Death in the Woods

What’s really going on with Southern Pine Decline?

New dean on the job: Dale Greene takes the helm

Thank you to our donors
This has been an eventful year for the Warnell School and of course for me personally. I was delighted and humbled to be named by President Jere Morehead and Provost Pamela Whitten in May to serve as our next Dean beginning June 1. Thank you to everyone in the Warnell family who was so supportive of our school and of me during our transition and recent search. I simply cannot find the right words to adequately tell you how much your support means not only to me, but also to the Warnell School.

Our strategic planning process was re-started in August with a goal of completing a new strategic plan by the end of 2015. This effort will engage faculty across our disciplines as well as our external partners and stakeholders across the region. This document will guide our efforts in the future to raise private funds to support our programs and to inform us about faculty replacements as those opportunities arise from likely retirements in the next decade.

We have searches underway for seven faculty positions. We began interviews in late September to fill a vacancy in natural resources recreation and tourism, followed in October by interviews for three outreach positions in wildlife, forest health, and economics/taxation, and finally for my old slot in forest operations. We have also recently re-advertised a forest pathology position and an opening in informatics shared with the Franklin College of Arts and Sciences. We look forward to welcoming additional talented faculty to strengthen and expand our efforts in research, outreach and teaching.

Our programs remain among the best in the country and we enjoy the support of outstanding and dedicated alumni. Joe Hamilton (BSFR ’71, MS ’78), founder of the Quality Deer Management Association, is our 2015 Distinguished Alumnus. Sharon Holbrooks (BSFR ’04, MS ’07), with the USDA-NRCS, is the recipient of the 2015 Distinguished Young Alumnus Award. Sharon was also recently recognized as a member of the UGA Alumni Association’s 40 Under 40 class for her early career accomplishments and dedication to UGA. Five of our younger alumni are also participants in the Advancing Georgia Leaders in Agriculture and Forestry program that Warnell is co-sponsoring with the College of Agricultural and Environmental Sciences.

We are currently planning our spring 2016 regional meetings for our alumni and friends, you will hear more about locations and dates in the next issue of the Log and in future communications.

Thanks for all you do for the Warnell School — Go Dawgs.

A NEW BEGINNING

Dean Dale Greene
Dean, Warnell School of Forestry and Natural Resources

T

Fall 2015 1
FEATURES

4 Dr. Dale Greene is on the job: Longtime Warnell professor takes the reigns

14 International research team discovers thriving wildlife at Chernobyl

15 Wood strength study sheds light on lowered lumber ratings

16 Wilderness areas need buffer zones, Warnell researchers say

17 Warnell study: Modern best management practices minimizing water quality issues

18 Are pines dying off for no good reason? Warnell researchers say that land managers don’t have to fear “Southern Pine Decline”

40 Thank you to our donors: Honor Roll

IN EVERY ISSUE

4 School News

11 Faculty Q&A: Chuck Bargeron

22 Student News

29 Alumni News

30 A Word from the Development Office

32 Erin Lincoln, Alumni on the Job

34 Class Notes

38 Obituaries

ON THE COVER:
Warnell researchers investigated reports about widespread “Southern Pine Decline” in the Southeast. Dead pine trees, like the ones on the cover, were feared mainly to have died from unexplainable causes — not unexplainable deaths as many feared was happening. Photo by Erich G. Vallery/USDA Forest Service, Bugwood.org.

TABLE OF CONTENTS PHOTO:
Przewalski horses were found to be living in the 1,621-square mile Chernobyl Exclusion Zone during a recent study on wildlife populations at the site of the 1986 nuclear accident. The study found that wildlife populations are thriving in the zone despite the accident that forced massive evacuation of people. See story, Page 14. Photo by Tatyana Deryabina.

THE LOG MAGAZINE STAFF:
Editor/Writer
Sandi Martin
Contributing Writer
Bridget Harden
Vicky Sutton-Jackson
Stephanie Schupska
Senior Graphic Designer
Wade Newbury

HOW ARE WE DOING?
We welcome letters to the editor and feedback from our readers. Submit news items, questions or address changes to:
thelog@warnell.uga.edu

The Log
Warnell School of Forestry and Natural Resources
180 E. Green St.
University of Georgia
Athens, GA 30602

The Log is an Alumni Association publication. It is published twice a year in the fall and spring.

Warnell on the Web:
www.warnell.uga.edu

WARNELL SCHOOL OF FORESTRY AND NATURAL RESOURCES ADMINISTRATION

Dale Greene,
Dean
Steven Castleberry,
Associate Dean of Academic Affairs
Mike Mengak,
Associate Dean for Outreach
Scott Merkle,
Associate Dean for Research
Gary Green,
Assistant Dean of Student Services
Bridget Hardin,
Director of Development
Emily Sandbichler,
Director of Alumni Relations
Bob Izero,
Director of the Center for Forest Business
Andrea Strother,
Director of Finance and Administration
Mike Hunter,
Lands and Facilities Director
Back in his late 20s, Dale Greene found himself almost done with his Ph.D., recently married and without a job. He’s sometimes asked why he came to the University of Georgia, and without hesitation he says, “it was a job.”

But it wasn’t just any job. For a young man who grew up helping tend his grandmother’s small woodlands in Arkansas, coming to UGA for a forest operations faculty position was a “great opportunity. It was a dream job to get to start at Georgia.”

Greene is actually on track to likely spend his entire career at the Warnell School. He and wife Jeanna Wilson, an associate professor of poultry science in the College of Agricultural and Environmental Sciences, both came here nearly 30 years ago and have never left. And after leading classes for nearly three decades, Greene is now leading the Warnell School.

After serving as interim dean for five months, Greene took on the job permanently in June after a national search. Stepping out of the classroom and into a full-time administrative role has been a challenge, Greene said, but one he is relishing. Greene was already serving as Warnell’s associate dean of academic affairs when he was named interim dean. And although different from anything he’d done before, overseeing the academic programs was a welcome new adventure. “I was enjoying it and helping students,” he said. “I really liked the pace. You didn’t just go down your to-do list. You handled things as they came through the door.”

It didn’t take him long as interim dean long to realize he enjoyed the top office, so he applied.

He was up against some tough competition, but he had some advantages over the other applicants: Three decades of honored teaching at UGA, strong and vocal support from Warnell’s alumni base, numerous awards and accolades for his work with the forest industry and in the classroom, and an incalculable number of contacts across the state. Between him and Jeanna, Greene jokes, “we can’t go anywhere in Georgia without bumping into someone we know.”

His background before UGA also made him a strong candidate for the job. He earned his bachelor’s degree from Louisiana State University in 1981, and he followed that up with a master’s degree from Virginia Tech in 1983, which is also where he met Jeanna. When she moved to Auburn University for a doctoral program, he followed her and earned his doctorate in 1986. “I never set out to be an academic, but when I realized that I had found the person I wanted to marry, I decided that was the first decision to get right,” Greene said. “Everything else would likely work out if I made the right decision there.”

Growing up helping his grandmother, he said, really shaped his love of forestry. Converted from old cotton fields, her woodlands fascinated Greene, particularly seeing how forestland and foresters could help protect the environment. A year before graduating with his undergraduate degree, Greene was working a summer internship for International Paper. He found himself in the “blistering heat, and I was holding a chainsaw.” And he loved it.

Coming to UGA started long, respected careers for both he and Jeanna. Greene has won an impressive number of awards both internally and externally. The Southeastern Society of American Foresters inducted him into the Georgia Foresters Hall of Fame in 2007, and in 2011 he was honored by the Boy Scouts of America with its “Herschel Award” for saving the life of a fellow professor at a meeting at Auburn University who had collapsed from an apparent heart attack. Greene performed CPR until paramedics arrived, and he still sees his colleague annually at the same conference.

But he says he is especially proud of being recognized for his teaching. He’s won the Herrick Award for Superior Teaching, the Xi Sigma Pi Professor of the Year Award, and the Warnell Alumni Association Award for Outstanding Teaching.

Dr. Dale Greene plans for the future of Warnell
Sadly, moving to the administrative side will not leave him time to teach, he said. Greene was especially fond of teaching the Maymester Forestry Field Camps and the Introduction to Natural Resources Conservation class, which allowed him to interact with students from across campus and expose them to the importance of environmental sustainability.

“Many of these students have some misconceptions about environmental issues or know little about the sources of the food and energy they consume,” he said. “People see the outdoors as a place for recreation and for protection, but they forget it also feeds us and provides us with products we need. Balance is key.”

As an expert in forest operations, Greene has focused on researching ways to improve timber harvesting methods to decrease the environmental impact while maximizing profits and improving product quality. He has taken that applied research and used it in his classes, both inside and in hands-on labs.

But now Greene will focus on some of the short-term and long-term challenges facing the Warnell School. He is already filling vacant faculty positions, leading a strategic plan revision, and re-energizing Warnell’s fundraising and development efforts. So far, he said, “a lot of my job has been getting people in place.”

And as a forester, he’s also working on expanding his contacts to include professionals in the wildlife, natural resources recreation and tourism, and water and soils fields. But his long-term and most important goal, he said, is to make sure that the Warnell School keeps striving to be one of the top natural resource programs in the country.

He said, “I’m excited about the opportunities in front of us and look forward to working with our faculty, students and alumni to continue to make great things happen in the Warnell School.”

Q&A with the new dean

What are your top three priorities now that you are dean?

Attracting great faculty and students, increasing our external funding for research, and increasing private giving to our programs are my top priorities. We’re working to complete a new strategic plan that visions through 2025, and it will help guide our efforts in all of these areas.

What are some of the challenges facing the natural resources fields today, and what is Warnell doing to stand out?

Rural America is depopulating and we are becoming a more urban society — two sides of the same issue. Urban dwellers often do not understand private property ownership and the need to actively manage landscapes to keep them healthy and produce income. Our research, teaching and outreach programs are increasingly dealing with the impact of these trends and helping inform policy decisions.

Private support of our programs is vital to their success. What plans do you have for increasing private support and alumni participation?

We’ve always done this pretty well compared to our peers or other programs on campus. This is about building and maintaining relationships, so I’ll spend a lot of time doing that. We intend to show people how they can help make our new strategic plan become reality by their private giving and alumni participation. Sharing our current success stories is a great way to get them excited about our future plans.

What do you think will change the most about the school in the coming years?

The average age of our faculty — the baby boomers are reaching retirement age — and the diversity of our student body. Georgia is becoming more ethnically diverse every year.

You’ve spent most of your career in the classroom. How will you translate that teaching experience into being the school’s top administrator?

As an instructor, I felt it was important to lead by example by being well-prepared and setting high expectations for each class. But each student is a different person and you need to know them if you’re going to help each achieve their best. I want an administrative team that executes well so that our faculty has the potential to achieve their best in their roles in the Warnell School.
NEW FACULTY SPOTLIGHT

Name: Dalia Abbas
Position: Assistant Professor, Forest Certification and Sustainability, with a joint appointment with the Savannah River Ecology Lab in Aiken, South Carolina
Education: PhD, University of Minnesota; MA, University of Sussex, United Kingdom
Where I was before Warnell: Tennessee State University, Nashville
Classes I am teaching: I am scheduled to teach in the areas of forest certification and sustainability. I am also developing a course in forest products supply and value chain management.
My research interests: Forest sustainability, operations management, forest products supply and value chain, economics, life cycle assessment, trade regulations and emerging sustainable bioeconomies.
Why I came to Warnell: Warnell offers an exquisite opportunity to meet with very well experienced and established scholars in the field of forestry. It is a wonderful to be able to meet with fellows who have such an enormous set of expertise in just one place!

Name: Doug P. Aubrey
Position: Assistant Professor, Energy Ecology with a joint position with the Savannah River Ecology Laboratory, where I am physically stationed
Education: BS ’02 and MS ’04, Missouri State University; PhD ’11, Warnell
Personal: Married to LeAnn Aubrey, daughter Olivia, 13
Where I was before Warnell: Assistant Professor of biology at Georgia Southern University
Classes I am teaching: I am currently developing an online course in energy ecology that should be of interest to not just Warnell students, but to students from a variety of disciplines. In addition to that, I will be developing Maymester courses in advanced forest ecology and fire ecology that I plan to offer every other year at SREL. These Maymester courses will provide students the opportunity to directly apply course concepts to both ongoing and student-designed research projects and expose students to research quality instrumentation to quantify ecosystem processes.
My research interests: I am broadly interested in understanding how biotic and abiotic factors influence the physiology of trees and how the physiological mechanisms of trees regulate ecosystem processes. My main research themes are focused on water, carbon and nitrogen cycling in forest ecosystems. Much of my research has been related to applied bioenergy production and sustainability questions, but I am also keen to leverage the simplified ecological framework afforded by these systems to probe basic ecological and physiological processes. I am particularly interested in belowground processes and interactions between above and belowground processes.
Why I came to Warnell: The opportunity to join the faculty at Warnell and SREL represented a homecoming for me on both fronts as my first professional research position was with the USFS-Southern Research Station, where I was stationed at the Savannah River Site for four years before choosing to pursue my Ph.D. at Warnell. My time at Warnell was full of positive experiences and allowed me to build relationships with a number of great scientists. Likewise, the research potential at SRS is second to none. Joining Warnell and SREL was an easy choice, and I am delighted and proud to be back home!

Name: James C. Beasley
Position: Assistant Professor, Wildlife Ecology and Management
Education: AAS ’00, Paul Smiths; BS ’02, SUNY ESF; MS ’05, Purdue University; PhD ’10, Purdue University
Personal: Married to Rochelle Beasley, sons Matthew, 3; Michael, 1
Where I was before Warnell: From 2012-2015 I was an assistant research scientist at the Savannah River Ecology Laboratory at UGA. Prior to that position I served as a visiting assistant professor at Purdue University.
Classes I am teaching: Field and molecular techniques in wildlife research and management, wildlife in America
My research interests: My research interests are broad and address both theoretical and applied questions in wildlife ecology and management at local, national and international scales. Within this framework, much of my work is focused on understanding the effects of anthropogenic land use and other human activities on the spatial ecology and population dynamics of vertebrates, carnivore conservation and management, wild pig ecology and management, management of zoonotic diseases, and scavenging ecology.
Why I came to Warnell: What drew me to Warnell was the opportunity to be part of a group of faculty at one of the greatest institutions with a strong wildlife program in both applied and basic research. The caliber of faculty and students at Warnell makes the school an ideal place for me to develop my research program and influence future generations of scientists and natural resource managers.

Name: Cristian Rodrigo Montes
Position: Associate Professor, Natural Resources Biometrics
Education: Forest Engineering, Universidad Austral de Chile; MSC, North Carolina State University; PhD, North Carolina State University
Personal: Father of four children, married to Alejandra for 19 years. I like to play music (guitar, piano), tinker with electronics, and do landscape photography.
Where I was before Warnell: I was in Chile, working for the largest South American forest company, Arauco. There I was in charge of silviculture and genetics research for Chile, Argentina, Brazil and Uruguay.
Classes I am teaching: Timber management for undergraduates and advanced forest modeling for graduate students.
My research interests: My research deals with integrating soil, weather and tree physiology into growth and yield models.
Why I came to Warnell: Warnell has a long story of growth and yield models. The Plantation Management Research Cooperative is recognized as having the highest influence in growth modeling around the world. Being part of that is an old dream of mine. Also, I think Athens provides a very friendly environment for my family to live. So far we have being delighted with the city and especially with the people.
Changing places, new faces

The Warnell School has welcomed new staff members recently. With Dean Dale Greene taking charge in June, it was time to make some changes to other key administrative positions.

After vacating the associate dean for academic affairs position, Greene tapped Dr. Steven Castleberry as his replacement. Castleberry has been with Warnell for 15 years, teaching and researching wildlife ecology and management. Castleberry was named assistant dean of student services in 2014 but is now overseeing promotion and tenure of faculty, Warnell’s undergraduate programs, graduate programs, recruitment and placement efforts, and instructional technology.

Castleberry said he’s looking forward to serving as associate dean. “Having been a student and faculty member at Warnell, I hope my unique perspective will allow me to better meet the needs of the students, faculty and staff,” he said. “My goal as associate dean is to give everyone the resources and support they need to succeed.”

Dr. Gary Green, who has been with Warnell since 2004, has taken over Castleberry’s former position as assistant dean of student services. He will provide additional support to the associate dean of academic affairs and undergraduate programs and service. “I am truly honored to be selected for this position and I intend to serve the Warnell faculty, staff and especially its students to my utmost ability,” Green said. “My aim is to provide additional support to our students and to exemplify Warnell’s legacy — that we are a family.”

There have also been additions to the staff. Joining Greene in the dean’s office is Wendy Holland, who will serve as the administrative assistant to the dean. Holland will support Greene and handle all day-to-day activities of the office, as well as provide administrative assistance to internal and external committees and process faculty appointments. “I am thankful for the opportunity to be a part of UGA, and especially the Warnell School,” Holland said. “I work with an amazing group of faculty, staff and students. I felt welcomed right away and appreciate everyone who has helped make this my home. I look forward to a long career at Warnell and UGA.”

Lauren Hildreth (BSFR ’12, MNR ’13) has come back to Warnell to take over as student relations and outreach coordinator. Hildreth will be recruiting students, helping pre-professional students become involved in Warnell, co- advising student ambassadors, and hosting outreach events around the community and Georgia. Hildreth said she is excited to return to her alma mater for work.

“I love Warnell so much and really want prospective students to understand what fantastic opportunities are available here,” she said. “As an undergrad, I talked to several people about how fantastic Warnell is, and now I get paid to do that every day. I truly believe in the programs we offer and the professors who are here. I know graduates from Warnell are prepared to light the world on fire. It’s pretty cool seeing where my classmates have ended up and also how far spread our alumni are in the country.”

Also joining Warnell as the student and career services coordinator is Katelyn Kivett, who will advise pre-professional undergraduates, assist students in developing professional résumés and cover letters, maintain the Warnell job board, help students with career placement, and facilitate outreach events.

Kivett earned her bachelor’s degree in psychology from Appalachian State University in North Carolina and her master’s in counseling from East Tennessee State University. She said she is very excited to come to Warnell from the career services department in UGA’s Franklin College of Arts and Sciences. “While I love my career, I have said 100 times that if I could do it over again, I would major in something pertaining to forestry and natural resources,” Kivett said. “So what better a job than to assist students entering the Warnell School and seeking futures in all the careers that are so near and dear to my heart!”

Chuck Bargeron

Current Position:
Public Service Associate and Associate Director for Invasive Species and Information Technology for the Center for Invasive Species and Ecosystem Health

Education:
B.S., Computer Science, Georgia Southern University; M.S., Computer Science, Georgia Southwestern State University

Personal Info:
Married to Lori with two sons, Charlie, 9, and John Michael, 5

You were instrumental in building Bugwood.org. What was behind the development of these sites and how have they been helping people?

Originally, these information technology tools were developed to enhance existing outreach and extension programs in forest health, invasive species and integrated pest management across the Southeast. Now our team is building tools to solve problems, and the tools are becoming the outreach programs. We now have smartphone apps that report invasive Burmese pythons in the Everglades, recommend herbicide prescriptions for invasive plants in southern forests, and provide identification keys for noxious weeds in Alaska and Montana.

You’re helping integrate forestry, natural resources and agriculture with new technology. How did you get into this new area?

By accident! I view computer science as problem solving. We had a problem of educators needing high quality digital images, so we built Forestryleimag es.org to solve this. There was a need for invasive species distribution maps and electronic early detection tools, so we built EDDMapS and our suite of smartphone apps to solve that. As new problems arise, I enjoy finding IT solutions to solve them.

What kind of impact do you see these emerging technologies having on the understanding of natural resources?

When the Apple iPhone was first introduced, it was described as a phone, music player and internet communicator. We have found that a smartphone’s real power is that it is a GPS unit, digital camera, field notebook and field guide. This gives us power to document nature like never before. I think we are just at the early stages of how they will impact our understanding and management of natural resources, which is good, because I have a long career ahead of me.

What project are you particularly proud of and why?

I have always said that ForestryImages.org was my true love and passion project. Seeing it grow from 3,500 images when it was launched in 2001 to nearly 240,000 today has truly amazed me. However, over the past 10 years EDDMapS has allowed me to travel across the country and work with a great group of cooperators. In part developing EDDMapS was key to my appointment to the National Invasive Species Advisory Council, which advises federal agencies on coordination, prevention, eradication and control of invasive species.
Dr. Bob Cooper received the Creative Research Medal at the 5th Annual Research Awards Banquet held in April at the Georgia Center for Continuing Education. The award is given by the University of Georgia Research Foundation to recognize outstanding research or creative activity within the past five years that focuses on a single theme identified with UGA. Cooper was recognized for his innovative research involving advanced quantitative and other methods to assess and advance decision-making involving the conservation of bird populations.

Prescribed burning can manage tick populations, according to a recently-published Warnell study. Elizabeth Gleim, who co-authored the paper while a graduate student at Warnell, found that prescribed burning over a long period of time effectively reduces tick populations and changes the landscape of the burned areas. This was particularly important because lone star ticks are known for transmitting a number of human pathogens. Dr. Michael Yabsley was one of the co-authors of the paper.

Warnell researchers have found that tokay geckos harbor bacteria that are resistant to a number of antibiotics, making them a health concern for pet owners. Dr. Sonia Hernandez imported the geckos, which are often caught in the wild and then imported into the U.S. pet trade, and tested them for their fecal samples against common antibiotics. She and a graduate student found that the bacteria from the geckos’ intestines—known as enteric bacteria—were resistant to the antibiotics. The findings were published in a recent issue of Science of the Total Environment.

Hernandez also recently led a project with researchers at UGA and the Savannah River Ecology Laboratory that found that a contaminated mixture called Aroclor 1268 has spread beyond a yond a former chemical plant, now a Superfund site, near Brunswick. The study was the first to investigate the presence of Aroclor 1268 in fish-eating birds, and they published their findings recently in the journal Environmental Science: Processes and Impacts.

Dr. C.J. Tsai is part of the “Dogwood Genome Project,” which is creating the first complete genome sequence for dogwoods, which will enable plant breeders to use genetic markers to guide cultivation of new varieties that are as beautiful as they are strong. Part of a $1.4 million National Science Foundation grant, the project involves a number of researchers from universities across the Southeast, including Tsai.

Warnell doctoral student Jane Diener won a 2015 Sustainable UGA Outstanding Graduate Student Award from the UGA Office of Sustainability earlier this year. She was one of four members of the UGA community to be honored for going above and beyond to demonstrate dedicated efforts to conserve natural resources, advance sustainability initiatives and improve quality of life, both on and off campus.” Diener was singled out for being extremely productive in her part-time role as sustainability coordinator for University Housing, where she has implemented the EcoReps peer mentoring program and instituted advancing recycling, composting and more.

Dr. Robert Warren was honored earlier this year by Virginia Tech’s Department of Fish and Wildlife Conservation and the College of Natural Resources and Environment’s Leadership Institute, which presented him with the Gerald H. Cross Alumni Leadership Award. Warren, professor of wildlife ecology and management at the Warnell School, received both his master’s and doctorate in wildlife sciences from Virginia Tech after earning his bachelor’s at Oklahoma State University.

Sea turtle researchers at the Warnell School have been using genetic fingerprinting to unlock the mysteries of the ancient mariners, and the innovative technology developed by Brian Shamblin, an assistant research scientist, and Joe Nairn, a Warnell professor, is a key feature in the 2015 “State of the World’s Sea Turtles” report. It is produced through a partnership consisting of the Oceanic Society, IUCN Marine Turtle Specialist Group, Duke University’s OBIS-SEAMAP and a number of international organizations, scientists and conservationists. Since they started this DNA project nearly a decade ago, Warnell researchers have used what they call “CSI for turtles” to identify 7,573 sea turtle mothers in over 34,500 nests. They’ve honed their genetic tagging technique into a fine art, and in the 2015 “State of the World’s Sea Turtles” report, they discuss the benefits of using DNA to track maternal turtle lineage over traditional tagging methods.

Dr. Kamal Gandhi has received a couple of distinct honors this year: She has been named a Center for Teaching and Learning Writing Fellow for the 2015-2016 year, and she has been named a Science Policy Fellow for the Entomological Society of America, just one of five scientists across the country named to the program. As a Science Fellow, Gandhi will attend virtual and in-person educational events to learn more about science policy and funding decisions made at the federal level of government. She also will participate in conferences that focus on developing federal science policy and budgets, help draft policy statements and meet with legislators. As a writing fellow, she’ll be one of 12 UGA faculty members to meet regularly and discuss the most effective ways to teach and respond to student writing.

Dr. Gary Grossman has been named an American Fisheries Society Fellow, which honors members who have made outstanding or meritorious contributions to the diversity of fields that are included in the American Fisheries Society. Contributions can include, but are not restricted to, efforts in leadership, research, teaching and mentoring, resource management and/or conservation, and outreach/interaction with the public.

Dr. Punnet Dwivedi just published a report that explains that many Southern African-American forest landowners are not participating in federal assistance programs because of a mistrust of the government, unclear property titles and inability to pay required up-front costs. Published in the journal of Forestry, Dwivedi’s study looked at what African-Americans and other stakeholder groups think about these programs. These results are a major advancement to existing understanding about low participation rates, Dwivedi said.

Dr. Karl Miller was featured recently in the “Whitetail State of the Union 2015” report, where experts discussed the challenges and issues facing the whitetail deer population. It aired on the Sportsman’s Channel.

Proponents of certain hunting strategies and others who support hunting have brought about a large amount of controversy surrounding the topic in recent years. But for those who enjoy hunting, the sport can be rewarding and offer a sense of adventure and camaraderie with others who share the same interest. To further support and promote the sport of hunting, the Georgia Department of Natural Resources has created a website called www.georgiawildlife.com/rut-map. This website allows hunters to access information about the rut dates for deer in their area. The map can be found online and downloaded at the Georgia Department of Natural Resources’ website, http://www.georgiawildlife.com/rut-map.

The map can be found online and downloaded at the Georgia Department of Natural Resources’ website, http://www.georgiawildlife.com/rut-map.

Now’s the time to be on high alert for deer in the road. Warnell researchers recently published a paper that outlines a county-by-county analysis of when motorists should be more aware of possibly hitting a deer. Recently published in the Journal of the Southeastern Association of Fish and Wildlife Agencies, the study analyzed deer-vehicle collisions from 2005 to 2012 and then compared the timing of those wrecks with available conception data, deer movement information obtained from deer wearing GPS collars in Harris County and the old “rut map” from Georgia Outdoor News.

James Stickles led the study while earning his master’s degree here at Warnell. Now an assistant deer coordinator for the Florida Fish and Wildlife Conservation Commission, Stickles worked with Warnell’s Robert Warren, David Stone, Charles Evans, Karl Miller and David Osborn; and Charlie Killmaster from the Georgia DNR. The project was funded by the Georgia DOT, and became a hot news topic in October when the findings were released in time for the start of rut season.

According to the study, between 2005 and 2012, there were 45,458 reported deer-vehicle collisions across all Georgia counties. Stickles hopes the information will be used to warn drivers in relevant times to be more aware of deer in the roadway, particularly as the study found that peak rut season can be drastically different depending on where you are in Georgia. “Depending on your location in Georgia, peak rut may occur anywhere from October to December,” Stickles said. “By knowing deer movement dates in specific areas, email blasts and other warnings to be more vigilant of deer can be distributed before, and during, times when deer-vehicle collisions are most likely to occur.”

The Georgia Department of Natural Resources is already using the new map created by UGA to inform hunters of peak rut dates. The Georgia DOT is also considering using this map to develop specific motorist warnings for each region.
**International research team finds thriving wildlife populations in Chernobyl**

By VICKY L. SUTTON-JACKSON

Public Relations Coordinator, Savannah River Ecology Lab

A team of international researchers has discovered abundant populations of wildlife at Chernobyl, the site of the 1986 nuclear accident that released radioactive particles into the environment and forced a massive evacuation of the human population.

Published in the journal *Current Biology*, the researchers report the site looks more like a nature preserve than a disaster zone — abundant with moose, roe deer, wild boar and wolves — nearly 30 years after the world’s largest nuclear accident. The research team included James Beasley, assistant professor of wildlife ecology at the Savannah River Ecology Laboratory and the Warnell School.

Previous studies in the 1,621-square-mile Chernobyl Exclusion Zone showed evidence of major radiation effects and significantly reduced populations of wildlife. For the first time since the Chernobyl accident, researchers have long-term census data that reveal thriving wildlife populations in the zone.

“Our data are a testament to the resiliency of wildlife when freed from direct human pressures such as habitat loss, fragmentation and persecution,” said Beasley, a co-author on the study. “The multi-year data clearly show that a multitude of wildlife species are abundant throughout the zone, regardless of the level of radiation contamination.”

“This doesn’t mean radiation is good for wildlife, just that the effects of human habitation, including hunting, farming and forestry, are a lot worse,” said Jim Smith, a professor of environmental science at the University of Portsmouth in the U.K. and the team’s coordinator.

The study results show that the number of moose, roe deer, red deer and wild boar living in the zone are similar to numbers in nearby uncontaminated nature reserves in the region.

he census data on wolves in the area indicate they are seven times greater in number than those living in the nearby reserves. Aerial census data collected from 1987-1996 reveal rising numbers of moose, roe deer and wild boar in the zone.

The study’s lead author, Tatiana Deryabina, a wildlife ecologist at Polissye State Radiocological Reserve in Belarus, has been “working, studying and taking photos of the wonderful wildlife in the Chernobyl area for over 20 years, and I am very pleased our work is reaching an international scientific audience.”

Additional co-authors on the study include Thomas Hinton, Institute of Environmental Radioactivity, Fukushima University, Fukushima, Japan; Sergey Kushmel, Polissye State Radiocological Reserve, Choiniki, Belarus; Liubov Nogorskaya, Academy of Sciences of Belarus, Minsk, Belarus, and Adelaide Lerebours, University of Portsmouth, Portsmouth, U.K.

The study was funded by the National Environmental Research Council, Environmental Agency and Radioactive Waste Management Ltd.

**Mature, fast-grown southern pine trees produce quality lumber, Warnell study shows**

Dahlen is very keen on testing wood sawn from other stands located throughout the region and expanding the focus of future studies. “This study looked only at properties of the lumber tested in bending,” he said. “However, other properties are important including the ratio of juvenile wood to mature wood and how it impacts lumber properties, testing lumber in tension, tracking warp in lumber during drying, and testing whether intensively grown wood has greater or lesser amounts of compression wood and its effect on lumber processing.”

Mature, fast-grown southern pine trees produce quality lumber, Warnell study shows

Dahlen wishes he had more funding and more time. When the Southern Pine Inspection Bureau changed the standards for visually graded southern pine lumber two years ago, there was a surge of confusion about the reasons behind it.

There were different theories why the design values changed, but they were largely anecdotal with few hard facts. And this lack of information spurred the forest industry to investigate the quality of lumber produced from mature, fast-grown trees. If Dahlen had more funding and time, he could take a look at how lumber properties vary across the entire Southeastern U.S., but for now he could only look at lumber cut from five stands located on the Lower Coastal Plain of Georgia. And his first study shows that mature stands that are between the ages of 24 and 33 in this region are producing quality lumber.

So why did the Inspection Bureau change the design values? It’s largely because they found through mechanical testing that visually graded Southern pine lumber cannot safely carry the same loads as before. But that didn’t answer why the material properties had changed. The bureau sampling focused on testing lumber available in commerce and not on investigating the underlying raw materials used to source the lumber, Dahlen said.

Many suspected that the methods used to grow trees faster — through site preparation, early competition and weed control, fertilization, genetic selection and reduced planting densities — were the reason for the changes in design values.

Dahlen, an assistant professor and director of the Wood Quality Consortium, was looking for answers.

In a new study conducted in conjunction with Plum Creek Timber Company and Varn Wood Products LLC and recently published in the *European Journal of Wood and Wood Products*, Dahlen found that Southern landowners are producing high quality lumber from fast-grown trees. He and his research team harvested Plum Creek trees from intensively managed plantations and then tested the lumber bending strength and stiffness according to ASTM International testing standards. They then compared the results to the previous and current design standards.

The lumber, Dahlen said, were not only stronger than the current design values put in place two years ago, but also comparable to the previous design values. “We found that the lumber produced from these stands, which are amongst the fastest growing operational stands in the Southeast, had high quality when tested in bending,” he said. “As demand for wood increases it is critical that the growth of wood be accelerated to sustainably meet this demand. But at the same time the acceleration of growth should not compromise wood and product quality.”

**Photo courtesy of Joe Dahlen**
Warnell study: Natural wilderness areas need buffer zones to protect from human development

D espite heavy development, the U.S. still has millions of acres of pristine wild lands. These wilderness areas are coveted for their beauty and draw innumerable outdoor enthusiasts eager for a taste of primitive nature. But these federally protected nature areas have a problem: Their boundaries have become prime real estate. People have built homes close to national parks, forests and wilderness areas for the same reasons these systems have been left protected from development — for the natural beauty and opportunities for outdoor recreation. This construction and growth near the National Wilderness Preservation System is beginning to degrade the quality of these lands and erode biodiversity. We need buffer zones, Warnell researchers say.

“People like the idea of having a national forest in their backyard,” said Lauren Ward, a Warnell graduate student. “But from over-applying lawn care chemicals to introducing invasive plant and animal species, landowners’ choices can have far-reaching negative impacts on neighboring wilderness areas.”

In an article published in the journal Illuminare, Ward and Dr. Gary Green propose that federal agencies overseeing these wild areas begin creating buffer zones to help wilderness managers better preserve and protect them. Encroachment into wilderness areas will only help wilderness managers establish five zones around these protected areas:

• A central “core zone” where all human activity would be banned;
• A zone surrounding the core to be used for scientific research and environmental education;
• Cultural and historical zones that would allow managers to protect and improve the unique qualities of each site;
• A recreation zone where all users would be allowed for outdoor play;
• A buffer zone surrounding them all to help minimize outside impacts. In some cases, it might be necessary to work cooperatively with private landowners around wilderness areas.

Studies show that buffer zones may be needed. Research shows that places near protected wilderness areas have had an upick in population, and one study found that the number of houses built within 30 miles of these lands will increase by 10 million from 2000 to 2030. This trend not only would convert undeveloped land into human-occupied property, but it would also lead to the development of more roads and utilities to support those people now living close to these protected lands, Green said. Once roads are in place, people who would normally have been unable to visit these areas would be more likely to visit.

“Wilderness is easy to destroy, but it is nearly impossible to re-create. Americans should continue to protect natural wild lands for future generations to enjoy,” Ward said.

BMPs working well at minimizing water quality problems, study finds

W e’ve come a long way. Best Management Practices today are lightyears ahead of what they were in the 70s, Dr. Rhett Jackson says, particularly when it comes to water quality. And a new study has produced three more research papers that back him up.

The work by Jackson and collaborators demonstrates that modern BMPs in the Southeast are working well at minimizing water quality issues that might be caused by clear-cutting and stand establishment. BMPs are not just protecting streams from herbicides, but also sediment, nitrogen and other nutrients, and thermal pollution.

“Since BMPs were first implemented in the 70s, states have continued to use new research to refine their guidance,” Jackson said. “This study both supports the 1999 BMP manual and identifies some areas for emphasis.”

The findings from what is called the Dry Creek study have been published in three journals: Transactions of the American Society for Agricultural and Biological Engineers, Hydrological Processes, and Forest Science.

The goal was to assess the effectiveness of the BMPs recommended in the 1999 Georgia forestry manual. Working with International Paper, the National Council for Air and Stream Improvements, and other researchers from Clemson, Florida and Florida A&M, Jackson focused on something that’s just not done that often: Paired watershed studies. Both expensive and time consuming, paired watershed studies typically only look at one pair, but Jackson focused on two pairs on the former IP Southlands Experimental Forest near Bainbridge, Georgia.

Studies show that buffer zones may be needed. Research shows that places near protected wilderness areas have had an upick in population, and one study found that the number of houses built within 30 miles of these lands will increase by 10 million from 2000 to 2030. This trend not only would convert undeveloped land into human-occupied property, but it would also lead to the development of more roads and utilities to support those people now living close to these protected lands, Green said. Once roads are in place, people who would normally have been unable to visit these areas would be more likely to visit.

“Wilderness is easy to destroy, but it is nearly impossible to re-create. Americans should continue to protect natural wild lands for future generations to enjoy,” Ward said.

Among the “interesting” findings:

• Even before harvest, these four apparently similar watersheds did not behave similarly, due to unseen complexity in groundwater flows.
• Timber harvest makes a watershed wetter by reducing total plant transpiration and reducing the amount of rainfall "intercepted" by the canopy and evaporated before reaching the ground. At Dry Creek, average streamflows in the clearcut watersheds increased substantially and water tables rose, creating seeps that were a possible mode of transport of nutrients and herbicides from the harvest/plantation area to the streams.

After harvest, sediment concentrations stayed the same, indicating that BMPs were successful in preventing the movement of sediment from the harvest and planting areas to the streams. However, because of higher streamflows, sediment exports from the harvested watersheds increased. Paradoxically the only way to keep sediment exports from increasing after harvest is to reduce concentrations in the streams. The results also clearly showed that the variability of sediment concentrations and exports was driven mostly by inter-annual variation in rainfall.

Both of the treated watersheds featured a small area of row crop agriculture in the headwaters on another landowner’s property. Nitrogen concentrations in the stream were quite high below the farmland, and nitrogen concentrations diminished rapidly going downstream due to either dilution by clean groundwater or biochemical processing. Nitrogen concentrations in streamflows did increase slightly after harvest, but these changes were very small relative to the nitrogen concentrations coming from upstream, and concentrations still decreased going downstream. The results indicated that forested watersheds are very conservative of nitrogen, releasing far less than enters the watershed by atmospheric deposition.

Herbicides used in forestry bond strongly to soils and organic matter, so they don’t move much if they have time to bond between application and the next rainfall. In the first two or three storms following application, investigators detected short pulses of pesticides of less than seven parts per billion (slightly above the level of quantification). These levels are a tiny fraction of concentrations that have been shown to have ecological effects.
Warnell researchers investigate Southern Pine Decline

Story by SANDI MARTIN

At first it was just vague reports. Then came whispers about something happening to pine trees. For decades, people simply talked about strange deaths that no one could explain — until someone put a name on this scary phenomenon that was allegedly lurking in Southeastern forests.

But was Southern Pine Decline actually happening?

Dr. Kamal Gandhi doesn’t think so. By the time the Warnell associate professor was called in, land managers and foresters were outright concerned that unexplainable die-off was happening, which if true could have untold consequences to the economic fortunes in what is called the “wood basket of the world.”

“No one freak out,” Gandhi said bluntly. “There are some pine health issues that need to be addressed, but Southern Pine Decline isn’t one of them. There are a whole bunch of factors we need to consider at the local instead of regional level.”

So what’s really going on?

If a pine tree dies alone in the woods, did anyone see it?

Back in the 1950s, some mature stands of loblolly pine in Alabama died, kickstarting years of reports of “unexpected” levels of landscape-scale tree mortality. Over the past half century, these deaths have been called lots of things: loblolly pine die-off, pine decline, dieback, and just “decline” in general. But recently, a new name popped up: Southern Pine Decline.

Although some believed those so-called “unexplained” deaths may have actually been caused by root-feeding weevils and associated fungi, concern about the possible deterioration of pines across the Southeast prompted those at the state and federal level to take notice as concern and discussion about Southern Pine Decline became widespread. People had begun questioning modern management techniques, wondering if they were to blame. And they were afraid that a crop they counted on for income would be wiped out for seemingly no reason.

Loblolly, longleaf, shortleaf and slash pine form the backbone of the Southern forest industry, whose prominence in global forest products markets grows every year. In Georgia alone, the forest industry supports more than 50,000 jobs and generates more than $365 million in revenue, according to an annual report by the Georgia Forestry Commission. Loblolly, in particular, is especially important to the forest industry as the source of wood pellets, lumber and paper, among other wood products.

A widespread decline of pine across the South would have had unimaginable costly implications for the industry. “Landowners became concerned,” said Dr. David Coyle, a post-doctoral researcher at the Warnell School. “If widespread southern pine decline was real, then landowners wondered if they should change their management practices or even not grow loblolly if those trees were just going to die.”

Gandhi was called in three years ago as more reports began rolling in, pointing to Southern Pine Decline.

(Story continues next page)
Pine Decline, and officials became rightly interested and concerned. The Georgia Forestry Commission and the U.S. Department of Agriculture’s Forest Service wanted someone to look at the actual hard data and figure out what was going on.

As a recognized expert in pine health, Gandhi was a natural choice to look at the issue. But at the time, she said, she knew virtually nothing about this supposed phenomenon. “That’s one of the reasons I was brought into this project,” Gandhi said. “Because I was impartial.”

Gandhi got to work.

Proof is in the pages

The task that lay before Gandhi was not an easy one. She and the rest of the research team started by pulling the actual data collected by the U.S. Forest Service.

The Forest Inventory and Analysis Program is unbelievably detailed, encompassing everything from forest location, size, tree growth, mortality, and how many trees are harvested to species. It provided everything researchers needed to look at 5,396 forest plots to calculate tree growth and mortality.

Gandhi and Coyle worked with Brittany Barnes, a research coordinator at Warnell; Dr. Larry Morris, a professor in the Warnell School, and Forest Service scientists Kier Klepzig, Frank Koch, John Nowak, William Otomsina and William Smith.

The research team spent three years looking at these data, as well as going out into the field and comparing healthy and unhealthy-looking pine stands. They measured more than 1,200 individual trees for multiple factors, analyzed soil nutrients, and collected root samples to see if fungi were present.

They spent hours poring over the data, looking for patterns in tree mortality rates and reviewing pine health issues in the Southeast. They were looking for anything to prove that these trees were dying off for unknown reasons.

What they found instead was an explanation. Most of the trees thought to have died off for seemingly no reason actually were killed by something identifiable — fire, insects, weather or invasive vegetation.

The team recently published their findings in the journal Forest Ecology and Management, conclusively stating that Southern Pine Decline isn’t happening on a large scale. In the paper, the team outlines what they believe are factors that can combine to cause a progressive deterioration in pines, said Gandhi.

Their research found that only a very small percentage of pine plots across the Southeast were dying off anyway, Gandhi said, about three percent. And we know why.

“When a lot of different factors contribute to tree death, and the primary one isn’t obvious, it’s easy for people to lump everything together and call it a ‘decline,’” Coyle explained. “Decline is a nebulous term that lumps many different things together, some of which can cause tree death on their own, and some that work with other factors to cause death.”

They also don’t believe root-feeding weevils and the fungi they bring with them are behind the tree deaths. “Everywhere you find dead or drying trees, you are going to find certain things, including these beetles and a certain group of root-infecting fungi,” Coyle explained. “It doesn’t necessarily mean these organisms caused the tree to die.”

So what’s really going on?

There are definitely environmental factors that do affect tree health, Gandhi said. These include site and soil conditions, drought, climate change, insects, pathogens and natural aging of the trees.

“In many instances, it’s really the interactions between the above factors that are affecting trees at small scale, especially as related to inadequate management practices,” Gandhi said.

Barnes said they’ve been collecting extensive data about pine health issues for years on other projects, and so far, it doesn’t look like the fungi is something that should be feared. “Our tentative results show that at least some of these fungi are in healthy and unhealthy stands and are not a threat to our Southern pine forests,” Barnes said. “These fungi are widespread but not deadly.”

Keep on, keep on

Land managers should not panic, Coyle said, and they should keep on doing what they’ve been doing.

Standard management practices are working just fine, he explained. Common, accepted management for Southern pines includes thinning when forests get too thick, weed control of some kind — usually prescribed fire, and in some cases, fertilization. Thinning is particularly good for forests as it allows the remaining trees to better use the water and nutrients present.

“There isn’t a big problem,” he said. “Stay the course and use established management practices.”

The majority of the management techniques that improves the health of forest stands will be more resilient to pest activities in general, he added.

The research group has created a website — www.sph.uga.edu — to provide foresters and landowners with up-to-date information and science on a variety of pine forest health issues.
Joe Vaughn

Joe Vaughn was on the verge of dropping out when Google stepped in. The 23-year-old forestry student was feeling a little out of sorts just a couple of years ago. While a freshman at Gordon State College, he felt overwhelmed and homesick and was running himself ragged on the cross country team. Majoring in history, classes were not going well. Overall, he said, “I was frustrated that I wasn’t enjoying school, something I had to do if I wanted to be productive in the workforce.”

What he decided he wanted was an environmental internship that would get him some work experience. So he hit up Google, and found the Student Conservation Association, which led to an alternative spring break program at Grand Teton National Park held in conjunction with the National Park Service.

Vaughn didn’t know it, but that search changed his future.

Growing up, Vaughn said he was always a bit of a loner — his dad worked away from home a lot and he sometimes found it hard to make friends. Being outside alone was never a problem, and he was always able to entertain himself. But Vaughn had never considered making that love of the outdoors his career. Inspired by his mother, a special education teacher, Vaughn had decided to one day teach history.

Obviously, Vaughn’s plans changed. After he signed up for the SCA-NPS Academy, he made his way to Wyoming where he was introduced to fire ecology. Through the program, he and other students from around the country learned about the NPS’s mission, park resources, career paths within NPS, and leadership and team building skills.

After that spring break, Vaughn said, he knew he didn’t want to be a history teacher anymore. He felt reinvigorated. “I redefined myself with a new motivation,” Vaughn said. “I put forth a strong effort to obtain a job as a wildland fire fighter where I could use my forestry background, my love of the outdoors to pursue a job I would love to do to day to day.”

He has continued to work for the Grand Teton National Park, as a fire effect monitor and as a forestry technician. At one time stationed in Blackrock on the Bridger-Teton National Forest, Vaughn has been part of a team that specialized in fuel reduction and fire suppression and managing fire for natural resource benefits. He’s run chainsaws daily in thinning and prescribed fire projects, assisted in burning operations using drip torches, and collected data on fire and weather for managed wildfires.

“I think I work and live in the most beautiful national park with some of the best recreational activities around the country learned about the NPS’s mission, park resources, career paths within NPS, and leadership and team building skills,” Vaughn said.

After that fortuitous spring break, Vaughn took classes at the University of North Georgia, then transferred to Oregon State University for a semester. It was a chance encounter with a Warnell alumnus that brought him to UGA. Hanging out with friends of his girlfriend, Vaughn learned about Warnell’s prescribed burning classes and transferred earlier this year. He hopes to graduate in December 2016.

After that “My end goal is to become the superintendent of Grand Teton National Park, but after I graduate I’ll have to start somewhere that will allow me to climb the ladder to get to that point,” he said. “I think I’ll have the opportunity to work as a wildland fire fighter with more involvement with fire ecology. This really appeals to me because I’m getting to do my part in conservation and making sure that our fire program is utilizing the best practices they can when managing fire.”

Jenna Stockton

For a while there, Jenna Stockton was being pulled in opposite directions. Part of her childhood spent near a Rhode Island beach instilled a love of the ocean. But as an undergraduate at the University of Mary Washington, Stockton discovered a love of soils. The Warnell master’s student finally decided to trade her marine biologist career aspirations in favor of becoming a soil scientist.

But the seeds were planted much earlier — not just in Rhode Island, but also in Colorado, where she spent most of her life. Stockton, 23, has had a circuitous route to Warnell. When she was young, she and her mom lived in Rhode Island near a beach. Her mother would hold ecology workshops for kids to teach about the environment and coexisting with wildlife. When they returned to Colorado, Stockton thought she’d be a marine biologist, and the importance of a sustainable environment was reinforced every day through her mother and the natural resources conscious community in Colorado, she said. “It was easy to know that I was going to do something related to environmental science,” Stockton said. “I was constantly outside hiking in the mountains, becoming more and more connected to the environment with every adventure.”

But it wasn’t until she went on a field trip to Catalina Island in high school that she began to suspect that she may be more interested in the land than the ocean in front of her. Her first semester at UMW, she said, changed her mind and she switched her major to environmental geology. Then a summer at Science Institute program insted her to soils. Working under a soil scientist at summer, Stockton became immersed in a project focused on analyzing soils contaminated by acid mine drainage.

Now she’s working with Dr. Dan Maskewitz and Dr. JP Schmidt in the Odum School of Ecology on a project that could have far-reaching implications on analyzing soil. They’re doing this by constructing a predictive model using the soil’s spectral signature within the visible to near-infrared range and previously tested carbon values to predict carbon in the field. This technique will allow people to predict carbon and eventually other soil nutrients and characteristics in the field without having to take their soil samples to a lab to be tested, saving time and money.

Stockton expects to graduate early next summer. After that, she’s open to relocating to a region that would give her an opportunity to solve environmental issues. Exploring the world and its ecosystems still has a huge pull, she said. So she’s looking at international jobs and internships for post-graduation, “to quell my curiosity and to learn all I possibly can of the world’s soils and overarching environments. By doing so, I could provide better impact in improving some of these ecosystems with what I have learned from not only Warnell, but other parts of the world.”

“Soil is considered to be one of the building blocks to all things living,” she said. “Without proper care, life on this planet would be difficult.” Stockton was hooked. She looked for a good forestry graduate program — and found Warnell, not only because of the positive feedback from her UGA-grad stepmother, but also because of its proximity to so many diverse geographic areas. Warnell offered Stockton the best of all worlds: a great forestry research program, a thriving university campus and a music scene unmatched across the U.S.

Now she’s working with Dr. Dan Maskewitz and Dr. JP Schmidt in the Odum School of Ecology on a project that could have far-reaching implications on analyzing soil. They’re doing this by constructing a predictive model using the soil’s spectral signature within the visible to near-infrared range and previously tested carbon values to predict carbon in the field. This technique will allow people to predict carbon and eventually other soil nutrients and characteristics in the field without having to take their soil samples to a lab to be tested, saving time and money.

Stockton expects to graduate early next summer. After that, she’s open to relocating to a region that would give her an opportunity to solve environmental issues. Exploring the world and its ecosystems still has a huge pull, she said. So she’s looking at international jobs and internships for post-graduation, “to quell my curiosity and to learn all I possibly can of the world’s soils and overarching environments. By doing so, I could provide better impact in improving some of these ecosystems with what I have learned from not only Warnell, but other parts of the world.”
Warnell Weekend a hit with largest crowd ever

When Warnell Weekend launched in 2012, organizers were hoping to give parents and alumni a little taste of what students experience every day.

People must like what they’re seeing, because what was a small crowd the first year grew to a hundred visitors this past April for the fourth annual Warnell Weekend. It’s incredible to see how popular the spring event has become, said Alumni Director Emily Saunders, and we’re excited about the possibilities of continuing to share the “Warnell experience” with our families, alumni, prospective students and friends.

“Our classrooms were overflowing with alumni, parents and prospective students this past year,” Saunders said. “Visitors even braved a rainstorm to participate in the outdoor lab activities — we are a natural resource program after all! It has been exciting watching the popularity of this event grow over the years, and we’re making plans to celebrate our 5th Warnell Weekend in April 2016!”

Warnell Weekend kicked off with the annual Spring Awards Banquet, where we distributed $175,000 in scholarships and awards to deserving students (see Page 28 for more information). But festivities ramped up the next day with tours, class lectures, field labs, and lunch with Dean Dale Greene.

Saturday offered visitors the chance to attend the G-Day Game, or they could tour Whitehall Mansion and then attend The Wildlife Society’s annual supper, which has become the premier concluding event for the weekend. Organizers of the Wildlife Supper have begun timing the feast to coincide with Warnell Weekend. “The student chapter of The Wildlife Society is thrilled to have their annual Wildlife Supper in conjunction with Warnell Weekend,” said Dr. Steven Castleberry. “Students are excited to bring their parents to see Whitehall Forest, meet the faculty and staff, and of course, try the food. Alumni that come back for Warnell Weekend also look forward to reliving their days at the Wildlife Supper.”

Warnell Weekend will continue next year, and Saunders and other organizers are already thinking of new ways to spice up festivities. Check back on warnell.uga.edu to see what new activities will be offered!

Photos by Wade Newbury
Without alumni and friends like you, we would not be able to provide our students and faculty with extraordinary academic programs and opportunities to better themselves and our communities. Your support helps us recruit top students and faculty, upgrade our facilities, and enable groundbreaking research. Consider joining us and providing the best possible future for the Warnell School of Forestry and Natural Resources. There are many ways to give back, and we would love to help you discover how you can make a meaningful impact.

Learn more online at Warnell.uga.edu/giving or contact the Office of Alumni Relations and Development.

Emily Saunders, Alumni Relations and Annual Giving
esaunder@uga.edu
(706) 542-1465

Warnell Ph.D student part of new human species discovery

By STEPHANIE SCHUPSKA
Public Relations Coordinator, UGA Public Affairs

It was day 21, the last day of the 2013 Rising Star Expedition, and Hannah Morris crouched next to a long bone, hands sweeping soil away as bone slowly emerged from the cave wall. She was hoping to free one last piece in the excavation area in the Dinaledi chamber before heading back to the U.S.

The Warnell Ph.D. student was slowed by a juvenile mandible fragment, a jawbone coming into view with each sweep of her brush. Ultimately, she began her 30-minute-plus climb out of the cave, where she squeezed back up a narrow chute, rappel down Dragon’s Back, walk through a large cavern and then kneel down and low crawl through Superman’s Crawl.

The chute narrowed to about seven inches high in some places, and Morris’s ability to fit — she has years of experience caving and climbing — was one of the reasons she was chosen for the expedition. And it made her part of a sensational research project that tantalized the world: the discovery of a new human-like species that is "challenging the ways we think of what it means to be human," she said.

Two cavers were the first to uncover Dinaledi. They contacted Lee Berger, a research professor at the University of the Witwatersrand in Johannesburg and an explorer-in-residence for National Geographic. He initially hoped the group would uncover one complete skeleton. In the days that followed, they found 15 individuals ranging in age from infant to elderly and removed more than 1,500 bones.

Morris’s trek to the “chamber of stars” started a lifetime before her trip to South Africa. As the daughter of a geology professor living just above Rome, she spent much of her time outside.

At UGA, she became interested in archeology — she graduated in 2007 with her bachelor’s degree in anthropology — and “has excavated in some unique and extreme circumstances,” she said, “so I think all of this personal and professional history, these random things, just came together in a cool way.”

This fall, Morris started her doctorate as an ICON, or integrated conservation, student in the Warnell School and is studying under Dr. Elizabeth King, a restoration ecologist and assistant professor. She obtained her master’s degree in anthropology from Ohio State University in 2012 after spending a few years, she says, as a shovelbum, working in Alaska, New York City with the American Museum of Natural History, Mexico and the southeastern U.S.

While she loves excavating and caving and all things involving a dig, she’s set her academic sights on a Ph.D. in determining the implications of human actions on vegetative ecosystems.

"Basically, I’m looking at land-use history—combining a lot of things from archeology and ecology to look at how land use in the past affects ecosystem functioning, and in particular, how it’s affecting vegetation.”
Warnell honors students with scholarships, awards at 2015 Spring Awards Banquet

The Warnell School honored dozens of students at the 84th Annual Spring Awards Banquet in April, celebrating the achievements of scholarships and awards. These annual honors are made possible by generous supporters who help fund our educational programs. Also recognized at the awards banquet were faculty members who have won several recent distinguished honors.

“The tremendous support we get from our donors allows us to provide a large number of awards and scholarships that directly benefit Warnell students,” said Dr. Steven Castleberry, associate dean and past chair of the honors and awards committee. “This year we awarded about $175,000 to deserving Warnell students. We are extremely proud of these students and grateful for the support from our donors that make it possible.”

B.E. Allen Scholarship
Melina Stuckey

Alumni Scholarships
New Freshman: William Anderson & Will Jackson
New Professional: Lauren Lance, Camilla Sherman, Chey Sikes, Kayla Smith, & Emily Strohan
Continuing: Jennifer McDaniell, Connor Rayen, & Jordan Seger
Earl D. & Wanda Taylor Barrs Entrepreneur and New Freshman: Judith Fitzgerald Brooks Memorial Scholarship
Arnett C. & Ruth Mace Memorial Scholarship
Continuing: Jennifer McDaniel, Connor Rayen, Davis-Hollcroft Family Forestry Scholarship
Charles A. & Rose Lane Leavell Scholarship
Chris Silcox, Kayla Smith, & Emily Strahan
Martha Love May Memorial Scholarship
Jennifer Bloodgood

National Wild Turkey Federation, Georgia Scholarship
Jared David May
Adlene C. & Tilden L. Norris Endowed Scholarship
Alyson Babcock & Bradley Coley
J. Reid Parker Memorial Memo Scholarship
Shelby Toller
Archaeo E. Patterson Endowed Scholarship
Tara Garcia Crawford, Aaron Johnson, Jace Nelson, Connor Rayen, David Grasman, & Tiffany Vidal
Robert W. & June C. Porterfield Memorial Scholarship
Jennifer Bledsoe
Emre E. Egevot Scholarship
Dalton Brown, Blake Hendley, & Cody Knight
N.E. Georgia Quail Unlimited Scholarship
Alex Jackson
William R. Rye Scholarship
Benjamin Candel, Jared David May, Hunter Prince, & Samantha Varallo
Continuing: Emily Bide & Forrest Banks
Gerald B. & Charlotte Alexander Saunders Scholarship
Elizabeth Hincher & Jacob Key
Society of American Foresters, Georgia Division Scholarship
Stephen Wright

Sponsored by Plum Creek wooded properties

Snook and Partners chimpanzee in field

Olinde XC Center Scholarship
Alex Jackson

Excellence in Ornithology: Andrew R. Little
Suzanne C. rattlesnake in field

Excellence in Wildlife Conservation: Tara Satterfield
C.M. & Bertha C. Stuping Freshman Scholarship
Brooks: Ryans Templeton
Professional: Joseph-P. Vaughn
Study Abroad Scholarship
Kiera Bailey
Supreme Pine Products Scholarship
Carli E. Erk
H.M. Mac Thompson Scholarship
Sarah Adams
William N. Thompson Distinguished Scholarship
Gregory J. Klaas
Tour Unlimited Cold Water Fisherman Scholarship
Alex Keen & John Perry
Knoe and Kathryn Wyatt Memorial Forestry & Natural Resources Scholarship
Andrew R. Little

Young Alumni Scholarship for Leadership & Training
Kirra Bailey, Emily Bide, Shannon Curry, Kathleen Garcia, Lauren Millerhahn, Shallan Orrin, Blake Sherry, Abby Sterling, Matt Urchin, & Sarah Welter
Scott Zabel Memorial Scholarship
Kevan Lee

Continuing: Dara

Freshman: Ryan Templeton

Study Abroad Scholarship

Warnell Outstanding Teacher Assistant Award
Luis Candanedo & Brian Crawford
Warnell Outstanding Teaching Assistant Award
Sarah Hinley & Rachel Hughes
Warnell Ambassador of the Year
Kirra Bailey
Presidential Award of Excellence
Becky Lynn

Plum Creek golf tournament rousing success for seventh year

The seventh annual Plum Creek Charity Golf Tournament had perfect weather this year, and with the support of generous sponsors it raised nearly $110,000 for the Harley Langdale, Jr. Center for Forest Business. Hosted by one of Warnell’s most enthusiastic supporters, the annual fundraiser drew dozens of alumni and friends to the Georgia Club just outside of Athens. The 2015 tournament proceeds will benefit Center for Forest Business Support Fund in the UGA Foundation. Dean Dale Greene noted that, “Plum Creek’s generosity through the Golf Tournament sponsorship, employment of interns and Warnell graduates, and cooperation on research projects and cooperative defines a true public-private partnership. We are extremely grateful to Plum Creek CEO Rick Holley and his team for their recognition of the Langdale Center for Forest Business and their continued strong support of the Warnell School of Forestry and Natural Resources.”

Special thanks to our tournament Co-hosts:

Deltic Timber Corp
Enviva, LP
Gay Wood Co., Inc.
Georgia-Pacific
Graphic Packaging International
Interstate Paper LLC / Newport Timber
Resource Management Service, LLC

Superior Pine Products Co
B & S Air / G&C Fertilizer

Sponsoring companies:

Forest Investment Associates
Forest Resource Consultants, Inc
G&C Fertilizer
Timberland Investment Resources
WestRock
Canfor
F&W Forestry Services, Inc
Forest Landowners Association
Hancock Timber Resource Group
Interfor

AGHON
Queen Brandon & Shae Mathews
Blue Key Honor Society
Vis Anderson & Andrew R. Little
Outstanding Senior in Forestry
Alex Cummins
Outstanding Senior in Wildlife
Kylia Buck
Outstanding Student in Natural Resources Recreation and Tourism
David Salvino
Warnell School Faculty Award
Agibal Abuduqan
UGA Outstanding Graduate Teaching Assistant Award
Luis Candanedo & Brian Crawford

Photos by aDen Newbury

2015 Fall Student News
A time to be thankful

By BRIDGET HARDEN

Returning to the Warnell School of Forestry and Natural Resources has been a sort of homecoming for me. This is an exciting time at the school, and I have enjoyed reconnecting with alumni and friends. Warnell has made great progress, and while some things have changed, I have noticed that the sense of family among the school’s community has remained as strong as ever.

As we enter the Thanksgiving season, it is only fitting for me to express my gratitude for this family and the generous support you have provided. So, I would like to highlight just a few examples of the impact of your support for which I am grateful.

I am thankful for…

…all who supported Warnell with a gift in fiscal year 2015.

The University of Georgia had a record-breaking year in private fundraising, and I am proud to say that many of you played an important role in that effort. Our numbers are consistently improving, and this support has had an enormous positive impact upon our students and the school. Special thank you to the Harley Langdale Jr. Foundation for their generous support of the Center for Forest Business.

…our generous scholarship donors.

During spring 2015 we awarded more than $175,000 in scholarships to undergraduate and graduate students at the 84th annual Spring Awards Banquet. More than 90 recipients of scholarships and awards were recognized at this event, and many scholarship donor representatives attended the banquet to present the awards.

…the Young Alumni Committee who recently named a classroom to support renovations and technology upgrades for the space.

Every year, the Young Alumni Committee allocates proceeds from the Reid Parker Memorial Golf Tournament to support the school. Thanks to a generous donation match from the children of Reid and Cynthia Parker, the 2014 golf tournament set a new fundraising record. The committee voted in the spring to support the naming of the Alumni Legacy Classroom, which was officially approved in September. We will soon begin working on appropriate recognition for the gift. (Learn more about naming opportunities on the next page.)

…our friends at Plum Creek who hosted the seventh annual Plum Creek Golf Tournament.

Proceeds from this year’s tournament will directly benefit the Harley Langdale Jr. Center for Forest Business. We are grateful for Plum Creek initiating this effort and for all of the event sponsors’ generous support — we appreciate their making a continued investment in our students and in the school. You can see an entire list of sponsors on page 29.

These are only a few examples of the many acts of generosity at Warnell — there are too many to list here. I am grateful for the many ways your support has impacted Warnell — so, allow me to say THANK YOU for your commitment to the Warnell family and for making the school the best it can be!

As you make your philanthropic decisions during the end of this calendar year, we hope you will consider investing in the Warnell School of Forestry and Natural Resources. Your gifts, of any size, make a difference. Whether you are renewing an annual pledge or offering a major gift, there are numerous ways you can make a lasting impact — such as naming a classroom, establishing an endowment, or making a planned gift. I would be honored to assist and advise you through the process.

Bridget B. Harden
Director of Development
706-542-6522
bharden@uga.edu

$100,000
Dean’s Conference Room
Dean’s Office
Conference Room 4-132
Atrium – Lobby of Building 4

$35,000
Classroom 4-517
GIS Lab 4-419

$25,000
Classroom 4-418
Map Room 4-516
Conference Room 4-301

$20,000
Vertebrate Lab 1-101
Habitat/Techniques Lab 1-107
Student Lounge
Classroom 1-122
Classroom 1-210* – Alumni Legacy Room

$15,000 – Classrooms
1-306
1-303
1-309
1-308

Contact:
Bridget B. Harden
Director of Development
Warnell School of Forestry and Natural Resources
706-542-6522
bharden@uga.edu

For more information, please visit
Warnell.uga.edu/giving/naming
Erin Lincoln

How did you end up at Tetra Tech?
I had a chance encounter with a woman from Tetra Tech at the Georgia Water Resources Conference. While we were chatting, we walked over to the Tetra Tech booth where her boss was talking with another Warnell graduate, who was a client of theirs and a friend of mine. I didn’t think much of that conversation, but five months later she called me up and asked me to come in and interview! The position was a great fit for me, so I accepted and moved back to Atlanta.

What is a day like for you at Tetra Tech?
As a project manager, I often work on multiple projects a day, in addition to general operations and administrative duties. I field phone calls from clients, run meetings, review budgets, write project proposals, edit reports, and QA/QC technical work. My goal every day is to keep my team focused and on task so we can make positive headway on all of our work.

Is there a particular project you’re working on right now that really excites you?
I’m very excited to be part of the Savannah Harbor Expansion Project because it will have a positive economic impact on our state. I lead the SHEP hydrodynamic and water quality model updates, which were used to assess environmental impacts due to channel dredging, and evaluate project alternatives and mitigation measures. Tetra Tech is involved in so many interesting aspects of the project, such as the fish passage and salinity intrusion mitigation feature designs, which were also led out my office.

How is it going from working in the field to working more in an office setting? Do you miss the field?
In school, I had thought — and hoped — that I would be doing field work forever. Then, in my late-20s when I became involved in project management and water quality modeling, I transitioned from field work to office work. Because I enjoy the work I do now, I haven’t missed my long days in the field. My co-workers are my favorite part of my job, and being in the office means spending more time interacting with them. Also, I walk several miles every day after work in our beautiful park-like neighborhood, which allows me to get my outdoor and nature fix.

What advice would you give current students who’ll soon be looking for jobs?
Take advantage of conferences and meetings to meet and network with professionals in your field, and also build solid relationships with your professors and employers. I landed all of my internships, full time positions, and my graduate school assistantship through personal connections.

How have you stayed connected to Warnell?
Both Chad and I appreciated the support we received from professors, staff and alumni while at Warnell, and we also enjoy the people and comradery in the natural resources field. We want to see Warnell and its students succeed, so we stay engaged in this community and help any way we can. We are Warnell Compass Program mentors, have both served as chair of the Young Alumni Committee, and have talked at club meetings. I can’t even begin to count the number of Warnell-sponsored events — from golf tournaments to conference happy hours — that Chad and I have attended over the past decade! 🍾

Photos courtesy of Erin Lincoln

Erin is pictured with husband, Chad.
1970s

Tommy Sasser (BSF ’70) has won the Perry Dye Service Award from the Golf Course Builders Association of America. The honor is so exclusive it has only been awarded four times before now. Sasser was honored with the award at the summer meeting of the GCBAA in July in Colorado Springs, Colorado.

1990s

Jason Dunn (BSFR ’98) has accepted the position of executive director of the Fitzgerald/Ben Hill Economic Development Authority. With his wife Dana and children Jacob, 13, and Jenna, 11, they will soon once again be residents of his hometown. Jason says he looks forward to hearing from any of his classmates and especially looks forward to expanding Fitzgerald and Ben Hill County’s role in the forest industry.

2000s

H. Jared Flowers (BSFR ’04) became engaged in August to Amy Comer.

Patrick O’Rouke (BSFR ’04) has taken a job with Georgia Power as a fisheries biologist. O’Rouke had been working for the Georgia Wildlife Resources Division, but says now that colleagues will still see him — just in a different shirt. “It isn’t often that a new biologist gets to work on the rivers and lakes that he grew up fishing, and that has helped me bring a lot of professional passion to my work in the past five-plus years,” O’Rouke said.

2010s

Mark (BSFR ’06, MS ’11) and Andrea (PhD ’13) Fritts of Havana, Illinois, were happy to welcome Clare Julianne Fritts on Aug. 5, 2015. Baby Clare weighed 9 pounds and was 21.5 inches long. Andrea said that “Mama and Dad are excited to welcome their new little Dawg!” Mark and Andrea are both working with the Illinois Natural History Survey-University of Illinois.

Joe Milanovich (PhD ’10) and wife Janice are pleased to announce the birth of their son, Miles Shaw Milanovich in June 2015. He joins his three-year-old sister, Amira. They reside in northern Chicago where Joe is an assistant professor of biology at Loyola University Chicago.

Matthew Phillips (BSFR ’15) has taken a job with the Florida Fish and Wildlife Conservation Commission as a biologist on the watershed assessment team. He says that over the next three years, the team will be assessing threats to fish and wildlife habitat within the Peace and Withlacoochee River’s watersheds, as well as compiling a catalog of the fish species within the Withlacoochee River. “I hope all is well within the Warnell family, and I miss our wonderful school already!”
Warnell alums join Advancing Georgia’s Leaders in Agriculture and Forestry class

Several Warnell alumni have joined the Advancing Georgia’s Leaders in Agriculture and Forestry (AGL) 2015-17 class. Among this new class — representing a broad cross section of corporations, businesses and organizations throughout Georgia — are Danielle Atkins, Christopher Baumann, Mike Harrell, Jeff Jordan and Brian Stone.

Organized by the University of Georgia’s College of Agricultural and Environmental Sciences and the Warnell School, the purpose of AGL is to educate and empower Georgia’s agricultural leaders to become effective advocates for the largest economic drivers in Georgia — the state’s agricultural and forestry industries.

This program is designed to bring together leaders from all segments of the state’s agriculture, forestry, natural resources and allied industries. Over 18 months, they will help one another grow through personalized leadership development geared towards understanding themselves as leaders, analyzing issues facing their industries and strengthening connections to become catalysts for positive change.

AGL 2015 inductees from Warnell include:

- **Danielle Atkins** (BSFR ’12, MFR ’13), management forester with Georgia Forestry Commission, Brunswick
- **Christopher Baumann** (MS ’97), Region 6 supervisor with Georgia Department of Natural Resources, Rockledge
- **Mike Harrell** (BSFR ’00), vice president of Stickley Timberland, Eastman
- **Jeff Jordan** (BSFR ’94, MS ’97), vice president for forest technology with F&W Forestry Services Incorporated, Albany
- **Brian Stone** (BSFR ’99, MFR ’01), appraisal services manager with Forest Resources Consultants, Macon

In 1993, community and state leaders across Georgia participated in the first leadership development program, formerly known as “Agri-Leaders.” Since then, 350 business leaders, farmers, foresters, educators and other stakeholders have worked through the program to become more effective leaders and advocates.

Celebrating its 25th anniversary, graduates of AGL have experienced transformational leadership development that has had a positive impact on their professional and personal endeavors. Recipients for the award are nominated by their peers, and an external selection committee reviews those nominations and chooses the new class of 40 Under 40.

Warnell alums receive distinguished honors

Two Warnell alumni recently received distinguished honors. At Homecoming festivities in October, the Warnell School named Joe Hamilton the 2015 Distinguished Alumnus and Sharon Hollbrooks the 2015 Distinguished Young Alumna. Hollbrooks was also named to the 40 Under 40 Class of 2015 by the University of Georgia’s Alumni Association this year.

Hamilton (BSFR ’71, MS ’78) has been a pioneer in the management and conservation of wildlife and is best known as founder of the Quality Deer Management Association, a non-profit organization with a mission to ensure the future of white-tailed deer, wildlife habitat, and hunting heritage. The QDMA currently has nearly 60,000 members across the U.S. and Canada, and in six foreign countries. Hamilton has served as the director of education and outreach for its Southern region, director of development, and now serves in the role of QDMA founder and senior advisor.

Hollbrooks (BSFR ’94, MS ’07) is a conservation easement specialist for the U.S. Department of Agriculture’s Natural Resource Conservation Service, where she helps landowners manage their property and wildlife habitat. She is also an expert in wetland and wildlife habitat management, and has been an active alumna since graduating, serving on the Warnell School’s External Advisory Board, Young Alumni Committee, Instruction and Outreach Committee, and Alumni Steering Committee.

This past summer, she was named one of UGA’s 40 Under 40, which recognizes exceptional young alumni who are achieving great success in their professional and personal endeavors. The 40 Under 40 program, created in 2011, honors alumna under the age of 40 who demonstrate commitment to UGA and who have made an impact in business, leadership, community, educational and philanthropic endeavors.

Sharon Hollbrooks (left) and Joe Hamilton (right) are pictured with Dean Dale Greene, who presented them with the distinguished alumnus awards at Homecoming festivities.
Robert E. “Bob” Sears

Robert E. “Bob” Sears (BSF ’69) of Havelhurst, died Thursday, April 30, 2015, at Community Hospice in Vidalia. He was 71. Born March 13, 1944, in Jeff Davis County to the late Eschol Graham Sears and the late Alma Harrell Sears, he attended Brewton Parker College and received his bachelor’s degree in forestry from the Warnell School. He was the owner and operator of Four-S Timberlands LP, was a registered forestier and timber broker, and attended the First United Methodist Church. He is survived by his wife, late Alma Harrell Sears, he attended Brewton Parker College and received his bachelor’s degree in forestry from the Warnell School. He was the owner and operator of Four-S Timberlands LP, was a registered forestier and timber broker, and attended the First United Methodist Church. He is survived by his wife, forester and timber broker, and attended the First United Methodist Church. He is survived by his wife, Robert E. “Bob” Jr. and Amy Sears of Havelhurst; brother, Virgil Hanson of Darien; five grandchildren, Robert E. (Trey) Sears III Hayley L. Sears, both of Valdosta; Jonathan L. Morris Jr., Gracie Anne Morris, and Dani Lynn Sears, all of Havelhurst; and several nieces and nephews.

David Franklin Giles

David Franklin Giles (BSFR ’92) died May 18, 2015, at Athens Regional Hospital. Described as a “beloved son, brother, uncle, cousin, nephew, friend, jazz fiend, volunteer fireman, mountain man, computer master, and forestier,” Giles is survived by his mother, Jane Gilliland Giles; sisters, Sally Giles and Susan Cruz, and nephew David Cruz. He was preceded in death by his father, Frank McCord Giles, in 1999. Giles is also survived by uncles John Gilliland and Robert Gilliland, and aunt Sally Cole.

Giles grew up in Tallulah Falls and Athens, Georgia, and graduated from Cedar Shoals High School in 1973 where he played trumpet and tuba in band, achieving all-state status in both instruments. It was in his early 30’s, Giles extended his love of the great outdoors into a college career, graduating from the Warnell School in 1992 with a minor in computer science. He took both of these obsessions to Satohla in the Northeast Georgia mountains, where he worked with on the USGA Coweeta research project and then began a business in computer technology. Giles became a member of the Satohla Volunteer Fire Department and discovered a new love of emergency medical assistance when he studied for and became a first responder. He was first on the scene to help others, something he’d always been very good at. Giles returned to the Athens area in 2011 where he lived with his mother Jane, caring for her during an extended convalescence following a hip replacement. He brought enthusiasm and great passion to everything he endeavored. Giles will be deeply missed by all the people whose lives he touched with his generous spirit and fierce intellect.

In Memoriam

Robert A. “Bob” Bahn

When Bob Bahn first joined the research team working under Dr. Doug Peterson, David Higginbotham was quickly impressed by the student’s tenacity and work ethic. And the two became good friends. Establishing friendships with others was something Bahn was very good at, Higginbotham said. “I felt like I was in his inner circle of friends,” said the Warnell research coordinator. “At Bob’s memorial service, I realized that everybody he had a relationship with felt like they were in his inner circle. He was that kind of person.”

Bahn (MS ’10) passed away on May 29, 2015. He was 34. Born June 26, 1980, in Jacksonville, Florida, to Terry and Janet Bahn, he lived in Bogart. Bahn had been working at Warnell as a hydrologist before falling ill to cancer. He was preceded in death by his grandparents, George Wolfmeyer and Robert Bahn, and grandmother, Alma Wolfmeyer. He is survived by his wife Jessy Bahn; son, Bennett Bahn; parents, Terry and Janet Bahn of Jacksonville, Florida; and brother, Thomas Bahn of Canton, Georgia.

Bahn’s death devastated members of his Warnell family. Dr. Rhett Jackson said the passing of someone so well-liked around Warnell has been difficult. Bahn, he said, was a “husband, father, hydrology lab coordinator, fish biologist, paleontologist, consultant, businessman, teacher, rock musician, boat mechanic, basketball player, friend to everyone, and all-around-good guy.” Before Bahn got married, Higginbotham gave him a unique wedding present: He treated Bahn to lunch at a different restaurant in Athens once a month for 10 months. The two bonded over trying out new restaurants, Higginbotham said, cementing their easy friendship. He really was a “friend to everyone,” Higginbotham said. “He was a fun guy.”

1940s
Bertram C. Capper (BSF ’40) of Knoxville, Tennessee, died Aug. 13, 2015.

1950s

1960s

1970s
### DONOR LISTING

**July 1, 2014 - June 30, 2015**

**$10,000 & Up**

- Anonymous (2)
- AgFirst Farm Credit Bank
- Dr. Anthony J. Casio and Mrs. Julie J. Casio
- G & P Rotary Charities, Inc.
- Georgia Ornithological Society

**$5,000 - $9,999**

<table>
<thead>
<tr>
<th>Name</th>
<th>Company/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Karen Bailey</td>
<td>Mr. Barry L. Beers and Mrs. Naomi Beers</td>
</tr>
<tr>
<td></td>
<td>Blue Source LLC</td>
</tr>
<tr>
<td>John B. Cokely</td>
<td>BTG Pactual Timberland Investment Group, LLC</td>
</tr>
<tr>
<td></td>
<td>Claw Forestry Services, LLC</td>
</tr>
<tr>
<td></td>
<td>F &amp; W Forestry Services, Inc.</td>
</tr>
<tr>
<td></td>
<td>Farmer AC</td>
</tr>
<tr>
<td>Finite Carbon Corporation</td>
<td>Forest Investment Associates L.P.</td>
</tr>
<tr>
<td>Forisk Consulting, LLC</td>
<td>Frazier &amp; Deeter LLC</td>
</tr>
<tr>
<td>General Electric Capital Corporation</td>
<td>Greenwood Resources, Inc.</td>
</tr>
<tr>
<td>Mr. Thomas E. Haynes</td>
<td>Mr. Mark W. Hennessy and Mrs. Paula B. Hennessy</td>
</tr>
<tr>
<td>Mr. Leonard D. Hogan Jr. and <em>Mrs. Sarah Anne Hogan</em></td>
<td>John Hancock Mutual Life Ins</td>
</tr>
<tr>
<td></td>
<td>Leonard and Sarah Hogan Charitable Fund</td>
</tr>
<tr>
<td>Dr. Brooks C. Mendell and Dr. Elizabeth E. Mendell</td>
<td>MetLife</td>
</tr>
<tr>
<td>Morris, Manning &amp; Martin, LLP</td>
<td>NCASI</td>
</tr>
<tr>
<td></td>
<td>Orbitis GIS Orbi, Inc.</td>
</tr>
<tr>
<td></td>
<td>Mr. James C. Parker</td>
</tr>
<tr>
<td></td>
<td>Pineland Plantation</td>
</tr>
<tr>
<td></td>
<td>Plum Creek</td>
</tr>
<tr>
<td></td>
<td>Prudential Financial</td>
</tr>
<tr>
<td></td>
<td>Quality Deer Management Association</td>
</tr>
<tr>
<td></td>
<td>South Louisiana Branch</td>
</tr>
<tr>
<td></td>
<td>Rayonier, Inc.</td>
</tr>
</tbody>
</table>

**$1,000 - $4,999**

- Anonymous (3)
- Adams and Reese LLP
- Mr. James I. Alfriend and Mrs. Ellen Alfriend
- American Forest Management, Inc.
- Dr. Charles L. Andrews
- B & S Air, Inc.
- Mr. Earl D. Barrs and Mrs. Wanda Barrs
- Mr. Dan Beasley
- Mr. Peter S. Bischoff
- Mr. Paul G. Boynton and Ms. Michelle Boynton
- Mr. George H. Brannen II
- Mr. Louis M. Coffee III
- Community Foundation of the Chattahoochee Valley, Inc.
- Deltic Timber Corporation
- Drax Biomass International Inc.
- Enviva, LP
- Mr. Richard O. Fitzgerald

**$100 - $999**

- Anonymous (3)
- Adams & Jordan, P.C.
- AgGeorgia Farm Credit
- AgSouth Farm Credit, ACA

---

*“I give to Warnell because gifts from alumni enriched my learning experience when I was a student. I know my contributions are directly subsidizing the education of future natural resources professionals through technology upgrades, scholarship endowments, and supplying equipment to the students.”*

Elizabeth Miller  
BSFR ’10 & MS ’13

---

<table>
<thead>
<tr>
<th>Name</th>
<th>Company/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. William M. Ford and Ms. Jane L. Rodrigue</td>
<td>Forest Landowners Association, Inc.</td>
</tr>
<tr>
<td></td>
<td>Forest Resource Consultants, Inc.</td>
</tr>
<tr>
<td>Mr. James E. Freeman II</td>
<td>G &amp; C Fertilizer</td>
</tr>
<tr>
<td>Mr. David H. Gambrell and *Mrs. Luck Gambrell</td>
<td>Gallivon Fertilizer, LLC</td>
</tr>
<tr>
<td></td>
<td>Gay Wood Company, Inc.</td>
</tr>
<tr>
<td></td>
<td>Georgia Power Company</td>
</tr>
<tr>
<td></td>
<td>Georgia Power Foundation, Inc.</td>
</tr>
<tr>
<td></td>
<td>Georgia-Pacific Financial Management LLC</td>
</tr>
<tr>
<td></td>
<td>Gilman Building Products, LLC</td>
</tr>
<tr>
<td></td>
<td>Graphic Packaging International, Inc.</td>
</tr>
<tr>
<td>Dean Dale Greene and Dr. Jeanna Wilson</td>
<td>Mr. Ralph E. Hall II</td>
</tr>
<tr>
<td>Mr. Charles B. Haygood Jr. and Mrs. Mary J. Haygood</td>
<td>Haygood Legal, PC</td>
</tr>
<tr>
<td>Mr. and Mrs. Stanley C. House</td>
<td></td>
</tr>
</tbody>
</table>

---

*Image: Tree seedlings with caption: “Fall 2015 to Spring 2016”*
It’s never too early to give back to a school who has already given me so much.

Blake Sherry
BSFR ’17 (in progress)
I give back to my school, because they gave so much to me. When I was a graduate student, the house I was renting burned down to the ground, and we lost everything, including our pets. Before we even could return to school the next day, the students, faculty and staff had collected enough donations to help us refurbish a home, and enough cash donations to pay rent for four months. That giving spirit provided to me by my Warnell family is just one reason why I give — because not only do I WANT to, I need to. It’s MY school, and I am proud of that, so it is my duty to ensure that every student who walks out of Warnell can also say that with the same sense of pride, ownership and responsibility that I have.

Sharon Holbrooks
BSFR ’04 & MS ’07

Fall 2015

$99 & Under
Anonymous (3)
Ms. Robyn E. Albritton
Mr. Allen S. Alford Jr. and Mrs. Carol A. Alford
Ms. Ashley A. Alred
Ms. Jennifer L. Andrew
Mr. Jeremy A. Andrews
Ms. Carmen Andrews
Ms. LaFon E. Arnold
Ms. Sarah L. Arnold
Mrs. Danielle M. Atkins
Ms. Sarah L. Arnold
Ms. Lafon E. Arnold
Ms. Carmen Andrews
Ms. Carmen Andrews
Ms. Kim W. Primmer
Mr. Ronald D. Prox
Mr. Cory M. Pruett
Mr. Brian E. Prusik
Mr. Joel A. Pugmire and Mrs. Allison T. Pugmire
Dr. Thomas M. Pullen Jr. and Ms. Ruth S. Pullen
Pumpkin Creek, Inc.
Mr. Robert L. Ramey Jr. and Mrs. Louisa Ramey
Mr. Michael D. Ransom
Mr. Jason B. Rawlins
Mr. James H. Redding Jr. and Mrs. Gayle Redding
Mr. Patrick L. Reddish and Mrs. Melissa J. Reddish
COL Robert W. Reese and Mrs. Millbra Reese
Mr. Barlow N. Rhodes
Mr. Clarence L. Rhodes Jr. and Mrs. Jane F. Rhodes
Ms. Cynthia Rivers
Mr. Calvin F. Robertson and Mrs. June H. Robertson
Mr. David H. Robinson and Mrs. Janette Robinson
Mr. James R. Rogers and Mrs. Janet N. Rogers
Mr. Edward A. Rollar III and Mrs. Melanie D. Rollar
Mr. Samuel W. Rorabaugh
Mr. Harold H. Rozier Jr. and Mrs. Mary E. Rozier
Mr. Mack J. Ruff Jr.
Mr. Warren T. Sasser and Mrs. Cindy K. Sasser
Mr. Andrew M. Saunders and Mrs. Emily J. Saunders
Mr. Richard V. Saunders Sr. and Mrs. Kay W. Saunders
Mr. David E. Scott
Lt Gregory A. Sealock Jr. and Ms. Robin M. Sealock
Mr. Richard J. Shaw and Mrs. Charla P. Shaw
Ms. Julia H. Shipes
Mr. Mickey G. Sisson
Sisson & Associates, Inc.
Sizemore & Sizemore, Inc.
Mr. Clifford C. Smith and Mrs. Mollie Smith
Mr. Jonathan W. Smith and Dr. Megan L. Smith
Mr. Michael H. Smith and Mrs. Shelley Smith
Mr. Stephen C. Smith
Mr. Thomas J. Smith and Mrs. Judith A. Smith
Mr. William S. Smith and Mrs. Elizabeth Smith
Ms. Alyson P. Snipes and Mr. George W. Snipes
Southeastern Society of American Foresters
Southeastern Wood Producers Association, Inc.
Southern Land Exchange LLC
Mr. Hiram W. Spence III and Mrs. Celeste Spence
Ms. Tiffanie J. Starr
State Farm Companies Foundation
Sterling Consulting, LLC
Mr. Brian A. Stone
Sturkey Timberland, Inc.
Dr. Tymur Sydor and Mrs. Oksana Korolchuk
Mr. Jess F. Tanner
Mr. Ronald F. Tansill and Mrs. Shirley L. Tansill
Mr. Jeffrey M. Teal
Dr. Negussie H. Tedela
Mr. Jeffrey M. Teal
Dr. Negussie H. Tedela
Mr. George D. Walker and Mrs. Doris L. Walker
Mr. David G. Wallace
Mr. David J. Walker and Mrs. Connie Walker
Walton EMC
Mr. Charles F. Warnell Jr. and Ms. Lana K. Warnell
West Fraser Inc.
Mr. Michael D. Westbrook Jr. and Mrs. April Teaver Westbrook
Weyerhaeuser
Mr. Matthew E. White and Mrs. Kristin M. White
Mr. Aubrey L. Whitfield and Mrs. Emily T. Whitfield
Mr. Mark D. Whitney and Mrs. Shawn Whitney
Mr. Brent N. Widener and Mrs. Jennifer M. Widener
Mr. Carey K. Williamson III and Mrs. Emily S. Williamson
Mr. Richard Winslow
Mr. James E. Wise
Mr. Charles T. Witt
Mr. Brian T. Wommack
Mr. John C. Wood and Ms. Carla Moore Wood
Mr. Rodney C. Woodard and Mrs. Kathleen A. Woodard
Mr. Stephen F. Worthington and Mrs. Sara R. Worthington
Mr. Matthew D. Wosotowsky and Ms. Amanda M. Wosotowsky
Mr. Harvey P. Yates Jr.
Mr. Claude E. Yearwood and Mrs. Emily S. Williamson
Mr. James A. Zobel and Ms. Zoe A. Zobel
Dr. Wei Zeng
Mr. Wayne A. Barfield
“On a daily basis, I see how the resources provided by our alumni and other supporters enrich the education and the opportunities for our students in Warrell. The impact is huge and I want to be a part of continuing a great tradition.”

Joseph Nairn, Professor
This honor roll comprises donations made between July 1, 2014, to June 30, 2015.

Mr. Earl D. Barrs and Mrs. Wanda Barrs
Mr. John T. Brumby, Jr.* and Mrs. Elsie Brumby
Mrs. Carolyn Bryan*
Dr. James C. Cobb and Mrs. Lyra K. Cobb
LCDR and Mrs. Demetrius Cox
Mr. Smith Dolliver, Jr. and Mrs. Sharon Dolliver
Mr. James L. Gillis, Jr.
Mr. Jimmie T. Hardy*
Mrs. Nellie S. Herrington*
Mr. and Mrs. Robert L. Izlar
James G. Boswell Foundation Trust
Mr. and Mrs. Rex N. Johnson
Mr. and Mrs. Larry Lackey
Mr. Harley Langdale, Jr.*
Mr. Jon P. Liles and Mrs. Jo A. Liles
Dr. Joseph M. Meyers and Mrs. June Meyers
Mrs. Frances O. Hopkins*
Professor Archie E. Patterson*
Dr. and Mrs. Richard L. Porterfield
Mr. Andrew M. Saunders and Mrs. Emily J. Saunders
Mr. and Mrs. David Terrell
Mr. Geoffrey D. Terrell
Dr. Alfred Viola and Mrs. Joy Viola
Ms. Anna D. Warnell*
Mr. Joseph E. Wyatt*
Anonymous

The following individuals have designated their planned gifts to the Warnell School and been inducted into the Heritage Society.

Heritage Society

Mr. and Mrs. Rex N. Johnson
Mrs. Sharon P. Wilkin
Mr. Henry G. Williams and Mrs. Emma J. Williams
Mr. Marvin F. Williams, Jr. and Mrs. Myrtha J. Williams
Mr. Benjamin F. Williamson
Mr. James R. Williamson and Dr. Margaret L. Williamson
Mr. Frank P. Willis and Mrs. Constance Willis
Mr. William S. Wise
Mr. Charles E. Withrow Jr.
Mr. Bobby L. Womack
Mr. Nathaniel W. Woods and Mrs. Tiffany D. Woods
Mr. Wayne D. Worsham and Mrs. Rebecca J. Worsham
Mr. Stephen L. Wright, Jr.
LOOKING FOR GREAT EMPLOYEES?

SEARCH NO FURTHER!

Warnell’s online job postings can put you in touch with the talent and skill you need.

email your job posting to kkivett@uga.edu