

2025 Ohio Tree Care Conference Program
Trees from the Ground Up

Monday, February 3

Certified Arborist Review

(Pre-registration is required; must be preparing for the certification exam.)

12:30 pm - 2:00 pm

Tree Biology

Presenter: Brian Kralovic, LaRoche Tree Service

A brief overview of tree biology and anatomy for those preparing for the certified arborist exam or for arborists who need a refresher.

2:00 pm - 3:30 pm

Tree Identification

Presenter: Brady Holko, The Davey Tree Expert Co.

Learn about the different parts of a tree and how they can be used to make a proper identification.

3:30 pm - 5:00 pm

Tree Diagnosis and Disorders

Presenter: Kodi Riedel, The Davey Institute

This presentation will provide a brief overview of how to diagnose tree disorders and problems for those preparing for the certified arborist exam.

Tuesday, February 4

Certified Arborist Review

(Pre-registration is required; must be preparing for the certification exam.)

8:00 am - 9:00 am

Plant Health Care

Presenter: Kodi Riedel, The Davey Institute

In this session, we will review the concepts of plant health care (PHC), integrated pest management (IMP), and the appropriate response process (ARP). We will review the key components of a monitoring program and the importance of preventative strategies in maintaining a healthy landscape.

9:00 am - 10:00 am

Tree Nutrition & Fertilization

Presenter: Andrew Freeman, Ohio Tree MD LLC

Overview of the relationship between tree nutrition and fertilization.

10:00 am - 11:00 am

Installation & Establishment

Presenter: Phil Olsen, The College of Wooster

This presentation will cover recommendations on planting techniques, survival changes and prevention of longer-term issues, identifying types of planting stocks, understanding proper planting based on species of trees, and identifying early tree care of newly planted trees.

11:30 am - 12:30 pm

Tree Assessment & Management

Presenter: Joe Moeglin, ODNR Division of Forestry

Brief overview of tree risk assessment as it relates to trees in the urban forestry environment.

12:30 pm - 1:30 pm

Tree Support & Lightning Protection

Presenter: Brian Goodall, Bartlett Tree Experts

This overview session will focus on how tree support reduces the risk of mechanical failure and how the usage of lightning protection systems can minimize the risk of damage.

1:30 pm - 2:30 pm

Options for Planting Trees in Tight Urban Spaces

Presenter: Brian Kralovic, LaRoche Tree Service

Brief overview of best management practices for working around trees during construction, such as how trees can be injured or killed as the direct or indirect result of construction damage. This session will also provide participants with a better understanding of the limitations for treatment of trees that have been damaged by construction.

2:30 pm - 3:30 pm

Tree Pruning

Presenter: Brian Goodall, Bartlett Tree Experts

An overview of the importance of understanding both the proper techniques and how the tree responds to pruning.

3:30 pm - 4:00 pm

Soil Science

Presenter: Andrew Freeman, Ohio Tree MD LLC

Participants will learn about the relationship between soil moisture, the absorption of essential elements, and root growth.

4:00 pm - 4:30 pm

Water Management

Presenter: Andrew Freeman, Ohio Tree MD LLC

Participants will learn about water management and how water influences plant growth and health, identification of soil characteristics and how they affect aeration, infiltration, and water holding capacity.

4:30 pm - 5:30 pm

Urban Forestry

Presenter: Joe Moeglin, ODNR Division of Forestry

A brief overview of urban forestry best management practices as they relate to managing and caring for vegetation in the urban and community forest.

Research Track

9:00 am - 10:00 am

Practical Research for the Everyday Arborist

Presenters: Zack Shier, Joseph Tree Service & Brian Kralovic, LaRoche Tree Service

In this presentation, Zack and Brian will start by giving an overview of some interesting research affecting our industry and how it can impact tree care management. Zack will then go into more detail on a few research topics, explaining how that research is driving change in our industry and the practical applications it has for arborists.

10:15 am - 11:30 am

Challenges in Assessing Tree Health in Urban Landscapes: A Call for Improved Diagnostic Methods

Presenter: Dr. Glynn Percival, Bartlett Tree Research Laboratory

Urban environments are increasingly recognized for their array of environmental stressors that adversely affect tree biology, including soil deoxygenation, compaction, aerial pollution, and de-icing salts. These stressors limit carbohydrate availability for growth and impede nutrient uptake, leading to leaf chlorosis and necrosis. These symptoms manifest as leaf yellowing and/or crown and branch die-back, which arborists use as visible indicators to assess tree vitality. However, visual assessments can be highly subjective, as they rely on individual knowledge and interpretation, leading to significant variability in health evaluations among assessors. In the forestry and crop industries, the value of physiological tests to identify low-vigor or damaged plants before visible deterioration is well-documented. Examples include, shoot and root electrolyte leakage, chlorophyll fluorescence, SPAD meter, twig starch content, infra-red thermometry etc. Despite this, the application of such tests in the arboricultural profession has been limited. Dr. Percival will outline the advantages and disadvantages of a range of stress detection systems that have potential applicability for professionals working within the arboricultural industry.

12:30 pm - 1:30 pm

The Art & Science of Tree Selection: Narrowing the Field Through Trial & Error

Presenter: Jeffrey Iles, Iowa State University

Selecting trees for use in managed landscapes should be a thoughtful and fact-driven process. Unfortunately, and all too often, we end up choosing species that are familiar and readily available. And when these criteria are given

disproportionate attention, we forfeit an opportunity to create functional, aesthetically pleasing, and biologically diverse landscapes. In this session, we will examine the process of tree species/cultivar development, evaluation, and eventual acceptance/rejection by decision-makers.

General Session

9:00 am - 10:00 am

Speaking Civil: Stormwater Tree System Basics

Presenter: Dr. Ryan Winston, The Ohio State University

This session will provide an overview and supporting academic data on integrating large urban trees and their associated soil volumes into ESD solutions, particularly in the densest urban areas. Urban re-development for roadways, sidewalks, and hardscape surfaces, particularly in the public right of way, is characterized by high levels of compaction, decreased porosity, poor aeration, and drainage thereby reducing pollutant uptake and soil absorption. Scores of cities already have tree and soil volume requirement ordinances. This existing mandated green infrastructure component – large trees and their soil volumes – is an underrealized opportunity for stormwater management and a missed opportunity for civil engineers.

One of the issues is separate professions have differing terminology when describing tree-based bioretention. This course will go into the definitions of how to describe to civil engineers the rationale and the sizing criteria including storm events, catchments, TMDLs, and pollutant removal rates, with an emphasis on tree/soil-based systems utilizing load-bearing modules in urban environments. By increasing the common ground, municipalities, water management districts, and developers will be better able to design multifunctional green infrastructure instead of the disparate systems commonly in use today.

10:15 am - 11:30 am

If You Could Build a Diverse Urban Forest Utopia, What Would it Be?

Presenter: Rich Hauer, Eocene Environmental Group

The journey any of us would walk, maybe sprint, to create an urban forest utopia would likely vary. The result and path we took might also differ. But maybe during the journey, the mental picture of the many ways trees benefit society, you, and I might have some rooted agreement. Planning your journey and growing a diverse tree portfolio may likely yield the highest return on the investment. This seems very sensible and as we use our eight senses (yes eight not five) and learn how diversity is important for human emotion in our treetopia. We will also learn about our utopia place and discover how designing for our first, second, and third space is rather important. So, welcome as we Jetson through a future urban forest utopia.

12:30 pm - 1:30 pm

Let's Fine Tune our TRA Skills

Presenter: Stephanie Foster-Miller, ODNR Division of Forestry

In this session, Stephanie will guide participants through an interactive tree risk assessment session with a focus on the likelihood of failure and the likelihood of impact steps of the ISA TRA Matrix. What influences tree conditions and targets? Be prepared to join in the discussion and build your confidence in inspecting and evaluating trees.

2:00 pm - 4:00 pm

Thriving in the Urban Jungle: Selecting Heat & Drought-Tolerant Trees for Sustainable Landscapes

Presenter: Dr. Glynn Percival, Bartlett Tree Research Laboratory

Urban trees and shrubs face numerous environmental stresses that impact their health. With increasing droughts and heat waves globally, selecting heat-tolerant trees becomes crucial for urban landscape managers. Inappropriate species choices can lead to short-lived planting schemes, resulting in plant degeneration and death. This talk will explore tree selection processes, alternative options, and the importance of physiological characteristics and provenance in identifying resilient species.

[Wednesday, February 5](#)

Aboriculture+/CA Review

(Pre-registration is required; must be preparing for the certification exam.)

8:00 am - 9:30 am

Tree Selection

Presenter: Phil Olsen, The College of Wooster

Overview of tree and site characteristics that influence a successful planting.

9:30 am - 11:00 am

Tree Worker Safety

Presenter: Brian Goodall, Bartlett Tree Experts

A brief overview of tree worker safety utilizing the arboriculture industry standard, best management practices, ANSI guidelines, and OSHA standards.

11:00 am - 12:00 pm

Tree Climbing Safety & Tree Work

Presenter: Brian Goodall, Bartlett Tree Experts

A brief overview of climbing and working in trees by using the industry's best management practices, ANSI, and OSHA guidelines.

Keynote

9:00 am - 10:30 am

Bark and Bite: How Trees Fight Back

Presenter: Dr. Glynn Percival, Bartlett Tree Research Laboratory

Throughout their lifespan, trees planted in urban environments face susceptibility to pathogenic fungi and bacteria. Pertinent examples include bacterial leaf scorch, sudden oak death, chestnut blight, and Dutch elm disease. If left unchecked, these pathogens can lead to tree decline and eventual death. Currently, conventional management heavily relies on repeated applications of insecticides and fungicides via foliar sprays, trunk injections, or soil drenches. However, due to pathogen resistance and environmental concerns, alternative pest and disease management methods are necessary. Trees possess active defense systems that can be activated before fungal attack and infection by specific organic compounds. This process, known as induced resistance (IR), plays a critical role in determining whether trees can withstand necrotizing pests and pathogens. In this presentation, we'll explore various inducing agents available to tree management professionals, discussing their effectiveness, optimal timing, and strategies for use in urban landscapes."

Climbers' Corner

11:00 am - 12:00 pm

Movement Preparation/Post Activity Routine

Presenter: Bartlett Safety & Training Team (Bob Cooley, Aaron Martin, Nels Spence & Marcas Vargas)

How to prepare your body for tree work and what to do after the work is done to aid in recovery.

1:30 pm - 2:30 pm

Primary Suspension Point (PSP) Selection & Best Practices

Presenter: Bartlett Safety & Training Team (Bob Cooley, Aaron Martin, Nels Spence & Marcas Vargas)

PSP selection is paramount to safe and efficient tree care and the better you are at it, the longer and healthier career you will experience.

2:30 pm - 3:30 pm

SRS/MRS Techniques

Presenter: Bartlett Safety & Training Team (Bob Cooley, Aaron Martin, Nels Spence & Marcas Vargas)

Once the PSP is selected, then we must safely get into the tree and set ourselves up to complete the work. This session will focus on techniques for getting up there and around safely with more ease.

4:00 pm - 5:00 pm

Work Positioning Aloft

Presenter: Bartlett Safety & Training Team (Bob Cooley, Aaron Martin, Nels Spence & Marcas Vargas)

How to position ourselves in the tree to put less wear and tear on our bodies and to make that last cut even better.

Commercial

11:00 am - 12:00 pm

Systemic Root Flare Applications

Presenter: Jacob Kulp, Bartlett Tree Experts

Discussion on different injection systems and BMPS for root flare injection treatments.

1:30 pm – 2:30 pm

Fertilization/Nutrient Management

Presenter: Jacob Kulp, Bartlett Tree Experts

Discussion on soil care (fertilization) and nutrient deficiencies.

2:30 pm - 3:30 pm

Getting to the Root of the Problem

Presenter: Andrew Freeman, Ohio Tree MD

Many times, tree health issues are identified by signs and symptoms above ground. Often though, the real problems lurk below the surface. Let's take a deep dive and explore the life beneath the surface through pneumatic air excavation. You will be surprised at what you might discover!

4:00 pm - 5:00 pm

Soil Science: Some Hopefully Practical Insights

Presenter: Stephen Schneider, The Ohio State University

This presentation will include a basic overview of soil science reviewing CEC, structure, and compaction. We will review a soil test and what the results mean and a simple field test for water infiltration.

Municipal

11:00 am - 12:00 pm

Mean Streets: Diagnosing Problems & Offering Solutions for Our Urban Trees

Presenter: Jeffrey Iles, Iowa State University

Urban trees provide countless environmental and psychological benefits for people who live and work in cities, towns, and villages. And what's not to like about trees lining streets and casting shade over our favorite lunchtime destination? However urban trees often live dramatically shortened lives due to a myriad of abiotic and biotic stressors. Participants in this session will learn how site factors, species selection, installation techniques, and post-plant care influence tree health and longevity.

1:30 pm -2:30 pm

Municipal Tree Care in the U.S.

Presenter: Rich Hauer, Eocene Environmental Group

This study quantified the latest baseline status through an Urban Forest Census on how communities manage trees in the United States. Over 1,750 communities were asked to participate to assess urban forest programs, operations, budgets, management, activities, and policies for municipalities. The project also carried on the seminal work first done in 1974 to the present. This gives a 50-year longitudinal analysis of community tree management. The involvement of public workers, private contractors, and volunteers/partners in tree management was explored. Thus, this presentation will provide the latest in the current and long-term examination of urban and community forestry management.

2:30 pm - 3:30 pm

Options for Planting Trees in Tight Urban Spaces

Presenter: Al Key, DeepRoot Green Infrastructure

In the 1980s, professionals began developing methods to improve tree growing conditions under pavement. Since then, many systems have been advanced to provide additional rooting space under hardscapes. Of these systems, two main approaches have emerged. One approach uses structural systems in which paving is designed to bridge over loosely compacted soil, either by spanning between structural elements or with engineered structures within the soil as the pavement build-up does not rely on soil for support. The second approach includes different types of structural soil, where the soil is designed to allow full compaction to support pavement and vehicular loads.

This session will go into the most common of the iterations of these techniques, including various iterations of suspended pavement, load-bearing modules, gravel-based structural soil (GBSS), and sand-based structural soil (SBSS). All are methods that have differing levels of long-term productivity, and they all have design limitations. This talk will examine the pros and cons of each of the approaches.

4:00 pm - 5:00 pm

Practical Conservation for Public Lands

Presenter: Danae Wolfe, Chasing Bugs

Climate change and loss of biodiversity are creating existential threats to people and the planet. However sustainable land stewardship can help reverse this trend. This session will provide land managers with actionable strategies to restore and enhance ecosystem health on public lands. We'll explore the benefits of native plants in reducing carbon emissions and

boosting biodiversity, discuss best practices for creating low and no-mow landscapes that support insects and other wildlife, and uncover ways to make public spaces bird-friendly while reducing light pollution. To wrap up, we'll dive into the many community science programs that can help engage the public in meaningful action to save the planet.

Utility

11:00 am - 12:00 pm

Herbicide is an Essential Integrated Vegetation Management Tool

Presenter: Randy Miller, Eocene Environmental Group

Vegetation management using herbicides controls plants or plant parts by interfering with specific botanical pathways. The goal of using herbicides should be to limit their use over time by facilitating cover-type conversion in a process described as chemically-facilitating biological control. That means promoting compatible plant communities by selectively applying herbicide to incompatible plants that are prone to resprout or sucker after removal. This presentation will review chemically-facilitated biological control, selectivity (both chemical and application technique), as well as commonly used herbicide site of action and mode of action.

1:30 pm - 2:30 pm

Customer Needs, Environmental Effects & Herbicides

Presenter: Dewey Goss, Townsend Tree Service

A look into using the right herbicides, application techniques, and safety to help achieve your client's needs and practice good environmental stewardship, all while trying to avoid issues and complaints.

2:30 pm - 3:30 pm

Modern Systems & Employee Retention, Improving Ergonomics

Presenter: Jonathon Ashment, The Townsend Corporation

In this session, Jon will discuss how modern climbing and rigging gear can help keep experienced climbers in the trees and make it easier to train climbing techniques to new people.

4:00 pm - 5:00 pm

Safety

Presenter: William Spencer, Eocene Environmental Group

The motto "safety first" may have a nice ring to it, and it certainly makes a great sticker, but lack of safety in the working world drives billions of dollars in annual incident costs in the U.S. Training limitations, workplace distractions, or simply the pressure to maintain high productivity are only a few of the reasons why we don't always find safety at its rightful place at the top of the podium. Safety should, and indeed, must be the number one value at any successful organization, but making this philosophy a reality involves a lot more than just whizzy gadgets and catchy slogans. This presentation explores the tried-and-true methods of building a lasting, resilient safety culture.

Thursday, February 6

Climbers' Corner

10:00 am - 11:00 am

Chainsaw Use (en espanol)

Presenter: Bartlett Safety & Training Team (Bob Cooley, Aaron Martin, Nels Spence & Marcas Vargas)

Working with cutting tools aloft can be dangerous but if you build upon the previous techniques discussed and put them together it can be much safer.

11:00 am - 12:00 pm

Aerial Rescue

Presenter: Bartlett Safety & Training Team (Bob Cooley, Aaron Martin, Nels Spence & Marcas Vargas)

Even with all the controls and best practices in place, accidents can still happen. A key point to longevity in tree care is the ability to respond to an accident and thus self-rescue, be rescued, or be able to aid in rescue when things go wrong.

Commercial

10:00 am - 11:00 am

Biochar Applications & Lifecycle in the Green Industry

Presenter: Christopher Fields-Johnson, The Davey Tree Institute

Biomass has been converted into charcoal and added to soil as biochar throughout known history, helping to generate

some of the most fertile soils on Earth. Today, we are reengineering this historical practice to meet modern needs, including improving growing conditions in soils and other growing media, removing pollution from water, and sequestering atmospheric carbon. Modern pyrolysis facilities can also generate co-products such as biofuels, wood vinegar, steam, and electricity along with biochar. This presentation will show many of the beneficial uses of biochar in the landscape through a series of ongoing original studies and trials and will outline the vision of how the lifecycle of biochar within the green industry can contribute to solving our most pressing environmental challenges.

11:00 am - 12:00 pm

Drought & Fire: Physiology & Management for Trees

Presenter: Christopher Fields-Johnson, The Davey Tree Institute

Drought stresses trees, causing an increased risk of pest and disease damage and destructive wildfires. Monitoring drought conditions and fire risks is a key component of good landscape management. Effective irrigation and soil care practices encourage deep rooting to give trees resilience against drought. Firewise vegetation management should be incorporated into tree care practices to reduce fire severity and intensity at the urban-wildland interface. This presentation will include key principles and practices arborists can employ to help manage trees for drought and fire.

Municipal

10:00 am- 11:00 am

The Future of Trees

Presenter: David Staley, The Ohio State University

Trees will be needed to combat climate change, but will simultaneously be threatened by the warming planet. How might we redesign trees for this new ecological reality? What are the consequences of thinking of trees as "technologies?"

11:00 am - 12:00 pm

Implementing Forest-Assisted Migration in Ohio Hills

Presenter: Bryce Adams, U.S. Forest Service

The Ohio Hills Adaptive Silviculture for Climate Change project is a collaborative, co-led research study between the USFS and ODNR Division of Forestry. The project joins a network of experimental silvicultural field trials across different forest types throughout the United States and Canada. Ohio Hill's adaptation framework was established in May 2022, during a workshop held at Zaleski and Vinton Furnace State Forests. Twenty-two researchers, managers, and extension personnel from the Northern Research Station, Ohio Division of Forestry, Southern Research Station, Wayne National Forest, Ohio Division of Wildlife, The Ohio State University, Ohio University, and Central State University, developed three site-specific treatments to align with an adaptation framework designed to facilitate resistance, resilience, and transition of the oak-dominated ecosystem under climate change. Treatments include mechanical thinning, expanded gap shelterwood, and forest-assisted migration. The team sourced 10,000 seedlings from the Ozarks where the contemporary climate is expected to resemble Ohio Hill's future climate and is expected to plant in spring 2025. The seedlings are expected to be future adapted to climate change to enable Ohio Hill's adaptation to climate change.

Utility

10:00 am - 11:00 am

Environmental - Bats

Presenter: Chant Eicke, Eocene Environmental Group

Bat trees and protected habitat have been a source of project delays since the Indiana Bat became a listed species. Now other bat species have joined the list, and the regulations continue to grow. We'll look at current best practices for knowing when and how to look for bat tree habitat and talk through current regulations and how to minimize the potential for project delays.

11:00 am - 12:00 pm

IVM Emerging Technology

Presenter: Tyler Woody, First Energy

How can we leverage the ever-evolving landscape of technology to improve our understanding of ROW vegetation system conditions? Trees and vegetation continue to be the number one cause of outages for utility companies and top the O&M spend category. This session will explore how advancements in remote sensing and machine learning models can assess vegetation risk to distribution assets, strengthen the bid process, and maximize the value of spend to benefit reliability.

All Tracks Combined

1:00 pm - 3:00 pm

Tree Amigas Talk Plants & Pests: A Year in Review

Presenters: OSU Extension Educators: Carrie Brown, Ashley Kulhanek & Ann Chanon

Let's discuss a year in review of plant pests, pathogens, and problems. We want to engage YOU in buggly banter, deciduous discourse, and of course treeful talking points and also hear from YOU about what problems have you concerned the most in the landscape.

Conference Presenters

Bryce Adams is a research forester with the USDA Forest Service, Northern Research Station, in Delaware, Ohio. He received a Ph.D. in Environment and Natural Resources from the School of Environment & Natural Resources at The Ohio State University in 2018 and began his current position in 2020 with the Forest Service. His current research examines climate adaptive silviculture, forest forest-assisted migration, and he is a member of the SILVAH decision support team. In his spare time, he enjoys fishing and hiking with his daughter and son.

Jonathan Ashment is the corporate training manager for The Townsend Corporation. He is a Certified Treecare Safety Specialist (CTSP) and a career-long climber who has served in both residential and line clearance sides of the industry.

Carrie Brown is the agriculture and natural resources educator for The Ohio State University Extension in Fairfield County. She brings specialized knowledge on topics including native plants, citizen science, small woodland management, and invasive species identification and control. Carrie is a member of the OSU Woodland Stewards, Buckeye Environmental Horticulture Team and she is a contributing author to the Buckeye Yard and Garden Line (BYGL) blog. Other responsibilities include teaching both adults and youth, pollinator research, and collaborating on publications on an assortment of natural resource topics.

Ann Chanon has been with Lake County Extension for two years as the agriculture and natural resources extension educator, and with The Ohio State University for 17 years. She earned a B.S. in Horticulture from OSU, an M.S. in Horticultural Sciences from Texas A&M University, and completed her Ph.D. in Horticulture & Crop Science from The Ohio State University in 2005. The emphasis for all three degrees was woody plant improvement and the topic for her graduate work at OSU was studying the reproductive biology and hybridization of *Aesculus* aka buckeyes. She works closely with local nursery owners to manage emerging production issues and coordinates the biweekly Integrated Pest Management meetings for nursery managers across northern Ohio. Before joining the Extension, Ann worked as a Research Associate on the Wooster Campus in the Horticulture & Crop Science Department where she contributed projects on floral biology, germplasm improvement, and the effects of environmental stress on plants.

Chant Eicke is a certified Professional Wetland Scientist specializing in natural resource management, analysis, and regulation. Chant employs an array of collaborative and technical tools in team and project management while focusing on the assessment and communication of environmental concepts and constraints. Chant provides evaluation of forest, riparian, wetland, and prairie habitats, backed up by the experience to restore and manage those areas with a focus on quality habitat, productive management, and sustainability.

Christopher Fields-Johnson is the tree conservation specialist and technical advisor for the Mid-Atlantic region for The Davey Institute, providing technical support to plant healthcare operations and expertise in soil, water, and root zone management across the United States and Canada. He holds a Ph.D. and an M.Sc. in Crop & Soil Environmental Sciences and graduated Summa cum laude with a B.Sc. in Forest Resource Management from Virginia Tech. His graduate work included research on the reforestation of surface-mined lands in the Appalachian coalfield and the development of biochar to improve the rehabilitation of impaired soils. His current research is on recycling urban forest green waste to optimize plant-soil-water relationships.

Stephanie Foster-Miller is the Western Ohio urban forestry coordinator with the ODNR, Division of Forestry. She supports four western Ohio regional urban foresters and provides technical and organizational assistance to communities in her 3-county region headquartered in Findlay. Originally from central Indiana, after earning her B.S. in Forestry with an Urban Option from Purdue University, she fine-tuned her skills with ACRT, working for 5 years. Her positions included utility forestry supervisor in Michigan for Consumers Power then as a utility work planner for AEP in Northwest Ohio and assisting with street tree inventories in several US cities. Stephanie began her career with the Ohio Division of Forestry in 1997 as a service forester working one-on-one with private forest landowners. A year and a half later, she transferred into the regional urban forestry position where she served 19 NW Ohio counties for 25 years. She is an ISA Certified Arborist, Municipal Specialist, an ISA Qualified Tree Risk Assessor (TRAQ), and a Society of American Foresters Fellow.

Andrew Freeman has been actively involved in the green industry for over 30 years. He has a bachelor's degree in Landscape Contracting from Pennsylvania State University. Andrew is Landscape Industry Certified in hardscapes and softscapes from the National Association of Landscape Professionals and he is an ISA Certified Arborist and T an ISA Qualified Tree Risk Assessor (TRAQ).

Andrew is the owner and operator of Ohio Tree MD LLC in Lancaster, Ohio. Some of Andrew's specialties include large tree transplanting and preservation, pneumatic air excavation, specialty pruning of ornamental trees, and arborist training, as well as tree risk assessments. He served as a director on the Ohio Chapter ISA Board and currently serves on the OTCC planning committee, the education/public outreach committee, and the Membership Committee.

Brian Goodall Brian is an arborist and educator from central Ohio. Brian is currently a regional safety manager for Bartlett Tree Experts. He has previously worked in urban forestry, commercial tree care, natural resources, and in education. Brian is passionate about the outdoors and teaching people to live and work safely with trees.

Dewey Goss has been a project manager of application services for Townsend Tree Service since 2012. Prior to Townsend, he served as applicator supervisor of the herbicide application crew for South Central REMC. In 2018, Dewey began serving on the board of the Vegetation Management Association of Kentucky and served as president in 2023. He is an ISA Certified Arborist and Certified Utility Specialist. He was awarded wildlife habitat steward from the National Wild Turkey Federation.

Rich Hauer is the director of urban forestry at Eocene Environmental Group and an Emeritus Professor of Urban Forestry at the University of Wisconsin – Stevens Point. He was honored with the 2023 Alex L. Shigo Award for Excellence in Education and the 2018 L.C. Chadwick Award for Arboricultural Research. He has published over 200 publications and presented over 500 talks throughout the world.

Brady Holko graduated from Kent State University in 2020 with a Bachelor of Science degree in Botany and is a current graduate student in the Master in Plant Health Management program at The Ohio State University. She works as a botanist and laboratory technician for The Davey Institute Diagnostic Laboratory. Apart from lab duties, Brady researches Beech leaf disease. Brady enjoys writing educational articles for The Davey Institute and often lectures on plant identification and invasive plants, pests, and diseases.

Jeffrey Iles serves as a professor in the Department of Horticulture at Iowa State University (Ames, IA). He teaches, conducts applied research, and provides extension programming in landscape plant establishment and maintenance, woody plant (mostly tree) evaluation, and nursery and garden center management. He received his B.S., M.S., and Ph.D. in horticulture from Michigan State, Penn State, and Iowa State, respectively. Between degrees, Jeff worked in the retail garden center/landscape installation segment of the green industry, first in suburban Detroit, and later in Littleton, Colorado.

Al Key has been involved in the green industry for 30 years as an owner of DeepRoot Green Infrastructure, LLC. Together with his partners, he is the co-inventor of the Silva Cell®, and together they have received several patents for their inventions that address trees and stormwater management in the urban setting. He is also a former board member of TreesNY, an American Chestnut Foundation Bronze Sponsor, and he is an associate member of the American Society of Civil Engineers. He has co-authored articles in a wide variety of periodicals like The Journal of Arboriculture and Civil Engineering News.

Brian Kralovic is a graduate of The Ohio State University with a degree in Landscape Architecture. He has worked on a tree farm, was a salesperson at a design/build landscape company, and oversaw the landscape and grounds department, GIS mapping, and street department for a small municipality before accepting his current position as director of residential sales at LaRoche Tree Service and manager of LaRoche Aviation's distribution team. Brian is an ISA Municipal Specialist and an ISA Qualified Tree Risk Assessor (TRAQ).

Ashley Kulhanek is an extension educator for agriculture and natural resources for The Ohio State University Extension. She has a Master's in Entomology from OSU and specializes in insects, phenology, and invasive species. She is a self-described bug nerd and crazy cat lady and loves answering strange bug questions.

Jacob Kulp is a regional lab extension specialist for F.A. Bartlett Tree Experts. He has been in the industry for 8 years. Jacob graduated from Penn State University with a degree in Agricultural Sciences, a Minor in Horticulture, and a Minor in Leadership Development.

Randall Miller is the director of research and development at Eocene Environmental Group. He brings more than three decades of Utility Vegetation Management experience, previously working as director of vegetation management for PacifiCorp. He served on the ISA Board of Directors, chaired the TREE Fund Board of Trustees, was president of the UAA, and contributed to numerous other arboriculture volunteer organizations. He is the author of the ISA Integrated Vegetation Management Best Management Practices, and is co-author, with Geoff Kempter, of the Utility Specialist Certification Study Guide.

Joseph Moeglin is the East Central regional urban forester with the ODNR Division of Forestry. He has a background in the utility forestry industry and a familiarity with proper techniques for maintaining proper clearance of trees from utility lines while preserving the health of the trees.

Phil Olsen is the manager of grounds at The College of Wooster. He has an Associate's Degree focused in Landscape Contracting & Construction from The Ohio State University and he is an ISA Certified Arborist.

Dr. Glynn Percival is the senior arboricultural researcher at the Bartlett Tree Research and Diagnostic Laboratory, primarily focusing on how environmental stress (drought, heat, waterlogging) influences tree growth and susceptibility to pest and disease attack. He is the author of more than 100 scientific papers, magazine articles, and book chapters, and is an honorary lecturer at Reading University and the Royal Botanic Garden, Kew. Dr. Percival was awarded the prestigious Arboricultural Association Award for Research and Education in 2017 and the L.C. Chadwick Award for Research in 2020.

Kodi Riedel has worked for the Davey Tree Expert Company since 2008. In her current role as the Davey Institute Diagnostic Laboratory Supervisor, she is responsible for providing diagnostic support services for the company nationwide. Kodi graduated from The Ohio State University with her master's in plant health management. She has been an ISA Certified Arborist since 2016.

Stephen Schneider began his 2nd career as a forester in 1998 when he started taking classes at The Ohio State University. He graduated in 2001 with a Bachelor of Science from the School of Environmental & Natural Resources with a major in forestry. He started working at OSU as a research assistant in 2002. Steve did research in soil science at the graduate level and in 2007 moved to facilities, operations, and design. In 2009 he became an ISA Certified Arborist. In 2013, Steve was awarded the Chadwick Arboretum's Lorax award. In 2017, he acquired his ISA Municipal Specialist and an ISA Qualified Tree Risk Assessor (TRAQ). In 2022, Steve obtained his ISA Board Certified Master Arborist. Steve is the landscape planner at The Ohio State University with duties including managing the urban forest, plant selections, removals, and helping direct tree policy. Steve is a past president of the Ohio Chapter and currently serves as treasurer.

Zack Shier Zack began his career in arboriculture in 2014 with Joseph Tree in Dublin, Ohio, after spending 4 years in the U.S. Army. While working for Joseph Tree, he obtained a bachelor's degree in Forest Ecosystem Management from The Ohio State University in 2018. In his tenure at Joseph Tree, he has worked on a crew as a climber and operator, sold both residential and commercial sales, and developed the plant health care section which he still currently manages. Zack is an ISA Board Certified Master Arborist, an Ohio Certified Pesticide Applicator, and an ISA Qualified Tree Risk Assessor (TRAQ).

William Spencer is the safety manager at Eocene Environmental Group, where he oversees all aspects of health and safety. Before this, he served as supervisor of R+D at the same organization, managing multiple projects across the U.S. and assisting with the research and development of future products and consulting services. He has worked in the Utility Vegetation Management industry since 2011—doing everything from overhead electric inspections, gas pipeline surveys, risk reduction projects, emergency response work, and tree & infrastructure assessments in the aftermath of storms and fires. Bill is an ISA Certified Arborist/Utility Specialist, an ISA Qualified Tree Risk Assessor (TRAQ), and received his B.S. in Biology with a minor in Chemistry from Western Oregon University.

David Staley, Ph.D. is a historian, writer, designer, futurist, educator, advisor, and journalist, and was recently described as an "eclectic academic." He is an associate professor in the departments of History and Design at The Ohio State University and is the author of *Alternative Universities: Speculative Design for Innovation in Higher Education*, the co-author of *Knowledge Towns: Colleges and Universities as Talent Magnets*, and the author of *Visionary Histories*, a collection of his essays about the future. He is an honorary faculty fellow at the Center for Higher Education Leadership and Innovative Practice (CHELIP) at Bay Path University, where he contributes to the University Design column. He is the host of the *Voices of Excellence* podcast, and president of Columbus Futurists, a local think tank. In 2022 he was

awarded Best Freelance Writer by the Ohio Society of Professional Journalists for his Next futures column with Columbus Underground.

Ryan Winston is an associate professor in the departments of food, agricultural, and biological engineering and civil, environmental, and geodetic engineering and a core faculty of the Sustainability Institute at Ohio State University. Ryan leads The Ohio State University Stormwater Management Program, which provides stormwater and stream management services and technical assistance related to urban water to federal and state agencies, local governments, and watershed groups where they conduct applied research at the practice, site, and small watershed scale to help understand the cost, benefits, and ecosystem services provided by stormwater control measures. Ryan has led more than 50 projects focused on urban/suburban stormwater monitoring and subsequent development and calibration of models based on these data. Ryan has a particular interest in applying lessons learned in field-based research projects to inform design of new stormwater controls.

Danae Wolfe is an award-winning conservation photographer, writer, educator, and TEDx speaker focused on fostering appreciation and stewardship of backyard bugs and wildlife. Ever the pragmatic, she believes that everyone has the power to make a difference in combatting climate change and biodiversity loss. Danae was the 2022 recipient of the Garden Communicators International Emergent Communicator award, and her work has been featured in various outlets including CNN, The American Gardener magazine, and Nature Conservancy Magazine. Through her community conservation initiative, Chasing Bugs, she has reached global audiences with science-based education about the importance of gardening for biodiversity and has inspired gardeners to appreciate the beauty of our natural world and embrace its role in its protection. Danae's debut trade book, *The Everyday Conservationist: A Beginner's Guide to Nurturing Nature in the Home Garden*, will be published by Timber Press in spring 2025.

Tyler Woody is the general manager of distribution vegetation management operations at FirstEnergy. He is responsible for the distribution forestry program for three Ohio operating companies and helped lead the development of FirstEnergy's Advanced Vegetation Analytics Tool. Tyler is an ISA Certified Arborist with over 20 years of experience in the industry.