DEPARTMENT OF FORESTRY AND NATURAL RESOURCES



College of Agriculture, Food and Environment



IN THIS ISSUE

3

4

8

9

Letter from the Chair
Retirements
Graduate Student Research
Undergrad Summer Jobs
White Oak Initiative
White Oak Genetics and Tree
Improvement Program
KY Maple Syrup Project
Flooding in Eastern KY

Photo Courtesy: Matt Barton, University of Kentucky



Meet The New Faculty

" I'm looking forward to joining a collaborative department that is motivated to understand systems-level questions in forested ecosystems and to use my toolkit in forest ecophysiology as I work with others. " - Dr. Gotsch

" I'm thrilled to be at the University of Kentucky where my interests are complemented by scientists interested in forest conservation. FNR provides an excellent balance of skillsets and research interests that lends itself to collaborative work. ** -Dr. McNeil

⁶⁶ I am eager to contribute to our department's work toward the sustainability of Kentucky forests. Both our location and our faculty are well positioned to help forest managers across the Central Hardwood region with the many challenges they face. " - Dr. Vickers

2022 - BUILDING FOR THE FUTURE

here are critical times in any organization that can define its character and shape its future, and 2021-2022 was one of those for our department. During this short time, we saw the retirement of long-serving faculty, the development of a succession plan, and more recently, the search and hiring process for their replacements. The retiring faculty and staff (see page 4) played critical roles in the department over a long period of time, shaping our instruction and research enterprises. Their presence will be missed. However, during this same time, they also helped us formulate a strong succession plan that clearly defined what was needed in their replacements: individuals with expertise that will help create synergy and build robust focus areas with our existing faculty, providing the department the best opportunity for future success.

The plan was approved by the dean and launched with the search to fill these positions, culminating this spring with the hiring of three incredibly gifted faculty. In all cases, we attracted and hired highquality candidates; the end result has been a complete success! Dr. Lance Vickers (forest management) and Dr. Darin "DJ" McNeil (wildlife management) started on August 1, and Dr. Sybil Gotsch (forest ecology) will be arriving on January 1. These additions not only address the needs we have identified but also bring active research projects to UK, as well as experience in teaching and mentoring students. We could not have asked for better. Please be attentive this fall and winter to our E-News as we introduce these new faculty in more detail.

I could not finish this letter without a quick reminder about the recent flood devastation that affected our staff at Robinson Forest and Quicksand. Please refer to recent E-News alerts if you are interested in donating.

Thanks for your continued interest in the department and for helping us shape its future.

- Dr. Jeff Stringer



Sign up to receive our newsletter or E-News:

Email <u>laura.lhotka@uky.edu</u> or visit <u>forestry.ca.uky.edu/FNR-</u> <u>Department-News</u>



We wish you all the best in your retirement.!



Dr. Mary Arthur

Mary Arthur, Professor of Forest Ecology, retired this summer after 29 years with the department.



Dr. Terry Conners

Terry Conners, Associate Extension Professor and Wood Products Specialist, retired in 2020 after 19 years with the department.



Dr. Mike Lacki

Mike Lacki, Professor of Wildlife Ecology and Management, retired last year after 32 years with the department.



Rob Paratley

Rob Paratley, Herbarium Curator and Adjunct Instructor, is retiring this year after 29 years with the department.



Dr. Jim Ringe

Jim Ringe, Professor of Marketing, Economics, and Wood Products, retired this summer after 38 years with the department.



Kai Davis, UK FNR Master's Student

Deforest the Bluegrass (RFB) is a local socioenvironmental initiative that aims to expand Lexington's urban forest and protect local waterways by planting native trees. This initiative has been beneficial for the awareness of environmental health in and around the city and in building support from the public. There are clear benefits for the city and the people within, however, there is minimal insight on the impact on wildlife or the full benefit that this reforestation initiative could potentially provide.

Urbanization is a global issue that is reducing wildlife habitat, and because of this, wildlife species are utilizing urban areas for habitat, safety, and sustenance. Birds are one such class of animals that are common throughout cities and

GRADUATE CORNER

may be affected. Habitat quality for resident and migratory birds is highly dependent on habitat patch size, human disturbance, and landscape context.

My project explores how more than two decades of this reforestation effort around Lexington has benefited birds in this urbanized landscape. In late 2021 and early 2022, we successfully deployed 18 automated recorder units in RFB plots that nearly spanned the chronological range of reforestation plantings, and we are sampling two older, urban forest blocks as controls.

My project can provide insight into how RFB is impacting and potentially benefiting avian species in Lexington, as well as plant seeds for future reforestation efforts.

Sarah Tomke, UK FNR PhD Student

s a fourth-year PhD Acandidate in the Forestry and Natural Resources department, I am studying the current distribution and population status of an imperiled aquatic salamander species in Kentucky, the Eastern hellbender. Eastern hellbenders are declining rapidly across their range in the eastern United States due to habitat and water degradation; however, we know very little about where they exist or how their populations are doing in Kentucky.

To answer these questions, I collected environmental DNA (eDNA) samples from over 90 sites across the state to determine if hellbenders are present or absent at those locations. I then conducted snorkeling surveys at our eDNA-positive sites in an attempt to find these elusive and cryptic animals. If a hellbender was found, our research team weighed and measured the individual to approximate its age and inserted a PIT tag (similar to a microchip) so we could identify it later. Additionally, with the help of the Kentucky Department of Fish and Wildlife Resources, we placed artificial nest boxes at our sites to determine if hellbenders are successfully reproducing in these streams.

Help protect hellbenders in Kentucky by keeping our streams clean and beautiful. If you see a hellbender, safely release the animal back where you found it and report it to the Kentucky Department of Fish and Wildlife Resources.

UNDERGRADUATE STUDENTS AT WORK

Christina Winfree UK Forest Health Extension

I chose the forestry major because I realized that I didn't want to sit inside and stare at a computer screen my entire life. I was homeschooled, with a background in robotics and robotic design, but I preferred the outdoors, especially the forest in western Kentucky.

This summer I worked with the forest health team here at UK, under Dr. Crocker and Dr. Yang, as a drone pilot. My job was to help in the assessment of forest health threats, including invasive species and laurel wilt disease. A drone can give us a big-picture view of these threats, allowing the team to see what is affected and where. This job was the perfect amalgamation of my skillsets so far and will allow me to go forward on a career path that will be useful to forests all over the world.



Looking for a Forestry Job?

Check out our job board at: forestry.ca.uky.edu/forestry-jobs

Looking to Hire?

If you would like to post a job opportunity on our job board, email your job announcement to Laura Lhotka (laura.lhotka@uky.edu). We will post relevant forestry and natural resource job opportunities.



ELK VIEWING ARE



Nick Harpe Kentucky Department of Fish and Wildlife Resources

I grew up in Tell City, IN, near the Hoosier National Forest, where my love for the outdoors took root. In 2002, after graduating from Indiana University, I moved to Lexington to start my first career in information technology. I needed a change after 18 years, so I enrolled in UK Forestry in 2020. My desire to give something back to the landscapes that give me so much made forestry an easy choice.

Working with the Kentucky Department of Fish and Wildlife Resources was a summer of variety. Our main project was designing a timber sale at Yatesville Lake Wildlife Management Area to create new grouse habitat. I also tagged an elk calf, helped with bird counts, taught at the Kentucky Forest Leadership Program, assisted with a boat-access FIA plot, and much more. This diversity of experiences showed me a small slice of what my future could hold after graduation while also helping with my quest to be a more well-rounded candidate in the eyes of future employers.



Vincent Morrison Molpus Woodlands Group

I grew up in northern Kentucky in the greater Cincinnati area and went to a couple of different colleges before landing at UK in the forestry program. The forestry program here stood out to me because the classes looked engaging and could offer a more practical, hands-on method of learning.

This summer I was an intern for Molpus Woodlands Group, a timber investment management organization based in Mississippi. I was given a variety of opportunities to shadow and learn the day-today responsibilities of a forester. We would check on active logging operations, practice forest mensuration, flag property lines and perform sight prep for tree planting. I was also given the responsibility of finding abandoned oil wells around the Molpus property and recording basic information such as coordinates, ownership and levels of spillage at each site.

This job was a great opportunity and allowed me to more fully understand the duties of a forester as well as further narrow down what I want my career to look like.



Cullen Reeves Oklahoma Forestry Services

I'm from Barbourville, KY and I've always enjoyed spending time in the woods. I was fortunate to land a field-intensive job during high school. This ultimately led me to pursue a career in forestry where I could continue working outdoors.

This summer I had the pleasure of interning with Oklahoma Forestry Services (OFS), where I was primarily based out of Wilburton, OK. During the internship, I conducted timber product output surveys with Forest Inventory and Analysis (FIA) crews, cruised timber, wrote stewardship plans, planted loblolly pine for a progeny study, participated in prescribed burns, inspected best management practices on logging sites, acted as a camp counselor, shadowed urban foresters in Oklahoma City, and worked at the Albert Engstrom Forest Regeneration Center. Thanks to OFS, I've gained plenty of valuable work experience and understand what it means to work for a state agency.

the White Oak Initiative

As the White Oak Initiative continues to develop and grow, so does excitement and expectation when it comes to managing healthy upland oak forests. One of the first goals was the development of the foundational White Oak Initiative Assessment and Conservation Plan, the first-ever range-wide plan, covering most of the eastern United States, to address upland oak management with white oak as a cornerstone species. Another important output of the White Oak Initiative is the development of sustainable oak management practices that will be key as we move forward with the goal of improving the overall health of our upland oak forests. These technical practices, written by oak researchers, will provide the foundation for trainings for foresters, forest managers, and others. Additionally, a new group of publications, called the Landowners for Oaks Series, will inform landowners about white oak (upland oaks) and the difficulties of oak regeneration.

The White Oak Initiative has understandably generated much attention and support. All of this, along with the support of the recently established congressional White Oak Caucus, will help guide us as we move forward with another goal: ensuring that white oak and upland oak management are included in the upcoming 2023 Farm Bill.

TO VIEW THE PLAN IN FULL AND LEARN MORE ABOUT THE WHITE OAK INITIATIVE, VISIT WWW.WHITEOAKINITIATIVE.ORG.

WHITE OAK GENETICS AND TREE IMPROVEMENT PROGRAM



white-oak-genetics.ca.uky.edu

The White Oak Genetics and Tree Improvement Program (WOGTIP) was developed as a collaborative project to provide a sustainable supply of high-quality white oak via a tree-breeding program that will improve our ability to conserve and restore white oaks. The program has three phases: (1) collecting acorns, (2) progeny testing to identify parent trees that produce high-quality offspring, and (3) acorn production and seedling deployment.

Volunteers from federal and state agencies, academic institutions, and NGOs, along with woodland owners and many additional citizen volunteers, have collected acorns from over 500 trees throughout the geographic range of white oak. The acorns are planted and grown into seedlings at the Kentucky Division of Forestry's Morgan County nursery. A planting site at Maker's Mark will be completed in spring 2023 and will include seedlings from all the acorn collections. A network of approximately 20 regional progeny tests, which will assess seedlings grown from locally sourced acorns to identify superior parents, will be launched in 2023 and 2024 throughout the range of white oak

We are currently getting ready for the fall 2022 acorn-collecting effort and welcome anyone who would like to make an acorn collection for WOGTIP. Email <u>Laura.DeWald@uky.edu</u> to volunteer.





Welcome to the Kentucky Maple Syrup Community!

Maple

Did you know we have maple syrup producers in Kentucky? We do, and their numbers are growing. The University of Kentucky Department of Forestry and Natural Resources, Kentucky Cooperative Extension Service, Kentucky Maple Syrup Association, and Kentucky Center for Agriculture and Rural Development have secured grants from the U.S. Department of Agriculture to develop the Kentucky Maple Syrup Project in support of Kentucky's maple syrup community.

The project is working to provide numerous maple syrup-related educational resources and programs to help realize the full potential of Kentucky's maple trees. Join us on this sweet adventure!

Photo Courtesy: Steve Patton, University of Kentucky

KY-MAPLESYRUP.CA.UKY.EDU

FLOODING IN EASTERN KENTUCKY

A note from Jeff Stringer

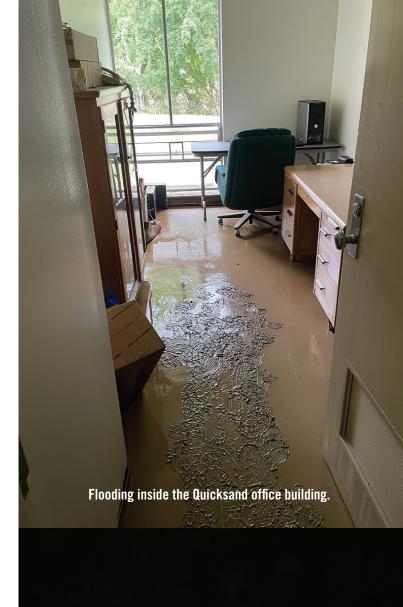
n late July, significant flooding ravaged eastern Kentucky. Many of you have reached out and we appreciate your concern. In short, our staff is safe. Unlike the CCC which had sense enough in the 1930s to elevate the cabins and dining hall, the classroom and office, constructed 20 years ago at ground level, sustained floor and lower wall damage.

The office building at Quicksand collected 1.5 feet of water, and while it will be habitable again, all contents were lost. Other agriculture and horticultural buildings, including barns, equipment sheds, greenhouses, and horticulture research are a total loss. The Wood Utilization Center was high enough to avoid any problems.

Buckhorn and Troublesome, the streams next to Highway 15 leading to the Forest, crested between 10-20 feet over the bank. This resulted in houses being moved off foundations or washed away. Unfortunately, several living in those watersheds perished.

Many of you have reached out wanting to assist UK staff at Robinson Forest and Quicksand that were significantly impacted by the flood. Two families lost their homes and belongings and three others lost a significant amount of their belongings. We sincerely thank the Kentucky Forest Industries Association (KFIA) for including our staff in their relief fund. The KFIA Flood Relief Fund is set up to provide assistance to individuals in, or associated with, the forest industry including those working at UK's Robinson Forest and Quicksand.

If you would like to learn more and donate, visit: <u>forestry.ca.uky.edu/flooding-in-</u> <u>Eastern-Kentucky</u>





Flooding at Robinson Forest camp at 1:30 AM on July 28, 2022. Water reached just below the front porch of the cabins.



Department of Forestry and Natural Resources

University of Kentucky 105 Thomas Poe Cooper Building Lexington, KY 40546-0073

(859) 257-7596 forestry.department@uky.edu forestry.ca.uky.edu NONPROFIT ORGANIZATION US POSTAGE PAID PERMIT 51 LEXINGTON, KY

From The Woods Today Wednesdays @ 11am EDT

A weekly show focusing on Kentucky woodlands and wildlife



FromTheWoodsToday.com