Summer Internship program.** June 2007 to September 2007, USDA-ARS, Soil Drainage Research Unit, Columbus, Ohio. Designed and supervised internship to provide undergraduate student with research experience in ecology and water chemistry. Obtained partial funding from Midwest Area Office to support internship.

**SEEDS Meeting Mentor: 2007 Meeting of the Ecological Society of America and the Society for Ecological Restoration.** May 9 to August 10, 2007. Mentored student from underrepresented groups in ecology to help them obtain the full benefits of their first international scientific meeting.

**Workshop Participant: Communicating Science to the Public: the Where, Why, and How of Engaging Non-scientists.** August 2007, Joint Meeting of the Ecological Society of America and the Society for Ecological Restoration, San Jose, California.

**Workshop Participant: Show me the money: How to Write Successful Grant Proposals.** August 2007, Joint Meeting of the Ecological Society of America and the Society for Ecological Restoration, San Jose, California.

**Instructor: Strategies for Conducting Field Research Safely.** April 11, 2007. The Ohio State University, College of Food, Agriculture, and Environmental Sciences. Developed one hour lecture to teach students basic concepts of safety to consider when conducting field research.

**Instructor: Cold Weather Safety Issues: Hypothermia and Frost Bite.** November 30, 2006. USDA-ARS, Soil Drainage Research Unit, Columbus, Ohio. Developed 15 minute lecture to teach students symptoms of hypothermia and frost bite and strategies towards avoiding these injuries while conducting field work in cold weather.

*(Teaching Experience continued)*

**Instructor: ARS Summer Internship program.** July 2006 to September 2006, USDA-ARS, Soil Drainage Research Unit, Columbus, Ohio. Designed and oversaw internship to provide undergraduate student with interdisciplinary research experience in ecology and public health. Obtained partial funding from Midwest Area Office to support internship.

**Instructor: Field Safety course.** July 25, 2006, USDA-ARS, Soil Drainage Research Unit, Columbus, Ohio. Taught basic concepts of field safety to consider when conducting field research.

**Instructor: ARS Summer Internship program.** May 2005 to August 2005, USDA-ARS, Soil Drainage Research Unit, Columbus, Ohio. Designed and oversaw internship to provide undergraduate student with research experience in ecology, soil science, and water chemistry.

**Instructor: Field Safety course.** May 7, 2005, USDA-ARS, Soil Drainage Research Unit, Columbus, Ohio. Taught basic concepts of field safety to consider when conducting field research.

**Workshop Participant: Introduction to Teaching Issues and Experiments in Ecology.** August 2003, Ecological Society of America, Savannah, Georgia.

**Guest Speaker: Wildlife and Fisheries Profession.** September 2001, Mississippi State University, Department of Wildlife and Fisheries. Spoke to undergraduate Wildlife and Fisheries majors on the benefits and importance of involvement in a professional society.

**Workshop Participant: Teaching Assistant Workshop.** August 13-14, 2001, Mississippi State University,

**Workshop Participant: An Introduction to Student Active Learning in Ecology.** August 2001, ESA Education Section, Ecological Society of America, Madison, Wisconsin.

**Teaching Practicum.** Spring Semester 2000, Mississippi State University, Advanced Fish Ecology and Management. As part of this graduate level course I was required teach lectures in patch dynamics, disturbance, scale, succession/stability, and life history and lead discussion of selected papers and ecological concepts.

**Graduate Assistant: National Science Foundation Young Scholars Program.** June 7-26, and July 12-31, 1992, University of Mississippi, Department of Biology. Taught advanced high school students field sampling techniques for assessment of lentic and lotic fish communities and directed their field research projects.

## **SERVICE TO SCIENTIFIC SOCIETIES AND OTHER PROFESSIONAL EXPERIENCE**

**Co-Chair of the Organizing Committee for the Midwest-Great Lakes Chapter of the Society for Ecological Restoration International.** Provide leadership for the establishment of a regional chapter of an international professional society. Developed mailing list, documented membership interest, represented Chapter at SER Chapter Caucus and Board Reception meetings, co-authored letter of request, and selected organizing committee. January 2007 to present.

**Judge – Buell and Braun Awards For Excellence in Ecology:** 2007 Joint Meeting of the Ecological Society of America and Society for Restoration Ecology, San Jose, California, August 2007

(Service to Scientific Societies and Other Professional Experience continued)

**Judge – John H. and Ruth W. Melvin Memorial STEM Scholar Awards (high school poster presentations):** 2007 meeting of the Ohio Academy of Science, Cleveland, Ohio, April 2007

**Peer Reviewer:** *American Midland Naturalist*, *Hydrobiologia*, *Journal of Environmental Quality*, *North American Journal of Fisheries Management*, and *Southeastern Naturalist*, 2007.

**Judge – Buell and Braun Awards For Excellence in Ecology:** 2006 Annual meeting of the Ecological Society of America, Memphis, Tennessee, August 7-10, 2006.

**Research Proposal Peer Reviewer:** Michigan Sea Grant, 2006

**Peer Reviewer:** *Hydrobiologia* (2 reviews) and *Transactions of the American Society of Agricultural and Biological Engineers*, 2006.

**Symposium Organizer:** Evaluating the influence of conservation practices on Ohio watersheds. 2006 Conservation Partnership All Employee meeting, Columbus, Ohio. March 1, 2006.

**Peer Reviewer:** *Agronomy Journal* and *Global Ecology and Biogeography*, 2005.

**Peer Reviewer:** *Neotropical Ichthyology* and *North American Journal of Fisheries Management*, 2004.

**Faculty Advisor:** Mississippi State University Student Subunit of the Mississippi Chapter-American Fisheries Society. Mississippi State University, August 2003 – May 2004.

**Judge – Best Student Paper Award:** 2004 Annual meeting of the Mississippi Chapter of the American Fisheries Society, Jackson, Mississippi, February 12, 2004.

**Peer Reviewer:** *Environmental Biology of Fishes*, 2003.

**Judge – Best Student Paper Award:** 2003 Annual meeting of the Mississippi Chapter of the American Fisheries Society, Cleveland, Mississippi, February 6, 2003.

**Peer Reviewer:** *Ecology of Freshwater Fish*, *Transactions of the American Fisheries Society*, and *North American Journal of Fisheries Management*, 2002.

**President:** Mississippi State University Student Subunit of the Mississippi Chapter-American Fisheries Society. Mississippi State University, Fall 2001 – Summer 2002.

**Moderator:** Session IIIb. Joint meeting of the Mississippi and Louisiana Chapters of the American Fisheries Society, Biloxi, Mississippi. February 7, 2002.

**Peer Reviewer:** *Journal of Aquatic Plant Management*, 2001.

**Vice-President:** Mississippi State University Student Subunit of the Mississippi Chapter-American Fisheries Society. Mississippi State University, Fall 2000 – Summer 2001.

**Moderator:** Session 3: Inland Fisheries. Annual meeting of the Mississippi Chapter of the American Fisheries Society, February 15, 2001.

**Peer Reviewer:** *Environmental Biology of Fishes*, 1999.

**Session Chair:** Session 43: Fish, Amphibian, and Reptile Interactions. 77<sup>th</sup> annual meeting of the American Society of Ichthyologists and Herpetologists, June 29, 1997.

**Vice-President:** Biology Graduate Student Association, University of Mississippi, 1992.

**Student Coordinator of Maintenance:** James H. Barrow Biological Field Station. 1988-1991. Performed general maintenance, provided feeding and health care of the animals, assisted with establishing a grid in the Beech-Maple Forest, and assisted with building educational facilities.

## PEER REVIEWED PUBLICATIONS

Smiley, P. C. Jr., R. B., Gillespie, K. W., King, and C. Huang. **In review.** Relative contributions of habitat and water quality to the integrity of fish communities in agricultural drainage ditches. *Journal of Soil and Water Conservation* (Invited front section article)

Smiley, P. C. Jr., F. D. Shields Jr., and S. S. Knight. **In review.** Designing impact assessments for evaluating the ecological effects of conservation practices on streams in agricultural landscapes. *Journal of the American Water Resources Association.*

King, K. W., P. C. Smiley Jr., B. J. Baker, and N. R. Fausey. **Accepted pending revisions.** Validation of paired watersheds for assessing conservation practices in Upper Big Walnut Creek watershed, Ohio. *Journal of Soil and Water Conservation.*

Smiley, P. C., Jr. and E. D. Dibble. 2008. Influence of spatial resolution on assessing channelization impacts on fish and macroinvertebrate communities in a warmwater stream in the southeastern United States. *Environmental Monitoring and Assessment* 138: 17-29.

Shields, F. D. Jr., P. C. Smiley Jr., and C. M. Cooper. 2007. Modifying erosion control structures for ecological benefits. *Journal of Soil and Water Conservation* 62: 157A. (Invited article)

Smiley, P. C. Jr., J. D. Maul, and C. M. Cooper. 2007. Avian community structure among restored riparian habitats in northwestern Mississippi. *Agriculture, Ecosystems, and Environment* 122: 149-156.

Smiley, P. C., Jr. and E. D. Dibble. 2006. Evaluating feasibility of planting aquatic plants in shallow lakes in the Mississippi Delta. *Journal of Aquatic Plant Management* 44: 73-80.

Smiley, P. C. Jr., E. D. Dibble, and S. H. Schoenholtz. 2006. Spatial and temporal variation of goldstripe darter abundance in first-order streams in north-central Mississippi. *American Midland Naturalist* 156: 23-36.

Slade, J. G., E. D. Dibble, and P. C. Smiley, Jr. 2005. Relationships between littoral zone macrophytes and the fish community in four urban Minnesota lakes. *Journal of Freshwater Ecology* 20: 635-640.

- Maul, J. D., P. C. Smiley Jr., and C. M. Cooper. 2005. Patterns of avian nest predators and a brood parasite among restored riparian habitats in agricultural watersheds. *Environmental Monitoring and Assessment* 108: 133-150.
- Smiley, P. C., Jr., and E. D. Dibble. 2005. Implications of a hierarchical relationship among channel form, instream habitat, and stream communities for restoration of channelized streams. *Hydrobiologia* 548: 279-292.
- Smiley, P. C., Jr., E. D. Dibble, and S. H. Schoenholtz. 2005. Fishes of first-order streams in north-central Mississippi. *Southeastern Naturalist* 4: 219-236.
- Parsons, G. R., and P. C. Smiley Jr. 2003. The effect of environmental changes on swimming performance of the white crappie. *Journal of Freshwater Ecology* 18: 89-96.
- Shields, F. D., Jr., P. C. Smiley, Jr., and C. M. Cooper. 2002. Design and management of edge-of-field water control structures for ecological benefits. *Journal of Soil and Water Conservation* 57: 151-157.
- Smiley, P. C., Jr., and E. D. Dibble. 2000. Microhabitat use by an introduced crayfish (*Orconectes rusticus*) in Long Lake, Wisconsin. *Journal of Freshwater Ecology* 15: 115-123.
- Smiley, P. C., Jr., S. S. Knight, C. M. Cooper, and K. W. Kallies. 1999. Fish richness and abundance in created riparian habitats of channelized northern Mississippi streams. *Southeastern Fishes Council Proceedings* 39: 7-12.
- Cooper, C. M., P. C. Smiley Jr., J. D. Wigginton, S. S. Knight, and K. W. Kallies. 1997. Vertebrate utilization of habitats created by installation of field-scale grade control structures. *Journal of Freshwater Ecology* 12: 199-207.
- Smiley, P. C., Jr., and G. R. Parsons. 1997. The effect of photoperiod and temperature on the swimming performance of white crappie. *Transactions of the American Fisheries Society* 126: 495-499.

#### **PEER REVIEW PUBLICATIONS IN PREPARATION**

- K.W. King, P.C. Smiley Jr., and N.R. Fausey. Hydrology of channelized and unchannelized headwater streams in the Upper Big Walnut Creek watershed, Ohio. for submission to *Journal of Hydrology*.
- Smiley, P.C., Jr., and C. M. Cooper. Influence of habitat and season on small mammal communities within created riparian habitats. for submission to *American Midland Naturalist*.
- Smiley, P. C., Jr., and E. D. Dibble. Initial responses of fishes to installation of instream habitat structures in Twentymile Creek, Mississippi. for submission to *Journal of the Mississippi Academy of Sciences*.

## PROCEEDINGS, ABSTRACTS IN PEER REVIEW JOURNALS, AND TECHNICAL REPORTS

- Smiley, P. C. Jr. and B. J. Allred. **In press.** Influence of wetland size on aquatic communities within wetland reservoir subirrigation systems in northwestern Ohio. *The Ohio Journal of Science*
- Smiley, P. C. Jr. 2007. Aquatic macroinvertebrate communities within agricultural drainage ditches and streams of the Upper Big Walnut Creek watershed, Ohio. *The Ohio Journal of Science* 107: 7. (Abstract published in Peer Review Journal)
- Smiley, P. C. Jr., and N. R. Fausey (editors). 2006. Evaluating the influence of conservation practices on Ohio watersheds. Proceedings of the Ohio Conservation Effects Assessment Project symposium. USDA-ARS, Soil Drainage Research Unit, Columbus, Ohio.
- Dibble, E. D., S. H. Schoenholtz, and P. C. Smiley Jr. 2004. Effectiveness of silvicultural best management practices in protecting aquatic habitat in timber management areas. Final report to Environmental Protection Agency, Region IV, EPA Grant number: X974062-00.
- Dibble, E. D., and P. C. Smiley Jr. 2004. Establishment of aquatic plants in Lake Charlie Capps. Final report to Mississippi Department of Wildlife, Fisheries, and Parks.
- Knight, S. S., F. D. Shields Jr., P. C. Smiley Jr., and C. M. Cooper. 2001. Comparison of fish catches from sediment damaged river ecosystems. Proceedings of Seventh Federal Interagency Sedimentation Conference. Vol I: 50 –53.
- Payne, B. S., P. C. Smiley Jr., and A. C. Miller. 2001. Macroinvertebrate communities and habitat in Luxapalila Creek, Mississippi and Alabama. ERDC/EL TR-01-34, U. S. Army Engineer Research and Development Center, Vicksburg, Mississippi. 30 pp.
- Smiley, P. C., Jr., and E. D. Dibble. 2000. Evaluation of Twentymile Creek restoration project: (fish and habitat responses). Final report to Mobile District, U.S. Army Corps of Engineers. Project number 3523-40354. 44 pp.
- Carroll, G. D., E. D. Dibble, R. Rogers, S. Woodruff, P. C. Smiley Jr., and S. L. Harrel. 1999. Water quality, physical habitat and fishes of two streams in the Bogue Homa-Leaf River drainage of the DeSoto National Forest, Chickasawhay Ranger District, MS. USDA Forest Service, Technical Report. 27 pp.
- Dibble, E. D., S. L. Harrel, and P. C. Smiley Jr. 1999. An evaluation of available habitat important to striped bass *Morone saxatilis* and the distribution and habitat use by other fishes in Black Creek, Mississippi. Report to U.S. Forest Service. 65 pp.
- Dibble, E. D., and P. C. Smiley Jr. 1999. Ecological evaluation of the streams and aquatic communities in Vicksburg National Military Park. Annual Report 1999. 36 pp.
- Cooper, C. M., M. T. Moore, W. B. Gillespie, Jr., S. Testa III, F. D. Shields, Jr., and P. C. Smiley, Jr. 1998. Preliminary assessment of water quality, biological habitat, and biotic communities of the Yalobusha River Watershed. National Sedimentation Laboratory Report no. 7., USDA-ARS, National Sedimentation Laboratory, Oxford, Mississippi.

- Smiley, P. C., Jr., C. M. Cooper, K. W. Kallies, and S. S. Knight. 1998. Assessing habitats created by installation of drop pipes. Wetland Science Institute Wetland Assessment Information Series, no. 2, 8 pp.
- Smiley, P. C., Jr., S. S. Knight, C. M. Cooper, and K. W. Kallies. 1998. Fish utilization of riparian habitats created by erosion control structures. Proceedings of the Mississippi Water Resources Conference, April 7-8, 1998. Water Resources Research Institute: Mississippi State University.
- Knight, S. S., C. M. Cooper, and P. C. Smiley Jr. 1997. Water quality analysis of habitats created by installation of drop pipe inlets. Pages 1035-1040 in S. S. Y. Wang, E. J. Langendoen, and F. D. Shields, Jr., editors. Management of Landscapes Disturbed by Channel Incision. Center for Computation Hydroscience and Engineering, University, MS.
- Smiley, P. C., Jr., C. M. Cooper, K. W. Kallies, and S. S. Knight. 1997. Assessing habitats created by installation of drop pipes. Pages 903-908 in S. S. Y. Wang, E. J. Langendoen, and F. D. Shields, Jr., editors. Management of Landscapes Disturbed by Channel Incision. Center for Computation Hydroscience and Engineering, University, MS.
- Cooper, C. M., P. C. Smiley Jr., J. D. Wigginton, S. S. Knight, and K. W. Kallies. 1996. Vertebrate utilization of habitats created by installation of drop pipes. Proceedings of the Sixth Interagency Sedimentation Conference vol. 2: Poster 19-22.
- Parsons, G. R. and P. C. Smiley Jr. 1994. Swimming performance of white crappie, *Pomoxis annularis*: The effect of environmental change. Freshwater Fisheries Report Number 136. Mississippi Department of Wildlife, Fisheries, and Parks, Jackson, MS.

## PRESENTATIONS AT SCIENTIFIC MEETINGS

- Gillespie, R. B., P. C. Smiley Jr., K. W. King, C. Huang. (Sept 2008). Relationships among macroinvertebrate community variables and water quality parameters in modified agricultural receiving streams in the midwestern United States. 50<sup>th</sup> anniversary NSL / 2008 CEAP conference.
- Smiley, P. C., Jr., R. B. Gillespie, K. W. King, and C. Huang. (Sept 2008). Implications of fish-habitat relationships for developing conservation plans for channelized headwater streams in the midwestern United States. (50<sup>th</sup> anniversary NSL / 2008 CEAP conference.
- Smiley, P. C. Jr., S. S. Knight, F. D. Shields Jr., and C. M. Cooper. (Sept 2008). Influence of gully erosion control on amphibian and reptile communities within riparian zones of channelized streams (50<sup>th</sup> anniversary NSL / 2008 CEAP conference.
- Smiley, P. C., Jr., R. B. Gillespie, K. W. King, and C. Huang. (August 2008). Comparing the influence of different habitat factors on fish communities in channelized headwater streams in Indiana and Ohio. ESA meeting.
- Gillespie, R. B., P. C. Smiley Jr., K. W. King, C. Huang. (June 2008). Relationships of macroinvertebrate communities with nutrients, pesticides, and physicochemical parameters in channelized headwater streams in Indiana and Ohio. ASLO Summer Meeting.

*(Presentations continued)*

- Smiley, P. C., Jr., R. B. Gillespie, K. W. King, and C. Huang. (June 2008). Relationships between water chemistry and fish communities within channelized headwater streams in the midwestern United States. ASLO Summer Meeting
- Smiley, P. C. Jr. and B. J. Allred. (April 2008). Influence of wetland size on aquatic communities within wetland reservoir subirrigation systems in northwestern Ohio. 2008 Ohio Academy of Sciences.
- Smiley, P. C. Jr., R. B. Gillespie, K.W. King, and C. Huang. 2007. Fishes in drainage ditches: what does it mean for the management of agricultural watersheds? 2007 Ohio Stormwater Management and Drainage Conference. (invited presentation).
- McGee, L. E., V. Bouchard, and P. C. Smiley Jr. 2007. The impact of low-head dams on riverine and riparian nitrogen dynamics. Joint Meeting of the Ecological Society of America and the Society for Ecological Restoration.
- Smiley, P. C. Jr., K. W. King, and N. R. Fausey. 2007. Developing restoration strategies for channelized headwater streams in a central Ohio watershed. Joint Meeting of the Ecological Society of America and the Society for Ecological Restoration.
- Dibble, E. D., and P. C. Smiley Jr. July 2007. Evaluating the feasibility of planting aquatic plants for habitat restoration in shallow Mississippi lakes. Aquatic Plant Management Society (invited presentation).
- King, K. W., P. C. Smiley Jr., N. R. Fausey, B. J. Baker. July 2007. Validation of paired watersheds for assessing conservation practices in Upper Big Walnut Creek Watershed, Ohio. Soil and Water Conservation Society.
- Gillespie, R. B., P. C. Smiley Jr., K. W. King, and C. Huang. July 2007. The relative contributions of habitat quality and water quality to the integrity of aquatic communities in agricultural drainage ditches. Soil and Water Conservation Society.
- Smiley, P.C. Jr., F. D. Shields Jr., and S. S. Knight. July 2007. Designing sampling protocols for evaluating ecological effects of conservation practices on agricultural streams. Soil and Water Conservation Society.
- Smiley, P. C. Jr. and L. R. Williams. 2007. Ecology and management of agricultural drainage ditches: a literature review. Symposium on Assessment and Management of Vegetated Ditch Systems for Drainage and Water Quality Goals, Soil and Water Conservation Society (invited speaker).
- Smiley, P. C. Jr. 2007. Aquatic macroinvertebrate communities within agricultural drainage ditches And streams of the Upper Big Walnut Creek watershed, Ohio. Ohio Academy of Science. (poster presentation)
- Smiley, P. C. Jr. and L. R. Williams. 2006. Ecology and management of agricultural drainage ditches: a literature review. Water Management Association of Ohio.

*(Presentations continued)*

- Smiley, P.C. Jr., F. D. Shields Jr., and S. S. Knight. 2006. Designing stream sampling protocols for measuring ecological effects of conservation practices. *Managing Agricultural Landscapes for Environmental Quality: Strengthening the Science Base*.
- Smiley, P.C. Jr., K. W. King, and N. R. Fausey. 2006. An experimental approach to assess the influence of nutrient and pesticide practices on headwater agricultural watersheds in central Ohio. *Managing Agricultural Landscapes for Environmental Quality: Strengthening the Science Base*. (poster presentation)
- Smiley, P. C. Jr. and K. W. King. 2006. Fish-habitat relationships in drainage ditches within a predominantly agricultural watershed in central Ohio. *Ecological Society of America*.
- King, K. W., P. C. Smiley Jr., and N. R. Fausey. 2006. Hydrology, water chemistry, and ecology of headwater watersheds within the Upper Big Walnut Creek, Ohio. Annual Meeting of the ARS Conservation Effects Assessment Project – Watershed Assessment Studies. (invited presentation)
- Smiley, P. C. Jr., R. B. Gillespie, F. D. Shields Jr., and S. S. Knight. 2006. Ecological methods for assessing the influence of conservation practices on lotic ecosystems. Annual Meeting of the ARS Conservation Effects Assessment Project – Watershed Assessment Studies. (invited presentation)
- Dibble, E. D., and P. C. Smiley Jr. 2006. Evaluating the feasibility of planting aquatic plants in shallow Mississippi lakes. NALMS 15th Annual Southeastern Lake and Watershed Management Conference. (invited presentation)
- King, K. W., P. C. Smiley Jr., and N. R. Fausey. 2006. Hydrology and water chemistry responses to conservation practices and land use within the Upper Big Walnut Creek watershed. Symposium on evaluating the influence of conservation practices on Ohio watersheds, Conservation Partnership All Employee Meeting. (invited poster presentation)
- Smiley, P. C. Jr. and K. W. King. 2006. Ecological evaluation of the influence of herbaceous riparian buffers on headwater agricultural drainage ditches in the Upper Big Walnut Creek watershed. Symposium on evaluating the influence of conservation practices on Ohio watersheds, Conservation Partnership All Employee Meeting. (invited poster presentation)
- Smiley, P. C. Jr., K. W. King, B. Baker, N. R. Fausey, C. Tennity, and B. Sohngen. 2006. Evaluating conservation practices within the Upper Big Walnut Creek watershed: water quality, ecology, soil, and economic perspectives. Symposium on evaluating the influence of conservation practices on Ohio watersheds, Conservation Partnership All Employee Meeting. (invited presentation).
- Smiley, P. C. Jr. 2006. Perspectives on the ecology and management of agricultural drainage ditches. School of Environment and Natural Resources Seminar Series, the Ohio State University. (invited speaker).
- Dibble, E. D., and P. C. Smiley Jr. 2006. Evaluating the feasibility of planting aquatic plants for habitat restoration in shallow Mississippi lakes. Joint Meeting of the Mississippi and Louisiana Chapters of the American Fisheries Society.

*(Presentations continued)*

- Dibble, E. D., and P. C. Smiley Jr. 2005. Evaluating the feasibility of planting aquatic plants in shallow Mississippi lakes. NALMS 2005: 25th International Symposium Lake Effects: Exploring the Relationship between People and Water.
- King, K. W., P. C. Smiley Jr., B. J. Baker, and N. R. Fausey. 2005. Assessing the impact of conservation management practices on water and soil quality in Upper Big Walnut Creek Watershed. American Society of Agricultural Engineers.
- Smiley, P. C., Jr., E. D. Dibble, and S. H. Schoenholtz. 2005. Influence of forestry best management practices on fish communities in first-order streams in north-central Mississippi. American Society of Ichthyologists and Herpetologists.
- Smiley, P. C., Jr., K. W. King, and N. R. Fausey. 2005. Evaluating habitat and fish community responses to conservation practices in headwater streams of the Upper Big Walnut Creek. American Society of Ichthyologists and Herpetologists. (poster)
- Smiley, P. C., Jr. and E. D. Dibble. 2005. Evaluating the feasibility of planting aquatic plants as part of lake restoration projects in Mississippi. American Ecological Engineering Society.
- King, K. W., P. C. Smiley Jr., and N. R. Fausey. 2005. Watershed Report - Upper Big Walnut Creek, Ohio. Annual Meeting of the ARS Conservation Effects Assessment Project – Watershed Assessment Studies. (invited presentation)
- Slade, J. G., E. D. Dibble, and P. C. Smiley Jr. 2005. Relationships between macrophyte and fish communities of east-central Minnesota lakes. Mississippi Chapter of the American Fisheries Society. (poster)
- Smiley, P. C., Jr. 2004. Influence of landscape habitat alterations on first-order streams in north-central Mississippi. Seminar, Kaskaskia, Ridge Lake, and Sam Parr Biological Stations, Illinois Natural History Survey, Sullivan, Illinois. (invited speaker)
- Slade, J. G., E. D. Dibble, and P. C. Smiley Jr. 2004. Multi-scale relationships between littoral zone macrophyte and fish communities of east-central Minnesota. Midsouth Aquatic Plant Management Society.
- Smiley, P. C., Jr. 2004. Determinants of community structure in lotic systems: perspectives from Mississippi. Seminar, Illinois River Biological Station, Illinois Natural History Survey, Havana, Illinois. (invited speaker)
- Smiley, P. C., Jr., E. D. Dibble, and S. H. Schoenholtz. 2004. Patterns of goldstripe darter abundance in first-order streams within managed pine plantations in north-central Mississippi. American Society of Ichthyologists and Herpetologists.
- Dibble, E. D., P. C. Smiley Jr., and S. H. Schoenholtz. 2004. Effect of forest disturbance on first-order stream communities in the southeast: a landscape manipulation. Watershed Restoration Symposium. Northeast Fish and Wildlife Conference.

*(Presentations continued)*

- Smiley, P. C., Jr. and E. D. Dibble. 2004. Implications of the relationships among channel form, instream habitat, and stream communities for restoration projects within channelized streams. Coastal Plains Chapter of the Society for Ecological Restoration. (invited speaker)
- Smiley, P. C., Jr. 2004. The importance of scale when assessing community responses to stream habitat alterations. Departmental Seminar, Department of Biological Sciences, Western Illinois University. (invited speaker)
- Smiley, P. C. Jr., E. D. Dibble, and S. H. Schoenholtz. 2004. Characteristics of fish communities from first-order streams in north-central Mississippi. Mississippi Chapter of American Fisheries Society.
- Dibble, E. D., P. C. Smiley, Jr. and S. H. Schoenholtz. 2003. Forest disturbance and the stream community: a landscape manipulation. Nucleo de Pesquisa em Limnologia, Ictiologia e Aquicultura, Universidade Estadual de Maringa, Brazil.
- Smiley, P. C., Jr. 2003. Interdisciplinary approaches to monitoring stream ecosystems. Seminar, USDA-ARS, National Soil Erosion Research Laboratory, West Lafayette, Indiana. (invited speaker)
- Smiley, P. C., Jr. and E. D. Dibble. 2003. Time for a change: design of community level assessments of stream restoration and channelization projects. Society for Ecological Restoration International.
- Smiley, P. C., Jr. and E. D. Dibble. 2003. Influence of spatial resolution and community extent on patterns of community structure within a channelized stream in Mississippi and Alabama. Ecological Society of America.
- Smiley, P. C., Jr. and E. D. Dibble. 2003. Relationships among channel form, instream habitat, and aquatic communities in a channelized stream. Mississippi Chapter of American Fisheries Society.
- Smiley, P. C., Jr. 2002. Influence of stream habitat alterations on dynamics of aquatic communities. Departmental Seminar (dissertation defense), Department of Wildlife and Fisheries, Mississippi State University.
- Smiley, P. C. Jr., J. R. Davis, S. McNamara, R. Hashim, and E. D. Dibble. 2002. Evolution and history of the Mississippi Chapter's Student Subunit of the American Fisheries Society. Annual meeting of the American Fisheries Society. (invited poster)
- Smiley, P. C. Jr., J. R. Davis, S. McNamara, R. Hashim, and E. D. Dibble. 2002. Evolution and history of the Mississippi Chapter's Student Subunit of the American Fisheries Society. Midyear meeting of the Southern Division of the American Fisheries Society. (poster)
- Smiley, P. C. Jr., J. R. Davis, S. McNamara, R. Hashim, and E. D. Dibble. 2002. Mississippi Chapter's Student Subunit of the American Fisheries Society. Mississippi and Louisiana Joint Chapter Meeting, American Fisheries Society. (poster)

*(Presentations continued)*

- Knight, S. S., F. D. Shields Jr., P. C. Smiley Jr., and C. M. Cooper. 2001. Comparison of fish catches from sediment damaged river ecosystems. Seventh Federal Interagency Sedimentation Conference.
- Smiley, P. C., Jr., E. D. Dibble, and A. C. Miller. 2001. Interrelationships among channel form, instream habitat, and aquatic communities. Ecological Society of America (poster).
- Smiley, P. C., Jr. 2001. From succession to disturbance and patch dynamics: a discussion of A. S. Watt's "Pattern and Process in the Plant Community". Departmental Seminar, Department of Wildlife and Fisheries, Mississippi State University.
- Smiley, P. C., Jr., E. D. Dibble, and A. C. Miller. 2001. Channel and instream habitat characteristics within a channelized stream. Mississippi Chapter of American Fisheries Society. (poster).
- Smiley, P. C., Jr., and E. D. Dibble. 2000. Temporal variation of fish and physical habitat within a newly restored reach of Twentymile Creek. Mississippi Chapter of American Fisheries Society.
- Smiley, P. C., Jr., and E. D. Dibble. 2000. Influence of instream habitat structures on fish and habitat within Twentymile Creek. Mississippi Chapter of American Fisheries Society. (poster).
- Dibble, E. D., and P. C. Smiley Jr. 1999. Fish and habitat responses to installation of instream habitat structures. 1999 International Conference of the Society for Ecological Restoration. (poster).
- Smiley, P. C., Jr. 1999. Influence of stream habitat alterations on dynamics of aquatic communities. Departmental Seminar, Department of Wildlife and Fisheries, Mississippi State University.
- Smiley, P. C., Jr., C. M. Cooper, J. D. Maul, and S. S. Knight. 1998. Comparison of small mammal and bird communities within impacted and created riparian habitats. Joint Meeting of American Society of Limnology and Oceanography and Ecological Society of America.
- Smiley, P. C., Jr., S. S. Knight, C. M. Cooper, and K. W. Kallies. 1998. Fish utilization of riparian habitats created by erosion control structures. Mississippi Water Resources Conference.
- Smiley, P. C., Jr., S. S. Knight, and C. M. Cooper. 1998. Watershed evaluation of the Upper Yalobusha River: Fishes. Mississippi and Louisiana Joint Chapter Meeting, American Fisheries Society
- Adams, S. R., G. R. Parsons, and P. C. Smiley Jr. 1997. Fishes of Indian Creek, Wolf River drainage. Mississippi Chapter of the American Fisheries Society.
- Knight, S. S., C. M. Cooper, and P. C. Smiley Jr. 1997. Water quality analysis of habitats created by installation of drop pipes. Conference on Management of Landscapes Disturbed by Channel Incision.
- Smiley, P. C., Jr., C. M. Cooper, K. W. Kallies, and S. S. Knight. 1997. Assessing habitats created by installation of drop pipes. Conference on Management of Landscapes Disturbed by Channel Incision.

(Presentations continued)

- Smiley, P. C., Jr., K. W. Kallies, S. S. Knight, and C. M. Cooper. 1997. Fishes, amphibians, and reptiles of habitats created by erosion control structures. 77<sup>th</sup> annual meeting of the American Society of Ichthyologists and Herpetologists.
- Smiley, P. C., Jr., S. S. Knight, and C. M. Cooper. 1997. The effect of pool area, depth, and season on fish communities within created habitats. Mississippi Chapter of the American Fisheries Society
- Smiley, P. C., Jr., S. S. Knight, and C. M. Cooper. 1996. The fishes of drop pipe created habitats. 76<sup>th</sup> annual meeting of the American Society of Ichthyologists and Herpetologists.
- Cooper, C. M., P. C. Smiley Jr., J. D. Wigginton, S. S. Knight, and K. W. Kallies. 1996. Vertebrate utilization of habitats created by installation of drop pipe inlets. Sixth Interagency Sedimentation Conference. (poster)
- Smiley, P. C., Jr., S. S. Knight, and C. M. Cooper. 1996. Ichthyofauna of wetland habitats created by installation of drop pipes. Joint meeting of the Mississippi and Tennessee Chapter of the American Fisheries Society.
- Adams, S. R., G. R. Parsons, and P. C. Smiley Jr. 1995. Swimming performance of the smallmouth buffalo, *Ictiobus bubalus*. American Fisheries Society.
- Adams, S. R., G. R. Parsons, and P. C. Smiley Jr. 1995. Swimming performance of the smallmouth buffalo, *Ictiobus bubalus*. Mississippi Chapter of the American Fisheries Society.
- Smiley, P. C., Jr., and G. R. Parsons. 1995. The effect of photoperiod, temperature, and tagging on the critical swimming speed of white crappie, *Pomoxis annularis*. Mississippi Chapter of the American Fisheries Society.
- Smiley, P. C., Jr. 1993. The effect of photoperiod, temperature, and time of day on the critical swimming speed of white crappie, *Pomoxis annularis*. Departmental Seminar, Department of Biology, University of Mississippi.
- Smiley, P. C., Jr. 1991. Lyme disease and ectoparasites on small and medium sized mammals at the James H. Barrow Biological Field Station. Departmental Seminar, Biology Department, Hiram College.

## **INVITED PRESENTATIONS FOR WATERSHED GROUPS AND OTHER STAKEHOLDERS**

Implications of fish-habitat relationships within agricultural drainage ditches for the assessment of conservation practices. Upper Big Walnut Creek Partnership, December 6, 2007.

Ecology of drainage ditches within the Upper Big Walnut Creek watershed: implications for water quality management. Ohio EPA, July 30, 2007.

Ecological and Public Health Perspectives on Headwater Streams in the Upper Big Walnut Creek Watershed. Delaware County Streams and Watersheds Committee. March 28, 2007.

Characteristics of headwater ditches and streams within the Upper Big Walnut Creek watershed, Ohio. Farmers Share Breakfast, Delaware, OH. March 17, 2007. (poster presentation).

Fishes in agricultural drainage ditches in Ohio. 2006 Annual Northwest Ohio Drainage Expo. August 17, 2006.

Ecological methods of evaluating drainage ditches. 2006 Annual Northwest Ohio Drainage Expo. August 17, 2006. (field demonstration).

Aquatic ecology research within agricultural drainage ditches in the Upper Big Walnut Creek watershed. Farmers Share Breakfast, Delaware, OH. March 2006. (poster presentation)

Connections between water quality and agricultural drainage ditches. Ohio DNR Division of Soil and Water, Rural Drainage Ditch Advisory Committee. January 12, 2006.

Ecological evaluation of agricultural drainage ditches and created wetlands. Ohio Land Improvement Contractors Association. January 4, 2006.

Development of alternative designs for agricultural wetlands. Upper Big Walnut Creek Partnership. December 15, 2005.

Monitoring methods for assessing fish and macroinvertebrate responses to forestry best management practices. Southern Best Management Practices Foresters. May 14, 2003.

## **PROFESSIONAL ORGANIZATIONS**

Ecological Society of America

Ohio Academy of Science

Society for Conservation Biology

Society for Ecological Restoration International

## **EXTRACURRICULAR ACTIVITIES**

Oxford-University Hash House Harriers, 1998-2005

Mississippi State Intramural Flag Football, 1999

Ole Miss Intramural Soccer, 1993

Ole Miss Rugby Club, 1991-1993

Hiram Rugby Club, 1988-1991

Hiram College Student Senate, 1988-1990

Intercollegiate NCAA Varsity Athletics: Hiram College Football: 1987-1991; Track: 1988