



AGENDA

Thursday 15 September 2022

7:30 to 8:15 a.m. – NCUFC Members Breakfast

- NC Urban Forest Council members are invited to join the Council Board of Directors for a networking breakfast (paid registration required)

7:30 to 8:30 a.m. – Registration

- Coffee and continental breakfast while visiting with exhibitors

8:30 to 10:00 a.m. – General Session

Welcome and opening remarks

Jeff Kish *NC Urban Forest Council, Chair*

Keynote address – Structural Pruning Considerations by Tree Species

Dr. Bruce Fraedrich *Bartlett Tree Experts / Research Lab, Vice President of Research (retired)*

- Both values and benefits increase with age and size of urban trees; however, tree related liabilities also increase. To maximize urban tree values and minimize tree related liabilities, arborists must structurally prune young trees. Not all tree species require the same pruning requirements. Some species depend on intensive management while other species can develop a strong structure with minimal pruning. This presentation explores (1) the common branch and crown defects that exist among North Carolina's major canopy species and (2) pruning requirements needed to prevent such defects. Examples of pruning specifications for individual trees and tree populations will be provided.

10:00 to 10:30 a.m. – Break with exhibitors

10:30 to 11:15 a.m. – Concurrent Sessions

Trends in Tree Protection Ordinances

Chad Meadows, AICP *Code Wright Planners, Principal and Founder*

- This presentation will cover a range of best practice approaches to development-related tree protection laws, such as the following: (1) basic voluntary incentive-based schemes, (2) relatively restrictive minimum retention requirements, and (3) relatively flexible alternatives (e.g., reforestation). This presentation also covers other tree protection ordinance basics, such as management of clear cutting, mitigation for tree removal, enforcement, credit toward other ordinance requirements for retaining trees, and program implementation issues.

Developing Your Art of Field Diagnosis

Matt Borden *Bartlett Tree Experts Research Laboratory, DPM / Plant Pathologist*

- The process of plant health diagnosis combines several physical and life sciences with keen observation and deductive skills. Diagnostics is rich in mystery, quite frequently doused with humility and occasionally involves human psychology. This session will help you hone your diagnostic skills and develop your awareness of this artform, both of which will enhance your care of trees and landscapes.

11:20 to 12:15 p.m. – Concurrent Sessions

Land Cover Analysis and Supporting Tree Canopy Assessment Using Remote Sensing in Wake County, North Carolina

Joseph Joyner *Davey Resource Group, Senior Associate Consultant*

Bill Shroyer *Wake County Government, Senior GIS Analyst*

- In 2022, Wake County Government started analyzing various land coverage features throughout Wake County's 857 square mile area. This collaborative assessment employs multiple types of remote sensing methods and targets tree canopy levels across a ten year period. Such an approach will help Wake County Government and all twelve constituent municipalities identify future planting opportunities and canopy health while collecting data on other environmental and socio-economic factors. During our presentation we will summarize the project's objectives and discuss what the assessment team has achieved to date.

Tree Defects: Root to Branch

Elden LeBrun *Bartlett Research Laboratory, Research Technician*

- Every Arborist should be trained to inspect trees for defects. There is no "Safe tree". We will discuss and identify common defects which should be of concern. Topics from root disease to stem decay and from branch architecture to weak branch unions will be discussed.

12:15 to 1:15 p.m. – Great NC Tree Luncheon

- Council award presentations. Meal included with registration.

1:30 to 2:15 p.m. – Concurrent Sessions

Updates and Outcomes from the North Carolina Wildlife Commission's Green Growth Toolbox Project

Kacy Cook *North Carolina Wildlife Resources Commission, Land Conservation Biologist*

- Local governments across the state use the Green Growth Toolbox to identify strategies for integrating wildlife conservation into their land use plans, development designs, and incentives and ordinances. You will receive the latest information of how North Carolina municipalities aid the conservation of declining wildlife populations and habitats.

The Wrong Tree for the Right Site: Finding the Best Trees for Urban and Suburban Landscapes

Dr. Barbara Fair *North Carolina State University, Associate Professor and Landscape Extension Specialist*

- We know that across North Carolina temperatures are going to rise, winds are going to blow, and the soil moisture level will alternate between really wet and really dry. These are just some of the factors that we must consider when selecting tree species for our public, residential and commercial spaces. In this presentation, we will look at some of the best and worst performing tree species in North Carolina. You will learn which tree planting options will get you the most bang for your buck while contributing to the long-term health of your trees and community.

2:20 to 3:05 p.m. – Concurrent Sessions

Common Landscape Diseases of Woody Ornamentals in North Carolina

Patrick Anderson *Rainbow Ecoscience, Lead Arborologist*

- Disease is something that prevents a plant from performing to its maximum potential. Plant diseases are ubiquitous in our landscapes and are commonly associated with several tree and shrub species we encounter. During this discussion we will become familiar with how plant disease occurs, cover common tree/shrub diseases in our landscapes, and discuss practical protocols for managing these.

Stormwater Management: Using Trees to Protect Water Quality

Mitch Woodward *North Carolina Cooperative Extension, Area Specialized Agent for Water Quality*

- Native trees play a critical role in stormwater management. We will explore the role of trees in water quality protection, especially measuring for stormwater control and streambranch repair.

3:05 to 3:35 p.m. – Break with exhibitors

3:35 to 5:00 p.m. – General Session

Urban and Community Forestry in North Carolina

Andy Pleninger *North Carolina Forest Service / Urban and Community Forestry, Program Head*

- Come learn about the current state of urban and community forestry in North Carolina. Additionally we will explore the challenges, opportunities and vision for our state's urban canopies from the perspective of the North Carolina Forest Service.

Soil Management Basics for Urban Trees

Dr. Bruce Fraedrich *Bartlett Tree Experts / Research Lab, Vice Preseident of Research (retired)*

- Healthy plants require healthy soils. This presentation identifies the soil characteristics that promote plant health and longevity. The following topics will be discussed: (1) soil volume, (2) soil sampling, testing and interpretation of test results, (3) fertilization considerations based on the ISA Best Management Practices for fertilization and soil, water and irrigation considerations.

Friday 16 September 2022

9:00 a.m. to 3:00 p.m. – Field Day at Barber Park with demonstrations

Join us for a day in the field! Many of the topics discussed at the indoor education sessions will be demonstrated and discussed in a real world setting. Attendees will split into groups and rotate through the different stations. Each rotation will last for 50 minutes. A catered lunch (one hour in duration) also will be provided.

This is your opportunity to observe experts demonstrate a variety of management practices and ask questions to aid your work in the field. Please dress for lots of outdoor walking.

- Demonstration Stations and Leaders
 - **Climbing Safety** Mike Skillen of *Skillen Tree Care*
 - **Pruning of Established Trees** Bruce Fraedrich, *Bartlett Tree Experts (retired)*
 - **Pruning of Nursery Trees** Mike Worthington and Tod Williams, *Worthington Farms*
 - **Tree Defects** Elden LeBrun and Mike Sherwood *Bartlett Research Laboratory*
 - **Urban Forestry Equipment** Randy Johnson, *Vermeer Mid-Atlantic*; Mark Harrison, *Mid-Atlantic Stihl*; Ricky Smith, *Asplundh*; Ivan Whitfield, *Altec Industries, Inc.*



MEET THE SPEAKERS

Patrick Anderson – Patrick Anderson is the Lead Arborologist with Rainbow Ecoscience where he provides direction for Rainbow’s Regional Technical Arboricultural Advisors. Patrick has a B.S. in Forest Science from Penn State University and has the following credentials: ISA Board-Certified Master Arborist and Municipal Specialist, ISA Tree Risk Assessment Qualified, ASCA Registered Consulting Arborist, and North Carolina Licensed Landscape Contractor. Additionally, he serves as an associate voting member of the ASC A3000 Committee and as the current President-Elect of the American Society of Consulting Arborists.

Matthew Borden – Matt Borden is a plant pathologist at the Bartlett Tree Experts Research Laboratory in Charlotte, North Carolina. He studies tree and shrub diseases and disorders, with broad experience in orchard and botanical garden management, plant problem diagnostics, and plant health writing. He gained a deep appreciation for integrated pest management while at Virginia Tech, followed by studies in landscape health and sustainable management strategies at the University of Florida.

Kacy Cook – Kacy Cook lives in Pinebluff, North Carolina and works statewide collaborating with local governments, communities, landowners, businesses, and partner organizations to proactively conserve declining wildlife. The Green Growth Toolbox, which she manages has won an Excellence in Wildlife Management Award from the Southeast Section of the Wildlife Society. Kacy holds a Master’s Degree in Forestry and Natural Resources from the University of Georgia where she worked on black bear habitat use in a developing landscape. She has also done field work on amphibians, various bird species, and bats in the U.S. and Mexico. She has been with the Wildlife Commission since 2006.

Barbara Fair – Barbara Fair hails from Pennsylvania. She obtained degrees from both Penn State and Ohio State University in Forestry and Horticulture. She is currently employed as an Associate Professor at North Carolina State University, where she serves as the Landscape Extension Specialist for North Carolina. Her program, which includes research, focuses on arboricultural practices, from thoughtful plant selection to proper planting and tree maintenance practices. She also teaches Landscape Ecosystem Management, Green Infrastructure, and Environmental Stress Physiology. Dr. Fair has been a Certified Arborist since 1998.

Bruce Fraedrich – Bruce Fraedrich is retired from the Bartlett Tree Expert Company where he served as Vice President of Research and Plant Pathologist at the Bartlett Tree Research Laboratories in Charlotte, North Carolina. In this position, Dr. Fraedrich primarily researched landscape tree and shrub diseases and provided technical support on such diseases. His research interests include diseases of landscape plants, tree risk management, and the planting and establishment of landscape plants. He received a Ph.D. in Plant Pathology from Clemson University and a Master’s in Forestry from Duke University. Dr. Fraedrich received the L.C. Chadwick Award for Arboricultural Research from the International Society of Arboriculture in 2005 and the ISA Award of Merit in 2018.

Joseph Joyner – Joe Joyner joined the Davey Resource Group as a Senior Associate Consultant in 2018. He has a diversity of experience within the arboriculture industry, including large-scale municipal tree inventories and assessments, construction and development projects, urban forestry policy, and urban forest management (both planning and implementation) in direct partnership with an array of public and private stakeholders. Joe is a Board-Certified Master Arborist through the International Society of Arboriculture and also has ISA Tree Risk Assessment Qualification. He earned his B.A. in political science and history from the University of North Carolina-Chapel Hill and his master's degree in international policy from the School of Public and International Affairs at the University of Georgia.

Elden LeBrun – Elden LeBrun is a research technician at Bartlett Tree Experts Research Laboratory, a position he has held since 2000. In addition to offering clients with research support and general arboriculture assistance, he provides training in integrated pest management. Since joining Bartlett Tree Experts in 1978, Elden has also worked as a climber, crew leader, and PHC Specialist. He received his Associate's Degree in Forest Technology from Alleghany College of Maryland and is both an ISA Certified Arborist and a Certified Treecare Safety Professional through the Tree Care Industry Association.

Chad Meadows – Chad Meadows, AICP, is Principal and Founder of CodeWright Planners in Durham, North Carolina. CodeWright Planners is a small consulting firm providing code drafting and comprehensive planning services exclusively to local governments in the Southeast. Chad has been a practicing planner for communities across the country for 30 years and has been a code drafter since 2003. He also serves as the Legislative Chair for the North Carolina Chapter of the American Planning Association, where he assists local government planners with tracking and responding to proposed planning-related legislation (e.g., pre-emption of local tree protection ordinances). He is a regular speaker on topics such as tree protection, landscaping and open space ordinances, and regulatory best practices.

Andrew Pleninger – Andrew Pleninger currently serves as the Program Head for Urban and Community Forestry at the North Carolina Forest Service. He has also worked as a City Forestry for Rochester, New York, a Consulting Urban Forester and Vice President of Urban Forestry, LLC, and a Consulting Urban Forester/Arborist for Aspen Tree Service in Carbondale, Colorado. Andy received his Bachelors in Natural Resource Management, with a concentration in Urban Forestry, from Colorado State University in 1989. He is the co-author of numerous urban forestry and arboricultural publications, including the “ABCs of Young and Small Tree Pruning”.

Bill Shroyer – Bill Shroyer is a GIS Analyst for the Wake County Planning Department and has over 20 years of experience in landscape modeling, land use planning, and environmental conservation. He works with multiple County departments to manage, integrate and analyze geospatial data. Previously Bill led the geomorphic mapping project along the Cape Hatteras National Seashore while working for the North Carolina Geological Survey. Bill received his Master's Degree in Natural Resources Management at North Carolina State University, with a focus on informed and comprehensive decision making. Additionally he has a GIS Professional Certificate and completed a professional lecture series for geospatial technologies through the Urban and Regional Information System Association's Leadership Academy.

Mitch Woodward – Mitch Woodward has 37 years of experience in tree protection, working for North Carolina State University, the federal government, Penn State University, the University of Maryland, and the Dupont Company. Every year he delivers between 20 and 25 workshops across North Carolina. These workshops address stormwater control, stream branch repair, and environmentally friendly development of landscapes.