



Watershed Watch

The underlying premise of Watershed Watch is that much of the best learning is derived from doing; that science, like art, is most inspiring when experienced.

The University of New Hampshire (UNH), The College of the Albemarle (COA), and Elizabeth City State University (ECSU), developed Watershed Watch (WW) as an exciting, inquiry-based experience that makes science more accessible, authentic, and socially-relevant to 1st- and 2nd-year undergraduates. WW is designed to recruit entry-level undeclared four-year degree students, as well as encourage enrollment of two-year degree students from local community and technical colleges into STEM majors at UNH and ECSU.

In particular, Watershed Watch was designed to engage students in hands-on use of geospatial technologies (GST) in an integrated, multidisciplinary study of two very different watersheds: the Merrimack in NH and the Pasquotank in NC. The Watershed Watch

incorporates:

- 1) The lessons learned from previous inquiry-based projects (Forest Watch, Project SMART, and Project Lake Watch) at UNH and the Undergraduate Research Program at ECSU;
- 2) The expertise in working with entry-level undergraduates at the Center of Excellence in Remote Sensing and Research (CERSER - <http://cerser.ecsu.edu/>) at ECSU;
- 3) The research expertise in GST at both UNH and ECSU;
- 4) An exceptional faculty selected on the basis of their commitment to innovative teaching methods, integration of scientific disciplines, and an embracement of diversity;
- 5) The expertise in curriculum development and assessment of the UNH Joan and James Litzel Center for Mathematics, Science, and Engineering Education (<http://www/leitzelcenter.unh.edu>).

This partnership between UNH and ECSU, based on a unique combination of expertise, mentoring skills, and faculty research, has formed the basis for development of an effective model to increase STEM majors.



WATERSHED WATCH

Summer Closing Program

August 14, 2009



ELIZABETH CITY STATE UNIVERSITY :: UNIVERSITY OF NEW HAMPSHIRE
COLLEGE OF THE ALBEMARLE

<http://nia.ecsu.edu/www/www.html>

NSF STEM Project Grant # H98230-06-1-0173 led by Dr. Barry Rock, University of New Hampshire

2009 WATERSHED WATCH PROGRAM TEAMS

Abstracts and Posters can be viewed at: http://nia.ecsu.edu/ww/summer09/summer09_essays.htm

Effect of Oxygen Levels on Survival of Midge Larvae and Fish

Evie Harris, Chelsey Lee, Juan Wilkins, Mentor: Kassim Traore

Herpetofauna and Avifauna Diversity in the Great Dismal Swamp and on the Elizabeth City State University Campus

Demaris Adams, De'Lyncia Bethea, Elizabeth Hudson, Justin Paxton, Arshaya Peterkin, and Joshua Rhodes, Mentors: Stephen Hale and Chris Perry

How Shoreline Changes Since 1709 May Have Impacted Eight Sites in Northeastern North Carolina Suggested as Possible Locations of Blackbeard's Lost Treasure

Jasmine Hyman, La'Quan McLaurin, Aaron Moore, Simone Nicholson, Mentor: Lloyd Mitchell

Human Impacts on Water Quality of the Pasquotank River Watershed

Lintavia Adams, Shaveon Boone, Montravias King, Ryan Lawrence, Andrew Milem, Amanda Piwowarski, James Webb, Mentor: Jeff Schloss

Hurricanes and their Effects on Forest Growth in Cypress Swamps

Shinique Barrow, Ashley Basnight, Taylor Robinson, Daquan Simmons, Karmaria Whidbee, Mentor: Barry Rock

Impacts on Tree Growth at Elizabeth City State University Campus Versus the Natural Setting of the Great Dismal Swamp

Anna Jackson and Jason Paxton, Mentor: Barry Rock

Influences of Shorelines, Rock Types, and Shoreline Elevation on Pre-Contact Chowan Indian Culture

Matravia Seymore, Sabrina Gaddy, Angel Boone, Mentor: Lloyd Mitchell

Study of a Carolina Bay, a Late Pleistocene Environment

James Gallup, Clarence von Highsmith, Mentors: Malcolm LeCompte, Dr. Dewayne Branch

The Effect of Sea Surface Temperature on the Strength of Major Hurricanes Ivan and Katrina

Derek Graham, Nick Tabron, Kendrick Norman, Justin Waddell, Mentor: Jinchun Yuan

Using Digital Images and Spectral Reflectances to Quantify Colored Dissolved Organic Matter (CDOM) Concentrations in Water

Kimberly Hislop, Simeon Jackson, Dereck Jenkins, and Breeyell Payne, Mentor: Michael Gagnon



SCHEDULE OF ACTIVITIES

• June 14th, 2009 •

11am-12:30pm Watershed Watch Poster Session
Jenkins Science Center Lobby
Teams listed to the left



1-3:00pm Lunch and Completion of Surveys, Golden Corral

Welcome Dr. Barbara L. Johnson
Associate Vice Chancellor Academic Affairs

- ☞ Presentation of Certificates and Stipend Checks
- Dr. Linda Hayden, Dr. Steve Hale, Dr. Barbara L. Johnson
- ☞ Remarks from the Program Students
- ☞ Remarks from the Program Faculty
 - UNH Dr. Jeff Schloss, Dr. Stephen Hale, Mr. Michael Gagnon
 - ECSU Dr. Malcolm LeCompte, Dr. Dewayne Branch,
Dr. Jinchun Yuan, Dr. Lloyd Mitchell
 - COA Mr. Chris Perry
- ☞ Remarks from the PI, Dr. Barry Rock
- ☞ Final Travel Logistics and Upcoming Events
- Dr. Linda Hayden



Upcoming Events

University of New Hampshire
Undergraduate Research Conference
April 16-24, 2010

Elizabeth City State University Research Week
February 1-5, 2010
