

Scott P. Werts

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Education

PhD in Geology (Soils focus), Johns Hopkins University, 2006

M.A. in Geology, Johns Hopkins University, 2004

B.S. in Earth Sciences, Pennsylvania State University, 2000

Employment

Assistant Professor of Geology: August, 2007-Present

Winthrop University, Department of Chemistry, Physics and Geology

Geohydrologist: May, 2006-August, 2007 (Grade: GG-12)

Nuclear Regulatory Commission

Teaching/Research Assistant: 2002-2006

Johns Hopkins University, Department of Earth and Planetary Sciences

Assistant Curator of Paleontology: 2001-2002

Calvert Marine Museum, Department of Paleontology

Geologist: 2000-2001

Groundwater and Environmental Services (GES), Crofton, MD.

Aerographer (Meteorology Division): 1993-1995

US Marine Corps Weather Division, Jacksonville, NC.

Appointments and Activities

American Geophysical Union Biogeosciences	
Biogeosciences Fall Meeting Program Committee	2012-2015
American Geophysical Union Biogeosciences	
Student Awards Committee	2011-2012
Soil Science Society of America National K-12 Education Committee	2010-2012
Winthrop University Environmental Program Coordinating Committee	2009-2010
Winthrop University Alternative Spring Break Faculty Trip Leader	2008-2010
Winthrop University Faculty Partner for Academic Success Communities	2008-2010
Winthrop University Curriculum Committee for Geology	2007-2010
Department of Chemistry, Physics and Geology Safety Committee	2008-2010
York County River Park Advisory Council (Chair)	2007-2010

Awards/Honors

Winthrop Research Council Grant (2)	2011
Combining Service and Learning Faculty Award	2010
Winthrop Research Council Grant (1)	2010
Winthrop Research Council Grant (2)	2009
Winthrop Research Council Grant (2)	2008
J. Brien Key Graduate Research Fellowship	2005
Graduate Research Grant, Geologic Society of America	2005
Graduate Research Grant, Geologic Society of America	2003
Eby Fellowship, Johns Hopkins University	2002
Alpha Sigma Lambda Honors Society	2000

Publications

Refereed Journals

Werts, S.P. and M. Milligan. Controls on Soil Organic Matter Content and Stable Isotope Signatures in a New Mexico Lithosequence. *Soil Science. Accepted and in press.*

Shelley, D.C., **Werts, S.**, Dvoracek D., and Armstrong W. 2012. Bluff to bluff: A field guide to floodplain geology and geomorphology of the Lower Congaree River Valley, South Carolina, *in* Eppes, M.C., and Bartholomew, M.J., eds., Geological Society of America Field Guide 29, p. 67–92, doi:10.1130/2012.0029(02). *Accepted and in press*

Werts, S.P. and L.A. Hinnov. 2011. A Simple Modeling Tool and Exercises for Incoming Solar Radiation Demonstrations. *Journal of Geoscience Education.* 59: 219-228.

Werts, S.P. and A.H. Jahren. 2007. Estimation of temperatures beneath archaeological campfires using carbon stable isotope composition of soil organic matter. *Journal of Archaeological Science.* 34: 850-857

A.H. Jahren, B.A. LePage and **S.P. Werts.** 2004. Methanogenesis in Eocene arctic soils inferred from $\delta^{13}\text{C}$ of tree fossil carbonates. *Palaeogeography, Palaeoclimatology and Palaeoecology,* 214: 347-358.

Government Documents

Contributor to Hydrology, Meteorology/Air Quality and Energy Alternatives

U.S. Nuclear Regulatory Commission (NRC). 2009a. *Generic Environmental Impact Statement for License Renewal of Nuclear Plants. Main Report, Draft for Comments* NUREG-1437, Office of Nuclear Reactor Regulation, Washington, D.C. (July).

- U.S. Nuclear Regulatory Commission (NRC). 2009b. *Generic Environmental Impact Statement for License Renewal of Nuclear Plants Supplement 35: Regarding Susquehanna Steam Electric Station, Units 1 and 2*. NUREG-1437, Supplement 35, Office of Nuclear Reactor Regulation, Washington, D.C. (March).
- U.S. Nuclear Regulatory Commission (NRC). 2008a. *Generic Environmental Impact Statement for License Renewal of Nuclear Plants Supplement 33: Regarding Shearon Harris Nuclear Power Plant, Unit 1*. NUREG-1437, Supplement 33, Office of Nuclear Reactor Regulation, Washington, D.C. (August).
- U.S. Nuclear Regulatory Commission (NRC). 2008b. *Generic Environmental Impact Statement for License Renewal of Nuclear Plants Supplement 32: Regarding Wolf Creek Generating Station*. NUREG-1437, Supplement 32, Office of Nuclear Reactor Regulation, Washington, D.C. (August).
- U.S. Nuclear Regulatory Commission (NRC). 2008c. *Generic Environmental Impact Statement for License Renewal of Nuclear Plants Supplement 31: Regarding James A. Fitzpatrick Nuclear Power Plant*. NUREG-1437, Supplement 31, Office of Nuclear Reactor Regulation, Washington, D.C. (January).
- U.S. Nuclear Regulatory Commission (NRC). 2007. *Generic Environmental Impact Statement for License Renewal of Nuclear Plants Supplement 30: Regarding Vermont Yankee Power Station*. NUREG-1437, Supplement 30, Office of Nuclear Reactor Regulation, Washington, D.C. (August).

Conference Presentations and Invited Lectures

- Werts, S.P.** and Wesselschmidt, N.* 2012. Inorganic Horizon Development and Metal Concentrations in a Peat Deposit in Congaree National Park, SC. American Geophysical Union Fall Meetings with Abstracts, San Francisco, CA.
- White, H.M.*, Boland, I.B., **Werts, S.P.** and Macino, L.* 2012. Surficial Geologic Map of Ninety-Six National Historic Site, Ninety Six 7.5 Minute Quadrangle, South Carolina. Geological Society of America Meetings with Abstracts, Charlotte, NC.
- Wesselschmidt, N.* and **Werts, S.P.** 2011. Investigating Environmental Influences on the Morphology and Stable Isotope Changes in a Holocene Peat Deposit from Congaree National Park. American Geophysical Union Fall Meetings with Abstracts.
- White, H.M.* and **Werts, S.P.** 2011. Analysis of Endomycorrhizal Fungal Spores at Elevated Temperatures from Semi-Arid Arizona Soils; Applications to Geoaerchology. American Geophysical Union Fall Meetings with Abstracts.

- Balint, A.* and **Werts, S.P.** 2010. Geochemical Alteration of Endomycorrhizal Fungal Spores at Elevated Temperatures. Geological Society of America Meetings with Abstracts.
- Werts, S.P.**, Arenas, Y.A.*, Yankech J.J.*, White, H.M.* (**Invited**) 2010. Fire effects on soil organic carbon and mycorrhizae: Applications to geoarchaeology. Appalachian State University Department of Geology Departmental Seminar Series.
- Werts, S.P.**, Yankech J.J.*, White, H.M.*, (**Invited**) 2010. Fire Effects on Organic Carbon in Mineral Soil Material: Applications to Geoarchaeology. UNC Charlotte, Department of Geography and Earth Sciences Departmental Seminar
- Werts, S.P.**, Yankech, J.J.*, White, H.M.*, Kerrigan, J. 2009. Stable Isotopic Signatures of Endomycorrhizal Fungal Spores at Elevated Temperatures: Applications to Archaeology. Geological Society of America Meetings with Abstracts.
- Yankech, J.J.*, **Werts, S.P.**, Cohen, A. 2009 Preliminary Carbon Stable Isotope Analysis of Monocots and Pollen Diversity in Holocene Peat Deposits in Congaree National Park. Geological Society of America Meetings with Abstracts.
- Werts, S.P.** and L.A. Hinnov. 2008. An Interactive Tool for Incoming Solar Radiation Demonstrations. Geological Society of America Meetings with Abstracts.
- Werts, S.P.** and A.H. Jahren. 2005. Carbon loss from mineral soils due to applied heat from above-ground fires. Geological Society of America Meetings with Abstracts.
- Werts, S.P.** and A.H. Jahren (**Invited**). 2005. Potential carbon loss and changes in $\delta^{13}\text{C}$ values in mineral soils due to biomass burning. Boston University Department of Earth Sciences Special Seminar.
- Werts, S.P.** and A.H. Jahren. 2005. Determining amounts of carbon loss and change in carbon isotope values from soils due to biomass burning. Third USDA Symposium on Greenhouse Gases and Carbon Sequestration in Agriculture and Forestry.
- Werts, S.P.** and A.H. Jahren. 2004. Organic carbon loss from various soil types due to biomass burning. ESA Mid-Atlantic Ecology Conference.
- Werts, S.P.** and A.H. Jahren. 2003. Effects of fire intensity on carbon emissions from various soil types. ASA-CSSA-SSSA (Soil Science Society of America) Annual Meeting.
- Werts, S.P.** and R.J. Cuffey. 2001. Bryozoan species in the Chickasaw Bryozoan Reef (Ordovician, Oklahoma). Geological Society of America Abstracts with Programs.

* Indicates student presenter.

Professional Societies

Geological Society of America

Soil Science Society of America

American Geophysical Union

American Quaternary Association

Carolina Geologic Society