

Crystal Yelverton: UNH Intern with an Eye on Climate Change

MEET CRYSTAL YELVERTON, Elizabeth City State University (ECSU) student and summer intern in UNH's Earth Systems Research Center. Having just completed her ECSU course requirements for a B.S. in Geology, and looking for math and science graduate school opportunities, Crystal was an ideal candidate for an internship with Dr. Ruth Varner's study of wetland ecosystem chemistry. Crystal arrived with experience in climate change research, having spent the past two summers of her undergraduate work as a climate studies intern.

In summer 2011 she was a RESESS (Research Experiences in Solid Earth Sciences for Students) intern in Boulder, Colorado. Her summer study of *Climate Change Affecting Tropical Cyclone Activity* compared 100-year-old data to current data, finding that tropical cyclone activity has, in fact, been increasing.

In summer 2012 she received a NOAA-based Ernest F. Hollings scholarship for an internship at the Northeast River Forecast Center (NERFC), a National Weather Service Station in Taunton, Massachusetts. Her project: creating an ARC GIS and Google Earth interface for determining high-hazard dams in New England. The interface can locate dams that might break, and in a timely manner, provide information on the dam ownership, current use, and recommended improvements.

Funded by New Hampshire Space Grant Consortium, Crystal's 2013 UNH internship focuses on biogeochemical studies of a wetland ecosystem at a site located in Barrington, N.H.—a long-term research site named "Sallies Fen." She is collecting methane and CO₂ samples in this temperate peatland, then measuring fluxes and analyzing the data in a Morse Hall laboratory under the direction of graduate student Samantha Roddy.

As for a future in research — Crystal is definitely interested in studying climate change, climatology, and maybe meteorology. She loves math and sciences and looks toward the day when she might be an investigator in her own research lab.

