

GREEN & GROWIN' 20

January 27 - 31, 2020
Greensboro, NC

*The
Future is
Green*



EDUCATION



GREEN & GROWIN' 20 EDUCATION

Specialty Classes and Certifications | All programs take place at the Sheraton Greensboro at Four Seasons
Gain marketable skills and career-boosting credentials. Advance registration required.

	MONDAY, JANUARY 27	TUESDAY, JANUARY 28
8:00 AM - 4:30 PM		●●● Creating the Ultimate Landscape Design
8:00 AM - 5:00 PM	●● IA Landscape Irrigation Technician Course	
8:30 AM - 4:30 PM	●●● Fundamentals of Profitable Landscape Design	
8:30 AM - 4:30 PM	●●● North Carolina Pesticide License Course & Test	●●● North Carolina Pesticide License Course & Test (8:30 AM – 5:30 PM)
8:30 AM – 5:00 PM	■●●▲ OSHA/NALP 10-Hour Construction Safety Course	■●●▲ OSHA/NALP 10-Hour Construction Safety Course (8:00 AM - NOON)
8:30 AM - 5:00 PM	●● ICPI Concrete Paver Installer Course	●● ICPI Concrete Paver Installer Course
8:30 AM - 5:00 PM	●● ICPI PICP Specialist Course	
1:00 PM – 5:00 PM		■●●▲ Adult First Aid/CPR/AED Certification Course

Professional Credits (CEU) Key Attend the sessions of your choice to earn continuing education credits toward state or national accreditations. Look for the icons below. **See course description for CEU approval status.**

- **LC** Landscape Contractor License (NC) - Technical CEU
- **LCB** Landscape Contractor License (NC) – Business CEU
- **LA** Landscape Architect License (NC)

- **IC** Irrigation Contractor License (NC) – Technical Irrigation CEU
- **ICB** Irrigation Contractor License (NC) – Business CEU
- **PA** Pesticide Applicator License (FL, NC, SC, TN, VA)

- **ISA** International Society of Arboriculture – Certified Arborist
- **NALP** National Association of Landscape Professionals – Landscape Industry Certified
- ▲ **SAF** Society of American Foresters – Certified Forester

Earn CEUs when you walk the Marketplace floor:

● (1) ● (2) ● (4)

Approved CEU:
LC=1 credit; IC=2 credits

Pending CEU: LA

●● IA Landscape Irrigation Technician Course

January 27, 2020
8:00 AM – 5:00 PM (lunch included)
Auditorium II

Instructor: John Newlin

(Approved CEU: IC=6 credits; NALP=1 credit per training hour)

Learn the basics of hydraulics and irrigation system installation and maintenance. This full-day, hands-on learning session covers gluing and repairing PVC pipe, installing nozzles and adjusting heads, setting and repairing electric valves, and field and controller wiring techniques.

●●● Fundamentals of Profitable Landscape Design

January 27, 2020
8:30 AM – 4:30 PM (lunch included)
Colony A

Instructors: Richard Ludwig & Bill Slack, Landscape Design Workshops

(Approved CEU: LC=5 credits; NALP=1 credit per training hour. Pending CEU: LA)

Workshop provides a profit-centered, hands-on approach to essential landscape design skills. Class offers intense one-on-one instruction and evaluation of drafting/graphic abilities. The central theme of the full-day course is generating more business by improving drawing skills that produce bold yet efficient graphics.

The two instructors have decades of industry experience and offer insight into how to turn design

skills into increased cash flow. Class is geared toward green industry professionals wanting to dramatically improve their ability to communicate their design ideas on paper. Participants will complete a final project incorporating all learned skills by the end of the day. All drafting/drawing supplies and instructional materials are included. This is a very intense day of landscape design skill development!

Drafting supplies provided: circle template, 45-45-90 triangle, 30-60-90 triangle, drafting vellum, 4B,2B,2H,4H graphite pencils, eraser, erasing shield, pencil sharpener

Morning Session

- **Generating \$Green\$ in the Green Industry** - What clients really want in design/build
- **Fundamentals of Speed Graphics** - Using your equipment to quickly communicate your ideas on paper

■ **Bold Yet Efficient Symbols**

- Hands on exercise to create striking trees, shrubs, ground-covers and hardscapes

- **Making Your First Impression Count** - Creating crisp, architectural lettering

Afternoon Session

- **Design Salesmanship** - Turning every prospect into a lifelong client
- **High Speed Title Blocks and Plant Lists** - Strategies that save time and effort yet produce professional results
- **Elaborate Symbols** - Learn how to draw sophisticated symbols that create punch and interest in a fraction of the time
- **Putting It All Together** - A final project that ties together everything that you have learned during the workshop

●●● North Carolina Pesticide License Course & Test

January 27-28, 2020

Day 1:

8:30 AM – 4:30 PM (Core Safety Training and NC Laws; lunch included)

Day 2:

8:30 AM – Noon (Ornamental and Turfgrass Training)

Lunch on your own

1:00 PM – 5:30 PM (NC Pesticide Applicators Licensing Exam – administered by NCDA)

Auditorium III

Instructor: Wayne Buhler, North Carolina State University

(Approved CEU: LC=4 credits; NALP=1 credit per training hour; ISA: Day 1=6.5 CEU for Certified Arborist, BCMA-Practice; Day 2=3 CEU for Certified Arborist, BCMA-Practice)

This 1½-day course conducted by NC State Extension prepares prospective applicators for the private and commercial applicator certification exams. Two study manuals will be shipped to participants upon registration. It is strongly recommended that study manuals are read and reviewed prior to the course.

Course registration fee includes cost of study manuals and Monday lunch. Test fees are not included and must be paid by cash or check only directly to NCDA at time of testing.

■●■▲ OSHA/NALP 10-Hour Construction Safety Course

January 27-28, 2020

Day 1:

8:30 AM – 5:00 PM (lunch included)

Day 2:

8:00 AM – Noon

Lunch on your own

Biltmore

Instructor: Joe Lewis

(Approved CEU: LCB=4 credits; NALP=1 credit per training hour. Pending CEU: ICB, LA, SAF)

Designed by the National Association of Landscape Professionals and approved by the Occupational Health and Safety Administration,

this course provides managers and field employees with in-depth information on the prevention of workplace hazards, workers' rights, employer responsibilities, filing complaints, and more. This is your one-stop shop for in-depth safety education. After finishing the course participants will receive the 10-Hour Construction Completion Course Card and a certificate from NALP.

●●● ICPI Concrete Paver Installer Course (Sponsored by Belgard)

January 27-28, 2020

8:30 AM – 5:00 PM (lunch included)
Moorhead

Instructor: Andrew Harris

(Approved CEU: LC=5 credits; NALP=1 credit per training hour)

This practical two-day course is designed to enhance the knowledge of individuals involved in the construction and installation of interlocking concrete pavements. The course is taught by ICPI instructors and is tied together with a video that takes participants through a step-by-step concrete paver installation.

Curriculum Topics: Job planning and documentation; estimating quantities, job layout, and flow; soil characteristics and compaction; base materials; edge restraints; bedding and joint sands; selection and installation of concrete pavers; maintenance and management; specialty applications and construction tips; safety; estimating and job costing; and contract basics.

●●● ICPI PICP Specialist Course (Sponsored by Belgard)

January 27, 2020

8:30 AM – 5:00 PM (lunch included)
Colony C

Instructor: Greg Ambrose

(Approved CEU: LC=5 credits; NALP=1 credit per training hour)

This classroom-based program is designed for contractors presently doing residential and/or commercial concrete pavement installations. Companies may already be

installing permeable interlocking concrete pavement (PICP) or planning to expand into the PICP market. Participants should be experienced contractors.

Curriculum Topics: Overview and systems; job planning and documentation; job layout, flow and estimating quantities; soil and site characteristics; sub-base and base materials; edge restraints; bedding and jointing materials; paver selection and installation; and maintenance.

●●● Creating the Ultimate Landscape Design

January 28, 2020

8:00 AM – 4:30 PM (lunch included)
Colony A

Instructors: Richard Ludwig & Bill Slack, Landscape Design Workshops

(Approved CEU: LC=5 credits; NALP=1 credit per training hour. Pending CEU: LA)

Developed for landscape professionals wanting a strong foundation in design theory in order to create plans that are stunning, unified and functional. Emphasis placed on profitable, time efficient strategies. Class takes an architectural approach and centers on creating wonderful outdoor space using form composition and lines of force. In addition, course weaves sustainable, earth-friendly principles into traditional design. This hands-on workshop is participant-centered and goes from a basic understanding to completing a master plan in just one day. Improve your skills as you create and sell beautiful, practical, profitable, earth-friendly design solutions for your client.

Drafting supplies provided: circle template, 45-45-90 triangle, 30-60-90 triangle, drafting vellum, 4B,2B,2H,4H graphite pencils, eraser, erasing shield, pencil sharpener

Morning Session

- **Mediocre or Magnificent** – Selling Outstanding Landscape Design
- **Client and Site Analysis** – Making the Most of What They Have

■ **An Architectural Approach to Landscape Design**

- **Lines of Force** – the Ultimate Design Tool

Afternoon Session

- **Why They Say 'No'** – Overcoming Resistance to Design Sales
- **Form Composition**
- **Developing a Consistent Visual Theme**
- **Marketing and Selling Your Design Ideas**
- **Final Project**

■●■▲ Adult First Aid/CPR/AED Certification Course

January 28, 2020

1:00 PM – 5:00 PM

Biltmore

Instructor: Joe Lewis

(Approved CEU: LCB=4 credits; NALP=1 credit per training hour; ISA=3.5 CEU for Certified Arborist, BCMA-Practice. Pending CEU: ICB, LA, SAF)

Learn how to recognize and care for a variety of first aid emergencies including burns, cuts, scrapes, and sudden illnesses. You'll also learn about treating head, neck, and back injuries, as well as heat and cold emergencies. Finally, you'll learn how to respond to breathing and cardiac emergencies for people over 12 years of age. Successful students will receive a certificate for Adult First Aid/CPR/AED, valid for two years.


TUESDAY, JANUARY 28

8:00 AM – 9:15 AM

KEYNOTE ADDRESS: State of the N.C. Agriculture Industry

Steve Troxler, Commissioner, North Carolina Department of Agriculture
(Approved CEU: ICB=1 credit; NALP=1 credit per training hour)

Steve Troxler has served as the N.C. Commissioner of Agriculture since 2005. He is an avid supporter of the state's nursery and landscape industry. He worked to include nursery crops in the Hurricane Florence Disaster Recovery Act, which earmarked \$240 million in relief funds for agricultural businesses adversely impacted by Hurricane Florence and/or Hurricane Michael. Join him to gain insights into the state of the agricultural industry in North Carolina.



EDUCATION TRACKS	BUSINESS Guilford E	LANDSCAPE Guilford D	PESTS, WEEDS & DISEASES Guilford FG	GARDEN CENTER Auditorium II	GROWER Guilford C
9:30 AM – 10:20 AM	■ ■ ■ Federal Motor Carrier Safety Administration Regulatory Update and Latest News	■ ■ ■ Building a Market Leading Organization	● ● ● ● ● Box Blight, Spotted Lanternfly and Other Regulatory Updates	● ● ● Power of Plants: How Gardening Helps Mind, Body, and Soul	● Replacing Perlite with Whole Tree: Our Experiences
10:30 AM – 11:20 AM	■ ■ ■ The Ownership Transition Challenge	● ● What If Your Plants Die in Green Stormwater Infrastructures?	● ● Resistance Management: Applying Herbicide Rotation in Nursery Management	● ● ● Best in Class Annuals and Perennials for the Piedmont	● Greenhouse Water Treatment Methods
11:30 AM – 12:45 PM	● ■ ■ General Session Speaker & Lunch - Kerry Scott, Program Manager, másLabor <i>(Approved CEU: LC=1 credit; ICB=1 credit; NALP=1 credit per training hour)</i>				
1:00 PM – 1:50 PM	■ ■ ■ Insurance Certificates 101	● ● ● Developing Multi-Functional Landscapes	● ● ● ● ● Pros and Cons of Native Trees for IPM	● ● ● Woody Ornamental Solutions for the Nursery and Landscape Industry	● ● Controlling Insects and Diseases in Nurseries
2:00 PM – 2:50 PM	■ ■ ■ Top Tax Strategies for Closely Held Businesses	● ● ● Road Salt and Urban Forestry	● ● Disease Management of Annuals in the Greenhouse	● ● Garden Next! Garden Retailing in the Age of Distraction!	● Mechanization
3:00 PM – 3:50 PM	■ ■ ■ Risk Management - How to Buy Less Insurance	● ● ● NC Coastal Landscaping: Inspired by Nature	● ● ● The Importance of Mosquito Control for Public Health	● David and Goliath - The Independent Garden Center vs. the Big Box Store	● ● IPM for European Pepper Moth and Other Nursery Pests
4:00 PM – 4:50 PM	■ ■ ■ The Probability of Profitability	● LEAN – Winning Through Production Efficiency	● ● ● ● Resistant Annuals and Herbaceous Perennials for Phytophthora-Infested Landscape Beds	● ● ● Garden Art: Using Ornament to Accent the Landscape	● ● ● Substrate Amendments for Growing Large Container Trees

Professional Credits (CEU) Key Attend the sessions of your choice to earn continuing education credits toward state or national accreditations. Look for the icons below. **See course description for CEU approval status.**

- **LC** Landscape Contractor License (NC) - Technical CEU
- **IC** Irrigation Contractor License (NC) – Technical Irrigation CEU
- **ISA** International Society of Arboriculture – Certified Arborist
- Earn CEUs when you walk the Marketplace floor:**
- **LCB** Landscape Contractor License (NC) – Business CEU
- **ICB** Irrigation Contractor License (NC) – Business CEU
- **NALP** National Association of Landscape Professionals – Landscape Industry Certified
- (1) ● (2) ● (4)
- **LA** Landscape Architect License (NC)
- **PA** Pesticide Applicator License (FL, NC, SC, TN, VA)
- ▲ **SAF** Society of American Foresters – Certified Forester
- Approved CEU:**
LC=1 credit; IC=2 credits
- Pending CEU: LA**

Business

Guilford E

9:30 AM – 10:20 AM

Federal Motor Carrier Safety Administration Regulatory Update and Latest News

Jon R. McCormick, Federal Motor Carrier Safety Administration

(Approved CEU: LCB=1 credit; ICB=1 credit; NALP=1 credit per training hour)

Join Jon McCormick of the FMCSA, who will provide information on the Drug and Alcohol Clearinghouse Rule, Entry Level Driver Training Rule, Electronic Logging Device Rule, Hours of Service Notice of Proposed Rule, and educational compliance resources. Gain a basic understanding of new requirements and discover resources to educate yourself. Bring your questions to ask the DOT.

10:30 AM – 11:20 AM

The Ownership Transition Challenge

Robert Hayter, LKC Engineering

(Approved CEU: LCB=1 credit; ICB=1 credit; NALP=1 credit per training hour)

Often called succession planning, exit strategies, generational transfer, selling or mergers & acquisitions, ownership transition should be a process not an event. Come join Robert Hayter, one of your fellow green industry owners and business consultant, who will share insights about ownership transition and assessing transition readiness.

1:00 PM – 1:50 PM

Insurance Certificates 101

R. Carmen Davis, CIC, Davis Insurance Agency and Ashby Ware, ChFC, CLU, CExP, Consolidated Planning, Inc.

(Approved CEU: LCB=1 credit; ICB=1 credit; NALP=1 credit per training hour)

We will examine insurance certificates including policy limits, additional insureds, waiver of subrogation, workers' compensation officer exclusion, and more. This course will advise the business owner of what certificates mean, how they apply to business management and can extend coverage to the certificate holder.

2:00 PM – 2:50 PM

Top Tax Strategies for Closely Held Businesses

Kenneth P. Martin, CPA and Scott Hensley, JD, CPA, Stancil CPAs & Advisors

(Approved CEU: LCB=1 credit; ICB=1 credit; NALP=1 credit per training hour)

This session will review the latest tax updates and provide the small business owner with the top tax strategies for 2020 to minimize one's tax burden and stay out of trouble with the tax authorities.

3:00 PM – 3:50 PM

Risk Management - How to Buy Less Insurance

Will Salisbury and Joe Gupton, Jones Keystone

(Approved CEU: LCB=1 credit; ICB=1 credit; NALP=1 credit per training hour)

Life is risky. And so is business. This session is an interactive discussion about how to identify and deal with the risks we all encounter. The solution is NOT "buy more insurance." Learn what individuals and business owners can do to reduce risks and add to the bottom line.

Session take-aways:

- Identify risks that can threaten your business, your employees, your family, and your financial security.
- Develop plans to avoid or reduce risks and their direct and indirect costs.
- Transfer risks to others when appropriate by using contracts and other "risk transfer" tools such as insurance and bonds.

4:00 PM – 4:50 PM

The Probability of Profitability

Paige Moody, Arbor Enterprises

(Approved CEU: LCB=1 credit; ICB=1 credit; NALP=1 credit per training hour)

Paige will discuss key tips and strategies to sustained profitability. The difference between success and turning dollars is in the details. Learn how to recognize waste in your business, keys to finding the right clients, and how to grow with the changing climate.

Landscape

Guilford D

9:30 AM – 10:20 AM

Building a Market Leading Organization

Ken Thomas, Envisor

(Approved CEU: LCB=1 credit; ICB=1 credit; NALP=1 credit per training hour)

Why is it that some companies grow to market leadership while others get stuck along the way? Only a small portion of landscape companies grow beyond a million dollars and of the ones that do, most get stuck never realizing their business dreams. In this presentation Ken Thomas of Envisor Consulting will share his insights around organizational development learned through the lens of business ownership and Landscape business consulting throughout the country. Participants will learn:

The basics of Business Development; The Business Lifecycle; and Why most business get stuck on the road to success and what to do about it.

10:30 AM – 11:20 AM

What If Your Plants Die in Green Stormwater Infrastructures?

Dan Whitehead, HortSource; Wei Zhang and Hailing Yang, TreeDiaper

(Approved CEU: LC=1 credit; NALP=1 credit per training hour)

In this presentation, we will review the new technologies that can help to solve the problem of plants dying in green stormwater infrastructures with the use of captured and stored stormwater. By capturing the stormwater, it enhances the stormwater reduction and retention feature of green infrastructures. In between storms and in drought, using the stored stormwater to irrigate the plants to ensure their survival. In return, the plants help to remove pollutants. Some technologies can help to reduce the need of maintenance.

1:00 PM – 1:50 PM

Developing Multi-Functional Landscapes

Barbara Fair, PhD, North Carolina State University

(Approved CEU: LC=1 credit; NALP=1 credit per training hour. Pending CEU: LA)

In this presentation, Dr. Fair will discuss the value plants have in our urban communities and how we can maximize those values. You will learn how to see plants in new ways and be introduced to general design concepts, how to maximize what plants have to offer, low impact development concepts and the policies and management decisions needed to create sustainable green infrastructure.

2:00 PM – 2:50 PM

Road Salt and Urban Forestry

Wei Zhang, TreeDiaper; Dan Whitehead, HortSource; Hailing Yang, TreeDiaper

(Approved CEU: LC=1 credit; NALP=1 credit per training hour; ISA=0.75 CEU for Certified Arborist, Municipal Specialist, BCMA-Management. Pending CEU: SAF)

Sodium Chloride, the most predominant salt used on streets for melting snow and ice, is the lubricant of the modern lifestyle in northern climates during wintry weather conditions. These same streets and parking lots are also the battleground where urban foresters strive to build green infrastructure for canopy coverage, stormwater management and aesthetics. It is all too common to observe the damages and casualties on roadsides in spring, when plants start to display the impacts of salt through discoloration and canopy loss.

At this stage, it is often too late to remedy and correct the damaged plants. The urban forestry community is aware of the issue. Many of these professionals have snow removal as part of their responsibility requiring salts as part of standard operating procedures. We will use case studies in Baltimore, MD and controlled environment studies in Richmond, VA to demonstrate a unique protocol of protecting plants from salt damages.

3:00 PM – 3:50 PM

●●● NC Coastal Landscaping: Inspired by Nature

**Jane Harrison and Gloria Putnam,
North Carolina Sea Grant**

(Approved CEU: LC=1 credit; NALP=1 credit per training hour. Pending: LA)

How can we increase nature-enhancing landscaping on the coast? This session will describe sustainable coastal landscaping solutions, and resources available for growers, as well as landscape designers, installers, and contractors. Plus, you will learn about recent research with coastal residents that reveals their landscaping dreams and desires. This session is led by leaders of the Coastal Landscapes Initiative, whose ultimate goal is to foster coastal landscapes that are attractive, environmentally-friendly, well adapted to the coastal region, storm-ready, enjoyable, and manageable.

This session will provide:

- Access to landscaping resources (e.g. design templates) specific to the NC coast
- Understanding of the features that define a sustainable coastal landscape
- Knowledge of specific action steps to create sustainable coastal landscaping solutions

4:00 PM – 4:50 PM

● LEAN - Winning Through Production Efficiency

Ben Gandy, Envisor

(Approved: NALP=1 credit per training hour)

With labor rising and pricing fixed, it is getting harder and harder to make a dime! Successful companies are learning to do more with less. Not by working harder but working smarter. In this presentation Envisor's Ben Gandy will present best practices learned from some of the world's top productivity experts in how to identify and eliminate waste in landscape production.

Pests, Weeds & Diseases

Guilford FG

9:30 AM – 10:20 AM

●●●▲ Box Blight, Spotted Lanternfly and Other Regulatory Updates

**Hsien Tzer (HT) Tseng and
Whitney Swink, NCDA&CS Plant
Industry Division**

(Approved CEU: LC=1 credit; NALP=1 credit per training hour; PA=1 credit for D, L, N, O, X. ISA=0.75 CEU for Certified Arborist, Municipal Specialist, BCMA-Management. Pending CEU: SAF)

This session is an overview of new pests of concern as well as regulatory updates for insects and diseases that affect the green industry. Participants will learn how to identify and report Spotted Lanternfly - our newest pest of concern; understand regulatory concerns related to box blight; and understand how interstate movement of plant material spreads regulatory pest issues.

10:30 AM – 11:20 AM

●● Resistance Management: Applying Herbicide Rotation in Nursery Management

Caren Schmidt, PhD, BASF

(Approved CEU: NALP=1 credit per training hour; PA=1 credit for D, L, N, O, X)

Join Dr. Schmidt for a reminder session on the importance of understanding and applying proper herbicide rotations to maximize weed control and crop productivity.

1:00 PM – 1:50 PM

●●●▲ Pros and Cons of Native Trees for IPM

**Steven Frank, PhD, North
Carolina State University**

(Approved CEU: LC=1 credit; NALP=1 credit per training hour; PA=1 credit for D, L, N, X. ISA=0.75 CEU for Certified Arborist, Municipal Specialist, BCMA-Management. Pending CEU: LA, SAF)

The right plant in the right place is a basic tenant of IPM and sustainable urban landscapes. Many people assume natives are the right plants for all places. Our research shows that native trees can support more

pests than exotic trees a problem that gets worse at the most urban sites. Many exotic trees also support as much insect biodiversity as natives. Thus, exotic trees may be the right plants for highly urban pest prone places.

2:00 PM – 2:50 PM

●● Disease Management of Annuals in the Greenhouse

**Inga Meadows, North Carolina
State University**

(Approved CEU: NALP=1 credit per training hour; PA=1 credit for D, L, N, O, X)

Diseases of annuals are a perennial issue in greenhouse production of ornamentals. Learn disease management strategies including cultural and chemical controls, including fungicide rotations to reduce the risk of fungicide resistance.

3:00 PM – 3:50 PM

●●● The Importance of Mosquito Control for Public Health

Sydney Brogden, Clarke

(Approved CEU: LC=1 credit; NALP=1 credit per training hour; PA=1 credit for B, N, D)

This session will be an overview of proper pesticide applications with a focus on the control of mosquitoes, larvae and adult, and the importance of resistance management. Learn more about product availability, product rotation, its relevance in your field, and disease management.

4:00 PM – 4:50 PM

●●● Resistant Annuals and Herbaceous Perennials for Phytophthora-Infested Landscape Beds

**Inga Meadows, Michelle Henson,
and Suzette Sharp, North Carolina
State University**

(Approved CEU: LC=1 credit; NALP=1 credit per training hour; PA=1 credit for D, L, N, X. Pending CEU: LA)

There are limited options for managing landscape beds that have been infested with Phytophthora. This session will discuss common and popular annuals and herbaceous ornamentals

that performed well in infested landscape beds over 2018 and 2019. General management of Phytophthora diseases will also be discussed. Attendees will learn about disease resistant plants, fungicide recommendations to manage Phytophthora diseases, and cultural practices to manage Phytophthora diseases.

Garden Center

Auditorium II

9:30 AM – 10:20 AM

●●● Power of Plants: How Gardening Helps Mind, Body, and Soul

**Bryce Lane, North Carolina State
University**

(Approved CEU: LC=1 credit; NALP=1 credit per training hour. Pending CEU: LA)

Did you know that a twenty-minute walk in the garden is equal to taking two anti-depressant pills? Time spent working or walking in a garden has bona fide benefits to our physical, mental and emotional health. This talk highlights many of the ways gardening makes us better, and shares much of the current research that supports what we gardeners already knew!

10:30 AM – 11:20 AM

●●● Best in Class Annuals and Perennials for the Piedmont

**Jeff Gibson, Ball Horticultural
Company**

(Approved CEU: LC=1 credit; NALP=1 credit per training hour. Pending CEU: LA)

In this session, Jeff Gibson will present a concise selection of trialed and true, sure to sell plants for landscape and garden centers right here in North Carolina.

1:00 PM – 1:50 PM

●●● Woody Ornamental Solutions for the Nursery and Landscape Industry

**Mike Duvall, Star Roses and
Plants**

(Approved CEU: LC=1 credit; NALP=1 credit per training hour. Pending CEU: LA)

This talk will highlight woody ornamental genetics that provide distinct advantages to growers and landscapers. These varieties have been selected to help solve an industry problem, whether that be better habits that result in less maintenance, longer flowering plants that offer more color, or improved tolerance of diseases. In discussing key varieties from Star's offering, this presentation will demonstrate the attributes a new plant needs to make it through trials and into the trade. Some plants of focus include Abelia, Cercis, Lagerstroemia, and Prunus.

2:00 PM – 2:50 PM

●● Garden Next! Garden Retailing in the Age of Distraction

Jeff Gibson, Ball Horticultural Company

(Approved: NALP=1 credit per training hour. Pending: LA)

This session will present top trends and commentary on reaching your landscape and garden center customers in the age of distraction!

3:00 PM – 3:50 PM

● David and Goliath - The Independent Garden Center vs. the Big Box Store

Matt Hunter, New Garden

(Approved CEU: NALP=1 credit per training hour)

As small business owners, we must get back to the basics and do what we know best. We did not enter the garden center business to sell artificial Christmas decorations, soaps, jewelry and clothes. This session will help you differentiate your Independent Garden Center from the big box stores, as well as create a profitable and sustainable business.

4:00 PM – 4:50 PM

●●● Garden Art: Using Ornament to Accent the Landscape

Bryce Lane, North Carolina State University

(Approved CEU: LC=1 credit; NALP=1 credit per training hour. Pending CEU: LA)

Gardens aren't just for plants anymore. You can use just about any kind of "non-plant" piece to decorate and enhance the landscape, and the more unusual or unexpected the better! From driftwood, birdhouses, and rebar, to sculpture, bathtubs, and window-panes, come see a collection of examples of how gardeners are creating unique and interesting spaces with their "junk."

Grower

Guilford C

9:30 AM – 10:20 AM

● Replacing Perlite with Whole Tree: Our Experiences

Mark Yelanich, PhD, Metrolina Greenhouses

(Approved CEU: NALP=1 credit per training hour)

Perlite is a very expensive but necessary component of modern potting mixes. Whole tree has given Metrolina a low-cost alternative and a promising component for the future.

10:30 AM – 11:20 AM

● Greenhouse Water Treatment Methods

Mark Yelanich, PhD, Metrolina Greenhouses

(Approved CEU: NALP=1 credit per training hour)

Metrolina water needs have increased as they have grown. This session will review the 47-year journey to the water treatment we are using today.

1:00 PM – 1:50 PM

●● Controlling Insects and Diseases in Nurseries

Nancy Rechcigl, Syngenta

(Approved CEU: NALP=1 credit per training hour; PA=1 credit for D, L, N, O, X)

Successful nursery production requires being prepared for the potential insect and disease problems that can quickly disrupt a prosperous season. Nancy Rechcigl, technical services manager for ornamentals at Syngenta, will share tips on how to prevent and control

key nursery insects and diseases. She will also highlight how to follow an agronomic program, which can provide a built-in resistance management strategy, reduce the need for corrective actions and ensure the production of a high-quality crop. Learn how to properly rotate chemical products and how to plan for pest pressure.

2:00 PM – 2:50 PM

● Mechanization

Mark Yelanich, PhD, Metrolina Greenhouses

(Approved CEU: NALP=1 credit per training hour)

The late founder of Metrolina Greenhouses, Tom VanWingerden, used to say "Automate or Stagnate." This session will review some of the labor-saving devices being used at Metrolina.

3:00 PM – 3:50 PM

●● IPM for European Pepper Moth and Other Nursery Pests

Steven Frank, PhD, North Carolina State University

(Approved CEU: NALP=1 credit per training hour; PA=1 credit for D, L, N, O, X)

European pepper moth is an exotic nursery pest that is widespread but relatively unknown. We will discuss identification and management of this pest and others.

4:00 PM – 4:50 PM

●●▲ Substrate Amendments for Growing Large Container Trees

Anthony LeBude, PhD, North Carolina State University and Jim Owen, PhD, Virginia Tech

(Approved CEU: NALP=1 credit per training hour; ISA=0.75 CEU for Certified Arborist, Municipal Specialist, BCMA-Management. Pending CEU: SAF)

Learn about substrate amendments available for growing shade and flowering trees in large containers and how it affects water holding capacity and growth during production. Learn what amendments are available to use for growth, increasing water holding capacity and perhaps increasing transplant survival to the landscape.

2020 License Requirements

NC Pesticide License

- The different licenses hold different requirements so make sure you are familiar with them.
- Most of our pesticide classes offer the D, L, N, O, X categories.
- For more info, visit ncagr.gov.

NC Landscape Contractors License

- Requires proof of attendance forms.
- At least three out of the seven CEUs must be technical (landscape) credits and at least two of the seven CEUs must be business credits. The remainder two hours can come from either technical (landscape) or business credits.
- For more info, visit nclclb.com.

NC Irrigation Contractors License

- Requires proof of attendance forms.
- License requires four (4) business credits and six (6) turf irrigation credits.
- For more info, visit ncicl.org.


NC Landscape Architect

- Requires proof of attendance forms.
- For more info, visit ncbola.org.

NC Certified Arborist

- There are six ISA certification credentials.
- For more info, visit isa-arbor.com.

WEDNESDAY, JANUARY 29

8:00 AM – 9:15 AM	<p>KEYNOTE ADDRESS: Plant Exploration and Conservation Tony Avent, Owner & Operator, Plant Delights Nursery & Juniper Level Botanic Garden <i>(Approved CEU: LC=1 credit; NALP=1 credit per training hour. Pending CEU: LA)</i></p> <p>Tony Avent has a passion for plants and nature. In 1988, he established Plant Delights Nursery, a retail mail order nursery, and Juniper Level Botanic Garden, a not-for-profit 28-acre research, education and display garden with more than 26,000 taxa, including an array of unusual specimen plants unlike any other in the world. Learn about his life's work of plant exploration and conservation, and what drives him to search the world for new, rare and unusual plants.</p> 				
EDUCATION TRACKS	BUSINESS Guilford E	LANDSCAPE Guilford D	TURF MANAGEMENT Guilford F <i>Coordinated by the North Carolina Sod Producers Association</i>	IRRIGATION Guilford C <i>Coordinated by the Carolinas Irrigation Association</i>	URBAN FORESTRY & ARBORICULTURE Guilford G <i>Coordinated by the North Carolina Urban Forest Council</i>
9:30 AM – 10:20 AM	Leaders Grow Leaders	Bird-Friendly Habitat Gardening	Utilizing Cultural and Pesticide Methods for Establishment and Conversion of Warm and Cool Season Turf	Choosing the Right Central Control System	What Lies Beneath: Fungal Tree Pathogens in the Urban Landscape
10:30 AM – 11:20 AM	Keeping Employees Healthy and Happy	Small Space Landscapes	Pesticide and Regulatory Issues Facing the Turfgrass Industry	Defining Your Value Proposition & Discovering the Path to Productive Solutions	Fruit Tree Pruning; Basics for the Arborist
11:30 AM – 12:45 PM	<p>General Session Speaker & Lunch - Kathie Dello, Ph.D., Director, NC State Climate Office & NC State Climatologist <i>(Approved CEU: LC=1 credit; ICB=1 credit; NALP=1 credit per training hour. Pending CEU: LA, SAF)</i></p>				
1:00 PM – 1:50 PM	HR Best Practices	How to Sell Profitable Lighting Systems	Soil Fertility Management for Successful Lawns and Landscapes	Selling Beyond Single Head Repairs	Preventing Tree Loss During Construction
2:00 PM – 2:50 PM	Opportunities for Women in the Green Industry	Selecting the Best Plants for Energy Efficiency	Advanced Disease Management Strategies for Cool and Warm Season Turf	Decoding Decoders – Two-wire Control 101	Threats to Landscape Trees
3:00 PM – 3:50 PM	Content Marketing	Advanced Lighting Design to Separate You From the Competition	Advanced Weed Management in Warm and Cool Season Turf	Large Fittings and Restraints	Trees and the Hazards They Present
4:00 PM – 4:50 PM	Creative Benefits Packages - Alternatives to Traditional Health Insurance	New Plants on the Trade Show Floor with the JC Raulston Arboretum*	Advanced Strategies for Controlling Difficult Insect Pests in Warm and Cool Season Turf	Irrigation and Backflow: What You Need to Know	Caring for Mature Landscape Trees

Professional Credits (CEU) Key Attend the sessions of your choice to earn continuing education credits toward state or national accreditations. Look for the icons below. **See course description for CEU approval status.**

- **LC** Landscape Contractor License (NC) - Technical CEU
- **IC** Irrigation Contractor License (NC) – Technical Irrigation CEU
- **ISA** International Society of Arboriculture – Certified Arborist
- **LCB** Landscape Contractor License (NC) – Business CEU
- **ICB** Irrigation Contractor License (NC) – Business CEU
- **NALP** National Association of Landscape Professionals – Landscape Industry Certified
- **LA** Landscape Architect License (NC)
- **PA** Pesticide Applicator License (FL, NC, SC, TN, VA)
- ▲ **SAF** Society of American Foresters – Certified Forester

Earn CEUs when you walk the Marketplace floor:

● (1) ● (2) ● (4)

Approved CEU:
LC=1 credit; IC=2 credits

Pending CEU: LA

*Course conducted at Greensboro Coliseum. Limited to 40 participants.

Business

Guilford E

9:30 AM – 10:20 AM

Leaders Grow Leaders

Conrad Hayter, CPCC, PCC, The Windsock Group

(Approved CEU: LCB=1 credit; ICB=1 credit; NALP=1 credit per training hour)

This course offers practical approaches and tools to grow your leadership contribution and impact. Participants will understand the process to identify their values and life purpose as a leader, learn tools to overcome their current leadership challenges, and discover the next step in their personal leadership development.

10:30 AM – 11:20 AM

Keeping Employees Healthy and Happy

Lee Ivy, North Carolina State University and Paige Moody, Arbor Enterprises

(Approved CEU: LCB=1 credit; ICB=1 credit; NALP=1 credit per training hour)

Emphasis will be on the benefits of healthy employees and the profitability that comes from daily habits of exercise and bodily care. Simple habits and steps toward healthy employees can increase productivity, company morale and individual and company longevity. Sample exercises and ideas for incentives will be presented.

1:00 PM – 1:50 PM

HR Best Practices

Janice Lane and David Shehdan, Jones Keystone

(Approved CEU: LCB=1 credit; ICB=1 credit; NALP=1 credit per training hour)

No manager looks forward to disciplining or terminating an employee but unfortunately many times managers find themselves in these difficult situations. Managers have a fine line to walk in coaching, managing and disciplining employees while ensuring the company is protected from potential employment claims from Equal Employment Opportunity Commission (EEOC) or Department of Labor (DOL) that can come from messy disciplinary write ups or terminations.

We'll Learn About

- Do you have job descriptions and an employee handbook in place?
- Responsibilities of employees and supervisors
- Different and effective communication styles
- Feedback and coaching
- How to document disciplinary actions that will stand the EEOC tests
- Corrective action steps
- Performance Improvement Plans (PIP)
- Document and document again!

2:00 PM – 2:50 PM

Opportunities for Women in the Green Industry

Moderator: Debbie Hamrick, NC Farm Bureau

Panelists: Dana Massey, Plantworks Nursery; Leslie Herndon, Greenscapes, Inc.; Paige Moody, Arbor Enterprises; Phil Campbell, Campbell Road Nursery; and Liz Riley, Alamance Community College

(Approved CEU: LCB=1 credit; ICB=1 credit; NALP=1 credit per training hour)

A panel of successful women in the industry representing growers, landscapers, retail, and education will share experiences and discuss opportunities including ownership and/or advancement and leading/managing teams. The purpose of the session is to make women aware of the opportunities the industry offers and ways in which to advance and to better lead and manage teams.

3:00 PM – 3:50 PM

Content Marketing

Eric W. Jones, ASLA, Turf Teacher, Inc.

(Approved CEU: LCB=1 credit; ICB=1 credit; NALP=1 credit per training hour)

This session will cover content marketing within a social media marketing strategy. Audience will gain knowledge of content to use in podcasts, vlogging, and social media posts for Instagram, Facebook, Snapchat, and other platforms.

4:00 PM – 4:50 PM

Creative Benefits Packages – Alternatives to Traditional Health Insurance

Joe Gupton and Janice Lane, Jones Keystone

(Approved CEU: LCB=1 credit; ICB=1 credit; NALP=1 credit per training hour)

Discussion on how many employers are offering more than the traditional medical, dental and life insurance options to meet the needs of their employees. A fresh look at combining insurance coverage in conjunction with time off, financial incentives, and tenure bonuses that can actually lower the hard costs of Employee Benefits.

This session covers lowering insurance (health and ancillary) costs, how to build benefits packages that better suit your employees, and creating incentives for employees to engage in the company via performance and tenure goals.

Landscape Track

Guilford D

9:30 AM – 10:20 AM

Bird-Friendly Habitat Gardening

Peter Schubert, New Hope Audubon Society and NC-IPC

(Approved CEU: LC=1 credit; NALP=1 credit per training hour. Pending CEU: LA)

More and more homeowners and HOAs are looking to create and maintain Bird-Friendly Habitat yards and developments, but they are finding few knowledgeable green industry professionals who can assist them. Pete will present an overview of Bird-Friendly Habitat Gardening and planting to maximize ecological value; what the New Hope Audubon Bird-Friendly Certification Program is doing in Durham, Orange, and Chatham counties; and how you can get involved in this growing approach to greenscaping. Attendees will learn how to expand into new and growing markets for landscape design, installation, and maintenance; learn the vital importance of plant selection to ecological health and diversity; and recognize the business opportunities available to early adopters in the habitat gardening movement.

10:30 AM – 11:20 AM

Small Space Landscapes

Eric W. Jones, ASLA, Turf Teacher, Inc.

(Approved CEU: LC=1 credit; ICB=1 credit; NALP=1 credit per training hour. Pending CEU: LA)

The course "Small Space Landscapes" will discuss issues that Contractors will have when designing and constructing any type of project in small spaces. This will include irrigation installation of main lines, lateral lines and zones. We will discuss the issues with trenching and boring in these small spaces as well as the issues with plant material installation, hardscape installation and overall access to the space. We will focus on the issues and restraints that either Landscape or an Irrigation Contractor will encounter.

1:00 PM – 1:50 PM

How to Sell Profitable Lighting Systems

Debra Burke and Jason Shanabarger, Unique Lighting Systems

(Approved CEU: LC=1 credit; NALP=1 credit per training hour. Pending CEU: LA)

Join Debra Burke and Jason Shanabarger of Unique Lighting Systems in learning how to sell a system not a fixture, make it difficult for the homeowner to say no, and other new selling techniques.

2:00 PM – 2:50 PM

Selecting the Best Plants for Energy Efficiency

Barbara Fair, PhD, North Carolina State University

(Approved CEU: LC=1 credit; NALP=1 credit per training hour. Pending CEU: LA)

Dr. Fair will discuss plant attributes that you must consider prior to selecting plants for the landscape. You will learn that the goal is to maximize their usefulness in the landscape if the aim is to save energy and of course money. And, it is not just about money, it is about making our communities more resilient to insect invaders, storms and weather events that can damage or destroy our plant communities. It is all about being diverse!

3:00 PM – 3:50 PM

●●●● Advanced Lighting Design to Separate You From the Competition

Debra Burke and Jason Shanabarger, Unique Lighting Systems

(Approved CEU: LC=1 credit; NALP=1 credit per training hour. Pending CEU: LA)

Learn advanced lighting designs that will have you thinking outside the box and separate you from your competitors, while having fun and making more money!

4:00 PM – 4:50 PM

**Held at the Coliseum on the Marketplace Floor. Limited to 40 participants.*

●●●●● New Plants on the Trade Show Floor with the JC Raulston Arboretum

Mark Weathington and Doug Ruhren, JC Raulston Arboretum at NC State University

(Approved CEU: LC=1 credit; NALP=1 credit per training hour; ISA=0.75 CEU for Certified Arborist, Municipal Specialist, BCMA-Management. Pending CEU: LA)

New plants are the lifeblood of the industry. Learn about new plants entering the market. We'll be looking at some of the new plants that are on the trade show floor and in nurseries now.

Turf Management

Coordinated by the North Carolina Sod Producers Association

Guilford F

9:30 AM – 10:20 AM

●●●●● Utilizing Cultural and Pesticide Methods for Establishment and Conversion of Warm and Cool Season Turf

Grady Miller, PhD, North Carolina State University, Department of Crop and Soil Sciences

(Approved CEU: LC=1 credit; NALP=1 credit per training hour; PA=1 credit for D, L, N, X. Pending CEU: LA)

Many lawn care operators are faced with the annual process of re-establishing lawns or converting lawns

from one turf type to another. This session will provide information on how to use cultural practices and herbicides to establish warm and cool season turf. Information will also be provided on how to use herbicide strategies to convert from one turfgrass species to another.

Landscape turf managers and related industry personnel will:

- Learn about the biology and management of warm and cool season turfgrasses as well as common and troublesome weeds in North Carolina.
- Learn the environmental implications of herbicide use in turfgrasses.

10:30 AM – 11:20 AM

●●●● Pesticide and Regulatory Issues Facing the Turfgrass Industry

Casey Reynolds, PhD, Turfgrass Producers International

(Approved CEU: LC=1 credit; NALP=1 credit per training hour. Pending CEU: LA)

Pesticide managers are under increasing negative public perceptions spraying lawns and landscapes. This session will discuss pesticide and regulatory issues that the turfgrass industry is facing. Many turf pesticides are increasingly under pressure from the public to be banned or not be utilized as management tools for pests. Discussion on pesticide and regulatory issues will be provided on a local and national level.

Participants will learn how pesticide and regulatory issues affect their business directly and how to stay informed about changes that may impact the turf industry.

1:00 PM – 1:50 PM

●●●● Soil Fertility Management for Successful Lawns and Landscapes

David H. Hardy, PhD, NCDA Soil Testing Agronomic Division

(Approved CEU: LC=1 credit; NALP=1 credit per training hour. Pending CEU: LA)

Managing nutrients through optimum soil fertility is a cornerstone to success for beautiful lawns and landscapes. Soils in North

Carolina are usually naturally acidic so pH management depending on turf type is important in optimizing healthy root growth along with nutrient availability and uptake. Turf requires many essential nutrients but nitrogen, phosphorus and potassium are the primary nutrients where management is focused. Nutrient source selection, timing of application, and safeguarding nutrient loss from application sites are important considerations. The chemistry of irrigation water can also impact soil nutrient availability. This session will cover nutrient management with a focus on interpretation of recommendations/lab tests offered through the Agromonic Services-NCDA&CS.

2:00 PM – 2:50 PM

●●●●● Advanced Disease Management Strategies for Cool and Warm Season Turf

Matt Martin, North Carolina State University, Department of Crop and Soil Sciences

(Approved CEU: LC=1 credit; NALP=1 credit per training hour; PA=1 credit for D, L, N, X. Pending CEU: LA)

Diseases are a seasonal problem in landscape in cool and warm season turf. In many cases, fungicide applications are the most expensive pesticide applications that turf managers utilize. This makes it very important to identify the disease, understand the proper fungicide, and apply the product at the appropriate time. In this seminar, information provided will focus on effective disease management and identification for commercial and residential lawn care operators in North Carolina. Information presented will include the latest research-based information and recommendations on current and forthcoming fungicides as well as cultural management practices for effective disease management.

Landscape turf managers and related industry personnel will:

- Learn about the biology and management of common and troublesome turf diseases in North Carolina.
- Learn the environmental implications of fungicide use in turf.

Participants will learn how to reduce pesticide applications through BMP research-based disease management programs.

3:00 PM – 3:50 PM

●●●●● Advanced Weed Management in Warm and Cool Season Turf

Matt Martin, North Carolina State University, Department of Crop and Soil Sciences

(Approved CEU: LC=1 credit; NALP=1 credit per training hour; PA=1 credit for D, L, N, X. Pending CEU: LA)

This seminar will provide participants information about weed control products for landscape turf using new herbicide chemistry and herbicide application strategies. Identification strategies to properly diagnose and manage difficult to control weeds will be discussed from the relationship of landscape cultural and pesticide management programs. Attendees will be exposed to weed management practices including chemical and cultural turf weed control techniques in the landscape. Participants will learn about specific weeds in NC with an emphasis on common and troublesome weeds in landscape environments and effective control programs.

Landscape turf managers and related industry personnel will:

- Learn about the biology and management of common and troublesome weeds in North Carolina.
- Learn the environmental implications of herbicide use in turf.

Participants will learn how to reduce pesticide applications through BMP research-based weed management programs.

4:00 PM – 4:50 PM

●●●●● Advanced Strategies for Controlling Difficult Insect Pests in Warm and Cool Season Turf

Matt Martin, North Carolina State University, Department of Crop and Soil Sciences

(Approved CEU: LC=1 credit; NALP=1 credit per training hour; PA=1 credit for D, L, N, X)

This session will provide information on effective insect management for common turfgrass pests found in commercial and residential lawns in North Carolina. During the past few years there have been several pests that have made resurgence in the Southeastern

US. Information presented will include the latest research-based information and recommendations on current and forthcoming insecticides as well as cultural management practices for effective insect management. This seminar will also include information on the fate and behavior of insecticides in a turfgrass environment.

Landscape turf managers and related industry personnel will:

- Learn about the biology and management of common and troublesome turf insects in North Carolina.
- Learn the environmental implications of insecticide use in turf.

Participants will learn how to reduce pesticide applications through BMP research-based insect management programs.

Irrigation

Coordinated by the Carolinas Irrigation Association

Guilford C

9:30 AM – 10:20 AM

●● Choosing the Right Central Control System

Brad Comer, Smith Turf & Irrigation

(Approved CEU: IC=1 credit; NALP=1 credit per training hour)

This session will explore and review central irrigation control options and discuss the process for selecting the correct one for the project.

10:30 AM – 11:20 AM

■●● Defining Your Value Proposition & Discovering the Path to Productive Solutions

Chris Keating, The Toro Company

(Approved CEU: LCB=1 credit; ICB=1 credit; NALP=1 credit per training hour)

This session will help contractors answer their customers question when they ask "why you?" Every company has a unique and special offering and once it is identified, contractors can use this information to grow and maintain their business and customer base.

1:00 PM – 1:50 PM

●● Selling Beyond Single Head Repairs

Steve Hill, New Leaf Associates

(Approved CEU: IC=1 credit; NALP=1 credit per training hour)

This session will improve the contractors understanding of selling beyond single head repairs which can help contractors save their customers money as well as conserve water resources and add revenue.

2:00 PM – 2:50 PM

●● Decoding Decoders – Two-wire Control 101

Reid Garner, Hunter Industries

(Approved CEU: IC=1 credit; NALP=1 credit per training hour)

Learn about two-wire/decoder irrigation technology in this introductory course. Basic concepts of design, installation and troubleshooting will be covered.

3:00 PM – 3:50 PM

●● Large Fittings and Restraints

John Fralick, HARCO Fittings

(Approved CEU: IC=1 credit; NALP=1 credit per training hour)

This class will review proper installation techniques and sizing of large fittings within an irrigation system. We will look at all the types of fittings needed and used for all different types of pipe and system requirements.

4:00 PM – 4:50 PM

●● Irrigation and Backflow: What You Need to Know

Craig Birchfield, Zurn/Wilkins

(Approved CEU: IC=1 credit; NALP=1 credit per training hour)

This presentation will cover backflow topics relating to irrigation including code and enforcement, application, selection and sizing, terminology, installation, testing, winterization and maintenance.

Urban Forestry & Arboriculture

Coordinated by the North Carolina Urban Forest Council

Guilford G

9:30 AM – 10:20 AM

●●● What Lies Beneath: Fungal Tree Pathogens in the Urban Landscape

Julia Kerrigan, Clemson University

(Approved CEU: LC=1 credit; NALP=1 credit per training hour; ISA=0.75 CEU for Certified Arborist, BCMA-Science, Municipal Specialist. Pending CEU: SAF)

Many fungal pathogens originate underground and move to above-ground tissues after infection. Learn how to identify common tree pathogens that occur in the urban environment and how and where they affect tree structure.

10:30 AM – 11:20 AM

●●● Fruit Tree Pruning Basics for the Arborist

Michael Parker, PhD, North Carolina State University

(Approved CEU: LC=1 credit; NALP=1 credit per training hour; ISA=0.75 CEU for Certified Arborist, TW Climber Specialist, BCMA-Practice, TW Aerial Lift Specialist)

With a growing interest in planting edible landscapes, many excellent ornamental horticulturists may not realize the subtle nuances needed to maximize fruit production. In this session Dr. Parker will share tips with you on managing and training/pruning fruit trees so that your client may get fruit. It is not just about making the cuts, though, you need to know a bit more about how and where the trees produce fruit.

1:00 PM – 1:50 PM

●●● Preventing Tree Loss During Construction

Jeffrey Kish, F.A. Bartlett Tree Expert Company

(Approved CEU: LC=1 credit; NALP=1 credit per training hour; ISA=0.75 CEU for Certified Arborist, Municipal Specialist, BCMA-Management. Pending CEU: LA, SAF)

A review of recommended processes for preventing tree loss during construction. The presentation will focus on the following: selecting trees to preserve; tips and techniques to prevent damage during construction and; after construction consideration and care.

2:00 PM – 2:50 PM

●●● Threats to Landscape Trees

Laurie Reid, City of Charlotte

(Approved CEU: LC=1 credit; NALP=1 credit per training hour; ISA=0.75 CEU for Certified Arborist, Municipal Specialist, BCMA-Management. Pending CEU: LA, SAF)

The impact of insects and diseases on landscape trees can vary from visual damage to causing an impact on tree health. This talk will focus on pests present in North Carolina and some new threats for which we need to be on the alert.

3:00 PM – 3:50 PM

●●● Trees and The Hazards They Present

Gene Stano, East Carolina University

(Approved CEU: LC=1 credit; NALP=1 credit per training hour; ISA=0.75 CEU for Certified Arborist, Municipal Specialist, BCMA-Management. Pending CEU: LA, SAF)

What is a hazardous tree? How do we determine a hazardous tree and what are the mitigation options available to us? These and other questions will be answered as we look at ISA TRAQ program and some practical common-sense ideas that will help to reduce the tree hazards.

4:00 PM – 4:50 PM

●●● Caring for Mature Landscape Trees

Patrick Anderson, Rainbow Treecare Scientific Advancements

(Approved CEU: LC=1 credit; NALP=1 credit per training hour; ISA=0.75 CEU for Certified Arborist, BCMA-Management. Pending CEU: SAF)

As trees age in our urban/suburban interface they face many challenges. Mature trees may respond differently than young or middle-aged trees to stress, and therefore may require an alternate form of care. Certain arthropod pests and diseases can be an added stress to these aged plants. In this discussion we will discuss several common stress factors of landscape trees, in addition to pests and diseases affecting our mature tree canopy. We will cover practical management strategies for these issues, which take into consideration tree condition, site, and target pest.