

DANIELLE M. ANDREWS

215 ASI Bldg., The Pennsylvania State University, University Park, PA 16802

Office: (814) 865-0052, FAX: (814) 863-7043, Mobile: (859) 699-6969

Email: dma203@psu.edu

EDUCATION:

The Pennsylvania State University Expected Summer 2010
Ph.D., Soil Science (Hydropedology), 4.0/4.0

University of Kentucky 2006
M.S., Plant and Soil Science, 4.0/4.0
Thesis: Hyporheic Zone Development & Water Quality Improvement
in a Restored Riparian Area

South Carolina State University 2004
B. S., Biology; Chemistry & Env. Sci. minors, 4.0/4.0, *Summa cum laude*

TEACHING EXPERIENCE:

Instructor

Soils 101, Introduction to Soils, The Pennsylvania State University Fall 2008
Taught 24 undergraduate students in a basic Soils lab/field based course

Teaching Assistant

Soils 405, Hydropedology, The Pennsylvania State University Fall 2007
Prepared and instructed 8 undergraduate students in a senior level lab/field course that emphasized the importance of the coupling of soil and water sciences

Tutor

Chemistry/Biology/Mathematics, South Carolina State University 2001-2004
Provided no less than 20 undergraduate students with comprehensive services that were designed to increase student academic performance

Tutor

Mathematics, South Carolina State University 2000-2001
Prepared 25 middle and high school students for standardized Examinations e.g. SATs

RESEARCH EXPERIENCE:

Research Assistant & Lab Manager

Crop & Soil Sciences Dept., The Pennsylvania State University Summer 2006-present

- Designed and implemented a field-based research project to understand the coupling of water and nutrient movement in a 7.9 hectare forested catchment
- Collected and analyzed water, soil, and gas samples for carbon and nitrogen using a TOC analyzer, Lachat, CHNS, and GC-MS
- Organized and summarized weekly field data for >100 sites
- Supervised 2-3 undergraduate student helpers in field data collection of soil moisture and matric potential, and depth to water table
- Managed a 6-person lab and co-coordinated field experiments
- Collaborated with Geosciences, Civil Engineering, and Forestry Depts. to conduct large scale field based research

Research Assistant

Plant & Soil Science Dept., University of Kentucky Summer 2004-Summer 2006

- Conducted field and lab analyses of vegetation, soil, and water samples from a restored stream system
- Analyzed data and submitted research for publication

Research Assistant

Forestry Dept., University of Kentucky Summer 2003

- Conducted analyses of the physical and chemical properties of >200 wetland soils to determine the relationship between soil properties and hydrologic response in restored wetland systems
- Analyzed data and submitted research for publication

Research Assistant

Savannah River Site, Aiken, South Carolina Summer 2002

- Participated in animal and vegetation research projects
- Conducted extensive literature reviews

SELECTED PRESENTATIONS & PUBLICATIONS:

- Nutrient dynamics along a steep hillslope in a small, forested catchment, central Pennsylvania. SSSA Annual Meeting, Houston, Texas (poster) 2008
- Hydropedologic Investigations in the Shale Hills Catchment. Goldschmidt Conference, Vancouver, Canada (poster) 2008
- Comparisons of the performance of three soil water potential sensors at a forest Catchment. SSSA Annual Meeting, New Orleans, LA (poster) 2007
- Hyporheic Zone Development and Water Quality Improvement in a Restored Riparian Area. GSA Annual Conference, Philadelphia, PA (oral) 2006
- **D. M. Andrews**, C. D. Barton, R. K. Kolka, and Stephen J. Czapka. Influence of Tree Shelters on Seedling Success and Debris Retention in a Restored Riparian Zone. (oral) (Submitted to S. Jour. of Applied Forestry, 2008) 2006
- C. D. Barton, **D. M. Andrews**, and R. K. Kolka. Influence of Soil Physicochemical Properties on Hydrology and Restoration Response in Carolina Bay Wetlands. In Proceedings Forest Ecology and Management. (Submitted to Restoration Ecology, 2007) 2005

AWARDS & HONORS:

Recognition

- Honorable Mention award. SSSA Annual Meeting, Salt Lake City, UT 2005
- Honorable Mention award. SWS Annual Meeting, Charleston, SC 2005
- Certificate of Achievement. Graduating Biology major with the highest cumulative GPA. South Carolina State University 2004
- Certificate of Achievement. Research efforts on restored wetland sites at Savannah River Site, Aiken, SC. USDA Forest Service 2002

Awards

The Pennsylvania State University 2006-2007

- Alex and Jesse Black Graduate Fellowship
- Robert W. Graham Endowed Graduate Fellowship

University of Kentucky 2004-2006
Research Assistant Fellowship

South Carolina State University 2000-2004

- Presidential Scholarship
- Gold Medallion Recipient