

Volume 21 | Issue 2 | Fall 2021 | North Carolina Geographical Society

Announcements

The North Carolina Geographer has recently published its newest issue featuring work research from Julia Cardwell, Timothy Mulrooney et al., Chris McGinn et al., and Russell Smith and Richard G. Moye, Jr. The North Carolina Geographical Society would like to extend our appreciation to all the authors who helped make this publication a success.

The University of North Carolina at Greensboro will be hosting the NCGS Annual Meeting scheduled for 18 March 2022. We will post additional information about conference registration and abstract submissions in the near future. If you are interested in learning more about our annual conference, please visit the official NCGS website.

The NCGS and Graduate Geography Student Association at UNCG are collaborating on a new program called the Giant Map Project. If you are interested in learning more or participating in the project, visit https://ncgeography.org/giant-map/.

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2021 Annual Meeting Conference Report

This report provides a brief overview of the proceedings of the 2021 NCGS (Society) Annual Meeting. The virtual meeting was hosted by the UNC Greensboro (UNCG) and was the second consecutive meeting hosted by the university and twenty-fourth annual meeting since the inception of the organization in 1970. Recent annual meetings were held at Winston Salem State University, (WSSU), NC Central University (NCCU), and as previously mentioned, UNCG.

The program commenced with an introduction by Vice President (VP) Jesse Lane (UNCG). Following the introduction, a series of presentations with break-out poster sessions followed. Presenters represented several UNC Schools including East Carolina University (ECU), UNCG, UNC Pembroke (UNCP), and UNC Chapel Hill (UNCCH). Following the presentations and break out session, Jeff Dequattro, Director of Restoration, Gulf of Mexico, Nature Conservancy provided the keynote speech.

Proceedings

Kelley De Polt, Eastern Carolina University, "Compound Coastal Water Event Risk within Eastern North Carolina,"

Dennis J. Edgell, University of North Carolina at Pembroke, "A Fair Candlemas,"

Poster Presentation (Room 1): Julia Cardwell, University of North Carolina, Chapel Hill, "Trends in NFIP (National Flood Insurance Program) Participation after Major Hurricanes in North Carolina,"

Poster Presentation (Room 2): Jahmina Ollison, University of North Carolina at Greensboro, "Dasymetric Mapping of 2016 Population of Washington, D.C. Using Hyperspectral Imagery,"

Keynote Address: Jeff Dequattro, Director of Restoration, Gulf of Mexico, The Nature Conservancy, "Non-Traditional Career Pathways"

Business Meeting

NCGS members discussed plans for the North Carolina Geographer, the biannual newsletter, and the financial situation with the organization. For more information on the Business Meeting, go to our website at: https://ncgeography.org/events/spring-2021-meeting/.

NEWS FROM THE DEPARTMENTS

University of North Carolina at Charlotte

The Department of Geography & Earth Sciences at UNC Charlotte has had an eventful semester so far. In an interview in August, Professor Magi described a network of low-cost air pollution sensors in North Carolina that he helped deploy in collaboration with non-profit CleanAIRE NC. The sensors are contributing new data to the network of Environmental Protection Agency regulatory air monitors around the country, and the low-cost sensor data is also helping to amplify community-scale conversations and action around topics related to air quality. On October 13th, Professor Elizabeth Delmelle was interviewed by UCLA's Lewis Center for Regional Policy Studies about her recent work investigating the connection between evictions and the opening of rail stations in gentrifying neighborhoods.

Recently, GES Alumna Claire Schuch and PhD student Tonderai Mushipe publish article on perceptions of Charlotte light-rail expansion. According to the study, rail transit impacts on adjacent neighborhoods are contested. Through the lens of New Urbanism and sustainable urban development, their article offers a critical analysis of different perceptions of neighborhood changes occurring after the opening of a new light rail line in Charlotte, North Carolina.

Western Carolina University

Exploration Leads to Career Connections.

By Geoff Cantrell

For almost a week this month, 29 students and five faculty members in Western Carolina University's <u>Geosciences and Natural Resources Department</u> went camping and visiting sites across the mountains. It was fun, to be sure, but there was a specific purpose.

It provided an opportunity to experience potential careers firsthand, centered around interaction with personnel from federal, state and non-governmental conservation groups across Western North Carolina and Northern Georgia.



"Think of it as a field trip that doubled as a job fair," said <u>Jane Dell</u>, assistant professor of <u>Geosciences and Natural Resources and Conservation Management</u>. "Beyond career exploration, the trip provided students the chance to build comradery with one another and to get to know their professors."

"Our meetings also included hearing from several WCU alumni from the program. It is a broad discipline, and our students can take several different pathways after graduation. Therefore, our goal was to introduce students to numerous professionals in the field, who then share their individual career journeys. Speakers discussed the type of work their groups perform and agency missions, provided career advice and answered students' questions."

"Going into Natural Resources Management at the beginning of the year, I had no idea how many options there were in the field," said student Ella Voorhees, a sophomore in NRCM from Charlotte. "This trip taught me so much about all the things I could do after I graduate. It also taught me how many things I can do even before I graduate to gain experience, which is one of the best ways to be able to get a job immediately out of college. I learned a lot about the various things I could do with my degree. We got to hear from people working for the federal government, the state government and private companies.

"I think it was very beneficial for everyone to hear all these different perspectives. I also thought it was very valuable to be able to talk to these people and ask questions because it is not every day that you get to hear about all these job opportunities and receive advice from people actually doing these jobs. It is very valuable to hear from people who were once in your same position."

For Peter Vue, a junior in NRCM from Connelly Springs, the trip created a better understanding of the many capabilities required for outdoors and conservation roles. "Listening to different people who do different things to help manage the resources we have only gave me more motivation to continue with this major," he said. "It helped a lot to know that there are numerous job opportunities out there and that any experience in this field is key to obtaining a career."

Among stops for the group:

- N.C. Mountain Research Station in Waynesville, with a tour that was led by two alumni, Katie Freeman and Will Morrow
- A private landowner in Sylva to see a streambank stabilization project done in conjunction with the Natural Resource Conservation Service
- Nonprofit conservation groups, Mainspring Conservation Trust of Franklin, and Forest Stewards of Cullowhee
- U.S. Forest Service, Blue Ridge Ranger District headquartered in Blairsville, Georgia. Representatives from numerous programs including fire, wildlife, recreation and archeology made presentations, including one by WCU alumnus Casey Young
- U.S. Fish and Wildlife Service, Chattahoochee Fish Hatchery, also in Blairsville, Georgia
- Coweeta Hydrologic Laboratory in Otto

Department head and participating faculty member <u>Diane Styers</u> described the trip as exemplifying the type of experiential learning opportunities provided through the <u>Department of Geosciences and Natural Resources</u>. "From field labs and camping trips to undergraduate research and participation in professional conferences," she said, "we offer students a variety of ways to add relevant real-world experiences to their degree programs."

Participating student William Brodauf, a sophomore in environmental science from Cornelius, perhaps summed it up best: "This field trip was an absolute joyful and life-changing experience that I am extremely thankful for. I met and had fun with great people who will be in my classes in the future and have similar interests as me," he said.

"It was amazing interacting with the professors I will have and developing a connection. Another valuable part of the trip outside of the career-aspects was my realization that I am not spending as much time outdoors as I wish. I realized I can do much more where we live, and I learned plenty of skills and how I can get started. Camping for me was something I needed greatly after a long year. I loved it."

University of North Carolina at Pembroke

The Department of Geology and Geography at UNC Pembroke as recently moved to the Oxendine Science



Building on Pembroke's beautiful campus and several important events are occurring around the department:

The American Indian Heritage Center at UNC Pembroke recently announced events for American Indian Heritage Month to be held November 2-30. The purpose of American Indian Heritage Month is to recognize and celebrate the diverse contributions, traditions and histories of American Indians. The month-long celebration is a time to observe the university's unique status as North Carolina's historically American Indian university, and to share American Indian culture and history with the university community. These events are open to everyone on campus.

Tommy Orange, the author of the New York Times bestselling novel, *There There*, will speak at UNC Pembroke as part of the 2021-2022 Distinguished Speaker Series. Orange will appear on Tuesday, November 16, 2021, at 7 p.m. on the Givens Performing Arts Center stage. His book highlights a multi-generational, relentlessly paced story about a side of America few have ever seen: the lives of urban Native Americans. Orange shines a light on the violence and recovery, hope and loss, identity and power, dislocation and communion, and the beauty and despair woven into the history of a nation and its people.

More than three decades after his death, Julian Pierce's legacy as a strong advocate for education, equality and justice for all people is kept alive through scholarship at UNC Pembroke. Last week, members of the Julian T. Pierce Memorial Scholarship Committee made a \$24,000 contribution to UNCP. The proceeds were raised at the annual Julian Pierce Art Dinner and Auction held this summer and will benefit the scholarship named in his honor. "The Julian Pierce Scholarship Committee has led magnificent work to build a scholarship fund of over \$200,000 at UNC Pembroke," said Steve Varley, vice chancellor of Advancement. "This fund has not only become one of our most important scholarships, it has become an essential pipeline for developing our next generations of Robeson County leaders," Varley added.

East Carolina University

The Department of Geography, ECU's Department of Geography, Planning and Environment houses undergraduate degree programs in Atmospheric Science, Geography, Geographic Information Science & Technology, and Community & Regional Planning. The

Department also offers an MS in Geography and we are excited to be rolling out a new MS in Planning and Development beginning in the fall of 2022.

The Department's 14 full-time faculty members have persevered through pandemic teaching and continue to make valuable research contributions in areas including climate science, coastal resilience, hazard perception and disaster planning, and geographies of health. Dr. Hannah Cooper, to take one example, has received funding from the National Park Service to examine coastal habitat change in North Carolina. Together with students in her Coastal Geography and Terrain Analysis Lab, Dr. Cooper is using remote sensing techniques for mapping and assessment of estuarine shorelines within the Neuse River Basin. The results of this work will provide coastal managers and policy makers with muchneeded insight into the pace of habit change in these fragile environments.

Dr. Burrell Montz, with funding from the Nurture Nature Center, is helping to improve storm readiness in her research with forecasters and emergency responders. Using surveys and focus groups, Dr. Montz and her students have tested the Winter Storm Severity Index to understand how it is used and what would make it more useful to decision-making. Iterative rounds with changes to graphics will allow the team to make recommendations to product developers for the most effective products.

Our students continue to impress as well. Four students this past year completed an undergraduate honors thesis under the mentorship of one of our faculty members, and six additional students participated in faculty research projects. Graduate student Jess Richter received an NC Sea Grant Research Fellowship and fellow MS student Kelley DePolt was awarded the 2021 Buzzard Graduate Scholarship from Gamma Theta Upsilon Geography Honor Society.

Our department has seen a number of changes over the past year. Former Department Chair Dr. Thad Wasklewicz has left ECU for a new opportunity in the Private Sector. We wish Thad well and welcome Dr. Jeff Popke to the position of Interim Chair. We also say thank you and best wishes to three long-serving colleagues who have announced their retirements: Drs. Paul Gares, Burrell Montz, and Karen Mulcahy. We will greatly miss their valuable contributions to the department as well their warm and collegial presence on the 2nd floor of Brewster Building.



University of North Carolina at Greensboro

The Department of Geography, Environment, and Sustainability at UNCG would like to commend the following faculty members for their service to the department:

This past spring, Dr. Roy Stine retired after more than 25 years of service to GES. Last spring marked the last semester that Dr. Roy Stine taught in the Department. He retired as associate professor of geography after a career in which he was instrumental in shaping the current array of programs as director of several internship programs, director of graduate studies, and key member of the interdisciplinary Archaeology Program. He began at UNCG as an assistant professor when the M.A. in Applied Geography was just getting underway. In the intervening years, he chaired 35 MA committees, and of those students he partially or fully funded 16 through his grants. He also chaired 10 PhD students. Thank for all of the years you helped make the department a success.

Dr. Sarah Praskievicz, associate professor of geography, has recently been awarded two major research grants to support her cutting-edge work on geospatial modeling of debris in river systems in the U.S. One grant, from the University Corporation of Atmospheric Research, will support her project "Post-Wildfire Debris-Flow Runout and Inundation Mapping Using Geospatial Analysis," while the other from the National Science Foundation will fund a three-year project on "Large Woody Debris in Low-Gradient Floodplain Rivers: Spatial Distribution, Physical Controls, and Geomorphic Effects." Congratulations to Dr. Praskievicz on receiving these highly competitive awards!

Recently, Dr. Debbage was the keynote speaker at the 7th International Conference on "Innovative (Eco-) Technology, Entrepreneurship and Regional Development" hosted by the Kaunas University of Applied Sciences in Lithuania. The title of his talk was "Sustainable Innovation in the Global Airline Industry: Lessons Learned for Cities and Regions." The talk was partly based on his soon to be published book chapter on "Sustainable Innovation in the Global Airline Industry" to feature in a forthcoming book by Edward Elgar Publishing titled "Handbook for Sustainable Tourism" and also on his work with InterVISTAS – a global airline consulting firm – part of a larger research grant funded

by the National Academies of Sciences/Transportation Research Board.

Finally, in October of 2021, NCGS and the GGSA teamed up with Renee Cunningham and to bring the Giant Map of South America to the students of New Town Elementary. Students had a great time engaging in geography-related activities. Students explored the map, learned to about scale and map directions, found country capitals, and played a scavenger hunt. During one of the activities, Art Teacher Danell Kearns shared with the students her story of living in South America. The Giant Map Project is an ongoing joint activity between NCGS and GGSA through which schools can bring geography to their students in a fun an active way. For more information, please visit the link above.

Appalachian State University

The Department of Geography and Planning at App State has had a busy 2021. A recent article published on App State's website highlights the career of one of the departments most successful professors, Dr. Baker Perry. He is recognized as one of the world's top experts in high altitude precipitation and climate change. Over the years, Perry has led undergraduate and graduate students on a number of climate research trips, where principles taught in the classroom come to life through hands-on experience. He sets a high bar for students who wish to participate in his programs. "Climate science careers often involve work in harsh and rigorous conditions," Perry said. "Fieldwork in high mountain environments is physically challenging, with strenuous hiking, camping and gathering data at high elevations in extreme cold."

Additionally, Dr. Maggie Sugg, assistant professor in the Department of Geography and Planning at Appalachian State University, has earned a CAREER Award from the National Science Foundation (NSF). She is only the second App State faculty to be so honored. Sugg will receive an expected \$413,763 over five years (May 2021–April 2026) in federal grant funding to support research, as well as teaching, student mentorship and outreach for her CAREER project.

Finally, students from the department conduct influential climate change research. Dr. Gregg Marland, who holds a dual appointment with the Research Institute for Environment, Energy and Economics and the Department of Geological and Environmental Sciences, and Dr. Jeff Colby from the Department of



Geography and Planning lead a team of four students in a research project determining which groups of people are most vulnerable to the effects of climate change.

Colby contributes to the conceptual development of the research, with geospatial technical support and works with graduate students. "The part of the project, which I have enjoyed the most, is working with the students. The energy and quality of the work they have brought to this project is inspiring," said Colby.

Former graduate students Leah Handwerger and Andrew Golden from the department participated in the initial stages of the project in the Summer of 2020. Research support has come from the Research Institute for Environment, Energy, and Economics.

University of North Carolina at Chapel Hill

Geography at UNC-CH offers a unique perspective to the study of some of our world's most pressing issues. Geographers bring together physical science, social science, and the humanities to study patterns and processes across the earth's surface. From analyzing regional dynamics of climate change to investigating new global structures of work and labor, UNC-CH's faculty and students conduct cutting-edge research at one of the country's top geography departments.

After a year a half in lockdown, our Chapel Hill campus reopened in summer 2021 under a mask mandate. Required to wear masks indoors, faculty and students resumed in-person classes in August. Although we feel grateful to be back on campus and see one another again, we are still figuring out how to lecture while masked, gather safely in large numbers, and support our students. Open to the public, our Friday colloquium series has resumed in-person attendance while still featuring a live zoom feed; for more information, please see events on our website.

Students and faculty continue to excel in research, teaching, and community engagement. Prof. Conghe Song earned a grant from the NSF to study interactions between community forestry, ecosystem services, and livelihoods in Nepal. Alongside partners from NCSU, UVA, and Tribhuvan University, Prof. Song will host a virtual conference on 6 November 2021 on the Dynamics of Integrated Socio-Environmental Systems: Implications for Natural Resource Management in Asia. On 15

September 2021, graduate student Andreina Malki led a lively discussion on the role of geographers in redistricting North Carolina, part of the AAG Redistricting Panel Series. Graduate student Kriddie Whitmore published an the effects <u>Ecosphere</u> examining geomorphology on aquatic carbon transformation in the Ecuadorian Andes. Her advisor, Prof. Diego Riveros-Iregui, leads Carolina's NSF-funded Carbonshed Lab in studying the interactions between hydrology, vegetation, and atmosphere. In 2020, he was named the Bowman & Gordon Gray Distinguished Professor for excellence in undergraduate teaching. As of July 2021, Prof. Gaby Valdivia, a political ecologist of Latin America, began a new role as Assistant Dean of Honors Carolina, demonstrating her commitment to undergraduate achievement. In January 2022, Prof. Banu Gokariksel will begin a new role as Chair of UNC's Curriculum in Global Studies, one of the largest majors on campus. Prof. Gokariksel recently published an edited volume, Feminist Geography Unbound (WVU Press, 2021) co-edited with Prof. Sara Smith and PhD candidates Chris Neubert and Mike Hawkins.

Finally, we celebrate promotions among our faculty. Drs. Sara Smith and Erika Wise are now full Professors, and Dr. Paul Delamater is Associate Professor with tenure. As of January 2022, Drs. Elizabeth Havice and Clark Gray will be promoted to full Professors. Congratulations!

University of North Carolina at Wilmington

The DeLoach Rock Garden was recently featured as a key component of UNCW's Green Ribbon Award for Sustainability from the US Department of Education, accepted by UNCW Chancellor Jose V. Sartarelli and other university officials. Massive thanks to EOS Senior Lecturer and alum Roger Shew for making the Rock Garden a reality.

Plenty of EOS Seahawks presented their research at the Geological Society of America Meeting in Portland, OR.



Presenting authors include MS student Jordan Burkey and professors Peter Haproff, Todd LaMaskin, and Patricia Kelley. Other EOS faculty and former students are co-authors on presentations including Andrea Hawkes, Shannon Klotsko, Jonathon Rivas, and John Russell.

Congratulations to EOS graduate student Jesse Beckman for his recently <u>published paper in MDPI</u> investigating the importance of grain size, land cover, and offshore wave characteristics in predicting barrier island overwash during hurricanes. He studied the changes on <u>@MasonboroIslandReserve</u> caused by Hurricane Florence to better understand how this island evolves and identify vulnerable areas.

North Carolina Central University

The Department of Environmental, Earth, and Geospatial Sciences at NC Central has a diverse group of students and staff who all work together to prepare the next generation for rewarding and important careers in the environmental, earth, and geospatial fields. According to Department Chari, Dr. Gordana Vlahovic, "Today, our programs include the following: a BS degree in Environmental and Geographic Sciences, with concentrations in Environmental Health, Environmental Science, and Geoscience; an MS Earth Science degree; and an Accelerated Bachelor-Master's program. Additionally, the department offers USGIF-accredited GEOINT certificates that allow students, regardless of their major, to gain valuable credentials recognized by the geospatial intelligence industry. NC Central's department is recognized as an NGA/USGS Center of Academic Excellence in Geospatial Sciences."

In a recent post on the <u>department's Facebook page</u>, Dr. Vlahovic discussed the recent collaboration project between the department and Coastlines and People Hubs

for Research and Broadening Participation (CoPe): "Water impacts all of our lives in eastern North Carolina. From harmful algal blooms to floodwaters, people throughout our region are constantly impacted by threats related to water quantity and quality. This Focused CoPe Hub is a collaboration between 7 academic institutions and 12 community stakeholder groups with an interest in understanding the environmental justice issues and solutions from water-related risks in eastern North Carolina. We are proud that NCCU DEEGS is one of the academic partners!"

Southeastern Division of the American Association of Geographers (SEDAAG)

The 2021 SEDAAG Annual Meeting will be held November 21-22, 2021 at the Marriott Shoals Hotel and Spa in Florence, Alabama. Registration for the meeting is still open. Thanks to the University of North Alabama for hosting this event! Visit https://sedaag.org/ to learn more.

SEDAAG is a regional subdivision of the American Association of Geographers, representing approximately 350 members in Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia. Our organization exists to advance investigations in geography and to encourage the application of geographic findings in education, government, and business. Members receive our peer-reviewed quarterly journal, Southeastern Geographer, and discounted registration rates at our annual meeting. Your membership dues help us to grant honors in recognition of excellence in teaching, service, and research; host educational and professional development workshops; support student paper and poster awards; and host a World Geography Bowl competition.



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If you are interested in publishing your research in our peer-reviewed journal, the North Carolina Geographer, please visit our submission page a

 $\frac{https://ncgeography.org/journal/index.php/NCGeograph}{er/user/register}.$



"Some hills are each only a few centimeters short of being a mountain."



"When you get mentally free, you are free. The rest is just geography!"



"Maps lie. Or at least, they don't always tell the truth. They're like us humans that way."



"Every where's been where it is ever since it was first put there. It's called geography."

What is the NCGS?

The North Carolina Geographical Society is founded on three main tenants:

- The need for the advancement of geographic knowledge in schools, colleges and public life throughout North Carolina.
- The continuing importance of geographical information to the national and international well-being of the United States.
- The desirability of a single organization to represent the diverse geographical personal resources within North Carolina.

The NCGS supports these ideals by sponsoring events, publishing an annual journal, and supporting academic and professional development opportunities in geography and related fields. To find out how you can become a member of the NCGS, visit our NCGS Membership Page at https://ncgeography.org/ncgs-membership/.







Under the Spotlight

Dr. Goldstein from UNCG and Dr. Moore from UNC Chapel Hill worked with a trio of researchers at Oregon State to analyze dune morphology along the coast of North Carolina. Titled "The relative role of constructive and destructive processes in dune evolution on Cape Lookout National Seashore, North Carolina, USA" the team of researchers developed a model for estimating dune morphometric change across various temporal and spatial scales.



