

2020-2021 Annual Report to the Chancellor

The College of Natural Resources remained focused on its strategic priorities working toward solutions that conserve our environment and generate economic value across North Carolina and the nation. Over the past year, five tenure/tenure track faculty, three professional track faculty, seven non-faculty EHRA, 11 post docs and seven SHRA were hired. Dr. Rasul Mowatt (Indiana University) will be Head of the Department of Parks, Recreation and Tourism Management (PRTM) on December 1, 2021. Dr. Erin Sills will be Head of the Department of Forestry and Environmental Resources (FER) effective June 30, 2021.

Strategic Plan

Goal 1: Enhance the success of our students through educational innovation.

- Our recruitment resulted in another high-quality, first-time, first-year class for the Fall of 2021, including 294 students (269 last year) with a weighted GPA of 3.97 (4.08 last year) as of 6/11/2021. Of these students, 50% are female (49% last year), and 15.8% are underrepresented minorities (African American, Hispanic, Native American, Pacific Islander) (11.5% last year).
- 25 students in the Department of Forest Biomaterials (FB) are participating in the Research Experience for Undergraduates program, partially supported with departmental funds to help mitigate the reduction in opportunities for industry internships due to COVID-19.
- Faculty, staff and students FER rose to the challenge of the pandemic by shifting summer 2020 field practicum courses online and adding extra field courses during the academic year and pairing students with partners in the forestry profession for practicums over winter break to ensure that students graduated on time with the requisite skills and experience.
- The Graduate School selected the MGIST program as one of nine graduate programs honored by

the university's inaugural Excellence in Assessment Award.

- The recruitment and student engagement team supported CNR academic units by offering virtual professional development activities for all students, including the second CNR Career Fair, where 34 employers and 209 undergraduate and graduate students participated.

Goal 2: Enhance scholarship and research by investing in faculty and infrastructure.

- Facilities in FB underwent renovation to the pulping pilot plant, the acquisition of a cross laminated timber cold press for Hodges Wood Products Lab, and creating additional space to accommodate growing numbers of graduate students.
- The College invested in a number of upgrades to outdoor spaces to help facilitate collaboration for students both during and after COVID restrictions, including eight new picnic tables between Biltmore and Jordan halls and new seating in the courtyard behind Biltmore Hall.
- The college recently became a Zero Waste Workplace and the first college on campus to implement the program throughout all its buildings in collaboration with Waste Reduction and Recycling and University Housekeeping.

Goal 3: Enhance interdisciplinary scholarship to address the grand challenges of society.

- The College participated in over 30 interdisciplinary collaborations across departments and colleges totaling \$22 million in funding.
- The 4th Annual CNR Graduate Research Symposium co-sponsored by Eastman Chemical was held virtually in March 2021, with 34 student presenters, 24 judges, 130+ visitors registered and about 400 zoom logins over the course of the event.

Goal 4: Enhance organizational excellence by creating a culture of constant improvement.

- The College facilitated strategic planning with Tidal Equality, a strategic consulting firm, to gather feedback from all faculty and staff to assess the college's vision, mission, goals and culture.

- The recruitment and student engagement team established a graduate recruitment committee and worked with DGPs/GSCs and the CNR Office of Diversity and Inclusion on strategies for improving graduate recruitment.

Goal 5: Enhance local and global engagement through focused strategic partnerships.

- The Forest Assets team is in partnership (second year) with the Conservation Legacy - Conservation Corps of NC, USDA NRCS, NC Forest Service, and other Eastern North Carolina Sentinel Landscape members to expand the capacity of private landowners and land managers to implement sustainable forest management practices across the state.
- Tourism Extension collaborated with NC Sea Grant to examine the relationship between mariculture and tourism, especially related to the cultivation of oysters in NC. The project seeks to define the market of tourists seeking oyster-based experiences.

Changes in the Service Environment

- For our traditional Environmental Career Day, we offered a month-long virtual event targeting high school and community college students including providing at-home activities families could do together.
- We converted our Admitted Student Visitation Day to a three-week virtual program. The virtual format resulted in more attendees than our typical in-person event, particularly from Tier 1 and Tier 2 counties and outside of North Carolina.

Changes to Programs

- The PRTM Undergraduate Program Advisory Committee completed a comprehensive assessment of its undergraduate programs to address declining enrollments in the sustainable tourism and natural resources recreation concentrations. The following curriculum changes were implemented:

- Old: Sustainable Tourism; New: Tourism and Event Management
- Old: Parks and Natural Resource Recreation; New: Recreation and Park Management
- The College transitioned and integrated the Environmental First Year team into Academic Affairs and worked with the appointed ENVFY Task Force to re-envision the program's scope, objectives, and structure to foster greater involvement across colleges and programs.

Diversity and Inclusion

- Initiated a new seminar series, Diversity, Inclusion and Racial Equity (DIRE), to address discrimination and systemic inequalities faced by marginalized individuals in fields related to natural resources. To date, 263 students, staff and faculty from multiple colleges across campus have attended.
- Using feedback from a CNR undergraduate climate survey (N=271 representing all three college departments) and instructor focus groups, we systematically examined 100-200 level courses to identify opportunities to include disciplinary-specific topics of diversity, equity, and inclusion.
- Each department and the Center for Geospatial Analytics (CGA) developed DEI plans for recruitment, retention, and overall climate.
- \$310,000 was granted from the Doris Duke Charitable Foundation to increase enrollment and graduation of students from under-represented groups in conservation science.

Research

- The College submitted 250 applications for sponsored agreements as the lead college, totaling \$70 million, and 34 applications for supplemental funding totaling \$1 million; CNR faculty were awarded 65 new grants in FY2021 totaling \$6 million.
- Research expenditures were \$7.6 million, projected at \$9.1 million for FY2021, up from \$8.6 million in FY2020.
- The current portfolio of ~\$60 million is 70% federal, or approximately \$42 million, with the top

federal sponsors being USDA (\$13.8 million), National Science Foundation (\$8.1 million), Department of the Interior (\$6.7 million), and Department of Energy (\$2.4 million).

- CNR faculty were involved in nine patents filed and 19 disclosures listing at least one CNR contributor. One new startup license was executed based on CNR intellectual property.

Extension

- CNR extension leveraged experience using virtual platforms for outreach and education to provide leadership and continuity of work for wildland fire and natural resource stakeholders in North Carolina, which reached over 1,500 landowners, wildland fire professionals, and others.
- Dr. Rajan Parajuli (Extension Specialist, Forestry), upon the request of the Carolina Loggers Association, estimated economic losses faced by the NC loggers, which was highlighted in a letter to the US Congress for the \$2.5 billion relief package request. The American Logger Association was able to receive \$200 million in the second stimulus package.
- Jennifer Fawcett and the Extension Forestry team published “Tools for Quickly Adapting During Pandemics, Disasters, and Other Unique Events” in the *Journal of Extension* early in the pandemic.
- Drs. Carla Barbieri and Whitney Knollenberg continued to explore opportunities to strengthen agritourism development in Western NC Counties through the Mountain Food Systems project.

Faculty and Staff Honors, Awards and Recognition

Forest Biomaterials (FB)

- Dr. Hasan Jameel, UNC Board of Governors Award for Excellence in Teaching
- Dr. Lokendra Pal, 2020-2021 University Faculty Scholar; 2021 TAPPI Fellow
- Dr. Marko Hakovirta, U.S. Department of State Fulbright Specialist Award

Forestry and Environmental Resources (FER)

- Sydna Willis, 2021 CNR SHRA Award for Excellence
- Dr. Jesse Contreras, one of the twelve inaugural Spring 2021 Impact Scholars in the Strengthening the Impact of Research program
- Dr. Caren Cooper, 2020-2021 University Faculty Scholar
- Dr. Jack Wang, 2020-2021 Goodnight Early Career Innovator
- Dr. Ryan Emanuel, 2021 James E. Holshouser Award Nominee; Selected for the William C. Friday Fellowship for Human Relations
- Dr. Jason Delborne, Appointed Director of the Program in Science, Technology, and Society (CHASS); Accepted into the Faculty LEAD Program through a competitive application process
- Dr. Stacy Nelson, Alumni Association Distinguished Graduate Professor; named to the North Carolina Wildlife Federation board of directors
- Dr. Steph Jeffries, Alumni Association Distinguished Undergraduate Professor
- Dr. Lara Pacifici, Outstanding Teacher Award for excellence in teaching
- Dr. Rachel Cook, Appointed the Carl Alwin Schenck Associate Professor; 2021 Outstanding Global Engagement Award
- Dr. Tom Gower; Appointed the Jordan Family Distinguished Professor for Natural Resource Innovation
- Dr. Megan Lupek, selected as a HHMI BioInteractive Ambassador Academy member; Pack Proficiency Champion; Finalist for the Faculty Open Resource Award, and her course ES100, Introduction to Environmental Science, was certified as a Quality Matters course at NC State University
- Dr. Barbara Conkling, two United States Department of Agriculture Certificates of Appreciation
- Dr. Kevin Potter, two United States Department of Agriculture Certificates of Appreciation
- Dr. Robert Scheller, named to the Reuters 'Hot List' of the top climate scientists in the world
- Dr. Madhusudan Katti, Pack Proficiency Champion
Dr. Mark Megalos, EcoForesters Lifetime

Achievement Award

- Dr. Bob Bardon, Jennifer Fawcett and Laurel Kays, Outstanding Education Material Bronze Award for Televised Conference/Videoconference/Webinar from the Association of Natural Resources Extension Professionals

Parks, Recreation and Tourism Management (PRTM)

- Rashawn King, 2021 CNR EHRA Award for Excellence and 2021 NC State Award for Excellence in Public Service
- Dr. Kim Bush, DASA Faculty Advisor Award
- Dr. Jason Bocarro, NC State University Outstanding Extension Award, NC State Academy of Outstanding Faculty Engaged in Extension
- Dr. Whitney Knollenberg, NC State University Outstanding Extension Award, NC State Academy of Outstanding Faculty Engaged in Extension
- Dr. Duarte Morais, Opal Mann Green Engagement and Scholarship Award (with team)
- Dr. Kathryn Stevenson, 2020-2021 Goodnight Early Career Innovator

Center for Geospatial Analytics (CGA)

- Dr. Justyna Jeziorska, semi-finalist in Education category in 2021 Women to Watch in UAS Global Awards

Student Honors, Awards and Recognition

(not all student honors, awards and recognition are listed)

Forest Biomaterials (FB)

- D'Kayla Thomas, Environmental Division Douglas Barton Memorial Scholarship
- Daniel Lucas, Spencer Payne, and Ronald "Iggy" Senchak, Phillips Family Leadership Incentive Award

- Autum Satterfield and Brandon Sanchez, Process Control Division Scholarship
- Ramon Vera, Provost's Fellowship
- Ryen Frazier, Nicole Hensley, Ian Kirven, Avery Griffin and Jacob Zwilling - National Needs Fellowship Recipients

Forestry and Environmental Resources (FER)

- NC State Sustainability Award: Martina Gonzalez Bertello
- Sustainability Stewards: Jaxon Davis, Martina Gonzalez Bertelli, Brody Hall, Kenan Hill, Elisabeth Holthusen, LP Mancini and Emma Wilson
- Social Innovation Fellows: Erin Kohn, Vanessa Merritt, Marica Thomas and Emma Wilson
- Doris Duke Scholars: Samai Bhojwani, Hailey Schmidt and Issac Smith
- NOAA Hollings Scholarship: Anna Poston and Kirsten Keleher
- Goodnight Scholars Class of 2025: Rhianna Absher, Isabella Insignares, Liam McCarthy and Trey Mumma
- Goodnight Transfer Scholars Class of 2024: Joshua Anderson
- Park Scholars Class of 2025: Brandon Wilson, Mya Lowry and Sascha Godfrey
- Southeast CASC Global Change Fellows: Olakunle Emmanuel Sodiya, Lauren D. Pharr and Andrew Shannon
- People's Choice award (both the NC State and state competitions): Meredith Hovis

Parks, Recreation and Tourism Management (PRTM)

- University Graduate Fellowships: Austin Thompson, Tyler Neimeyer
- Chancellor's Creating Community Student Award: Caitlin Reilly, Roslynn Powell and Courtney Hotchkiss
- Wilkinson Graduate Fellowship: Claudia Gil Arroyo
- 2021-22 Global Change Fellow: Courtney Hotchkiss

- International Collegiate Licensing Association 2020 Synergy Award Finalist: Christopher Boyer
- 2020 Emerging Leader Rising Star Award (TTRA): Ladan Ghahramani
- NCRPA Fletcher Scholarship for Recreation Professional: Reilly Protzman
- Energy Data Analytics Ph.D. Fellowship: Joshua Randall

Center for Geospatial Analytics (CGA)

- Uche Osia (Ph.D. Student), National Science Foundation Graduate Research Fellowship
- Kate Jones (Ph.D. Student), Joint Fire Science Program Graduate Research Innovation Grant
- Katie McQuillan (Ph.D. Student), Nature Conservancy NatureNet Fellowship
- Megan Coffey (Ph.D. Student) and Shannon Ricci (Ph.D. Student), NC Sea Grant-NC Space Grant Graduate Student Fellowship
- Ian McGregor (Ph.D. Student), NC Space Grant Graduate Research Fellowship; and NASA FINESST Grant
- Megan Coffey (Ph.D. Student) and Ian McGregor (Ph.D. Student), USGIF Scholarship
- Uche Osia (Ph.D. Student), GEM Fellowship
- Brit Laginhas (Ph.D. Student), Ecological Society of America George Mercer Award
- Alex Reinwald (MGIST Student), NC State's 2021 Esri Development Center Student of the Year
- Muiyiwa Adeyeye (Ph.D. Student), Diversity Enhancement Fellowship; 1st place in Outreach category for PackPics infographic competition
- Caitlin Haedrich (Ph.D. Student) and Ariel Saffer (Ph.D. Student), University Graduate Fellowship
- Nikki Inglis (Ph.D. Student), 1st place in Impact category for PackPics infographic competition

Fundraising

- The College achieved its campaign goal of \$35,000,000 in November 2020 and has continued to have success in fundraising. As of May 31, 2021, the College has raised \$38,462,510 (110% of its \$35M goal).

- Two successful Days of Giving, raising \$660,216 in September 2020 from 317 unique donors and \$1,544,865 in March 2021 from 525 unique donors.

Key gifts from FY2021 include:

- Ecology Wildlife Foundation Distinguished Professorship for Conservation Biology, the Dale Earnhardt Foundation endowment, and Robert B. Jordan III Extraordinary Opportunity Scholarship Endowment

New endowed scholarships established at the \$50,000 to \$100,000 level include

- Francis Family Scholarship, Adrianna Grant Kirkman Scholarship, Packaging Corporation of America (PCA) Endowed Scholarship, and the Charlotte Swart Memorial Award.

Recommendations and Concerns for the Future

Through the course of the pandemic and leadership changes, the College continues to move forward. This past year over 200 individuals (students, staff, faculty, alumni, and volunteer leaders) contributed their voices and ideas to the new CNR strategic plan (launching fall 2021). The plan will define priorities and set the direction for the College for sustained excellence in teaching, research, and extension and engagement. We are optimistic about new opportunities that will come from this effort. In the near term, the college leadership will engage the CNR community in creating operational plans for implementation. We will maintain our commitment to diversity, equity and inclusion. Immediate challenges ahead include transitioning our staff and faculty community back to campus and rebuilding a sense of community disrupted by the pandemic. Attempts to reconfigure offices and labs to adjust to Covid-19 underscored perennial needs for facility upgrades. Ongoing uncertainty surrounding the pandemic and salary increases is affecting morale within the college community. Another challenge is increased competition with other universities and private industry to retain talented staff and faculty. Despite these challenges, the College is poised for continued success in contributing to the mission and goals of NC State.