

2024-2025 Annual Report to the Chancellor

The 2024–2025 academic year was marked by continued growth, innovation and impact across the College of Natural Resources. This report highlights progress toward the university’s seven strategic goals, showcasing key accomplishments in enrollment, research, engagement, culture, partnerships and reputation. With record-breaking enrollment in several programs, expanded student support services and rising research expenditures, the college strengthened its position as a national leader in natural resources education and innovation. Faculty secured major federal and corporate grants, led international conferences and advanced industry partnerships. Engagement efforts extended across North Carolina and beyond, from Hurricane Helene recovery initiatives to invasive species management and education. The college also deepened its commitment to well-being and student success through targeted support programs. These achievements reflect a college community committed to our land-grant mission, working collaboratively to shape a more sustainable and resilient future.

Goal 1: Empower Students for a Lifetime of Success and Impact

- **Total enrollments for all undergraduate degree programs** were up 3.5% for Fall 2024 (1,769) from Fall 2023 (1,710), and 3% from Spring 2024 (1,644) to Spring 2025 (1,694). Overall, the college has experienced a 5% increase in undergraduate enrollment since 2020.
- **Total enrollment for all graduate degree programs** (not including certificates) rose slightly in Fall 2024 (396) compared to Fall 2023 (391). There was a 6.4% increase in doctoral students compared to last academic year, mostly due to a 22% increase in the forest biomaterials doctoral program. At the master's level, there was a slight 2.8% decrease, despite a 10.6% increase in the Master of Geospatial Information Science and Technology and an 83.3% increase in the Master of Science in Parks, Recreation and Tourism.

- **The college awarded 545 degrees** in this academic year (AY 23-24: 525; AY 22-23: 613), 425 undergraduate degrees and 120 graduate degrees.
- **The Summer Undergraduate Research Experience (SURE) (\$35,000)** brings together undergraduate researchers in CNR with high school students for a common experience that includes collaborative research, professional development, mentoring and career advising.
- **The college awarded 384 scholarships amounting to \$903,052** for the 2024-25 academic year and has offered 219 scholarships so far for the 25-26 academic year, totaling \$698,671.
- **The college supported graduate students by covering tuition (\$110,000)** for those funded on McIntire-Stennis Capacity Research Program grants and other terminated grants.
- **Investment in the Environmental First Year Program** yielded a 69% increase in enrollments since the 2020-2022 average, and is projected to be over 100% in Fall 2025 with new Department of Biological Sciences and EcoVillage partnerships.
- **I-GROUP** (Interdisciplinary Geospatial Research Opportunity Undergraduate Program) will begin in August 2025. With funding from PEP, CNR's Student High Impact Experiences Fund, external grants, Ross Meentemeyer's Goodnight Distinguished Professor Endowment, and a partnership with the Goodnight Scholars Program, the college will hire 10 undergraduate RAs for the initial cohort. Over 80 students applied for this new internship program.

Goal 2: Ensure Preeminence in Research, Scholarship, Innovation and Collaboration

- **Faculty submitted 180 proposals totaling \$81.6 million** in FY 24-25 and were awarded 104 new grants totaling \$21.9 million.
- **Annual research expenditures for FY 2025 were \$17.9 million**, an increase of 15% over FY24.
- **Nathalie Lavoine**, assistant professor in the Department of Forest Biomaterials, received a National Science Foundation CAREER Award.
- **The Department of Forest Biomaterials hosted the 2025 International Symposium on Wood, Fiber and Pulping Chemistry**. Over 200 researchers and professionals from 22

countries attended, including five plenary speakers considered the top scientists in the field.

- **The Seventh Annual CNR Graduate Research Symposium** featured 45 graduate student presentations, a 3-Minute Thesis Competition, and more than \$8,000 in cash awards.

Goal 3: Expand and Advance Our Engagement With and Service to North Carolina and Beyond, Defining the Standard for a 21st-Century Land-Grant University

- **CNR Extension continued to support recovery from Hurricane Helene** in western North Carolina through virtual and on-the-ground workshops and trainings. Webinar topics included taxation, investment and cost-share opportunities, tourism recovery strategies, and more. Workshops covered chainsaw safety, wildland fire mitigation, stream/riparian zone restoration, the use of drones to deploy seeds for ground cover repair, and more.
- **The Broadening Extension through Graduate Student Training (BEST) Program**, a collaborative professional development initiative with Penn State University, offers a summer training and mentoring experience. Participants develop crucial skills and gain a deeper appreciation for the land-grant university's role in public service. Five students, three faculty and four staff from Extension Forestry and Tourism Extension attended the 2025 program.
- **The Innovation in Mass Timber Solutions Conference**, hosted by CNR Extension in partnership with the colleges of Engineering and Design, brought together industry and academia to explore collaboration opportunities and strategies for promoting mass timber as a building material.
- **The CNR Continuing and Professional Education Office** supports the promotion and positioning of the college's broader continuing and professional education program. The office generated \$207,625 in 2024-2025.

Goal 4: Champion a Culture of Equality, Belonging and Well-being in All We Do

- **In the second year of offering embedded mental health counseling services**, 349 clinical appointments were recorded. Our counselor attended 49 outreach events, connecting with 599 students, 74% of whom were from our college.
- **The CNR Wellness Working Group** hosted or supported more than 20 events. Activities included the Wolfpack Employee Wellness Challenge, Breast Cancer Awareness “Pink Out” event, a therapy dog visit, housekeeping appreciation activities, and the annual holiday party.
- **The college achieved the “Gold” level Well Wolfpack Certification** for the second year in a row in recognition of its efforts to encourage and support employee wellness.

Goal 5: Improve University Effectiveness Through Transformative Technologies, Cutting-Edge Processes and Actionable Data

- **The CNR Research Office streamlined its pre-award process with Airtable**, a cloud-based data management platform that gathers data about proposals, stores metadata, assigns proposals to grant managers, sends deadline reminders, and more. The CNR Business Office is now collaborating with the Department of Forestry and Environmental Resources on an intake form for unpaid/no-pay appointments.

Goal 6: Lead in Developing Innovative Partnerships, Entrepreneurial Thinking and Applied Problem-Solving

- **Jack Wang**, associate professor of forestry and environmental resources, director of the Forest Biotech Group and co-founder of TreeCo, was named the 2024 John S. Risley Entrepreneur of the Year.
- **Joel Pawlak and Richard Venditti**, both professors in the Department of Forest Biomaterials, and **Alfonso Dominguez Gonzalez**, a doctoral candidate, received the Chancellor's Innovation Award for research on a fiber-based material that could replace plastic foam in packaging products.

- **The Sustainable and Alternative Fibers Consortium** added three new member companies. The consortium, now with 34 member companies, contributes \$4.5 million to develop key knowledge and technologies to advance sustainable fibers for different industrial applications.
- **A one-day symposium** was held to highlight the work of the industry-supported cooperative research programs in the Department of Forestry and Environmental Resources, including Camcore, the Tree Improvement Program, the Forest Productivity Cooperative, the Southern Forest Resources Assessment Consortium, and the Forest Biotechnology Group.
- **The CNR Undergraduate Environmental Health and Safety Internship Program** completed its third year with six students (majority from the environmental technology and management major) assisting the CNR safety officer with communication, safety audits and reports.
- **Monetization of the lands outside the Hofmann Forest timber deed area** (14,845 acres) generated more than \$270,000 in income from the sale of mitigation credits in our wetland mitigation banks and over \$118,000 from farm and miscellaneous income. The market value of the timber deed with RMS (54,000 acres) currently stands at \$115 million.

Goal 7: Elevate the National and Global Reputation and Visibility of NC State

- **The college published more than 70 original articles** highlighting faculty research, student and alumni success, and college initiatives. Through collaboration with University News Services and CNR-led targeted search engine optimization strategies, the college secured more than 170 media mentions in both local and national outlets.
- **Page views across the college and department websites reached over 1.8 million**, up 104% from last year. The CNR news site saw over 835,000 page views, a 114% increase. These results expanded the college's visibility and enhanced the recognition of its faculty as thought leaders, driving media requests and advancing the college's national profile.
- **The College of Natural Resources is ranked nationally** as the #1 Best Forest Management/Forest Resources Management School, #1 Best Wood Science and Wood

Products/Pulp and Paper Technology School, and #1 Best Parks, Recreation and Leisure Facilities Management Master's Degree School by College Factual.

- **The total endowment for the College of Natural Resources surpassed \$250 million**, currently at \$263.4 million for 2024 (Source: NC State Treasurer's Report).

Highlights From College Units

Academic Affairs

- **The Environmental First Year (ENVFY) Program** had 247 participants over the fall and spring terms. A new MOU was established with science education (earth and environmental sciences concentration) in the College of Education. Others are being finalized with biological sciences (ecology, evolution and conservation biology concentration) in the College of Sciences, Climate and Sustainability Academy in OUIP, EcoVillage Living and Learning Community, and the University Honors Program within DASA.
- **Significant growth was observed** in ENVFY undeclared (72%), sport management (10.3%), fisheries, wildlife and conservation biology (7.3%), the new minor in environmental technology and management (800%), and the renewable energy assessment (20%).
- **The college's personalized yield campaign** generated a first-year enrollment increase of 15%, with increases of 53% from underserved counties and 80% from Tier 1 counties. Out-of-state enrollment, a key focus at the university and college level, increased by 31%.

Philanthropy

- **As of June 30, the college raised \$4,046,910** against a goal of \$5.35 million (75.6%) compared to our three-year (FYE) average of \$4,098,797 (78%). Annual giving dollars are at \$738,038, down 18% from last year.
- **The college raised \$796,485 on Day of Giving**, surpassing our \$500,000 internal goal. The college met its three challenge matches to support the CNR Enhancement Fund, Brian Cardini Memorial Scholarship, and the new Graduate Student Support Fund, securing \$17,000 in donor funds.

- **Funds from previous Day of Giving challenges provided \$17,680 in grants** for faculty to organize high-impact experiences, including wildland fire training and field trips to observe protected area management at Great Smoky Mountains National Park and biodiversity conservation projects in San Diego, California and coastal North Carolina.
- **Major corporate gifts in FY 2025 include:**
 - **\$500,000** from **Smurfit Westrock** for unrestricted support to paper science and engineering. Smurfit Westrock is the world’s largest paper and packaging company.
 - **\$150,000** from **Amazon** for research on sustainability in paper and packaging.
 - **\$144,450** from **Linde** as part of a three-year commitment to continue the Linde Natural Resources Scholarship for students in the college with a demonstrated interest in climate and environmental sustainability.
 - **\$100,000** from **Climate Breakthrough** to support work on next-generation fibers.

Culture and Community

- **The Office of College Culture and Community (OCCC) was created in November 2024.** Under the leadership of Stacy Nelson, associate dean of college culture and community, this office develops, implements and supports community-building and well-being initiatives for students, staff and faculty. OCCC houses embedded counseling services, the wellness working group and the CNR Student Leadership Council. It also provides CNR representation on the Student Behavioral Case Management (also known as NC State CARES).
- **OCCC led the college’s contribution to NC State’s successful Carnegie Community Engagement Reclassification report,** offering a rich and diverse portfolio of engagement examples — spanning from community partnerships focused on sport leadership to providing specialized pulp and paper basics to industry professionals. These examples effectively showcased the integrated nature of our community partnerships and their far-reaching impact across the university and state.

Extension

- **CNR Extension continues to support three of North Carolina’s leading industries** — forestry, wood products and tourism — which collectively contribute over \$95 billion annually to the state’s economy.
- **The Leveraging Direct-to-Consumer Marketing and Tourism to Diversify Income Streams for Seafood Producers Project**, funded with \$193,988 from the U.S. Department of Commerce, developed two fact sheets on agritourism for shellfish mariculture operations and provided marketing materials for North Carolina commercial fishers and marine aquaculture producers entering the tourism sector.
- **The Salinity Monitoring for Oyster Growers Project**, a collaborative effort with faculty from the colleges of Natural Resources, Agriculture and Life Sciences, and Veterinary Medicine, conducted needs assessments with 14 oyster growers and is developing salinity monitoring tools to address a critical need for this industry. Initial findings were shared with 30 coastal scientists at the NC Sea Grant Coastal Conference.
- **Fourteen in-person and virtual education events** on wildfire risks, the ecological role of fire, and prescribed fire application were attended by 271 individuals across the state.
- **The NC Bradford Pear Bounty program**, in collaboration with the North Carolina Urban Forest Council, North Carolina Wildlife Federation and North Carolina Forest Service, successfully targeted the invasive Callery pear by distributing more than 600 native trees and increasing awareness of invasive species among more than 250,000 people online.
- **The Poolside Pests program**, a partnership between the Plant Industry Division of the North Carolina Department of Agriculture and Consumer Services and the North Carolina Forest Service, educated more than 36,000 individuals and pool industry professionals about invasive insects through its website and social media.

Facilities and Operations

- **Furniture and technology upgrades** in Jordan Hall and the Center for Geospatial Analytics brought significant improvements to learning environments.

- **Much-needed audiovisual upgrades** were completed in classrooms at Hill Forest's Slocum Camp in time for the 2025 Summer Practicum program for forest management and fisheries, wildlife and conservation biology majors
- **The CNR Office of Information Technology and Support Services, led by Dustin Duckwall, provided technical expertise** to the NC State Gaming and Esports Lab and supported the 2025 College League of Legends and College VALORANT Championship Grand Finals, contributing to the success of this high-profile collegiate esports event.

Forest Assets

- **The Office of Forest Assets manages 11 properties** that are Sustainable Forestry Initiative and American Tree Farm certified sustainable forest land.
- **New or updated management plans** were submitted for all forests. Each plan is aligned with ecological, economic and regulatory requirements defined by the American Tree Farm Certification and Sustainable Forestry Initiative (for Hofmann), reflecting our commitment to sustainable forest stewardship and compliance with institutional and external standards.

Research

- **The CNR research portfolio continues to grow**, with the number of awards increasing 5.9% over the past year and amount per award growing by 252%.
- **An increasing number of competitive awards exceed \$500,000, including:**
 - **\$7.4 million from the U.S. Department of Agriculture's National Institute of Food and Agriculture** for the "A Gift Seed: Accelerated Genetic Improvement of Fir through Sequencing, Economics, Extension and Diagnostics" project led by Justin Whitehill, an assistant professor of forestry and environmental resources and director of the Christmas Tree Genetics Program.
 - **\$1.4 million from the U.S. Department of Energy** for the "A Novel Approach to Decarbonizing the Pulp and Paper Industry: Kraft Chemical Recovery via Bipolar Membrane Electrodialysis" project led by Sunkyu Park, the Jordan Family Distinguished Professor for Natural Resources Innovation in the Department of Forest Biomaterials.

- **\$951,363 from TreeCo** for the “Genome Editing for Superior Fiber Feedstocks” project led by Ronalds Gonzalez, an associate professor of forest biomaterials.
- **\$599,268 from the U.S. Forest Service** for the “Post-Helene Assessment of Structure and Composition in Upland Oak Hickory Forests in the Southern Appalachians” project led by Jodi Forrester, an associate professor of forestry and environmental resources.

Cumulative List of Major Faculty and Staff Awards

Academic Affairs Office

- Nancy Haworth, Executive Assistant - College Award for Excellence recipient and University award level nominee

Advancement Office

- Erin Elliott, Office Manager, NRF Board Secretary - University Advancement Award, Teamwork and Collaboration
- Kate Furiness, Stewardship Officer - University Award, Innovation
- Jonathan Hernandez, Assistant Director of Philanthropy - University Advancement Award Teamwork and Collaboration
- Zach VanHekken, Donor Engagement and Experience Officer - University Award, Teamwork and Collaboration

Center for Geospatial Analytics

- Stacy Supak, Associate Teaching Professor - Office of Faculty Excellence Faculty Fellow
- Lois Utt, Executive Assistant - Pride of the Wolfpack
- Elsa Youngsteadt Faculty Fellow - George J. and Rhoda W. Kriz Study Leave Award (NC State Kriz Endowment)

CNR Extension

- Jennifer Fawcett – Association of Natural Resources Extension Professionals Outstanding Extension Award – Silver Award

- Kurt Smith, Assistant Professor - North Carolina Association of Cooperative Extension Specialists, Outstanding Subject Matter Award, and the NC State University Outstanding Extension Award
- Renee Strnad, Extension Associate - Outstanding Practitioner Award, Environmental Educators of North Carolina

Department of Forest Biomaterials

- Medwick Byrd, Teaching Professor - 2025 TAPPI (Technical Association of the Pulp and Paper Industry) and Paper Industry Management Association Award
- Nathalie Lavoine, Assistant Professor - National Science Foundation CAREER Award
- Lucian Lucia, Professor - 2025 TAPPI Research and Development Division Award and the William H. Aiken Prize
- Lokendra Pal, E.J. “Woody” Rice Professor - Alumni Association Distinguished Undergraduate Professor
- Angela Rush, Director of Student Recruitment in Paper, Science and Engineering - College Award for Excellence recipient and University award level nominee

Department of Forestry and Environmental Resources

- Justin Baker, Associate Professor - University Faculty Scholar
- Jodi Forrester, Associate Professor - Outstanding Teaching Award
- Megan Lupek, Assistant Teaching Professor - DELTA Faculty Fellow and Office of Faculty Excellence Fellow
- Lara Pacifici, Teaching Professor - USDA Regional Award for 2024 Excellence in College and University Teaching Awards for Food and Agriculture Sciences
- Nils Peterson, Professor - Alumni Association Distinguished Graduate Professor
- Kelly Oten, Assistant Professor - Goodnight Early Career Innovators Award
- Jennifer Richmond-Bryant, Associate Professor - NC State University Outstanding Engagement Award
- Mirela Tulbure, Professor - University Faculty Scholar

- Jack Wang, Associate Professor - John S. Risley Entrepreneur of the Year
- Justin Whitehill, Assistant Professor - 2024-2025 Goodnight Early Career Innovators Award

Information Technology

- David Goodwin, IT Client Support Specialist - Nominated, Operational Excellence Team Award as part of the Google Service Team at the 2025 Annual IT Community Event

Department of Parks, Recreation and Tourism Management

- Kyle Bunds, Associate Professor - Provost Faculty Fellow, Global Leadership Track
- Corey Johnson, Karla A. Henderson Distinguished Professor - 2025 Academy of Leisure Sciences Innovation in Teaching Award
- Kathryn Stevenson, Associate Professor - 2024 Outstanding Contributions to Research in Environmental Education Award, North American Association for Environmental Education
- Whitney Knollenberg, Associate Professor - 2025 Academy of Leisure Sciences Innovation in Teaching Award

Major Student Awards

Doctoral Fellowships for 2024-2025

- Evan Dadson (Geospatial Analytics), advised by Chris Jones, University Graduate Fellowship
- Kushagara Meshram (Parks, Recreation and Tourism Management), advised by Lincoln Larson, Provost Doctoral Fellowship and Andrews Doctoral Fellowship
- Muhammad Ikbal Putera (Parks, Recreation and Tourism Management), advised by Yu-Fai Leung, Andrews Doctoral Fellowship and Beth Evelyn Wilson Doctoral Award
- Kelly van Woesik (Geospatial Analytics), advised by Natalie Nelson, Goodnight Doctoral Fellowship and University Graduate Fellowship

Global Change Research Fellows

- Kurt Naquin (Forestry and Environmental Resources), advised by Caren Cooper
- Tawakalitu Tajudeen (Geospatial Analytics), advised by Katie Martin

- Juliana Jolley (Parks, Recreation and Tourism Management), advised by Lincoln Larson
- Asumi Saito (Geospatial Analytics), advised by Sankar Arumugam
- Nathan Schunk (Forestry and Environmental Resources), advised by Justin Baker

North Carolina Wildlife Federation Governor's Conservation

Achievement Award

- Deja Perkins '25 (Geospatial Analytics) - NC Wildlife Federation Young Conservationist of the Year

Undergraduate Student Honors

- **2025 Matthews Medal Recipient:** Emma Budden (Microbiology and Environmental Sciences)
 - **Park Scholars:** Sawyer Cumbow (Environmental Sciences); Cadence Davis (Sustainable Materials and Technology); Niveda Mahesh (Chemical Engineering and Paper Science and Engineering)
 - **Goodnight Scholars:** Hana Robinson (Forest Management); Kayla Ruff (Fisheries, Wildlife and Conservation Biology)
-