GREEN& Fouration GENERAL SESSIONS

WEDNESDAY, JANUARY 21, 2026 7:30-8:30 AM: Check-in & Coffee **BUSINESS LANDSCAPE TURF EDUCATION TRACKS GROWERS IRRIGATION OPERATIONS OPERATIONS MANAGEMENT Guilford** D Guilford E Guilford F Guilford G Auditorium II Location 8:30 - 9:20 AM Exiting 101 | Setting **PPE Transportation** There's a Fire in the Wire How to Save Money in Management of Japa-Yourself up for a Storage and Security Jason Shanabaraer. **Turfgrass Management** nese Maple Scale and Successful Transition The Toro Company/ Dr. Ray McCauley, NCSU of Pesticides Other Pests Threatening Liz Vetter, James Gorzynski, Eric Jones, Container Production Unique Lighting Philip Kolb, Turf Teacher, Inc. Dr. Karla Addesso, TSU New Leaf Brokerage 9:30 - 10:20 AM Sales Manager Vs. Sales You Pick the Pests: Landscape Under There's a Fire in the Wire: Selling Solutions, Not Just Leader: Which Are You? Siege: Identifying Tools for Advanced Trou-**Turf Insect Edition** Plants: Rethinking Value Rayne Gibson, Taproots and Reporting New Dr. Terri Billeisen, NCSU in the Green Industry bleshooting Horticulture Consulting Invasive Pests Jason Shanabarger, David Hoffman, Amy Michael, Dr. HT Tseng, The Toro Company/ Hoffman Nursery Josie Pasche, NCDA&CS Unique Lighting 10:30 - 11:20 AM Eliminating Murder: **Understanding Soil-**What We Learned from New Challenges and Get the Most Out of Plant-Water Relationships Hurricane Helene How Not to Kill Plants Changes Ahead with Preemergence Herbicide Programs in for Optimal Scheduling Bill Jones. Bryce Lane, Horticulturist Turf Pesticides Carolina Native Nursery Dr. Grady Miller, NCSU Dr. Travis Gannon, NCSU **Container Nurseries** Dr. Joe Neal, NCSU Rayne Gibson, Taproots Horticulture Consulting Approved: LCB-1.0; ICB-1.0; CPP-1.0 **Passion is Not Leadership** 11:30 AM - 12:00 PM: In this thought-provoking keynote, we will debunk the myth and delve into the intricate layers that truly define Lunch, available exceptional leadership. Embark on a Paradigm-Shift Journey: Discover the power of passion as a driving force, but go on a first-come beyond the surface to explore why it's not the sole ingredient for effective leadership. Illuminate the Pitfalls: Explore the first-served basis limitations of passion-driven leadership and learn from real-world examples where passion alone fell short in the face of leadership challenges. Unlock the Components of True Leadership: Dive deep into the essential qualities of successful 12:00 - 12:50 PM: leaders, from emotional intelligence to strategic vision and team collaboration. Nurture Your Leadership Growth: Walk **Keynote Presentation** away with practical insights and actionable strategies to develop and enhance your leadership skills, ensuring you are equipped to lead with purpose and impact. Ignite Your Leadership Potential: This keynote isn't just a speech; it's a call to action! Be inspired to transcend the passion paradigm and embrace the multifaceted dimensions of true leadership. **EXPLORING REGIONAL** LANDSCAPE TURF **EDUCATION TRACKS IRRIGATION GROWERS PLANTS OPERATIONS MANAGEMENT** Location **Guilford D** Guilford E Guilford F Guilford G Auditorium II 1:00 - 1:50 PM Advanced Trouble-Southern Stars - Native **Pond Management and** Diagnosis and **Labor Saving Innovations** Trees and Shrubs that its Relation to Turf and in Nursery Production shooting: Electrical Management of Dr. Anthony LeBude, NCSU Work in Real Landscapes Plant Health **Diagnostics for Irrigation** Turfgrass Diseases in Mark Weathington, JCRA Trent Nelson, Kasco Marine Systems the Landscape Maggie Sarvor, Tucor Lee Butler, NCSU 2:00 - 2:50 PM Native Perennials for Water-Wise by Design: **Drip Irrigation for** Turfgrass Weed Manage-Soilless Substrates for Creating Sustain-Shrubs, Flower Beds, ment: Identification, **Nursery Production:** the Shady Site Shannon Currey, Izel Plants able Landscapes in and Groundcovers Control Strategies, and Trends, Innovations, and North Carolina **Emerging Technologies Management Strategies** JB Liefert, SiteOne Amy Mead, NCSU Dr. Navdeep Godara, Dr. Brian Jackson, NCSU NCSU 3:00 - 3:50 PM **Applying Pump Station** Adding Native Plants and Zen and the Art of **Precision Turfgrass New Plant Showcase** Conservation Land-Landscape Maintenance Curves in the Field Management for Opti-

CEU Opportunities The NCNLA applies for continuing education credits from the following entities:

Tom Joyce,

Tom Joyce Consulting

scaping to Your Services

Gloria Putman, NCSU

Amy Mead, NCSU

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

Lee Barnwell, SiteOne

ICB Irrigation Contractor License (NC) — Business CEU

PA Pesticide Applicator License (NC)

ISA International Society of Arboriculture — Certified Arborist

CPP Certified Plant Professional

mized Pest Management

Dr. Qiyu Zhou, NCSU

BUSINESS OPERATIONS & EXPLORING REGIONAL PLANTS, Guilford D

8:30 - 9:20 AM

Exiting 101 | Setting Yourself up for a Successful Transition



Approved: LCB-1.0; ICB-1.0; CPP-1.0

Liz Vetter, James Gorzynski, Philip Kolb, New Leaf Brokerage

This session will walk you through how to exit your small business with maximum profit and minimal stress. We'll explore the key players involved, the 8 drivers of business value, and what buyers are really looking for. You'll learn practical strategies you can start using now to boost your valuation and improve your exit outcome. We'll cover real-world case studies, how to rate your own business, and how long a sale can take. Plus, you'll get best practices for creating a smooth transition. Whether you're looking to sell soon or in the future, this session is your roadmap to a



successful exit. 9:30 - 10:20 AM

Sales Manager Vs. Sales Leader: Which Are You?



Approved: ICB-1.0; CPP-1.0

Rayne Gibson, Taproots Horticulture Culture

Many nurseries and landscapers rely on sales managers who focus on oversight, reporting, and tasks. But growth depends on cultivating sales leaders who inspire, develop, and drive performance. This session explores the difference between managing processes and leading people, showing how leadership creates stronger teams, healthier cultures, and higher revenue. Attendees will leave with practical strategies to elevate managers into leaders who influence results far beyond the sales desk.

What You'll Learn:

- · The key differences between a sales manager and a sales leader
- Why nurseries stall when managers only "keep score" instead of coaching growth
- How leadership shifts improve staff motivation, customer trust, and profitability
- Simple steps to start transforming managers into leaders today
- Real-world examples of leadership behaviors that nurture long-term success

It's time for owners and managers to ask: do we have sales managers or sales leaders? This session challenges you to rethink how you build, support, and empower your teams. Walk away ready to plant the seeds of leadership that will sustain your business growth for years to come.

10:30 - 11:20 AM

What We Learned from Hurricane Helene



Approved: ICB-1.0; ISA-0.75 Arborist, Urban Forest, BCMA-management; CPP-1.0

Bill Jones, Carolina Native Nursery

What Happened to Carolina Native Nursery when Hurricane Helene dropped 30"s of rain in 3 days?

Find out:

- What we had in place prior.
- What we did in the first week.
- What happened in the first 3 months and what we should have done in addition.
- · What funds were and are available.

Having a hurricane preparedness plan is a must. Find out if you have in place what is needed.

1:00 - 1:50 PM

Southern Stars - Native Trees and Shrubs that Work in **Real Landscapes**



Approved: LC-1.0; LA-0.83; ISA-0.75 Certified Arborist, Urban Forest, BCMA-Management; CPP-1.0

Mark Weathington, JCRA

Native plants are often touted as better suited for our region, but the truth is that our landscapes provide anything but native conditions. No matter how much you love natives, they are only economically viable if they look great in a nursery container and thrive in the harsh conditions of urban and suburban landscapes. Let's look at some native species and selections which are proven performers and think about how they can be used in new ways.

2:00 - 2:50 PM

Native Perennials for the Shady Site



Approved: LC-1.0; LA-0.83; CPP-1.0

Shannon Currey, Izel Plants

Shady spaces in the landscape often get the mulch treatment or are planted with problematic spreaders like liriope or English ivy. Fortunately, there are a variety of native, herbaceous perennials that offer a powerful combination of visual appeal and ecological function. While few plants grow in the dense shade underneath evergreens, shade-tolerant species have developed strategies that allow them to do well in less than full-sun conditions. This session addresses the nature of shade and some of the physiological adaptations that shade-tolerant plants employ. Focusing on regionally native species and their cultivars, we'll take a close look at a selection of perennials, grasses, and sedges to understand why they're particularly helpful. We'll also highlight handy combinations and deer-resistant species that give you a range of options in creating beautiful, functional shade plantings.

3:00 - 3:50 PM

Adding Native Plants and Conservation Landscaping to Your Services



Approved: LC-1.0; LA-0.83; CPP-1.0

Gloria Putnam, Amy Mead, NCSU

Are clients asking you about adding native plants to their property? Looking to tap into this growing trend? Not sure what to think about, or how to get started? This session will help you answer these questions by sharing real-world examples from property owners and businesses that are either taking small steps in this direction or jumping all in. We'll also look at how landscapers can expand their services through recommending regionally appropriate plant choices for different site conditions and helping clients understand the longterm benefits and maintenance needs of native landscapes, turning today's interest in native plants into a practical and profitable part of your business.

LANDSCAPE OPERATIONS, Guilford E

8:30 - 9:20 AM

PPE Transportation Storage and Security of Pesticides



Approved: LCB-1.0; PA-1.0 A,G,H,I,L,N,D,X; ISA-0.75 Arborist, Urban Forest, BCMA-Management; CPP-1.0

Eric Jones, Turf Teacher Inc.

All about safety, storage and security of green industry pesticides. This session provides pesticide applicators with essential knowledge on the proper handling, transportation, storage, and security of personal protective equipment (PPE) used in pesticide operations. Improper management of PPE can lead to contamination, exposure risks, and regulatory violations. Participants will learn about key regulations governing PPE related to pesticide use, including requirements from the Worker Protection Standard (WPS) and product label instructions.

The session will cover best practices for:

- Transporting PPE to and from application sites without contamination.
- Storing PPE in clean, secure, and designated areas separate from pesticides.
- Preventing unauthorized access to PPE and ensuring PPE integrity.
- Recognizing when PPE should be cleaned, repaired, or replaced.

9:30 - 10:20 AM

Landscape Under Siege: Identifying and Reporting New Invasive Pests



Approved: LC-1.0; PA-1.0 G,H,I,L,N,D,X; ISA-0.75 Arborist, Urban Forest, BCMA-Science; CPP-1.0

Amy Michael, Dr. HTTseng, Josie Pasche, NCDA&CS

Experts from the NCDA&CS Plant Industry Division will provide key updates on invasive pests and diseases impacting North Carolina's nurseries and landscapes. Learn about current and emerging threats—including invasive snails, box tree moth, spotted lanternfly, red imported fire ant, Asian long-horned beetle, yellow-legged hornet, and more. The session will also cover new and concerning plant diseases such as Vascular Streak Dieback and Beech Leaf Disease, with tips on symptom recognition and early detection. Green industry professionals play a critical role in identifying and reporting invasive species. Stay informed—your early observations are essential for protecting our industry.

10:30 - 11:20 AM

Eliminating Murder: How Not to Kill Plants



Approved: LC-1.0; LA-0.83; CPP-1.0

Bryce Lane, Horticulturalist

Gardening is a challenge! All too often we make gardening decisions that lead to plant death. With a little botanical knowledge, we can avoid the major pitfalls that lead to garden failure. In this talk we will talk about garden botany and how we can apply that knowledge in our own gardens.

1:00 - 1:50 PM

Pond Management and its Relation to Turf and Plant Health



Approved: PA-1.0 A,L,N,D,X; CPP-1.0

Trent Nelson, Kasco Marine

This session will cover the basics of pond management including algae and weed identification, basic water chemistry, and nutrient loading. Application methods and product selection. As well as proper selection of Aeration devices to improve water quality.

2:00 - 2:50 PM

Water-Wise by Design: Creating Sustainable Landscapes in North Carolina



Approved: LC-1.0; LA-0.83; PA-1.0 L,N,D,X; ISA-0.75 Arborist, Urban Forest, BCMA-Management; CPP-1.0

Amy Mead, NCSU

This presentation will guide participants through the fundamental principles of water-wise landscape design and plant selection. Attendees will explore strategies for creating resilient landscapes that thrive with less supplemental water. The presentation will cover drought tolerant species, how plant selection and cultural control is a critical part of Integrated Pest Management, and how to integrate design elements for water conservation and effective stormwater management.

3:00 - 3:50 PM

Zen and the Art of Landscape Maintenance



Approved: LC-1.0; LA-0.83; PA-1.0 L,X; CPP-1.0

Tom Joyce, Tom Joyce Consulting

To the untrained eye landscape maintenance looks like work. To the Zen mind, it is mediation in motion. Let's learn a new approach.

This session introduces Zen landscape maintenance as a low-input, mindful approach to managing outdoor spaces. Participants will learn how the principles of Zen gardening—such as working with nature to align closely with Integrated Pest Management (IPM) strategies and pesticide reduction goals.

The course will focus on how intentional design, proper plant selection, and mindful maintenance practices reduce pest pressure and the need for chemical interventions.

By blending aesthetics with ecological function, Zen landscape maintenance offers a sustainable model that meets both environmental and regulatory standards for landscape care.

IRRIGATION, Guilford F

Coordinated by the Carolinas Irrigation Association



8:30 - 9:20 AM

There's a Fire in the Wire



Approved: IC-1.0; LA-0.83; CPP-1.0

Jason Shanabarger, The Toro Company/ Unique Lighting

There's a Fire in the Wire" and we will be discussing where does electricity come from, understanding how to safely and effectively diagnose low-voltage electrical problems maximizes a contractor's proficiency and profitability while ensuring the health and safety of the public, Ohm's law, wire connections and what not to do when installing irrigation or lighting.

9:30 - 10:20 AM

There's a Fire in the Wire: Tools for Advanced Troubleshooting



Approved: IC-1.0; LA-0.83; CPP-1.0

Jason Shanabarger, The Toro Company/ Unique Lighting

Participants will learn to master advanced meter usage, including measuring resistance and amperage, and the use of specialized tools. The course focuses on diagnosing frustrating intermittent issues that only appear under specific conditions, like moisture or heavy loads. Through a systematic approach and real-world case studies, professionals will gain the skills to confidently solve even the most complex and tangled electrical faults in the field.

10:30 - 11:20 AM

Understanding Soil-Plant-Water Relationships for Optimal Scheduling



Approved: IC-1.0; LA-0.83; CPP-1.0

Dr. Grady Miller, NCSU

Learn how different soil types affect water infiltration and retention, plant water requirements, and practical methods for measuring and managing soil moisture to inform irrigation schedules.

1:00 - 1:50 PM

Advanced Troubleshooting: Electrical Diagnostics for Irrigation Systems



Approved: IC-1.0; LA-0.83; CPP-1.0

Maggie Sarvor, Tucor

Pinpointing and resolving common electrical issues in irrigation systems, including wiring faults, solenoid problems, controller malfunctions, and lightning protection.

2:00 - 2:50 PM

Drip Irrigation for Shrubs, Flower Beds, and Groundcovers



Approved: IC-1.0; LA-0.83; CPP-1.0

JB Liefert, SiteOne

Best practices for designing and installing efficient drip systems in dense planting areas. Topics include emitter selection and spacing, managing plant density, and effective water delivery to a complex root zone.

3:00 - 3:50 PM

Applying Pump Station Curves in the Field



Approved: IC-1.0; LA-0.83; CPP-1.0

Lee Barnwell, SiteOne

We rely on pump curves to select equipment that meets a project's performance requirements. But when that performance varies in the field, whose fault is it? The pump? The site? The installer? This course explores how to use the pump curve as a diagnostic tool in the field, verifying the essential information we think we know: pressure and flow. Join us for a serving of alphabet soup as we explore the relationships GPM, TDH, and NPSHa have with pump performance.

TURF MANAGEMENT, Guilford G

Coordinated by the NC Sod Producers



8:30 - 9:20 AM

How to Save Money in Turfgrass Management





Approved: LC-1.0; PA-1.0 L,N,D,X; CPP-1.0 Dr. Ray McCauley, NCSU

Cost-effective and environmentally sound pest control strategies will be covered in this presentation. Attendees will learn the correct product selection and control strategies to maximize their profits and environmental responsibility. Specific turfgrass pests and control options will be presented for landscape, golf, and sports turf settings.

9:30 - 10:20 AM

You Pick the Pests: Turf Insect Edition





Approved: LC-1.0; PA-1.0 L,N,D,X; CPP-1.0

Dr. Terri Billeisen, NCSU

In this seminar, participants vote from a list of turfgrass insect pests. We will review the top selected insects, their biology, monitoring strategies and management. Particular focus will be given to successful management approaches for cost-effective and environmentally-sound control.

10:30 - 11:20 AM

New Challenges and Changes Ahead with Turf Pesticides



Approved: LC-1.0; PA-1.0 H,L,N,D,X; CPP-1.0 Dr. Travis Gannon, NCSU

Pesticides are commonly incorporated into comprehensive pest management plans; however, pesticides have permeated news outlets in recent months and years. Unfortunately, much of the disseminated information has been misconstrued and/or contains misinformation and the scrutiny around their use will likely continue to increase in the future. While pesticides are an integral component of pest management plans, it's imperative for personnel to understand intricacies of how pesticides perform and behave to optimize efficacy without adversely affecting human or environmental health. It is also very important to keep up with the latest pesticide laws and pesticide registrations changes. In this session participants will learn about the latest upcoming pesticide registration changes as well as the fate and behavior of pesticides in a turfgrass environment. Information provided will be the latest NCSU pesticide research concerning how pesticides react in a turfgrass system.

1:00 - 1:50 PM

Diagnosis and Management of Turfgrass Diseases in the Landscape



Approved: LC-1.0; PA-1.0 L,N,D,X; CPP-1.0

Lee Butler, NCSU

Diseases in the landscape can be challenging, and this presentation will cover the basics of the most common diseases in warm—and cool-season turfgrass lawns. It will focus on the newest management strategies and incorporate methods that have been successful for quite some time.

2:00 - 2:50 PM

Turfgrass Weed Management: Identification, Control Strategies, and Emerging Technologies



Approved: LC-1.0; PA-1.0 L,N,D,X; CPP-1.0

Dr. Navdeep Godara, NCSU

Weed management continues to be one of the most challenging aspects of maintaining high-quality turfgrass. This session will provide practical strategies for identifying common turfgrass weeds, reviewing current herbicide options and labels. Discussion around emerging precision herbicide application tools. Attendees will also be requested to participate in a short survey regarding weed management practices during the session.

3:00 - 3:50 PM

Precision Turfgrass Management for Optimized Pest Management



Approved: LC-1.0; PA-1.0 L,N,D,X; CPP-1.0

Dr. Qiyu Zhou, NCSU

Precision turfgrass management is reshaping how turf professionals maintain high-quality playing surfaces while advancing sustainability. This presentation will highlight emerging technologies and practices that support decision-making and more efficient use of resources, including pesticides use. Topics will include the use of remote sensing tools to develop site-specific management zones and large-scale mapping, as well as GPS-guided sprayers that improve application accuracy, reduce overlap, and minimize pesticide waste. Practical strategies will demonstrate how precision technologies can enhance turf performance, improve pest control efficiency, and protect the environment through optimized pesticide use.

GROWERS, Auditorium II

Coordinated by the JC Raulston Arboretum



8:30 - 9:20 AM

Management of Japanese Maple Scale and Other Pests Threatening Container Production



Approved: PA-1.0 L,N,D,X; CPP-1.0

Dr. Karla Addesso

This lecture explores effective strategies for identifying, monitoring, and managing Japanese maple scale and other key insect pests that pose significant threats to container-grown ornamental plants. Attendees will gain practical insights into integrated pest management (IPM) techniques tailored for nursery production systems.

9:30 - 10:20 AM

Selling Solutions, Not Just Plants: Rethinking Value in the Green Industry



Approved: LA-0.83; CPP-1.0 David Hoffman, Hoffman Nursery

In today's market, success is no longer about growing quality plants- it's about solving problems. From stormwater management and habitat restoration to landscape resilience and design trends, customers are looking for more than individual species; they want complete solutions. This talk explores how reframing plants as problem-solvers creates new opportunities for growers, designers, and green-industry professionals. Drawing on Hoffman Nursery's journey of expanding product lines and focusing on customer-driven outcomes, we'll look at practical ways to shift sales conversations, tailor product mixes, and build long-term partnerships. Attendees will leave with actionable ideas to transform the way they position plants in the marketplace and the way they think about their own businesses.

10:30 - 11:20 AM

Get the Most Out of Preemergence Herbicide Programs in Container Nurseries



Approved: PA-1.0 L,N,D,X; CPP-1.0

Dr. Joe Neal, NCSU

In this presentation Dr. Neal will discuss strategies to improve efficiency and reduce the costs of weed control in container nurseries. Strategies include optimizing herbicide selections, optimizing application uniformity using hand-held and aerial applicators, and reducing reliance on labor for hand weeding.

1:00 - 1:50 PM

Labor Saving Innovations in Nursery Production



Approved: CPP-1.0

Dr. Anthony LeBude, NCSU

This lecture highlights cutting-edge labor-saving technologies and practices designed to increase efficiency and reduce manual workload in nursery production.

2:00 - 2:50 PM

Soilless Substrates for Nursery Production: Trends, Innovations, and Management Strategies



Approved: CPP-1.0

Dr. Brian Jackson, NCSU

The growing media industry is facing many challenges in regard to cost, availability, and sustainability. With challenges come opportunities. This presentation will summarize new developments, products, and crop management strategies for nursery crop producers.

3:00 - 3:50 PM

New Plant Showcase



Approved: CPP-1.0

Panel Discussion

Join us for a lightning round of new plants in the trade. If you have a new introduction and would like to participate, send inquiries to mweathi@ncsu.edu for more information.