

East Carolina University

VECTORS

News and Notes from the Department of Geography

FALL 2012

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Department of Geography News

Notes from Burrell

It has been a very busy semester, which helps to explain this late version of *Vectors*. The most time-consuming activity was the external review. We spent the first part of the semester perfecting our self-study document. In late October, we spent 2 ½ days with the reviewers (Dr. Greg Carbone from the University of South Carolina, Dr. Judith Kenney from the University of Wisconsin, Milwaukee, and Dr. Lester Zeager from the ECU Department of Economics). They were an excellent group who asked many probing questions and made a number of excellent observations. The “word on the street” from several administrators is that we came out very well in the eyes of the reviewers. Thanks to all who responded to our alumni survey. Those responses were an important part of the self-study document. We will be receiving their report any day now, after which we will develop a response and set out to implement the recommendations that the administration and we agree upon.

We had an exciting time with Hurricane Irene. Fortunately, no one in the department experienced serious damage to their homes, though one or two were without electricity for several days. The university experienced some damage, but nothing in the department. As good geographers and planners, however, we were able to incorporate the event into our teaching and research. Irene found her way into atmospheric science classes, the Water Planet, planning courses, and many more. Talk about an excellent case study. Dr. Curtis even took some students in the field to take some measurements (much to my chagrin!). See page 5.

These two events were probably the biggest of the semester, but we were kept busy with many other activities. We had a great colloquium series and learned about such diverse topics as immigration policy, West Nile virus, southeast United States climatology, and environmental planning. ECU Geography was well represented at SEDAAG and we took home several awards. See pages 3 and 4.

Through this newsletter you will learn all about what we have been doing. As always, we want to hear from you! Please keep in touch. Please come by. We would love to have you visit, meet with faculty and tour the department.

Dr. Burrell Montz, Chair.



Alumni Spotlight

In the Fall semester of 2006, Suzanne McArdle arrived in Greenville to begin her Master of Arts in Geography after completing a BS in Geography and Geosciences with a concentration in GIS from Salisbury University, Salisbury MD. By the end of Spring semester 2008 she had completed her thesis, “Come ‘Out,’ Come ‘Out,’ Wherever You Are: The MySpace Lesbian and Her Material Social Worlds” under the direction of Dr. Alderman. Immediately she returned to Maryland to join the US Census

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Bureau as a cartographer. There she is a member of a software development team who programs and maintains the in-house automated mapping production system which generated millions of high quality maps to support the 2010 Census field operations. Suzanne and the rest of this team were recognized by Director Robert Groves with the 2010 US Census Bureau Director's Award for Innovation for creating an innovative high-volume, parameter-driven, artificial intelligence technical solution for optimizing map design and production which resulted in substantial savings of time and resources.

She also works on a small team that developed and maintains an automated generalization system which takes advantage of the Oracle Spatial topology model to hierarchically generalize boundaries from the Geography Division's TIGER spatial database. Generalized cartographic boundary files are created to support small scale mapping endeavors within the agency such as the American Fact Finder, in addition some generalized boundaries are being released to the public. Suzanne authors the FGDC metadata that accompanies a number of the publicly released products. She is also responsible for creating quality assurance procedures and documentation for cartographic product creation.

"I am extremely grateful for the opportunities I had and experiences I gained while at ECU. One of my favorite parts of being at ECU was the mutual respect between professors and students in the Geography Department. Creative ideas and research were encouraged, and that certainly kept me motivated to continue thinking in different ways and I became aware of many new schools of geographic thought. The department and GeoClub's support of student travel to conferences was key for gaining exposure to current trends in geographic research, developing confidence in my communication skills whether it was presenting or networking, and above all, it allowed me to see firsthand that not all geography programs are created equal. I attribute finding a great career right after school to the people, knowledge and skills I got to know in Brewster."

Department

News and Events

Urban Regional Planning Update

By Jerry Weitz, Director

This fall the planning faculty has been busy working on changes to the curriculum for the Bachelor of Science in Urban and Regional Planning degree. The most complex of these is a complete revamp of the options for concentrations. Planning majors may choose a minor or two concentrations in lieu of a minor. We developed a revised set of concentration areas that, if approved, will make our graduates more competitive.

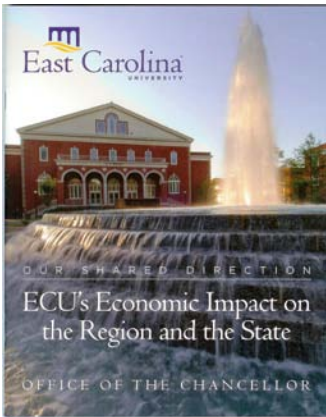
Meanwhile, work also continues on our pursuit of a Master of Community Planning degree program. It will be only the second in the entire state. There is strong demand for our proposed graduate planning program.

Although set back some by budget cuts, the loss of the fixed-term faculty position held by Al Burne and Al's fight with health issues, we are greatly relieved and thankful to hear of his miraculous recovery. He will return to teaching duties part-time in Spring 2012. Welcome back, Al! We also welcome back Deanna Swain in Spring 2012 as an adjunct faculty.

Speaking of faculty, there is a trend toward integrating more field-based learning opportunities in our planning courses. In Dr. Dan Marcucci's classes this fall semester, students went on a canoe expedition to learn about river ecosystems and took a trip through the Roanoke River basin to learn about large-scale regional ecological landscape planning. In Dr. Anuradha



South Mills student planning team from Dr. Weitz's land use planning class. Pictured left to right, back row, Nick Snyder, Waller Whittemore, Thomas Shreve, Chad Buch; front row, Chris Lawson (resident and advisor), Margaux Kerr, Dylan McDonnell and John Burlison.



Mukherji's urban design class, a field trip gave students first-hand knowledge of urban design issues. In the spring Dr. Misun Hur is planning to replace much of the classroom time

with experiential learning for her neighborhood planning course by taking walking tours of city neighborhoods. In my land use planning class this fall, several students visited Camden County, NC, to experience public participation in action and translating public sentiments into community plans.

The planning program's university service was led by Dr. Mulatu Wubneh with his recent completion of a fiscal impact study of ECU on the community. The cover is seen above. Service to profession has also been led by Dr. Wubneh with his role in the Association of Collegiate Schools of Planning (ACSP's) minorities committee.

The entire planning faculty attended the ACSP conference in Salt Lake City this October. Students have been investing energies in their own organization, Student Planners' Action Network (SPAN) as well. We thank the officers and planning student body for keeping the organization active, relevant, and fun this year, and we look forward to finalizing arrangements soon for our spring 2012 SPAN banquet.

Outreach to communities will continue. Service projects involving students and planning faculty have been arranged and completed for the Mid-East Commission, the Town of Hookerton, Edgecombe County, Camden County, and Greenville. Dr. Marcucci is in the process of winding down his multi-year effort on the environmental impacts of the proposed Mid-Currituck bridge project. Faculty research continues in the arenas of neighborhood planning, evaluation of the implementation of hazard mitigation plans in coastal North Carolina, and the extent of job sprawl in the U.S., among others. These and other efforts are moving the planning program in the direction of more intensive scholarly research, much-expanded field-based learning opportunities for students, and stronger, outreach to communities in Eastern North Carolina.

Awards and Honors

Every Pirate Needs a Treasure Map

This was the theme of the of the New Student Convocation and the title of the Keynote Address given by Dr. Derek Alderman. There were about 3000 students, faculty, and staff in attendance.



Dr. Derek Alderman pictured giving keynote address at the new student convocation.

National Science Foundation Grant

Dr. Tom Rickenbach and Dr. Rosana Nieto-Ferreira are the recent recipients of a three-year, \$314,000 National Science Foundation grant, funded by the NSF Directorate for Geosciences' Atmospheric and Geospace Sciences Division.

In their grant proposal, "*Development of a Climatology of Precipitation System Organization in North Carolina to Improve Climate Precipitation Forecasts*," Rickenbach and Nieto-Ferreira suggest that climate change places pressure on North Carolina's fresh water supply in ways that are not fully understood. They propose that knowing how year-to-year changes in the atmosphere control the way in which precipitation is delivered to the state will lead to a better understanding of the impact that these changes have on the current and future climate of North Carolina, directly impacting all residents.

SEDAAG Student Awards

At the 2011 SEDAAG meeting in Savannah, GA, Michael Griffin, won the Master's honor paper competition for *Estimating Future Water Resource Health in the Lower Cape Fear Basin, North Carolina* and Kelsey Mulder got honorable mention for her Master's honor paper, *Likelihood of Response to Flash Flooding: Case Study of Boulder, Colorado*.

Geography





Students Place in Map ESRI Competition

Working with Dr. Allen, Brent Gore, Matt Carey, Travis Hill, and Michelle Covi placed in the 2011 ESRI map gallery competition Best Map Product in a Digital Display Format category for their map, *Sea-Level Rise Vulnerability in the Albemarle-Pamlico Estuarine System, North Carolina*.



Honoray coach, Dr. Viva Reynolds, pictured at lower left, is on the sidelines with Lady Pirates' players and coaches for the 11/17 game with Virginia Intermont.

Reynolds Named Honorary Coach

Each year the ECU women's basketball players each get to nominate one ECU professor to be an Honorary Coach for a game. This year the team members chose Dr. Viva Reynolds. Viva, her husband and daughter arrived at Minges Coliseum and received passes to the game. While her family found seats on the bleachers, Dr. Reynolds was allowed into the locker room area where she was introduced to the team members and coaches and given a signed team photograph. She even gave a brief speech, "Go Pirates!", and then listened to Coach Macy's final words of team encouragement and game plays. For the pre-game team warm-ups and introduction as well as during the game itself, she was allowed to sit on the bench, talk with the players, observe all of the plays drawn out by coaches during time outs, and to really feel part of the team. She reports, "This experience was a great way for me to show my daughter great college and professional role models and it reminded me of how hard our dedicated student-athletes work while at ECU."

Alderman Regional Councillor & 2011 Outstanding Service Award

In July of 2011, Dr. Derek Alderman was elected Regional Councillor for the Southeastern Division within the Association of American Geographers. This fall he was recognized by SEDAAG again by being awarded the 2011 Outstanding Service Award. It is a region-wide recognition of service to the organization, the discipline of Geography, and the broader community.

Undergrad Focus Jamie Wheeler Wins 2011 Undergrad Research & Creativity Award

This Fall semester, Jamie was awarded an ECU Undergraduate Research and Creative Activity Award for her work as a GIS specialist on research studying the possible impacts of hydraulic fracturing in North Carolina. The project is a joint effort between the Geography and Geology departments at ECU, and includes Dr. Burrell Montz, Dr. Alex Manda, and Ph.D. candidate Wendy Klein.

The purpose of the research is to develop a model to analyze and compare the potential locations and effects of the hydraulic fracturing method of drilling for natural gas on water quantity and quality in North Carolina and other states along the Eastern Seaboard. Her tasks include: building a GIS database by reseraching and obtaining geologic maps, hydrologic data, aquifer locations,



Jamie Wheeler and her daughter are shown here whitewater rafting in the mountains at Big Creek, TN this past summer.

natural gas distribution lines, transportation routes, and hydraulic fracturing leases, the exploration of the spatial relationships among water resources, distribution lines, shale deposits and transportation routes, and the design and production of cartographic products. Jamie is a very busy young woman. She has a fiance named Frank, a 7 year old daughter Kylie, and a soon to be step-daughter 11 year old Katelyn. Jamie reports being “honored to receive the award and excited about participating in this important project!”

Into Hurricane Irene*

When many people were inside their homes while Hurricane Irene battered North Carolina, one courageous group from East Carolina University braved the storm. Four students in the combined Coastal Storms and graduate Advanced Coastal Storms class led by Dr. Scott Curtis, ventured out into the elements to document valuable data about this hurricane.

Curtis and his students traveled mainly around Pitt County for the duration of the field trip. Every 20 minutes or so, Curtis stopped their van and he and his students took measurements of the wind speed and pressure levels of the storm with their handheld instruments. They also tried to measure the rainfall, but because of the intense winds, the rain gauge was not reading accurately. Noah Poe, an undergraduate in applied atmospheric science, and Kelsey Mulder, a graduate student in geography, went on the field trip. They both agreed that the trip was a fantastic experience.

*Excerpted from “Into the Storm”, by Meagan Williford, ECU University Marketing, 9-7-11. Photos by Cliff Hollis, ECU News Services.



Graduate student Kelsey Mulder using a Kestral handheld instrument which measures wind speed and surface pressure. Cliff Hollis, ECU News Services.



Undergraduate student Noah Poe using a Kestral handheld instrument which measures wind speed and surface pressure. Cliff Hollis, ECU News Services.

Busy Fall for GeoClub

The school year started off with a rumble and a bang with an uncharacteristic East Coast earthquake and Hurricane Irene. Since then, the group has met informally at Winslow’s trivia night every Sunday and has placed in the top three nearly every week, especially with the help of geography related questions and trial run at GeoBowl early in the semester.

Most recently, many GeoClub members attended the annual Southeast Division of the Association of American Geographers (SEDAAG) meeting in Savannah, GA. Funding for the trip was provided through the ECU Student Government Association and covered hotel expenses. Members had the opportunity to hear relevant research, network with other schools, and some students presented their work. It has been a busy and fulfilling semester so far. For the rest of the year, the American Meteorological Society and AAG conferences are on the docket as are making club shirts and a bowling night or two.

Spotted outside Brewster Building on a balmy November day the undergraduate students seen below are working on final course projects in GEOG4510 *Meteorological Instruments and Observations*. The projects are to compare wind measurements between sonic anemometer and propeller anemometer for one student, Jason Blumenfeld, BS Applied Geography major, and to examine wind change with height using two sonic anemometers for Mark Nissenbaum, BS AAS major. The other student, John Benedic was helping with the setup.



Our Newest Alums

Summer & Fall 2011 Undergraduates

Seth A. Avrette, *BS Urban & Regional Planning*

Donisha S. Brown, *BS Urban & Regional Planning*

Shiloh P. Canale, *BA Geography*

Charles M. Chappell, *BS Urban & Regional Planning*

Christopher T. Ford, *BS Urban & Regional Planning*

Noah H. Gillam, *BS Urban & Regional Planning*

Curtis R. Hoffman, *BS Urban & Regional Planning*

Olajuwon D. Lyles, *BS Urban & Regional Planning*

Steven R. Mattocks, *BS Applied Geography, Certificate in Geographic Information Systems.*

Cory E. Mullen, *BS Applied Geography*

Justine A. Rountree, *BS Applied Geography*

Amy N. Shew, *BS Geography, Certificate in Geographic Information Systems*

Zachary A. Smith, *BS Applied Geography*

Nicholas R. Snyder, *BS Urban & Regional Planning*

Wyatt R. Thorpe, *BA Geography*

Chelsea A. Weiner, *BS Urban & Regional Planning*

Joshua K. Whaley, *BS Geography, Certificate in Geographic Information Systems.*

Alice L. Wilson, *BS Urban & Regional Planning*

Summer & Fall 2011 Master of Arts

Bryce Carmichael, *A Validation assessment of the Hazards of Place Model of Vulnerability for Northeastern North Carolina.*

Richard Curran, *The Utility of Digital Globe's Worldview-2 Satellite Data in Mapping Seagrass in North Carolina Estuaries.*

James Edwards, *Prioritization of Carolina Bats as Mitigation Projects From a Herpetofaunal Perspective.*

Laurynas Gedminas, *Evaluating Hurricane Advisories Using Eye-tracking and Biometric Data.*

Michael Griffin, *Assessing Future Water Resources: The Influence of Climate Change, Population Growth and Land Use change in the Lower Cape Fear Basin, North Carolina.*

Allison Hueber, *Analyzing Resident Place Satisfaction in a Tourist Destination through Auto Photography: The Case of Southern Shores, NC.*

Gary Monitz, *Using Vulnerability and Planning Data to Measure Resilience in Coastal North Carolina.*

Sarah Jessop, *Mid-Summer Dry Spell and Agriculture in Jamaica: Implications For Farming Practices, Techniques, and Culture.*

Geo Challenge

How many current students and faculty members can you recognize in the Terrestrial Laser scan below? A version will be available on the Facebook Alumni page. Tag as many as you can! Search for ECU Geography Alumni. If you have photos or anecdotes please share them on the Alumni page.

What's Up With You?

Do you have news to share with your fellow Department of Geography alumni? How about an idea you think would make a good story for *Vectors*? Email Karen at mulcahyk@ecu.edu or post it on Facebook.



Students and faculty pose for a high resolution terrestrial laser scan of themselves to be used on GeoClub t-shirts.

