

Sustainable Urban Landscape Symposium: It's About Pollinators

Talk Descriptions and Speaker Bios

Cincinnati Zoo & Botanical Garden; March 22, 2018

Pollinators in the Garden; A Bird-Eye View, Scott Beuerlein, Cincinnati Zoo & Botanical Garden; 9AM-950AM

The overview. This talk will provide very practical information that can turn any piece of ground into an ecosystem supportive of beneficial insects.

Scott Beuerlein is a Horticulturist at the Cincinnati Zoo & Botanical Garden. Scott is Chair of the Boone County Arboretum Collections Committee, past Chairman of Taking Root, past President of the Cincinnati Flower Growers Association, and Past Chairman of the Northern Kentucky Urban and Community Forestry Council. He has published over 75 magazine articles, including Ohio Gardener, Horticulture Magazine, and American Nurseryman. He currently writes the Only in Ohio column for Ohio Gardener, and is a regular contributor to the Garden Rant blog. He is an ONLA Certified Landscape Technician and an ISA Certified Arborist.

Bring Back the Pollinators: What You Need to Know to Save Native Bees and Have Fun Doing It! Mace Vaughn, Xerces Society, 950AM- 1040AM.

Through beautiful photos, personal stories, and engaging natural history, Mace will lead you on a tour of the importance of native bees and other pollinators, and the latest updates on their conservation. You will come away from this talk with a new appreciation for the wildlife visiting flowers all around you, as well as with a clear understanding of how to conserve bees in your backyard, neighborhood park, school or greenspace. You'll even learn how the pollinator stories that unfold in our gardens can connect families separated by 1000s of miles.

Mace Vaughn serves as the Xerces Society's Pollinator Conservation Program Co-Director and a Joint Pollinator Conservation Specialist to the USDA's Natural Resources Conservation Service's (NRCS) West National Technology Support Center in Portland, Oregon. Mace has led Xerces' Pollinator Conservation Program since 2003 and acted as Joint Pollinator Conservation Specialist to the NRCS since 2008. In his tenure at the Xerces Society, the pollinator program has grown from a small pilot project on California farms to a national program implementing pollinator conservation projects across the US. Mace now co-leads a team of 20 pollinator conservation specialists and several consultants across the U.S., and supervises the largest pollinator conservation team in the country.

His work with other staff at the Xerces Society and the USDA-NRCS has led to the implementation of hundreds of thousands of acres of pollinator habitat on farms throughout the U.S. Through education and outreach events he has directly reached thousands of agency staff, farmers, land managers, and homeowners. He also has expertise in working to reduce the impact of pesticides on pollinators and was invited to serve on the steering committee for an international meeting of regulators, scientists, and industry leaders to develop improved risk assessment strategies to better protect pollinators.

Mace has written numerous articles on the conservation of bees, butterflies, aquatic invertebrates, and insects, and is co-author of the publications Attracting Native Pollinators: Protecting North America's Bees and Butterflies, Farming with Native Beneficial Insects, and the Pollinator Conservation Handbook. He is the lead author of Farming for Bees: Guidelines for Providing Native Bee Habitat on Farms. He was a lecturer on honey bee biology and beekeeping at Cornell University, from which he holds Masters Degrees in Entomology and Teaching. Mace has conducted research into the behavior and community ecology of insects, and has worked as an insect wrangler and bee expert for PBS Nature.

Floral adaptations- the magical interaction between flowers and pollinators, Dr. Robert Geneve, University of Kentucky, 1110AM-12PM

This presentation takes a closer look at flower morphology and diversity as it relates to pollination. Various systems used by flowers to facilitate pollination are described. Special attention is given to adaptations in flower morphology designed to attract and interact with general or specific pollinators. Flowers signal pollinators with nectar guides, trick insects into

visiting flowers by mimicking other organisms, lure pollinators into traps and even have moving floral parts. If you look close, you can see the floral magic.

***Dr. Robert Geneve** has been a faculty member of the University of Kentucky, Department of Horticulture for over 30 years doing teaching and research in nursery production and plant propagation. He is an author of several books including the textbook "Hartmann and Kester's Plant Propagation: Principles and Practices". Dr. Geneve has been recognized as a Fellow of the American Society for Horticultural Sciences and the International Plant Propagator's Society – Eastern region. He is a frequent speaker at national and international conferences on subjects ranging from plant propagation, seed biology and plant morphology.*

Zoo's Best Plants for Pollinators, Steve Foltz, Cincinnati Zoo & Botanical Garden, 110PM-2PM

This talk will describe a broad number of plants that provide for pollinators based on many years of trialing at the Cincinnati Zoo & Botanical Garden. Everything from annuals to large trees!

***Steve Foltz**, Director of Horticulture at the Cincinnati Zoo & Botanical Garden. Steve is responsible for one of the area's largest plant collections that include 3,000 varieties of trees, shrubs, tropical plants, grasses, bulbs, perennials and annuals. His expertise is widely-known in the industry and he is frequently asked to speak to horticulture groups.*

A graduate of the University of Kentucky with a B.S. in Ornamental Horticulture, he is currently teaching Horticulture at both Cincinnati State Technical and Community College and at the University of Cincinnati. In addition, each year he teaches a series of classes on "Landscaping Your Home." Steve has been a member of the Ohio Plant Selection Committee, serving as Chair of the committee for two years. He is also a member of the Kentucky Plant Selection Committee for the Theodore Klein Award and a member of the International Plant Propagators Society, Eastern Region. Steve was the 2015 recipient of the Ohio Nursery and Landscape Association's highest award, the Distinguished Contributor Award.

Caring for solitary bees, Natalie Boyle, USDA, 2PM-250PM

Solitary bees are an extremely diverse insect group, with over 4,000 native species living in North America. Like honey bees, solitary bees provide critical pollination services for wild and managed ecosystems, although they exhibit extremely different lifestyles and behaviors. Solitary bees do not make honey or live in a hive; rather, they reside alone and in a variety of alternative habitats such as in soil, hollow reeds, or inside wood cavities. Orchard bees comprise a commonly observed solitary bee group that occupy vacant cavities in wood, reeds, or artificially provided nesting habitats, and are known to be exceptional pollinators of spring-blooming flowers. Because of this, they are frequently employed for commercial pollination of tree fruit crops including almonds, cherries and apples. Orchard bees naturally occur throughout the United States and are often available for purchase at local farm stores for use at any scale. We will provide a brief overview of management and gardening practices that can support orchard bees and other wild pollinators in your own backyard.

***Natalie Boyle** is a postdoctoral researcher for the USDA-ARS Pollinating Insects Research Unit in Logan, UT. Her research focuses on improving the management of solitary bees for commercial pollination, including the blue orchard bee and the alfalfa leaf cutting bee. Prior to joining the bee lab in 2016, Natalie earned her M.S. in Entomology studying the effects of pesticide residues on honey bee colony health and her Ph.D. Studying pollinator-mediated gene flow between transgenic and conventionally grown alfalfa seed varieties. Natalie earned her B.S. in Biology at Western Washington University*

Butterfly Garden Attract More Than Just Butterflies, Joe Boggs, OSU Extension, Hamilton County, 320PM-410PM

Flowering plants attract more than just butterflies and pollinators. How are pollen and nectar key components to maximize the impact of beneficial insects.

Joe Boggs is an Assistant Professor with Ohio State University Extension, Hamilton County, and the OSU Department of Entomology. He specializes in tree problem diagnostics including the detection and management of tree pests. Joe averages over 100 presentations per year teaching in local, state, national, and international conferences. He is a frequent contributor to various trade journals including American Nurseryman, Tree Care Industry Association Magazine, and Canadian Groundskeeper. Joe has a weekly Saturday morning radio segments titled "The Buggy Joe Boggs Report" that airs from April through October on the radio show, "In the Garden with Ron Wilson," (WKRC, Cincinnati); the show is syndicated by iHeartRadio to 30 radio stations in 12 states.

Salads in the Snow, Kevinn Collard, Pine View Nursery, 410PM-5PM

Growing vegetables in the middle of the winter might seem unlikely but it's a reality with the season extension tool of a high tunnel. High tunnel production is still relatively new to many people but has been in use for several decades now. I've been using high tunnel production techniques to grow vegetables in the winter for 4 years. I primarily grow cool season vegetables such as lettuce, kale, collards, spinach, Asian greens, broccoli, cauliflower, cabbage and many root crops such as onions, radish, carrots and beets. It's almost magical to walk into an unheated greenhouse in the middle of winter and leave with everything you need to make your own salad. In this talk I will discuss what a high tunnel is and how they can be used. I'll talk briefly on types of structures and initial layout of beds and drip irrigation system. I will share my experiences from the beginning and show how anyone with growing experience can reproduce the same results.

Kevin Collard is 1992 graduate of Western Kentucky University with a B.S. in horticulture. After graduation he studied gardens in Great Britain in the summer of 1992. He founded and has owned and operated Pine View Nursery in Leitchfield, Kentucky for 25 years. Pine View Nursery is a retail/wholesale nursery and garden center growing trees, shrubs, perennials, annuals and fresh vegetables (during the winter and spring). They also offer landscape, landscape maintenance and hardscape services. They specialize in fine, rare and unusual plants and also grow many unique varieties of boxwood not commonly found in the trade. He has a special calling to feed the people and has been in the process of expanding his operation into the production of fruits and vegetables to feed his family and anyone else interested in organically grown local food.