

SUMMARY CURRICULUM VITAE 2007

Stephen W. Golladay, Ph.D.

Associate Scientist



Dr. Golladay's interests include the ecology of streams and wetlands, the impact of human land use on water quality and aquatic invertebrates, and the impact of variation in hydrology on ecological processes and aquatic communities. Recently, he has developed an interest in the ecology and conservation of rare and endangered freshwater mussel species. Dr. Golladay has served as a technical advisor to the Sand County Foundation, Georgia EPD, DNR and Water Management districts in Florida. He has developed training activities for resource professionals in partnership with the U.S. Fish and Wildlife Service. Dr.

Golladay also has assisted in the development of programs to enhance the natural resource awareness of regional educators in cooperation with regional Georgia Youth Science and Technology Centers.

Education:

PhD in Zoology, Virginia Polytechnic Institute and State University, May 1988

MS in Zoology, Virginia Polytechnic Institute and State University, May 1981

BS in Biology, Juniata College, May 1978

Professional Experience:

1998-present: Associate Scientist, J. W. Jones Ecological Research Center

1998-present: Adjunct Assistant Research Scientist, Institute of Ecology, University of Georgia

1992-1997: Assistant Scientist, J. W. Jones Ecological Research Center

1992-1997: Adjunct Assistant Research Scientist, Institute of Ecology, University of Georgia.

1990-1992: Assistant Professor, Biological Station and Department of Zoology, University of Oklahoma

1988-1990: Research Assistant Professor, Biology Department, Clarkson University

1987-1988: Research Associate, Biology Department, Virginia Polytechnic Institute and State University

Professional Affiliations:

The North American Benthological Society
 The American Association of the Advancement of Science
 The Ecological Society of America
 The Freshwater Mussel Conservation Society

Recent Research Publications: (Past 5 years)

- Battle JM and SW Golladay. 2007. How hydrology, habitat type, and litter quality affect leaf breakdown in wetlands on the Gulf Coastal Plain of Georgia. *Wetlands* 27:251-260.
- Golladay SW, JM Battle and BJ Palik. 2007. Large wood debris recruitment on differing riparian landforms along a Gulf Coastal Plain (USA) stream: a comparison of large floods and average flows. *River Research and Applications* 23:391-405.
- Muenz TK, SW Golladay, G Vellidis and LL Smith. 2006. Stream buffer effectiveness in an agriculturally influenced area, southwestern Georgia: responses of water quality, macroinvertebrates, and amphibians. *Journal of Environmental Quality* 35:1924-1938.
[This document may be obtained from the publisher's website.](#)
- Neatrou, MA, RH Jones, and SW Golladay. 2007. [Response of three floodplain tree species to spatial heterogeneity in soil oxygen and nutrients.](#) *Journal of Ecology* 95:1274-1283. The definite version is available at <http://blackwell-synergy.com>.
- Neatrou MA, RH Jones and SW Golladay. 2006. [Correlations between soil nutrient availability and fine-root biomass at two spatial scales in forested wetlands with contrasting hydrological regimes.](#) *Canadian Journal of Forest Research* 35:2934-2941. Reproduced with permission of the National Research Council Press © 2006.
- Smith LL, DA Steen, JM Stober, MC Freeman, SW Golladay, LM Conner and JC Cochrane. 2006. [The vertebrate fauna of Ichauway, Baker County, GA.](#) *Southeastern Naturalist* 5:599-620.
- Gagnon PM, SW Golladay, WK Michener and MC Freeman. 2004. [Drought responses of freshwater mussels \(unionidae\) in coastal plain tributaries of the Flint River Basin, Georgia.](#) *Journal of Freshwater Ecology* 19:667-679.
- Golladay SW, P Gagnon, M Kearns, JM Battle and DW Hicks. 2004. [Response of freshwater mussel assemblages \(Bivalvia:Unionidae\) to a record drought in the Gulf Coastal Plain of southwestern Georgia.](#) *Journal of North American Benthological Society* 23:494-506.
- Battle JM and SW Golladay. 2003. [Prescribed fire's impact on water quality of depressional wetlands in southwestern Georgia.](#) *American Midland Naturalist* 150:15-25.
- Davis SN, SW Golladay, G Vellidis and CM Pringle. 2003. Macroinvertebrates biomonitoring in intermittent coastal plain streams impacted by animal agriculture. *Journal of Environmental Quality* 32:1036-1043. [This document may be obtained from the publisher's website.](#)

Battle JM and SW Golladay. 2002. [Aquatic invertebrates in hardwood depressions of southwest Georgia](#). *Southeastern Naturalist* 1:149-158.

Golladay SW and JM Battle. 2002. Effects of flooding and drought on water quality in Gulf Coastal Plain streams in Georgia. *Journal of Environmental Quality* 31:1266-1272. [This document may be obtained from the publisher's website](#).

Outreach Publications and Reports to Natural Resource Agencies: (Past 5 years)

Golladay SW and TK Muenz. 2006. Survey and relocation study of Unionids In Chickasawhatchee Creek and Elmodel Wildlife Management Areas, Southwest Georgia. Submitted to Georgia DNR Natural Heritage Program, Social Circle, GA.

Hicks DW and SW Golladay. 2006. Impacts of agricultural pumping on selected streams in southwestern Georgia. Submitted to Georgia Environmental Protection Division, Atlanta, GA.

Muenz TK, SP Opsahl, SW Golladay, DW Hicks, B Clayton and KA Cressman. 2006. Assessment of stream habitat in the Flint River Basin. Submitted to U.S. F.W.S., Panama City, FL.

Shaw DT, CN Dahm and SW Golladay. 2005. A Review of Proposed Minimum Flows and Levels for the Middle Segment of the Peace River, from Zolfo Springs to Arcadia. Submitted to the Southwest Florida Water Management District. Brooksville, Florida.

Golladay SW and DW Hicks. 2003. Mussel population surveys and estimation of potential stream withdrawals at selected sites in the lower Flint River Basin. Department of Natural Resources, Environmental Protection Division, Georgia Geological Survey, Atlanta GA, 12 pp.

Golladay SW, P Gagnon, M Kearns, JM Battle and DW Hicks. 2002. Changes in mussel assemblage composition in the lower Flint River Basin from 1999 to 2001: An assessment of the impacts of the 2000 drought. Project Report 50, Department of Natural Resources, Environmental Protection Division, Georgia Geological Survey, Atlanta GA, 34 pp.

Johnson PM, A Liner, SW Golladay and WK Mitchener. 2001. Effects of drought on freshwater mussels and instream habitat in Coastal Plain tributaries of the Flint River, southwest Georgia (July-October, 2000). Final Report Submitted to the Nature Conservancy, Appalachian River and Bay Project. 45 pp.

Grants and Contracts: (Past 5 years)

Tietjen W, SW Golladay, RK McIntyre, L Larson and D McGlincy. 2007. Environmental Education Research Academy (EERA) 2005: A summer workshop designed to increase content knowledge and improve instructional strategies in science for K-12 Teachers. Improving Teacher Quality Grants Program. University of Georgia. (\$23,688 administered through Georgia Southwestern University).

Miwa M and SW Golladay. July 2001 – present. Streamside management zone effectiveness on first order stream water quality and the aquatic habitats in southwest Georgia. Cooperative agreement with International Paper Company.

- Hicks DW and SW Golladay. 2004. Evaluation of permitted agricultural water use and potential effects of streamflow in southwestern Georgia. Georgia Environmental Protection Division. Budget \$98,169, January 1, 2004 – June 30, 2006.
- Tietjen W, SW Golladay, RK McIntyre and D McGlincy. 2005. Environmental Education Research Academy (EERA) 2005: A summer workshop designed to increase content knowledge and improve instructional strategies in science for K-12 Teachers. Improving Teacher Quality Grants Program. University of Georgia. (\$21,688 administered through Georgia Southwestern University).
- Opsahl SP, SW Golladay and DW Hicks. 2004. Assessment of stream habitat in the ACF basin. US Fish and Wildlife Service. Budget \$19,000, October 1, 2004 – December 31, 2005.
- Gingras R, RK McIntyre, SW Golladay and D McGlincy. 2004. Environmental Education Research Academy (EERA) 2004: A summer workshop designed to increase content knowledge and improve instructional strategies in science for K-12 Teachers. Improving Teacher Quality Grants Program. University of Georgia. (\$21,688 administered through SW-GYSTC, Bainbridge College).
- Hicks DW, SW Golladay and SP Opsahl. 2002. Evaluation of groundwater and surface-water exchanges in the lower Flint River Basin. Georgia Environmental Protection Division. Budget \$96,674, June 1, 2002 – June 30, 2003.
- Golladay SW, P Johnson, JM Battle and M Kearns. 2001. Survey and relocation study of Unionids in Chickasawhatchee Creek and Elmodel Wildlife Management Areas. Funded by Georgia Department of Natural Resources. Budget \$50,399, October 2001 – December 2002. (Principal Investigator).

Current Jones Center Research:

- Golladay SW, SP Opsahl, LL Smith, DW Hicks. 2005. Hydrologic Variation and Human Development in the Lower Flint River Basin: An Ongoing Landscape-scale Experiment.
- LK Kirkman, LL Smith, SW Golladay, SP Opsahl and DW Hicks. 2005. Depressional wetlands in the Coastal Plain landscape: Maintenance of regional biological diversity.

Recent Student Advisement:

- Kathleen Rugel. Current. Odum of Ecology, University of Georgia, Athens, Georgia.
- Lindsey Sargent. Current. Odum School of Ecology, University of Georgia, Athens, Georgia.
- Eva Whitehead. Current. Odum School of Ecology, University of Georgia, Athens, Georgia.

- Matt Neatrour. 2005. Factors affecting root system response to nutrient heterogeneity in forested wetland ecosystems. Ph.D. Dissertation, Department of Biology. Virginia Polytechnic Institute and State University, Blacksburg, Virginia.
- Tara Muenz. 2004. Indicators of stream health: the use of benthic macroinvertebrates and amphibians in an agriculturally impacted area, southwest Georgia. M.S. Thesis. Institute of Ecology, Conservation Ecology and Sustainable Development. University of Georgia, Athens, GA. (Co-advisor with George Vellidis).
- Margaret Kearns. 2001. Effects of Annual Flow Regime on Redbreast sunfish and bluegill growth M.S., University of Georgia, Conservation Biology Program, School of Ecology. (Co-advisor with Mary Freeman).
- Sally Entrekin. 2000. Abundance, biomass, and secondary production of chironomids (Diptera) in grass-sedge marshes and cypress-gum swamps. M.S., Entomology Department, University of Georgia. (Co-advisor with Darold Batzer).
- Stephanie Davis. 2000. Assessing Impacts of Animal Agriculture on Macroinvertebrates in Intermittent Coastal Plain Streams in the Southeastern USA: Implications for Biomonitoring. University of Georgia, Conservation Biology Program, School of Ecology. (Co-advisor with Catherine Pringle).