

# *Cincinnati Zoo & Botanical Garden's* Sustainable Urban Landscapes Symposium

## *Talk Descriptions and Speaker Biographies*

March 10, 2022

### **Elmcestry and Oak Folks; Explore your tree family trees for clues of character and performance!**

#### **Nancy Buley, JF Schmidt Nursery, Boring, OR 9:00AM-9:50AM**

Whether *Ulmaceae*, *Fagaceae* or *Hominidae*, families are complicated! Just like your relatives, understanding where elm, oak and other species come from, and how they are related to each other, can give important insights as to their appearance, behavior, strengths and weaknesses. Digging into tree family trees reveals important clues about their future performance in the nursery, on the streets and in landscapes. Exposing tree family secrets reveals insights into the susceptibility, resistance and tolerance of insects, disease and environmental factors.

*Nancy Buley is Director of Communications for J. Frank Schmidt & Son Co., wholesale tree growers of Boring, Oregon, where she's been "talking trees" since 1994. She is a member of AmericanHort®, Oregon Association of Nurseries (OAN), GardenComm.com, International Society of Arboriculture and the Society of Municipal Arborists, from which she earned a certificate from the Municipal Forestry Institute (MFI). Nancy served on the board of directors of Friends of Trees for a decade and is a Lifetime Honorary Member of the American Society of Landscape Architects.*

*In recognition of her longtime tree advocacy and stewardship efforts, she was presented the Frederick Law Olmsted Award by The Arbor Day Foundation and the Outstanding Professional Award by Oregon Community Trees. She earned a Bachelor's Degree in Technical Journalism, with a Horticulture Minor, from Oregon State University. She resides in Boring, where she gardens beneath an ever-widening canopy of shade.*

### **Trees for Bees**

#### **Bill Hendricks, President, Klyn Nurseries, 9:50AM-10:40AM**

With the current focus on the importance of pollinators and so much talk on pollinator plants it is important to remember that many trees provide a lot of flower power that benefits pollinators. Research by Dr. Dan Potter of the University of Kentucky and others has shown the importance of trees that provide the most benefits and are the basis for this talk.

*Bill is a highly sought-after speaker on a variety of horticultural topics. Over his extensive career Bill has served on many boards and committees in the Green Industry, including Ohio Nursery & Landscape Association, Nursery Growers of Lake County, Ohio, International Plant Propagator's Society, International Dendrological Society, American Bamboo Society, American Conifer Society, Perennial Plant Association, Scenic Ohio Board and Past President of Lake County Nurserymen's Association. Other interests include photography. Many of Bill's photos have been used in professional horticultural publications. A cactus and succulent collection of over 4000 species started at age 9 is a continuing hobby.*

## Nature and Cardiovascular Health

### **Dr. Aruni Bhatnagar, University of Louisville, 11:10AM-12:00PM**

This talk will be an update Dr. Bhatnagar's incredible 2019 talk on his extensive research on how exposure to nature effects human cardiovascular health.

*Aruni Bhatnagar, Ph.D., F.A.H.A. is widely regarded for spearheading the new field of Environmental Cardiology, Dr. Aruni Bhatnagar, a Smith and Lucille Gibson Professor of Medicine at the University of Louisville, has spent more than 25 years studying the impact of toxic substances, tobacco smoke constituents and environmental pollutants on heart disease. He is a graduate of Kanpur University, India and received his post-doctoral training at the University of Texas Medical Branch at Galveston. Dr. Bhatnagar is known for his pioneering work on the metabolism of toxic substances in ambient air and tobacco smoke, and how they affect the development of cardiovascular disease and diabetes. He has published over 280 research papers, commentaries and review articles, and 20 book chapters. A leader in cardiovascular health, he has participated in more than 50 peer-review panels of the National Institutes of Health, and has served as a member of the Institute of Medicine's Committee on Secondhand Smoke Exposure and Acute Coronary Events, as well as the Committee on Long-Term Health Consequences of Exposure to Burn Pits in Iraq and Afghanistan. For the last 7 years, Dr. Bhatnagar has served as Deputy Editor of the American Heart Association journal - Circulation Research. His research has been supported by the National Institutes of Health, the Environmental Protection Agency, the Department of Defense, and the American Heart Association. He currently serves as Director of the newly created Envirome Institute, and the Diabetes and Obesity Center at the University of Louisville and Director of the American Heart Association Tobacco Regulation and Addiction Center.*

## Plant Sustainability & Keys to Successful Urban Landscapes

### **Steve Foltz, CZBG, Director of Horticulture, 1:00PM-1:50PM**

When it comes to horticulture in the urban landscape, too many people fall into the trap of making broad statements about plant sustainability based on assumptions, trends, and prejudice but the issue is far more nuanced. What determines which plants are considered sustainable? There are a lot of opinions out there and it would be better if we could tie the title to specific goals. Steve will introduce a rating system that considers the human, community, and ecological outcomes within the reality of urban growing conditions. Steve will share how the Cincinnati Zoo & Botanical Garden has used this system and a handful of design, installation, and maintenance techniques to ensure beautiful and successful gardens, at the Zoo and in the community.

*Steve Foltz is Director of Horticulture at the Cincinnati Zoo & Botanical Garden, where he has worked since 1990. A graduate of the Horticulture School at the University of Kentucky, Steve began his career at Delhi Garden Centers. Since joining the Zoo, he has designed, installed, and managed nearly every imaginable facet of horticulture. He has generously shared his wealth of knowledge by nearly continuous involvement with many horticultural organizations in the city, state, and region. Previously, he served on the Ohio Nursery & Landscapes Plant Select Committee and on the board of the Ohio Invasive Plant Council. He enjoys teaching aspiring horticulturists as an adjunct professor at both the University of Cincinnati and at the Cincinnati State Technical and Community College. He has received the Community Award from the Boone County Arboretum, the Garden Club of America's Horticulture Commendation, and the ONLA's Distinguished Contribution Award.*

## Avoiding Disasters by Design

### **Dan Herms, VP R&D The Davey Tree Expert Company, 1:50PM-2:40PM**

Many insects that are rarely pests in natural forests are prone to outbreaks in urban forests and ornamental landscapes because of factors that destabilize their populations. When understood, the ecological interactions between plant-feeding insects, natural enemies, and their abiotic environment can be manipulated to prevent pest outbreaks. A rich body of research provides the theoretical underpinnings for ecologically-based pest management programs that enhance plant health and the sustainability of ornamental landscapes in urban environments.

*Dan Herms is Vice President of Research and Development for The Davey Tree Expert Company. Prior to joining Davey, Herms was a professor in the Department of Entomology at The Ohio State University for 21 years. His research and outreach programs focus on the ecology and management of trees in forests, urban forests, and ornamental landscapes, including interactions with insects, soils, and climate. He received his B.S. in Landscape Horticulture from Ohio State University, his M.S. in Horticulture and Entomology from Ohio State University, and his PhD from Michigan State University in Entomology. Prior to joining Ohio State University, he worked for 13 years at The Dow Gardens, a public garden in Midland, MI, where he directed the pest management program.*

## There's a Bee...Now What? Research and Direction at CZBG

### **Jerome Stenger, CZBG, Horticulturist, 3:10PM-4:00PM**

In 2021, a group of CZBG volunteers, led by former long-time department manager Deb Zureick, conducted pollinator research trials throughout the zoo. This talk will revisit that very large and impressive data set, speak on the methods and challenges involved, and highlight some of the coolest observations. This pollinator research falls under our larger plant trials umbrella and our commitment to identifying valuable plants for the urban landscape. Using this pollinator research as a springboard, Jerome will share an outline of where CZBG Horticulture is headed in 2022 and beyond.

*Jerome Stenger is a Horticulturist at the Cincinnati Zoo & Botanical Garden, where he has worked since 2017. From 2010-2017, he was the general manager of Painters Greenhouse, a 9-acre plant farm and retail garden center in Asheville, North Carolina, home of the largest Boston Fern hanging baskets you can obtain legally. Since joining the zoo, he has contributed to many major landscaping renovations, including Roo Valley and the Rockdale Urban Learning Garden. Jerome oversees plant ordering and assists with nursery inventory, plant trialing, and social media content. He is a Cincinnati native, holds English and Journalism degrees from Ohio Wesleyan University, and somehow has only taken one Botany class in his life. He survives strictly on street smarts and the brilliance of co-workers.*

## **Bees, Pesticides & Politics: Challenges & Opportunities for Sustainable Urban Landscapes**

**Dr. Dan Potter, Entomologist, University of Kentucky, 4:00PM-4:50PM**

This talk will help attendees better understand why bees and other pollinators are in peril, the role of insecticides and other factors in pollinator decline, and how to safeguard pollinators when managing lawn and landscape pests. Pollinator conservation initiatives that can be implemented by homeowners, garden centers, and land care professionals will be discussed, as well as the best woody landscape plants for supporting bees and other pollinators.

*Dr. Daniel Potter is Professor of Entomology at the University of Kentucky, where for 43 years his research has informed strategies for sustainable management of pests and beneficial insects in urban landscapes nation-wide. Dan is an award-winning teacher and a frequent invited speaker at conferences around the world. He has received national leadership awards from the Entomological Society of America, Professional Land Care Network, American Nursery and Landscape Association, U.S. Golf Association, and other scientific and industry organizations.*