

Take Me

For many Bucknellians, the Susquehanna River, despite its magnificence, is but a vague piece of their college memories. While we may have regularly crossed small tributaries on campus and were aware that the river was a border to both campus and Lewisburg, unless we rowed on the crew team, we rarely had cause to venture down to its banks.

That disconnect is not the case for present-day Bucknellians, as the Bucknell University Environmental Center (BUEC) and professors from fields as diverse as biology and foreign languages work to uncover its history and evaluate its present, drawing well-deserved attention to the mighty Susquehanna.

The Susquehanna River stretches 444 miles from its headwaters in Cooperstown, N.Y., to Havre de Grace, Md., where it empties into the Chesapeake Bay, contributing 50 percent of the bay's fresh water. Along the way, the river drains 46 percent of the state of Pennsylvania and provides drinking water to 3.8 million people. At its widest point, in Harrisburg, the river spans nearly one mile. Major floods typically occur every 20

years, and in the meantime, the river provides recreation opportunities and is a migratory flyway for numerous species of birds. Although people canoe, kayak and boat on the river, it is commercially non-navigable in this century — the longest such river in the U.S. The Susquehanna supports agriculture, food processing and manufacturing. Its waters generate power through hydroelectric dams and cool the turbines of nuclear and non-nuclear power plants. And it has always played an integral, if quiet, role in the Bucknell community.

For years, geology and biology classes have been making use of the surrounding area for field-based studies, but a new endeavor is literally expanding campus to encompass the river. This past fall marked the inauguration of the most ambitious river-based educational effort to date: Bucknell on the Susquehanna, a four-course, full-semester interdisciplinary program that utilizes the entire Susquehanna River basin as an outdoor classroom. BotS, as it came to be known, immerses students in the study of the Susquehanna River region as completely as a study-abroad program immerses students in a foreign culture. Although the program and its students were

By Theresa Gawlas Medoff '85, P'13 • Photography by David Manthos '11



to the River

Bucknellians set up a classroom on the Susquehanna.

physically situated on campus this past fall, students and faculty members were in the classroom fewer than a dozen times throughout the semester. Instead, they spent most of their time out in the field, racking up miles and experiences as they took day-long and extended trips that brought them to eight states, including a trip to the West Coast for a river comparison.

"We were able to see and do more than I ever imagined we could in one semester," says geography major **David Manthos '11**. "It makes my head swim to think of all the area we covered. We studied the entirety of the Susquehanna watershed — not just the geology and biology and ecology, but also its history and culture and economic features."

BotS is the latest incarnation in what began as an initiative to further explore and preserve the environment. Six years ago, an enthusiastic and diverse group of faculty, staff and students came together with the dream of creating a permanent Bucknell environmental center. "Many present wanted Bucknell University not only to take a stronger role in local and regional environmental matters but also

to seek a national leadership role in forging new, interdisciplinary connections between environmental problem-solving in the 21st century and undergraduate education,” Chris Camuto, associate professor of English, would later write about that first meeting.

The Bucknell University Environmental Center officially opened in early 2005 and has since settled into its own space at Ritter House on the far end of Fraternity Row, across from the astronomy building. With help from a \$450,000 grant from the Henry Luce Foundation, BUEC established the Susquehanna River Initiative, a major program to integrate teaching, research and outreach focused on the Susquehanna River.

As part of its Susquehanna River Initiative, the center has opened two field sites for research on the Susquehanna. The new Bucknell Landing, a canoe and kayak dock on River Road, provides easier accessibility for study and recreation purposes. The Roaring Creek Field Station for Watershed Studies (a partnership with Pennsylvania’s Department of Conservation and Natural Resources) provides faculty and students with four gauging stations and a large weather station in a forested watershed system, as well as short-term housing for faculty and students.

Funding for BotS also comes from the same grant. BotS students were among those who participated in the fifth annual Susquehanna River Symposium hosted by Bucknell in October 2010, which featured guest speakers and more than 100 student and faculty research poster presentations from numerous universities and agencies.

Eleven students enrolled in the first BotS program. They lived together on the same hall in Swartz, had all of their classes together and spent a good deal of time riding around Pennsylvania and surrounding states in a minibus they nicknamed the BotSmobile. They were team-taught by three faculty members: Craig Kochel, professor of geology; **Matt McTammany ’95**, associate professor of biology and environmental studies; and Peter Wilshusen, associate professor of environmental studies.

“There is so much about the place we live in that we wanted to share with our students,” McTammany says. “This entire area is a great geological destination where we can see evidence of glacial activity, mass erosion, plate tectonics and the creation of the Appalachian Mountains. There are forests, wetlands, bogs, streams and lakes.”

BotS will be offered again next fall, but this time by different faculty teaching about the Susquehanna River basin from a humanistic perspective: the cultures it has nourished, the creativity it inspires and the vital connection between identity and place. The region’s cultural heritage is just as rich. Katherine Faulk, professor of German and comparative humanities, is one of the three faculty running next fall’s BotS program. She has researched the interaction of Moravian settlers with Native Americans in an 18th century Iroquois town, “the capital of the Woodlands Indians,” that once flourished in present-day Sunbury.

The primary approach of BotS in a given year might be scientific or humanistic, but it will always be interdisciplinary.



In fact, one of the four courses that comprise the BotS program next fall, "Communities, Identities and Landscape: The Human Natures of the Susquehanna," will be registered as an Integrated Perspective (IP) course, Faull notes. The new College Core Curriculum requires all students (beginning with the Class of 2015) to take an IP course in the sophomore year. IP courses are designed to build on the intellectual groundwork laid by first-year Foundation Seminars, and will be team-taught by at least two faculty members from different departments.

BotS also aims to create a learning community much like that fostered by the Residential Colleges, which is why students are housed together. Likewise, having the same three core instructors for the courses allows students and their professors to get to know each other much better than they might in a traditional course setting. "With all the time that we spent in the field and on the bus, there was a lot of time for students and professors to talk about what we were learning," says environmental studies major **Joanna Freeman '12**. "On the last day of classes we sat down to discuss what we had done and learned, and the big thing we discovered was how much we had retained of what we learned during the semester."

Biology major **Morgan Davis '12**, who has a double minor in art and education, was attracted to the hands-on, interdisciplinary nature of BotS. "I was looking forward to getting into the water and dirt, to taking things apart and seeing how they work," says Davis, who particularly enjoyed the photography and nature writing components of the program. "Art and science go hand-in-hand for me." But she was most affected by the

visit to the Onondaga, or Iroquois, Nation in Onondaga, N.Y. "It was interesting to talk to them about how hard it is to keep up their culture and language," she says. "Their history touched me and made me feel that there is an understanding between the Native-American and my own African-American culture."

Students enjoyed hearing a variety of perspectives on the Susquehanna from the many different guest speakers, McTammany says, and he was struck during the conversation on that last day of classes by the way different students honed in on different issues. "Some focused on the Native-American issues, others were interested in how science and policy interact, others were taken by the natural history or the ecological phenomena," he says.

Whereas the Susquehanna River may have been a forgotten boundary to the Bucknell campus in years past, it now forms a new moving, flowing, living campus for students who want to learn about the landscapes, places and peoples who came before them. "The Susquehanna River is what connects us," says Faull, "to the past, to the present and, if we are good stewards, to the future." **B**

Theresa Gawlas Medoff '85, P'13 is a freelance writer and frequent contributor to Bucknell Magazine. She grew up in Wilkes-Barre, Pa., along the North Branch of the Susquehanna River. Special thanks to David Mantos '11 for allowing Bucknell Magazine to use his photography for this story.

Learn more about the BotS program at www.bucknell.edu/bots. 

