

Cultivate™ 17

An AmericanHort Experience

July 15-18, 2017 | Columbus, OH USA

Whether you're a grower on the nursery side or the greenhouse side, serve customers as a retailer or a florist, or make the world more beautiful as an interiorscaper or a landscaper, we all need a reason to get together to make great things happen.

WHAT IS CULTIVATE?

CULTIVATE IS WHERE COMPANIES DEBUT NEW PRODUCTS, PROFESSIONALS ADVANCE THEIR CAREERS, NEW VARIETIES COME TO LIGHT, AND MOMENTOUS OCCASIONS ARE CELEBRATED.

WHO'S AT CULTIVATE?



Garden Retailers



Landscapers



Interior Plantscapers



Greenhouse Growers



Florists



Nursery Growers



Landscape Distributors



Industry Suppliers



Emerging Professionals



Educators & Researchers



Media

With cutting-edge educational sessions dedicated specifically to your industry segment, impactful keynote experiences, and an ever-growing trade show, Cultivate is your opportunity to get it all done and have an incredible experience.

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DATE & TIME	TITLE & SPEAKER	DESCRIPTION
Saturday, July 15 7:45 AM - 5:30 PM	Nursery Learning Tour	<p>Nurseries today are stronger, leaner, and more innovative. Learn how new technologies can improve nursery production efficiency from the USDA-ARS Application Technology Research Unit (ATRU), which is located in The Ohio State University's OARDC campus. In addition, learn how Eagle Creek Wholesale Nursery approaches growing a resilient business based on sound economics and fundamental plant practices.</p>
Saturday, July 15 8 AM - 12 PM	Succession Planning in a Family Business - A Workshop Beatrice Wolper	<p>Tailored to business leaders, this day-long workshop will help you identify and systematically develop new leaders within your company. Craft the perfect exit strategy while confident that your legacy will continue successfully.</p>
Saturday, July 15 8 AM - 4:30 PM	Floriculture Learning Tour	<p>Explore three distinct greenhouse operations that are all leveraging opportunity with innovation: bulb production and marketing at Dutch Mill Greenhouse, wholesale floriculture production for the 21st century at Timbuk Farms, and profitable cut flower production at Sunny Meadows Flower Farm. See everything they're doing to expand their markets, increase profit margins, and evolve for the future.</p>
Saturday, July 15 8 AM - 5 PM	Hands-On Biocontrols Workshop: Practical Skills Suzanne Wainwright-Evans, Ronald Valentin, PhD, Paul Koole, Kelly Vance, Debbie Palumbo-Sanders	<p>This comprehensive hands-on biocontrol workshop walks you through the critical aspects of a successful biocontrol program. In a step-by-step fashion, you'll learn about 1) scouting and diagnostics, 2) dipping, 3) beneficial nematode application equipment, 4) sachets, 5) supplemental foods, 6) costs, and banker plants. End the day with time to discuss specific questions and situations so that you can leave confident that you're taking the right steps for an effective biological control program.</p>

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Saturday, July 15 9 - 10 AM	Learning the Lighting Lingo Roberto Lopez, PhD, Steven Szewczyk	Whether in greenhouses or indoors, there are many different terms and concepts used with plant lighting. In this session, academic and industry lighting experts Roberto Lopez and Steve Szewcyk will discuss different lighting applications to regulate flowering, growth, yield, and plant quality attributes. Terms such as PAR, PPF, DLI, light quality, quantum, and micromoles will be explained in simple terms to educate novice growers and to serve as a refresher for those already in the industry.
Saturday, July 15 9 - 10 AM	How to Succeed Using Biocontrols Raymond Cloyd, PhD	Pest management is an ever evolving science. Learn the latest techniques for optimizing biological control agents, including release timing, release rates, and direct and indirect effects of pesticides on biocontrols in greenhouse settings. Get the tips and tricks for success and learn why biological control is becoming a critical aspect of quality greenhouse production.
Saturday, July 15 9 - 10 AM	Learning Outside of the Box Seth Reed, Mason Day	Seth Reed and Mason Day team up to offer you a look at what is revolutionizing the future. Explore top non-horticultural trends that will impact your business and outside examples of industry disrupters. Take away key strategies for operating more like these trendsetters and ideas for pushing the limits of potential.
Saturday, July 15 9 - 10 AM	Nine Proven Profit Strategies For Landscape Contractors Jeffrey Scott	Are you reaching your highest profit potential? Many contractors think they are doing good (or bad) but don't know for sure. Learn nine proven profit strategies for renowned landscape business expert Jeffrey Scott. He'll share industry benchmarks on mark-ups, gross profit, net to owner, and other areas of business. Learn how to create a high profit culture that allows you to build and lead your team to new heights. Discover the 4 Jet Engines of Profit and how to ignite all four and gain confidence to make better financial and organizational decisions.
Saturday, July 15 9 - 10 AM	Update on Rose Rosette Alan Windham, PhD	Rose rosette, a virus disease of nearly all Rosa spp., can be a major headache for rosarians and grounds managers. Even though this is the most damaging disease of this generation for rose species, not all is lost. A multi-disciplinary group of scientists are working to unravel the mystery that surrounds this mite-vectorated disease. Attend this workshop to get the latest information on rose rosette biology and management.

DATE & TIME	TITLE & SPEAKER	DESCRIPTION
Saturday, July 15 10 AM - 4:30 PM	CareerUP - Define Your Future Kelly Norris, Nancy Fisher, Tyler Baras, Bridget Behe, PhD, Steve Black	Connect with other young professionals who are ambitious about growing their careers and are passionate about revolutionizing the way we promote horticulture as a career, hobby, and life necessity. This one-day workshop + inspiration series is tailored to emerging horticulture professionals to help you expand your skills, define your future, and navigate the green industry career ladder.
Saturday, July 15 10:15 - 11:15 AM	Downy Mildew Update Margery Daughtrey	Downy mildew used to be such an obscure disease, and now it seems to have become Public Enemy No. 1. Learn about where downy mildew is still showing up on impatiens and why, what plants are susceptible to it, and what can be done to protect impatiens against it. Margery will also share stories to forewarn you of downy mildews on coleus, poppy, digitalis, veronica, geum, sunflower, and rudbeckia.
Saturday, July 15 10:15 - 11:15 AM	Growing Practices for Safe Edibles John Erwin, PhD	<i>Session description coming</i>
Saturday, July 15 10:15 - 11:15 AM	What To Know When Shopping for a Point-Of-Sale System Gail Vanik, Mark Sandstrum, J. Lombardi	Navigating your way through the decision to purchase a POS system, choosing which one is right for you, then the installation itself can all be a daunting process. Let's face it -- purchasing a POS system is a major investment. In this session, we'll walk you through the pros and cons of an online system versus a server-based system and an industry specific system versus a general POS product. We'll help you navigate the decision-making process and share tips and pointers to make the choice as seamless as possible. We'll cover what you should consider before starting the search, questions to ask as you work through the process, then how to narrow down the choices, and finally some things to examine before making a final selection. You will benefit from both a retailer's and a vendor's point of view, and we'll share some real life experiences that we've encountered while working through this process.

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Saturday, July 15 10:15 - 11:15 AM	Green Light Selling for Design Build Jeffrey Scott	Learn a systematic sales process that will show you how to get in front of qualified prospects, form emotional bonds, create more on-target proposals, and close more sales--without selling on price. Avoid wasting time with "Red Light" prospects, learn how to qualify "Yellow Lights," and spend more time building profitable relationships with "Green Light" clients. You will also create more up-sale opportunities and maximize your maintenance conversions with minimal warranty and complaints.
Saturday, July 15 10:15 - 11:15 AM	From Field to Pot: Cultivating Bare Root Perennials Brad Moran	Learn new techniques for cultivating and harvesting bare root perennials and best post-harvest practices that will ultimately result in a beautiful potted and planted plant.
Saturday, July 15 11:30 AM - 12:30 PM	Organic Substrates: How to Handle & Additives for Success Jean-Pierre Fortin	<i>Session description coming</i>
Saturday, July 15 11:30 AM - 12:30 PM	Exciting New Cut Flowers John Dole, PhD	Each year dozens of new cut flower varieties are released - learn which ones are must-haves, whether you produce cut flowers in the field, tunnel, or greenhouse. Learn which ones have a long postharvest life and how to handle them. Also get the scoop on best grower sources for these varieties.
Saturday, July 15 11:30 AM - 12:30 PM	Save the Good Bugs! Conserving Beneficial Insects Carlos E. Bogran, PhD	Learn about conservation biological control theory and how it translates into a strong biological control program in nursery environments. Understand how to identify common natural enemies to the "good bugs" and also how to strategize application and timing of selective products including insect growth regulators and biopesticides. Also discover effective and practical biological control options for managing scale, mealybugs, and other nursery pests.

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Saturday, July 15 1 - 5 PM	Urban Farm Tour	Visit the innovative operations that are making the most of this new frontier and creating a niche for themselves with consumers and new markets. Tour St. Stephen's Project Aquastar and see how urban agriculture is being used to eliminate the food insecurity epidemic. Also explore the Swainway Urban Farm, which is focusing on methodology that makes urban farming a career builder, community contributor, and profitable business venture.
Saturday, July 15 1:30 - 2:30 PM	Cost Accounting Lloyd Traven	<i>Session description coming</i>
Saturday, July 15 1:30 - 2:30 PM	Lean and the Power of Continuous Flow Elizabeth Peters, Rick Peters	Continuous flow is a powerful Lean principle that can transform how you do business. Flow helps companies achieve consistently higher operational results by removing barriers that hinder the movement of product or information through process steps. It is an effective way to shorten lead times to customer delivery. This interactive workshop offers immediate, tangible steps to improve your businesses tomorrow! A fun, hands-on simulation will clearly demonstrate why continuous flow is superior to traditional batch processing and that no company can truly be lean without flow.
Saturday, July 15 1:30 - 2:30 PM	High Tunnels: Improving & Extending Cut Flower Production Roberto Lopez, PhD	High tunnels are traditionally used for season extension of specialty cut flowers. Recent research indicates that stem quality parameters and yield of some specialty cut flowers is improved in high tunnels over those grown in the field. Learn which species should be grown in high tunnels throughout the production season for increased quality and profitability.
Saturday, July 15 1:30 - 2:30 PM	Plant-Based Merchandising Tammy Behm, Laura Tetley	<i>Session description coming</i>
Saturday, July 15 1:30 - 2:30 PM	Estimating Bidding Jobs Based on True Costs Marcus vandeVliet	Most landscape companies do not use a cost-based estimating system. There are a number of different pricing systems that include a material multiplier, fair market price, unit pricing, and the ever-accurate "guesstimate." It's critical to understand your direct costs, how much overhead to recover, and how much profit your company needs to succeed. From there you can put together stronger bids that translate into better business.

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Saturday, July 15 1:30 - 2:30 PM	I Have a Drone. Now What? James Robbins, PhD	Get an overview of the different types of drone aircraft and sensors and how these can be powerful resources in your horticulture business. Learn the basics of drone operation and how to leverage their potential for maximum effectiveness.
Saturday, July 15 2:45 - 3:45 PM	Cost Analysis for Your Greenhouse Paul Fisher, PhD	If you don't know your costs, you can't maximize your profit. Learn how to analyze production costs for greenhouse crops, hanging baskets, and field-grown container plants, and use this info to make critical decisions such as whether to grow poinsettias in the fall or invest in automation instead.
Saturday, July 15 2:45 - 3:45 PM	Pesticides & Pollinators: Greenhouse Production Perspective Raymond Cloyd, PhD	Learn the latest information about how pesticides affect pollinators in greenhouse production. See the latest sound-science research findings on the impact of neonicotinoids on pollinator safety and what options growers have.
Saturday, July 15 2:45 - 3:45 PM	Neuromarketing Green Industry Products Marco Palma, PhD	<i>Session description coming</i>
Saturday, July 15 2:45 - 3:45 PM	Growing with Green Infrastructure Shannon Currey	Plants for green infrastructure (GI), and the expertise to grow and maintain them, offer our industry a new market. Learn what GI is and the factors that drive its implementation. Using Hoffman Nursery's palette of grasses and sedges as examples, Shannon Currey will help you get a better handle which plants to grow for the GI market and give tips on ways to discover GI opportunities in your region.
Saturday, July 15 4 - 5 PM	Advanced Techniques in Cut Flower Production John Dole, PhD	The best cut flowers are those with long, strong stems. Learn how to increase stem length and strength with techniques that can be used in the field, tunnel, or greenhouse. You'll discover how to lengthen short stems and strengthen weak stems and produce undoubtable quality that your customers will love.
Saturday, July 15 4 - 5 PM	Plant Identification and Reaction to the Environment Part 1 Larry Ryan, Mark Bartlow	<i>Session description coming</i>

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Saturday, July 15 4 - 5 PM	Mastering Inventory Control with RFID Applications Ben Meyers, Matt Vollmer	RFID hardware and strategic software integrations are powerful management tools for nursery managers and field crews. New applications of RFID technology have led to production automation and the reduction of non-value-added activities. Learn how you can use RFID technology to streamline the flow of information throughout production stages including zone mapping, sale creation, and calipering. Use RFID to holistically track all production inputs and outputs and see how it causes less waste and improved margins.
Saturday, July 15 5 - 7 PM	OSU Cultivar Trials	Unleash your inner plant nerd and assess 700 annual and perennial varieties on display at The Ohio State University Cultivar Trials. See how they grow in typical Central-Ohio environmental conditions and evaluate their growth in containers, landscape beds, and hanging basics. Also be sure to check out Howlett Hall's green roof. Free shuttle rides from the Convention Center are available -- final departure from OSU back to downtown Columbus is at 7 p.m. Open to all attendees. OSU thanks AmericanHort and the Ohio Nursery and Landscape Association for their support.
Sunday, July 16 8 - 9:15 AM	Morning Jolt Keynote: The Energy Bus Jon Gordon	Jon Gordon, bestselling author and business consultant, shares the secrets for approaching life and work with the kind of positive thinking that leads to true accomplishment - at work and at home. Everyone faces challenges. And every person, organization, company, and team has to overcome negativity and adversity to define themselves and create success. No one goes through life untested, and the answer to these tests is positive energy -- the kind of positive energy consisting of vision, trust, optimism, enthusiasm, purpose, and a spirit that defines great leaders and their teams. You will learn how to create more success in your career, workplace, teams, and home and enjoy the ride of your life!
Sunday, July 16 8:30 - 9:30 AM	The Trendy Plant Overtaking Your Instagram Caleb Schlegel	The succulent craze is alive, well, and looking to go strong for who knows how long. Get insider tips from a leading Midwest grower on propagating, growing, and designing with succulents. Caleb will share his tips, born of direct experience and a flair for creativity, for growing succulents and using them in the interior environment for a fresh edge on creative designs.

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Sunday, July 16 9:30 - 10:30 AM	Family Business: Best Practices, Potholes & War Stories Jeffrey Scott	<p>Family businesses can outperform the competition if all synergies are realized. They can also under-perform if they are mismanaged. While statistics will say that most family businesses fail when handed to the next generation, Jeffrey Scott will share his extensive experience in ensuring the opposite -- unbelievable success. Protect and grow your family business by learning how to increase the speed of growth and company morale; define and stay in your lane; increase profitability and productivity; and shift focus from inputs to outputs. Enjoy more success and increase your confidence that both family and non-family employees can carry on your family business legacy.</p>
Sunday, July 16 9:30 - 10:30 AM	Behind-the-Scenes Pesticide Updates Rick Yates	<p>Go behind the scenes with several of the newer insecticides, miticides, and fungicides. Strategies for maximizing effectiveness and integration with existing pest control programs will be emphasized. Application tips, bloom safety, compatibility with biocontrols, and more practical information will also be shared.</p>
Sunday, July 16 9:30 - 10:30 AM	Containerized Herb Production: Research and Application Christopher Currey, PhD, Lloyd Traven	<p>Culinary herbs continue to increase in popularity amongst consumers and producers alike. Whether you're looking to get started with containerized herbs or are looking to improve your current production, Chris and Lloyd will be sharing extensive knowledge for best practices -- from the research and production side of the bench. Get tips, tricks, and key knowledge on everything from propagation to marketing.</p>
Sunday, July 16 9:30 - 10:30 AM	Putting Your POS to Work For You: Inventory Tracking Sam Kirkland	<i>Session description coming</i>
Sunday, July 16 9:30 - 10:30 AM	Plant Identification and Reaction to the Environment Part 2 Larry Ryan, Mark Bartlow	<i>Session description coming</i>

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Sunday, July 16 9:30 - 10:30 AM	How Mycorrhizae Provide Value at Your Nursery or Greenhouse Graham Hetland, Hugh A. Poole, PhD, Jozsef Racsko, PhD	Learn how beneficial symbiotic soil fungi, known as mycorrhizae, can benefit your greenhouse or nursery production through expanded plant root mass, increased soil nutrient efficiency, improved water acquisition and storage, improved shelf life and drought tolerance, and ultimately enhanced transplant success and landscape survivability. Hugh A. Poole, Ph.D. and Jozsef Racsko, Ph.D. will explain the science behind these beneficial microbes, as well as the practical applications for your greenhouse, nursery, home garden, or landscaping. You will not only learn about this fascinating microscopic evolutionary building block and how it is essential to life on earth, but also how you can utilize mycorrhizal fungi to benefit your professional growing operation and ultimately your business' bottom line.
Sunday, July 16 10 - 10:20 AM	Attracting Pollinators AND Eco-Friendly Homeowners Hayk Khachatryan	Learn strategies to incorporate pollinator-related attributes into residential landscape designs, marketing strategies, and product offerings. Discover insights into consumer preferences for pollinator-friendly landscapes and the tradeoff between maintenance requirements, economic benefits, and eco-friendly characteristics. These principles are relevant for garden centers, nurseries, and landscapers. Understand the various opportunities pollinator friendly landscapes present and how working together across all fronts can successfully aid pollinator health in urban environments.
Sunday, July 16 10 - 10:30 AM	Diagnosing Plant Diseases Alan Windham, PhD	There's an art and science to disease diagnosis, and diagnosing plant diseases is the key to successful disease management. Blight or mildew? Wilt or root rot? Dr. Windham will cover tips, tricks, and roadblocks to identifying plant diseases. He'll also share resources that are available to everyone. Sharpen your diagnostic skills and gain an upper hand on the diseases that cut into your profit and plague your customers' landscapes.
Sunday, July 16 10:30 - 10:50 AM	Upgrade Mulch with a Grass & Sedge Package Shannon Currey	Replace those oceans of mulch with beautiful plants that preserve and build the soil, outcompete weeds, and provide a host of ecosystem benefits. Learn which grasses and sedges work well for ground covers or alternatives to turf grass. See how these workhorse plants can bring beauty and functionality to any landscape.

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Sunday, July 16 10:45 - 11:15 AM	Mealybugs: Arch Nemesis No More Raymond Cloyd, PhD	Mealybugs can be serious insect pests of greenhouse-grown horticultural crops and an even more serious problem to eradicate. Learn strategies to effectively deal with mealybugs based on sound plant protection practices including scouting and proper insecticide usage. Also hear the research results on the effectiveness of systemic insecticides against mealybugs.
Sunday, July 16 10:45 - 11:45 AM	Beyond the Paycheck: Creating a Company Culture That Sticks Leslie F. Halleck, CPH	Your employees' happiness and dedication to your company depends on more than wages...and unhappy employees are costly. Poor morale can destroy teams, erode profit, and ultimately destroy your business. Learning how to manage better in the workplace and be a better employee, requires you to determine where you fit within the generational dynamic and how each team member approaches work and life. Bring your team together in this session to address managerial tactics, incentive strategies, and inter-generational team communication to help build a dynamic company culture.
Sunday, July 16 10:45 - 11:45 AM	Greenhouse Lighting Considerations: Selection & Installation Roberto Lopez, PhD, Erik Runkle, PhD	Compare key factors in the decision between conventional lighting and LED lighting in greenhouse environments, including: lamp longevity, efficacy, cost, light spectrum, electricity rate, utility rebates, and various growing scenarios. Work through a cost calculation example and gain better understanding of the best lighting solutions for your growing scenarios.
Sunday, July 16 10:45 - 11:45 AM	Edible Ornamentals: A Look at Production John Erwin, PhD	<i>Session description coming</i>
Sunday, July 16 10:45 - 11:45 AM	The Top Trends For 2018 Katie Dubow	In today's fast-paced world with well-connected consumers, keeping up with trends keeps your business alive. Global trend-spotter from Garden Media Group, Katie Dubow, will teach you how to apply new research and inside information to help you stay relevant and grow your business. From how to Uber-ize your services to taking advantage of the health and wellness movement, you will pick up new tricks to garner loyal fans, create new brand ambassadors, and ultimately increase sales.

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Sunday, July 16 10:45 AM - 12:15 PM	Problem Pests in Interior Landscapes and What to Do Suzanne Wainwright-Evans	This session is perfect for technicians who are ready to expand their knowledge of interior landscape pests and broaden their arsenal of solutions. Learn the latest management and eradication techniques and pick up some new tips and tricks.
Sunday, July 16 10:45 - 11:45 AM	Water Recycling from Clean Water3 Research Paul Fisher, PhD	Water conservation is a critical aspect of plant production. Recent research provides best common-sense practices to reduce, remediate, and recycle irrigation water based on real-life grower examples.
Sunday, July 16 11 AM - 12 PM	Garden Retail Topic Christina Salwitz	<i>Session description coming</i>
Sunday, July 16 11:30 AM - 12 PM	Sales & Marketing in a Lean Flow Environment Gerson Cortes	Learn how sales and marketing plays a significant and vital role in the success of Lean Flow implementation, as well as how to apply Lean Principles to sales and marketing. Understand the parameters of Lean sales and marketing and how the results can add up significantly.
Sunday, July 16 12 - 1:15 PM	Cultivate Town Hall: Changing the Industry Lloyd Traven	Join the upfront and personal panel discussion and get various perspectives on consumable goods and how they're changing the industry. Be prepared to think, consider, and discuss while getting the big-picture view of where the industry is headed.
Sunday, July 16 1:30 - 1:50 PM	Find Your NICH and Help Grow the Industry Susan McCoy	NICH (sounds like pitch) is the National Initiative for Consumer Horticulture (consumerhort.org). It's a big title for an even bigger grassroots movement to stimulate sales and grow the horticultural industry. Our goal is to get more people to garden and buy more plants and garden products. All aspects of the green industry benefit, from university research scientists and extension agents to breeders, growers, nurseries, garden centers, and ALL horticultural companies. Learn how you can be part of this united front to stimulate economic growth and increase the number of people who garden and spend money in the industry. #FindYourNICH

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Sunday, July 16 1:30 - 2:30 PM	Building Blocks of Plant Nutrition Brian Whipker, PhD, Garrett Owen	Just like eggs, flour, and water are the basics for baking, “Fert, Dirt, and Squirt” are the fundamental basics for growing plants. We will discuss these necessary building blocks that shape a plant nutrition management and monitoring program. Discuss the basics of managing water alkalinity, getting the pH right, accounting for nutritional needs of the plant, and nutritional monitoring while walking away with a sound and practical understanding of plants’ nutritional needs.
Sunday, July 16 1:30 - 2:30 PM	Reasons & Benefits of Conducting Your Own Research Brian Krug, PhD, Peter Konjoian, PhD	Doing your own in-house research can yield impressive benefits; namely, you control the experiment and see the results first-hand. Not only that, tailoring research to your specific needs can mean results that are more attuned to helping you make solid business decisions. Learn the parameters for conducting successful in-house research and why it’s a program you’ll be looking to get started right away.
Sunday, July 16 1:30 - 2:30 PM	Cut Flowers in Garden Retail Gretel Adams	<i>Session description coming</i>
Sunday, July 16 1:30 - 2:30 PM	Planning Your Exit Strategy Art Campbell	Every business owner will exit their business one day. Those who start planning now will be better positioned to achieve their end goal and leave a lasting legacy. This session is designed to provide you with valuable information about how to develop your exit strategy and increase the value of your business.
Sunday, July 16 1:30 - 2:30 PM	Estimating Bidding Jobs, Part 2 Marcus vandeVliet	See the connections between the entire project process from estimating sales to final production and understand why job costing is the most important information every business owner needs. Learn how to collect accurate field data for better-informed decisions and get examples of reports that allow owners to hold all employees accountable and better control project process and costs.

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Sunday, July 16 1:30 - 5 PM	Reducing Plant Replacements for Interiorscapers Kathy Fediw, LEED AP ID+C, CLP, CLT	<p>Do you want to increase the longevity of your plants in the interiorscape? This hands-on workshop will show you and your horticulture technicians how to add weeks, months, and years to your indoor plants despite low light, temperature fluctuations, and “helpful” customers. Learn simple and effective watering techniques, how a plant’s needs change as they age, quality standards, pruning techniques, pest and disease identification and prevention, and easy tricks of the trade to keep the plants on your accounts looking great for much longer -- increasing your profits and your client’s happiness level. Plus, find out how to handle those tough customer issues that can cause cancellations no matter how good your plants look. This half-day workshop is led by Kathy Fediw, author of “The Manual of Interior Plantscapes” and industry icon, with nearly 40 years of experience in the field.</p>
Sunday, July 16 2 - 2:20 PM	This is a Good Sign: Retailers’ Best Practices Bridget Behe, PhD	<p>Recent studies show what consumers see (and don’t see) in shopping environments, so that well intentioned display might just be overlooked. Bridget Behe, PhD, one of the industry’s leading marketing experts, will share some best practices for signs in the garden center based on her recent studies. Come learn what to add (and what to leave off) your signs to boost sales.</p>
Sunday, July 16 2 - 2:30 PM	Biocontrols Mindset Alex Traven	<p>Biocontrol systems are a paradigm shift in how growers approach pest control. Join Alex Traven, Head Grower at Peace Tree Farm, for a discussion on how implementing a successful biocontrol program requires a fundamentally different mindset than conventional growing. Traven offers insights and experience about essential strategies, common pitfalls, and intriguing nuances. This presentation has valuable information for those looking to start a biocontrol program as well as experienced practitioners seeking to improve already existing programs.</p>
Sunday, July 16 2:30 - 2:50 PM	Should Your Business Leverage Facebook Live? Katie Dubow	<p>While you may think Facebook Live is only for celebrities, major brands, or reality TV personalities, it’s not. Learn three compelling reasons why your brand should start leveraging Facebook Live in this session with Garden Media’s creative director, Katie Dubow, and how it can transform your social media game from chore to fun.</p>

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Sunday, July 16 2:45 - 3:15 PM	Who Says I Need a License to Fly My Drone? James Robbins, PhD	So you've got a new toy and are ready to fly the skies. Quickly get the low-down of the process to register your drone aircraft and become a certified "remote pilot." Get a detailed handout that guides you through the entire process so that you can avoid the headaches and have fun.
Sunday, July 16 2:45 - 3:45 PM	Making Strides: Women in Horticulture	Join a panel of women representing a variety of different roles and careers to learn about the opportunities and challenges for women in horticulture.
Sunday, July 16 2:45 - 3:45 PM	Biocontrols: Simple Fixes for First-Year Woes Suzanne Wainwright-Evans	<i>Session description coming</i>
Sunday, July 16 2:45 - 3:45 PM	Vertical Farming Coming to a City Near You? Henry Gordon-Smith	With a rapid increase in the number of vertical farming operations worldwide, it seems like this might be a viable market to get into. Learn what all the hype is about, technical examples of different vertical farming systems, potential business models, and key factors in success and failure. Also participate in a discussion on why vertical farming might not be the next mainstream agricultural innovation that some claim it to be.
Sunday, July 16 2:45 - 3:45 PM	Targeting Consumers with Pollinator-Related Promotions Hayk Khachatryan, Alicia Rihn	Backed by research, see how pollinator-related marketing actually impacts consumer perceptions including their response to pollinator friendly plants, various plant attributes, production methods, promotional wording, and neonicotinoid insecticide use. The use of "pollinator friendly" in marketing has been proven to improve customers' perceived value; learn how it can be used to meet new market needs and justify higher price points by product differentiation.
Sunday, July 16 2:45 - 3:45 PM	What Do You Sell, Why Do You Sell It, and What's Its Value? Joel Pesapane, CLP	Not everyone is your key customer, so what does it take to find your core customers and provide products just for them? Learn how to identify core demographics and hone in on pricing for profit and value. You'll see how this simple strategy can result in big results.

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Sunday, July 16 2:45 - 3:45 PM	“Sorry Not Available” - Dealing with Plant Shortages William Hendricks, Craig Cawrse	The reality of landscape plant shortages can lead to challenges in meeting design specifications. By working together, landscape installers, designers, and growers can develop cohesive strategies for navigating shortages together. Join Landscape Architect Craig Cawrse and nurseryman Bill Hendricks as they share insights on being open-minded and preparing in advance to meet future needs, especially the shortage of caliper trees.
Sunday, July 16 2:45 - 3:45 PM	CMBS and Why You Should Worry Mengmeng Gu	Crape myrtle bark scale (CMBS) is a relatively new exotic pest of crapemyrtle and has many documented alternative hosts including plants from 16 genera in 13 families. Crape myrtle is a \$66 million crop, and CMBS is threatening the utility and aesthetics of crape myrtles in urban landscapes in all Southeastern states except Florida. Dr. Mengmeng Gu will discuss brief history of CMBS in the U.S., symptoms, life cycle, and controls.
Sunday, July 16 3 - 3:20 PM	The Foodscape Revolution Brienne Arthur	Learn about how to make every cultivated space bountiful and beautiful. Brie explains the ecological and economic benefits to designing and managing foodscapes for the future and how it’s revolutionizing the way people view landscapes and their value.
Sunday, July 16 3:30 - 3:50 PM	Thinking Outside the Box: Why Classes & Events Matter Lindsay Chrisp	Fun and engaging educational opportunities for your customers matter more than ever at your garden center. Gain fresh inspiration to begin developing an exciting educational vision that fits your location and your guests. Glean practical ideas on choosing relevant class topics, creating unique events, and building a vibrant learning community that will help your business -- and customer base -- grow.
Sunday, July 16 3:30 - 4 PM	Edible Production Techniques John Erwin, PhD	<i>Session description coming</i>

DATE & TIME	TITLE & SPEAKER	DESCRIPTION
Sunday, July 16 4 - 4:20 PM	An Introduction to Pollinators and Edibles Christina Mogren	<p>Many of the edible plants in our gardens rely on pollination to set fruit or produce seeds, with native and managed bees benefiting in the process. Edible plants can be incorporated in home gardens to the mutual benefit of all. This brief introduction will highlight crop plants and their insect pollinators and will be expanded upon in the full session "What's the Buzz? Conserving Pollinators with Edibles."</p>
Sunday, July 16 4 - 5 PM	Labor: Where Are We Going and Where Do We Find It? Craig Regelbrugge	<p>Finding qualified labor to fill staffing needs is one of the most significant challenges facing the green industry. While many continually struggle, resourceful growers are exploring new ways for recruiting workers or reducing labor needs. Delve into labor availability, what Washington may do, and how some operations are finding success filling their employment needs.</p>
Sunday, July 16 4 - 5 PM	Measuring & Monitoring Greenhouse Environments with Data Christopher Currey, PhD, Brian Krug, PhD, Roberto Lopez, PhD, Brian Whipker, PhD, Garrett Owen	<p>Greenhouses are a dynamic balance between light, temperature, carbon dioxide, moisture, and mineral nutrients -- all of which affect the growth and quality of greenhouse crops. So how do you keep track of it all to maximize and influence the best results? Discover several tools that easily allow growers to better understand what is happening in your greenhouse and why. In this hands-on session, you'll work with five of these essential tools to discover ways to capture the information that will help you be a better grower.</p>
Sunday, July 16 4 - 5 PM	Edibles & Container Combos: Function & Flair Christina Salwitz	<p>Container combinations have been a trendy entry-point for novice plant consumers who don't have the time to go all out with extensive landscape beds. Take the container combination one step further with an emerging trend where edibles are incorporated. Not only do these creations take the patio tomato to new heights, but they're a key product differentiation many IGCs can capitalize on.</p>
Sunday, July 16 4 - 5 PM	Training Your Staff on the True Cost of Running Your Retail	<p>A staff who understands true business costs and is actively engaged in helping you achieve your budget goals is an asset. Learn straightforward approaches to training your team on true retail costs and see how it results in greater savings and efficiencies.</p>

DATE & TIME	TITLE & SPEAKER	DESCRIPTION
Sunday, July 16 4 - 5 PM	Utilizing Native Plants in the Landscape Jim Kleinwachter	Creating better habitats for butterflies and birds is a key element in sustainable landscaping. Native landscaping principles have influenced strategies for addressing butterfly and bird habitat needs. Learn about the latest landscape design "product" -- Pollinator Meadows -- and how they're an attractive landscape answer and a cost effective solution.
Sunday, July 16 4 - 5 PM	Business Software 101 and Your Best Options to Benefit Greg Lafferty	Business software comes in many shapes and sizes, but how do you know what system is right for your company? Learn the building blocks of business system software, the relationship between growth and complexity, how to know when you're ready for a change, and keys for successful implementation.
Sunday, July 16 5:15 - 7:30 PM	Franklin Park Conservatory Tour	If experiencing landscapes, botanic gardens, and conservatories makes your heart sing, you'll want to be sure to check out Columbus' own Franklin Park Conservatory & Gardens. Hop a free shuttle and go exploring. You have our permission to get totally excited about an evening in the garden.
Sunday, July 16 5:15 - 7:30 PM	Cultivate Block Party	What's an event without a party? Let AmericanHort welcome you to Columbus and Cultivate with a free drink, great energy, and good vibes. This is where everyone gets together to celebrate a day well done and to kick off an evening of even more fun.
Sunday, July 16 6 - 8:30 PM	Interior Plantscapes Award Celebration	The Interior Plantscape Awards Celebration brings interiorscapers together to celebrate the successes of another year while also presenting awards to this year's International Plantscape Award winners. It's an evening of excellent company, outstanding work, fresh inspiration, and long-lasting memories.

DATE & TIME	TITLE & SPEAKER	DESCRIPTION
Monday, July 17 8 - 9:15 AM	Keynote: State Of The Industry	<p>A wind of change has been sweeping the country since last year's November elections and much of it will impact our businesses.</p> <p>Ken Fisher, AmericanHort President and CEO, will discuss key, green industry trends and efforts from AmericanHort to navigate this new environment for our members. We're six months in and counting with a new President, new administration, and new Congress, and Craig Regelbrugge, Senior Vice President, Advocacy and Research, will give his "Inside Washington" perspective on the new political order and outlook on horticulture industry policy priorities from workforce to tax and small business issues. Finally, AmericanHort Chief Economist Charlie Hall will report and explain current economic indicators, policy implications, and help set the stage for our best strategic thinking for the rest of the year.</p>
Monday, July 17 9:45 - 10:45 AM	HR Regulations & Changes: What You Need to Know Tricia Pokosh	<i>Session description coming</i>
Monday, July 17 9:45 - 10:45 AM	Flowering Control with Photoperiodic Lighting Jeff Mastin, Erik Runkle, PhD	<p>Need your garden plants in flower for early spring sales? Photoperiodic lighting, which is the use of electric lighting to create long days, provides significant control of flowering time in long-day and short-day plants. Learn when photoperiodic lighting is worthwhile, how to deliver it effectively, and what technologies should be considered. Also gain insight on the economics of LEDs versus conventional lamps.</p>
Monday, July 17 9:45 - 10:45 AM	Through the Eyes of the Plant Shopper Bridget Behe, PhD	<p>Ever wonder what consumers see (or don't see) while they are shopping in your garden retail center? Recent consumer research using eye-tracking shows how consumers shop for plants. Get fresh insight about signage, prices, and merchandising from new consumer research. Findings can help you enhance the shopping environment to improve sales and profitability.</p>

DATE & TIME	TITLE & SPEAKER	DESCRIPTION
Monday, July 17 9:45 - 10:45 AM	When Biocontrols Aren't an Option: Pest Management Answers Raymond Cloyd, PhD	If the use of biological control isn't an option in an interiorscape space, what are your choices? Get the rundown of how regular plant inspections, minimization of plant stress, pruning, and appropriate pesticide use can make these situations low-stress and insignificant.
Monday, July 17 9:45 - 10:45 AM	Breaking into New Markets Matt Nelson	<i>Session description coming</i>
Monday, July 17 9:45 - 10:45 AM	Designing Plant Communities: The Science Behind Planting Claudia West	Successfully arranging perennials in both aesthetically pleasing and environmentally conscious compositions continues to be a challenge for designers and gardeners alike. Get a professional introduction to international perennial plant strategy systems and their landscape applications. Explore a variety of perennials and their garden habitats and see how inter-planting is evolving into a revolutionary new planting strategy in Europe.
Monday, July 17 9:45 - 10:45 AM	Tobacco Mosaic Virus Meets Its Match Lorence Oki	Slow sand filters are a time-tested, low-input technology that's being used to remove pathogens from captured runoff water. This water can then be used for irrigation. Learn the latest research findings that indicate how these filters can be used to remove Phytophthora and tobacco mosaic virus.
Monday, July 17 10 - 10:20 AM	Build Your Business With Biological Products Keith Jones	With consumer demand for sustainable products at an all-time high and increasing regulatory pressure on conventional horticulture production products, the biological sector has flourished. How do you respond to customer inquiries about the use of biological products? How have biological products including biopesticides and biostimulants evolved to improve product quality, availability, and field support? How can you grow your business by gaining knowledge and expertise in this burgeoning category? Keith Jones, the Executive Director of the Biological Products Industry Alliance (BPIA), will answer these questions and more.
Monday, July 17 10 - 10:30 AM	Growing Media Topic Jean-Pierre Fortin	<i>Session description coming</i>

DATE & TIME	TITLE & SPEAKER	DESCRIPTION
Monday, July 17 10:30 - 10:50 AM	Branching Out: Increasing Plant Branching & Quality Christopher Currey, PhD	Everyone knows that a quality containerized flowering plant has good and strong branching, which usually requires pinching in the production phase. This labor-intensive strategy isn't the only option anymore. Learn how plant growth regulators (PGRs) like ethephon and benzyladenine can enhance branching without pinching. Learn best practices for results everyone can be excited about.
Monday, July 17 10:45 - 11:15 AM	Mysteries of the Cloud: Solved Greg Lafferty	Cloud-based computing isn't as mystical as some would have you believe. Chances are, you've been using cloud-based products for some time in business and at home. In this session, learn what the cloud is and what it's not, its benefits and pitfalls, and the future of this technology and how it will impact your business operations.
Monday, July 17 11 AM - 12 PM	Make Your POS Work for You: Marketing Sam Kirkland	<i>Session description coming</i>
Monday, July 17 11 - 11:20 AM	Office Design Trends for Interiorscapes Kathy Fediw, LEED AP ID+C,CLP,CLT	<i>Session description coming</i>
Monday, July 17 11 AM - 12 PM	How to Combine Bio- controls and Conventional Pesticides Ronald Valentin, PhD	Learn answers to the perpetual question, "What can I spray?" Understand what you need to keep in mind when considering the compatibility of traditional pesticides with biological control agents including overall program effects, timing, and application method. Then explore what happens when you've run out of options and need to apply a traditional pesticide and how to avoid this situation altogether in the future.
Monday, July 17 11 AM - 12 PM	Holiday Inspiration - Thinking Outside the "Gift" Box Janice Goodman	Christmas in July? Really??? You won't be disappointed if you join us for this lively interactive session! Take back a sleigh-full of fresh ideas for the new holiday season. You'll leave inspired once you see the new design trends we share. And don't be surprised if you walk out the door with glitter in your hair.
Monday, July 17 11 AM - 12 PM	Economics of Green Wall Systems	<i>Session description coming</i>

DATE & TIME	TITLE & SPEAKER	DESCRIPTION
Monday, July 17 11 AM - 12 PM	Technology in the Landscape Scott Hutcheon	<i>Session description coming</i>
Monday, July 17 11 AM - 12 PM	Beyond Herbicides: Improving Weed Control Through IPM Christopher Marble, PhD	We all know that herbicides are the most economical way to manage weeds, but there is definitely more to the story. Almost everything that goes on during production can impact weed growth and herbicide performance including how we fertilize, how we irrigate, and what kind of substrate we use. In this presentation, the impacts of various production practices on weed control will be covered along with many integrated, non-chemical approaches to weed management that are actually effective.
Monday, July 17 11:30 - 11:50 AM	Marketing with a Small Budget: Lessons From Major Brands Jennifer Kerns	You might be a small business with limited resources, but that doesn't mean you can't do marketing like the major retailers out there. You can learn a lot from Costco, Nordstrom, Maytag, and other major retailers and achieve the same big results -- even with a small staff and limited marketing budget. Improve your sales with small budgets and saviness. We'll show you how.
Monday, July 17 11:30 AM - 12 PM	Tips for Conducting Your Own In-House Research Trials Peter Konjoian, PhD	Being a scientist doesn't require a lab coat. Learn why conducting in-house research trials is essential to your business and in keeping pace with rapidly changing markets. Understand the process and methodology that will get you results and help you make stronger business decisions.
Monday, July 17 12:15 - 1 PM	Utilizing Native Plants in the Landscape Jim Kleinwachter	Creating better habitats for butterflies and birds is a key element in sustainable landscaping. Native landscapes are a cost effective alternative to traditional landscaping, and municipal codes are helping the cause by promoting more native areas in detention basins and pond edges. Learn about a new trend -- the Pollinator Meadow -- that is attractive to both humans and pollinators and very cost effective in the long run too.

DATE & TIME	TITLE & SPEAKER	DESCRIPTION
Monday, July 17 1:30 - 2:30 PM	Hiring and Retaining Quality Employees Mark Sellew	The horticulture industry offers meaningful employment, but it can be challenging to find the right people for the job, hire them, retain them, and help them grow into their careers. Hear creative and common sense solutions to the industry's labor challenges with a focus on hiring the right people and keeping them on-board and engaged.
Monday, July 17 1:30 - 2:30 PM	Getting the Skinny on Phosphorus Joshua Henry^Brian Whipker, PhD	Control excessive stem stretch using a low phosphorous fertilization strategy. Learn where the sweet spot is in how low you can go and still produce an acceptable plant. NC State Research has identified the the best phosphorous fertilization and plant quality threshold, as well as atypical symptoms of late-season phosphorous deficiency.
Monday, July 17 1:30 - 2:30 PM	Greenhouse Software Technology Panel Peter Ling, PhD	<i>Session description coming</i>
Monday, July 17 1:30 - 2:30 PM	Plant Nights to Pinterest Parties: New Ideas for Events Kate Terrell, Tina Bemis, Karlie Graf, Lindsay Chrisp	Classes, workshops, and events in your garden center are the best way to invite customers in, engage them, learn about them, and share your passion for horticulture. But just like you get tired of doing the same thing year in and year out, your customers can get bored with the same slate of workshops. Join a panel of creative and ambitious garden retailers who will share their tips for getting inspired and innovative when it comes to putting on amazing and talk-worthy evetns at your store.
Monday, July 17 1:30 - 2:30 PM	Technology Meets Biophilia Janice Goodman, Michelle Marquez	Learn how using your iPad on sales calls can set you apart from the competition along with some great apps that will allow you become more efficient and effective to keep up with a world that's running at the speed of light. Come see how you can flip you color rotation department upside down and get fresh ideas that will inspire you to think differently about those color bowls and bromeliad rotations you have been doing for years. See it all come together in added value for your customers and beautiful representations of living art in their interiorscapes.

DATE & TIME	TITLE & SPEAKER	DESCRIPTION
Monday, July 17 1:30 - 2:30 PM	Your Brain on Nature Part 1 Joe Zazzera, Jonce Walker	Join Jonce Walker from Terrapin Bright Green and Joe Zazzera from Plant Solutions in a series of workshops and presentations designed to increase your perception of important design patterns and your ability to communicate their value to others. Receptivity to the message that nature enhances our wellbeing and productivity has never been higher. Using a biophilic lens, learn how to recognize a buyer's persona and develop a business plan that adds biophilic design to your company's portfolio of services. These hands-on workshops will challenge your creativity and enhance your project skills and salespitch vocabulary.
Monday, July 17 1:30 PM - 2:30 PM	Differences in Outdoor versus Indoor Herbaceous Production John Erwin, PhD	<i>Session description coming</i>
Monday, July 17 2 - 2:20 PM	Biocontrols Mindset Alex Traven	Biocontrol systems are a paradigm shift in how growers approach pest control. Join Alex Traven, Head Grower at Peace Tree Farm, for a discussion on how implementing a successful biocontrol program requires a fundamentally different mindset than conventional growing. Traven offers insights and experience about essential strategies, common pitfalls, and intriguing nuances. This presentation has valuable information for those looking to start a biocontrol program as well as experienced practitioners seeking to improve already existing programs.
Monday, July 17 2 - 2:30 PM	Crape Myrtle Bark Scale Mengmeng Gu	The introduction of exotic crape myrtle bark scale (CMBS) is threatening the utility and aesthetics of crape myrtles in urban landscapes in Texas and surrounding states. Crape myrtle is a \$66M crop and is planted throughout the South and in many other parts of the United States, so CMBS stands to have a severe economic impact on the industry. Dr. Mengmeng Gu will discuss brief history of CMBS in the U.S., symptoms, life cycle, and effective control measures.
Monday, July 17 2:45 - 3:15 PM	What is SANC? Jerry Lee	<i>Session description coming</i>

DATE & TIME	TITLE & SPEAKER	DESCRIPTION
Monday, July 17 2:45 - 3:45 PM	Lean Flow: "Dock Supermarket" Thinking Gerson Cortes	Learn how a supermarket concept in your shipping process can produce very impressive results that include improved productivity, less discrepancies, and better quality. Hear from two growers who have implemented the Dock Supermarket concept. They will tell you about their experience and the benefits they achieved.
Monday, July 17 2:45 PM - 3:45 PM	What Annuals and Perennials Attract Pollinators?	<i>Session description coming</i>
Monday, July 17 2:45 - 3:45 PM	The Online Frontier: Developing E-Commerce Karen Van Duyvendyk, Sid Raisch, David Bosco, Jonn Karsseboom	Learn how this panel of garden retailers have braved the world of online sales and the results they've seen. Hear directly from them about different challenges, obstacles, and areas of fresh opportunity and how you can break into online sales having learned from their mistakes.
Monday, July 17 2:45 - 3:45 PM	Urban Streetscapes Evelyn Chamberlin, Matt Nelson	<i>Session description coming</i>
Monday, July 17 2:45 - 3:45 PM	Your Brain On Nature Part 2 Joe Zazzera, Jonce Walker	Join Jonce Walker from Terrapin Bright Green and Joe Zazzera from Plant Solutions in a series of workshops and presentations designed to increase your perception of important design patterns and your ability to communicate their value to others. Receptivity to the message that nature enhances our wellbeing and productivity has never been higher. Using a biophilic lens, learn how to recognize a buyer's persona and develop a business plan that adds biophilic design to your company's portfolio of services. These hands-on workshops will challenge your creativity and enhance your project skills and salespitch vocabulary.

DATE & TIME	TITLE & SPEAKER	DESCRIPTION
Monday, July 17 2:45 - 3:45 PM	Whats the Buzz? Pollinators and Edibles Christina Mogren	While traditional pollinator gardens are excellent ways to provide valuable food and habitat for bees, pollinator conservation does not need to be a strictly aesthetic endeavor. Learn about pollinator biology and why managed and native bees are critical for plant reproduction and food production, as well as the resources obtained by bees during the act of pollination. By taking advantage of this close plant-pollinator association, gardeners and landscapers alike can provide valuable pollinator resources while incorporating food-based landscaping in urban and suburban environments. Fruit and vegetable farmers can also utilize conservation strips to enhance crop pollination.
Monday, July 17 3 - 3:20 PM	SANC Dana Rhodes	<i>Session description coming</i>
Monday, July 17 3:30 - 4 PM	How Much Water Do Landscape Plants Really Need? Lorence Oki	How much water does each plant use? Do you actually know? And know why it matters? Learn how knowing landscape plant water usage translates into more effective irrigation and adherence to state laws. Water budgeting is the new line item, so see how to work it to your advantage.
Monday, July 17 4 - 4:20 PM	Ignite! with the HortScholars	HortScholars are the industry's top horticulture students who are shaping the future with professionalism, fresh insights, new ideas, and cutting edge research. Hear from these six Scholars about the industry's leading trends and critical areas for opportunity and advancement.
Monday, July 17 4 - 5 PM	Transportation Costs: An Opportunity for Profit Greg Schaan	Transportation expenses are a significant part of your operating costs, and changing trucking regulations will drive them higher. Learn to manage these costs and improve profitability by identifying improvements to reduce costs, understanding the impact of regulations, and learning how to leverage vendors that best fit your business needs.

DATE & TIME	TITLE & SPEAKER	DESCRIPTION
Monday, July 17 4 - 5 PM	LED Lighting for Fruits, Flowers, and More Kathleen Baughma, John Bonner, Phil Tiemstra, Douglas Marlow	Cut through the clutter and decipher fact from fiction. A panel of your peers—four growers doing what you do every day with the same goal of efficiency and profitability—will share information about growing under LEDs. Representing a variety of crops including ornamental, high-wire vegetable, herbs, lettuce, and leafy greens, the growers will discuss what they learned from their experiences with LEDs. Walk away from the session with practical information and an understanding of things to consider as you move towards adoption of LED technology for your greenhouse operation.
Monday, July 17 4 - 5 PM	Paying to Play: What and How to Spend on Social Media Mason Day	We are now past the days of organic and “free” social media reach. Social media remains an EXTREMELY valuable marketing tool, so learn key factors in paid-for social strategy, including what to spend, how to do it, and where to spend it, as well as key data to collect from your investment.
Monday, July 17 4 PM - 5 PM	Living Walls: Long-Term Maintenance Elliott Bennett, CLT-1, Joanne Young, Jim Mumford	Come learn about the perks and perils of installing and maintaining living walls. Our panel with a combined 100 years of interior landscaping experience will discuss how to handle large scale projects and share knowledge about a variety of living wall systems. Gather information on how to maintain extremely high vertical walls safely and what to expect regarding plant performance over the lifespan of your contract. Some very useful tips & tricks will be shared to help your company be successful with installing and maintaining living walls.
Monday, July 17 4 - 5 PM	The Foodscape Revolution - ALTERNATIVE GROWING SYSTEMS Brienne Arthur	Consumers, culture, and the global economy have evolved and so should our landscapes evolve for the modern era. Get the ins and outs of incorporating new technologies into everyday landscapes -- like space-saving vertical growing systems and water-efficient techniques like Aeroponic, Aquaponic, and Hydroponic growing. Learn how to integrate these “altrenative” systems into landscapes, patios, and even indoor space for year-round growing.
Monday, July 17 4 - 5 PM	Changing the Way We Look at Substrates James Owen, PhD	<i>Session description coming</i>

DATE & TIME	TITLE & SPEAKER	DESCRIPTION
Monday, July 17 5 - 6:30 PM	Greenhouse Grower's Evening Of Excellence	Greenhouse Grower's Evening of Excellence is the celebratory event at Cultivate that awards and recognizes individuals and operations that are dedicated to bringing new varieties to market and also strive for excellence in their daily work. Awards given include Medal of Excellence for Breeding, Marketing, and Industry Achievement, Operation of the Year, and Head Grower of the Year.
Monday, July 17 5 - 7 PM	OSU Cultivar Trials	Unleash your inner plant nerd and assess 700 annual and perennial varieties on display at The Ohio State University Cultivar Trials. See how they grow in typical Central-Ohio environmental conditions and evaluate their growth in containers, landscape beds, and hanging basics. Also be sure to check out Howlett Hall's green roof. Free shuttle rides from the Convention Center are available -- final departure from OSU back to downtown Columbus is at 7 p.m. Open to all attendees. OSU thanks AmericanHort and the Ohio Nursery and Landscape Association for their support.
Monday, July 17 8 - 10 PM	Unplugged + Trivia	Hosted by the AmericanHort GenNext community, you're invited to meet up at a local Columbus bar, grab a drink, and unplug from a day of hard work. Plus, test your knowledge with the ongoing Cultivate Trivia competition.
Tuesday, July 18 8 AM - 12 PM	GPGB Registered Trainer Seminar; Your Brain On Nature Part 3 Justin Bogardus	At the completion of this 1 hour training (in addition to having attended either part 1 or part 2), the status of Registered Trainer is conferred upon attendees. You will be given the official Biophilia slide deck and the forms needed to offer 1 hour of CE to designers and architects.
Tuesday, July 18 8:15 - 9:15 AM	Making Wise Equipment Choices Peter Ling, PhD	<i>Session description coming</i>
Tuesday, July 18 8:15 - 9:15 AM	Marketing with a Limited Budget: Lessons from Major Brands Jennifer Kerns	You might be a small business with limited resources, but that doesn't mean you can't do marketing like the major retailers out there. You can learn a lot from Costco, Nordstrom, Maytag, and other major retailers and achieve the same big results -- even with a small staff and limited marketing budget. Improve your sales with small budgets and savviness. We'll show you how.

DATE & TIME	TITLE & SPEAKER	DESCRIPTION
Tuesday, July 18 8:15 AM - 9:15 AM	Utilizing Pollinators in the Landscape David Smitley, PhD	<i>Session description coming</i>
Tuesday, July 18 9:15 - 9:45 AM	Nursery Substrate Considerations James Owen, PhD	<i>Session description coming</i>
Tuesday, July 18 9:30 - 10:30 AM	Problem Perennials and What You Can Do Dan Long Trevor Hilburn	From cutting to garden-center bench, clematis can be challenging and rewarding plants. Learn key production and maintenance points to take with this popular climber, including myths, truths, and some of the newest varieties that add color to your line and green to your wallet. Ferns are also a challenging perennial, so learn how to conquer their timing challenges and practical tips and tricks for your best crop yet.
Tuesday, July 18 9:30 - 10:30 AM	Let Sedges Do the Work Shannon Currey	Get to know sedges, their strengths and limitations, and why they are workhorse-must-haves for today's landscapes. Sedges are important for anyone interested in green infrastructure, the ecological landscape market, and in the dense, layered plantings prevalent in today's designs. Learn through beautiful photography, illustrations, and examples.
Tuesday, July 18 9:30 - 10:30 AM	SANC: Perspectives from a Consultant, Regulator, and Nursery Jerry Lee, Kimberley Lovelace-Young, Dana Rhodes	Learn about SANC (Systems Approach to Nursery Certification) and perspectives from consultants, regulators, and nurseries who are working together to implement strategies that lead to healthier plants. See how this program facilitates commerce for all sizes and types of nurseries and how you can get on board.
Tuesday, July 18 10 - 10:20 AM	Planning in a Lean Flow Environment Gerson Cortes	Lean Flow practices not only make current production more cost and time effective, but it also gives you the tools to use data to forecast future plans. Learn the techniques that will align your production schedule with actual sales and the strategies behind producing the right products based on sales history.
Tuesday, July 18 10 - 10:30 AM	What's New in the Weed Control World? Christopher Marble, PhD	A world without weeds is still only a dream, so learn the latest research on herbicides, including new formulations, new combinations, and new ways to use these products to get just a little closer to the dream of "weed-free."

DATE & TIME	TITLE & SPEAKER	DESCRIPTION
Tuesday, July 18 10:30 - 10:50 AM	Mysteries of the Cloud: Solved Greg Lafferty	Cloud-based computing isn't as mystical as some would have you believe. Chances are, you've been using cloud-based products for some time in business and at home. In this session, learn what the cloud is and what it's not, its benefits and pitfalls, and the future of this technology and how it will impact your business operations.
Tuesday, July 18 10:45 - 11:45 AM	Successful Planting Strategies for Green Infrastructure Claudia West	Structural stormwater management facilities are extreme sites that require vegetative layers to be functionally successful. Conditions oscillate between wet and extremely dry substrates throughout the growing season. Proper plant selection becomes more difficult with higher pH levels, salt concentrations, and compacted soil layers. By basing designs on naturally occurring plant communities that evolved under similar conditions, projects prove to be more successful. Explore native plant compositions that tolerate such difficult conditions and are vital for providing various functions and high ecological value.
Tuesday, July 18 11 - 11:20 AM	Ignite! with the HortScholars	HortScholars are the industry's top horticulture students who are shaping the future with professionalism, fresh insights, new ideas, and cutting edge research. Hear from these six Scholars about the industry's leading trends and critical areas for opportunity and advancement.