

Brian M. Culp

310 E. Market Street, Danville, PA
Cell: 319-427-0372 ♦ bmculp@gmail.com

Education

Master of Science in Geosciences

The Pennsylvania State University, Expected Graduation 2013

- Masters Thesis: Impact of CO₂ on Fracture Complexity When Used as a Fracture Fluid in Rock. This will be accomplished by fracturing rock samples under various conditions to explore previous findings that CO₂ develops more geometrically complex fractures.

Bachelor of Science in Geosciences

Bloomsburg University of Pennsylvania, 2011

- Dual focus in Geology and Planetary Science

General Studies

University Of Northern Iowa, Cedar Falls, Iowa, 2008 to 2009

Certificate

Naval Nuclear Prototype Training, Saratoga Springs, NY, Nuclear Plant Operations, 2004 to 2005

- Focused on reactor plant theory, plant chemistry, operations, electrical theory, nuclear physics, and emergency procedures

Employment History

Teaching Assistant, The Pennsylvania State University. August 2012 to Present

- Introduction to Environmental Geology. Responsible for grading, labs, and course development.
- Geology of the National Parks. Responsible for grading, communicating, and interacting with nearly 1000 students.
- The Earth System and Global Change. Responsible for lecturing, grading, and developing training exercises

Geoscience Intern, Chesapeake Energy Corporation. Oklahoma City, OK. May 2013 to August 2013

- **Well Optimization in Marcellus South Utilizing Along-Wellbore Geological and Completion Variables.** Analysis was performed on 52 wells across 5 counties and explored 3 different distinct regions within the Marcellus Shale. This project promoted collaboration between geologists and engineers and looked to optimize wellbore location with completion design. I was able to steer wells using TerraVu, generate geologic/petrophysical maps using Geographix, and develop a method for post completion assessment.

Summer Intern, Pennsylvania Department of Environmental Protection, June 2011 to August 2011

- Department of Energy and Technology Deployment. Assisted in technical review and authorization of grants under various Pennsylvania grant programs.
- Revitalized and streamlined the grant review process for the Pennsylvania Sunshine Program, improving the efficiency of the short staffed department.

Research Assistant, Bloomsburg University, May 2010 to August 2010

- Assisted in the processing of Arecibo Radar data, organization of materials, and inventory of equipment

Electrician's Mate, United States Navy, Norfolk, Virginia, 2004 to 2007

- Worked as an electrician, maintaining power continuity about a nuclear reactor

Research

Grants Awarded:

- **Richard Standish Good Graduate Scholarship in Geosciences**, The Pennsylvania State University Department of Geosciences, 2012
- **Graduate Student Research Grant**, Geological Society of America, 2012
- **Paul D. Krynine Memorial Award**, The Pennsylvania State University Department of Geosciences, 2012

Presentations at Professional Meetings:

- **Culp, B.M.**, Venn, C., Brunskill, J.C., Shepard, M.K., Application and Evaluation of Developed Remote Sensing Techniques to Identify and Track Changes of Subzones Within a Salt Marsh Near Wallops Island, Va, 2011, Geological Society of America Abstracts with Programs, Vol. 43, No. 5, p. 619
- **Culp, B.M.**, Venn, C., Brunskill, J.C., 2011, Integration of Quickbird Satellite Imagery and GIS to Map Subzones within a Salt Marsh near Wallops Island, VA, Geological Society of America Abstracts with Programs, Vol. 43, No. 1, p. 132
- **Culp, B.M.**, Venn, C., 2011, Integration of Quickbird Satellite Imagery and GIS to Map Subzones within a Salt Marsh near Wallops Island, VA, Presented at Council on Undergraduate Research Posters on the Hill Event, Washington D.C.
- **Culp, B.M.**, Venn, C., Shepard, M.K., Use of Quickbird Satellite Imagery to Distinguish Subzones within a Salt Marsh near Wallops Island, VA, 2010, Presented at Atlantic Estuarine Research Society Fall Meeting

Other Abstracts:

- Venn, C., Hranitz, J.M., Shepard, M.K., Brunskill, J.C., **Culp, B.M.**, 2011, A Model For Integrating Undergraduate Research Into Course Content Across Disciplines: Salt Marsh Mapping As A Focus For Courses In Remote Sensing, GIS, Field Zoology, Marine Ecology And Wetlands Ecology, Presented at 21st Biennial Conference of the Coastal and Estuarine Research Federation, Dayton Beach , Florida
- Venn, C., **Culp, B.M.**, Brunskill, J.B., Shepard, M.K., 2011, A Technique For Monitoring Salt Marsh Subhabitats: Integration Of Quickbird Satellite Imagery With GIS To Map Subzones In A Virginia Salt Marsh

- Venn, C., **Culp, B.M.**, Huot, D.A., Shepard, M.K., Brunskill, J.B., 2011, Remote Sensing And Geographic Information Science As Tools To Track Salt Marsh Changes In Wallops Island, VA, Presented at ASLO Aquatic Sciences Meeting 2011, San Juan, Puerto Rico

Activities, Honors, and Awards

Awards:

- **2012 GSA Research Grant Outstanding Mention**, 20 of the 303 awards were selected for exceptional merit in conception and presentation.
- **2012 GSA Research Grant, Structural Geology and Tectonics Division Award**
Research grant recipients who submitted proposals of exceptionally high merit in conception and presentation in their fields.
- **Outstanding Student in Geoscience** Class of 2012 and is awarded to a single student each year in Bloomsburg University Department of Geography and Geosciences.
- **Outstanding Undergraduate Student Poster Award**, GSA Northeast/North-Central Sectional Meeting, Pittsburgh 2011
- Honorable Mention for Top Geologist, SUNY Buffalo Field Camp, 2011
- Top of Class, Naval Nuclear Prototype Training, 2005

Memberships in Professional Societies:

- Geological Society of America
- American Geophysical Union
- Pennsylvania Council of Professional Geologists
- American Association of Petroleum Geologists
- American Institute of Professional Geologists

Activities:

- **Fundamentals of Geology Examination**, Passed in March 2013
- I contributed over 20 hours of community service to Tornado Disaster Relief while in Oklahoma City.
- Assisted in 'Star Gazing Night' at Greenwood School for Friends, 2010-2011
- Participated in Bloomsburg University of Pennsylvania, College of Science and Technology Research Day, Spring and Fall, 2010-2011.