

WINTER SYMPOSIUM
CVNLA 54th SHORT COURSE
PESTICIDE RECERTIFICATION
THURSDAY, FEBRUARY 9, 2023

Stewarding the Land, Healing Ourselves

8:50 am **Welcome, virtual attendees admitted**

9 am **Centering Ecology and Biodiversity in Design**

Jennifer Dowdell, project manager and senior landscape ecological planner/designer, Biohabitats Inc., Baltimore, MD

Through research, planning, design, and construction, the Biohabitats team seeks to restore ecosystems, conserve habitat, and regenerate the natural systems that surround us. Ms. Dowdell provides insights into the foundations of landscape ecology and ecosystem services as drivers of design in the public and private realm. She examines a diverse selection of projects where ecology has been woven seamlessly into the planning and design process.

10:15 am **Sugar, Sex, and Poison: Shocking Plant Secrets Caught on Camera** *(virtual presentation)*

Bill Cullina, Executive Director, Morris Arboretum, PA

Plants are at the base of both the human and non-human food chain. Everything eats them directly or indirectly, which may or may not be a good thing as far as plants are concerned. Because they do not move around, it is easy to forget that plants are not helpless. They have evolved an incredible arsenal of chemicals, camouflage, spines, hairs, and waxes to discourage herbivores. It is a carefully balanced natural economy and community based on the products of photosynthesis that is amazing in its complexity and efficiency. Strengthening this natural economy through sound horticultural and agricultural practices is in essence what the organic movement is all about. Bill Cullina shows how this world of pollen, poisons, pigments, pheromones, sugars and sex translates to sound organic practices from which we can all benefit.

11:15 am **Modeling the Influence of Environmental Covariates on Pollinator Richness in Urban Gardens around Richmond**

Dr. Nicholas Ruppel, Randolph-Macon College, Ashland, VA

Pollination is an essential ecosystem service that supports the

reproduction and propagation of over 87% of the world's flowering plants. The dramatic decline in pollinators, especially insect pollinators, due to climate change and pesticide use threatens not only our food supply, but also the diversity of native plants. Urban areas, if well managed, can serve as corridors and reserves for pollinator species and benefit agricultural and natural ecosystems well beyond the urban environment. Dr. Ruppel discusses our recent assessment of Mid-Atlantic (U.S.A.)-region urban garden plant-pollinator interactions, focusing on activity associated with the regionally-native plants Dense blazing star (*Liatris spicata*; Asteraceae) and Clustered mountain mint (*Pycnanthemum muticum*; Lamiaceae). Our findings are important for further understanding how the urban setting may influence pollinator activity, strongly suggesting that informed management practices should guide future human development.

12:15 pm **Lunch**

1:15 pm **Creating Flourishing Ecosystems for All**

Jasmine Thompson, Director, Philly Forests, Philadelphia, PA

Jasmine Thompson details her work in nurturing gaps in our food and eco-systems from the soil, to humans, and wildlife. There's knowledge in observing natural systems, and creating work that uplifts all stakeholders therein.

2:15 pm **BREAK with snack**

2:30 pm **Should We Reconsider Boxwood in Our Landscapes?**

Dr. Matthew Borden, plant pathologist at Bartlett Tree Research Lab and Arboretum, Charlotte, NC

Love it or hate it, folks often have strong feelings about their boxwood. Explore some of the culture and history of boxwood, including management tips in the era of boxwood blight and other pests. Learning how to recognize key boxwood problems is an important first step, but deciding what a plant's value is to you and considering alternatives, particularly natives, warrants more discussion. Are boxwoods, long symbolic of immortality, here to stay or fading away?

3:30 pm **Adjourn**

SPEAKERS

FEBRUARY 9

Jennifer Dowdell serves as project manager and senior landscape ecological planner/designer at Biohabitats Inc., based in the Chesapeake Bay bioregional office in Baltimore, MD. For over 15 years she has applied principles of ecology, landscape architecture, conservation planning, and living infrastructure to projects ranging from greenways to state parks, college campuses, and citywide ecological networks. Her work merges landscape ecology, resilience strategies, and environmental justice in site design and planning. After receiving a BA in History and Creative Nonfiction Writing from Loyola University in Maryland, she earned her Masters of Landscape Architecture from the University of Michigan's School of Natural Resources & Environment (now SEAS), where she worked with Joan Nassauer in her Landscape Ecology, Perception, and Design Lab. Jennifer's writing has been published in the *Wilson Quarterly*, *Landscape Architecture Magazine*, *PLACES Journal*, *theEarthIssue #4*, *The Nature of Cities* blog, and the e-quarterly, *Leaf Litter*. Her experience in writing and advocacy informs her work facilitating dialogue about the social and ecological narratives that engage nature in design.

William Cullina (kul-EYE-nuh) is the F. Otto Haas Executive Director of the Morris Arboretum of the University of Pennsylvania. Prior to this he was the President and CEO of Coastal Maine Botanic Garden for eleven years. Cullina holds degrees in plant science and psychology, has been working in public horticulture for 25 years, and has extensive experience in in horticultural and forestry research, and commercial nursery production. A well-known author and recognized authority on North American native plants, Cullina lectures on a variety of subjects to garden and professional groups and writes for popular and technical journals. His books include, Wildflowers, Native Trees, Shrubs, and Vines; Understanding Orchids; Native Ferns, Mosses, and Grasses; and Understanding Perennials

Nick Ruppel, Ph.D., earned a B.S. in Botany from Miami (OH) University in 2001, and later obtained his Ph.D. in Plant Sciences at Indiana University. He then worked as a postdoctoral research associate in the Department of Plant Sciences at the University of California - Davis. He is currently an Associate Professor and Chair of the Biology department at Randolph-Macon College.

Jasmine Thompson is the Executive Director of Philly Forests, a three acre vegetable farm in Philadelphia, PA that manages a CSA Program and independently operates a weekly farmers market. As a social enterprise, Philly Forests takes a percentage of crop sales to operate the Urban Ecology Program where trees, shrubs, and perennials are purchased for free distribution to zip codes with a low tree canopy. Jasmine has a background in improving local food systems and establishing food forests for tribal communities. She serves as a National Young Farmers Coalition Fellow, FSA Philadelphia County Committee Member, and Board member of the Pennsylvania Farmers Union.

Dr. Matthew Borden is a plant pathologist at the Bartlett Tree Research Laboratories in Charlotte, NC. He has practical experience in orchard and botanical garden pest management, plant problem diagnostics, and plant health writing. He gained a deep appreciation for integrated pest management while at Virginia Tech, followed by studies in landscape health and sustainable management strategies at the University of Florida.

Continuing Education Credits

International Society of Arboriculture

Certified Arborist: 5	Municipal Specialist: 5	BCMA-Science: 2
BCMA-Practice: 1	BCMA-Management: 2	TW Climber Specialist: 5
TW Aerial Lift Specialist: 5		

Virginia Certified Horticulturist

February 9: 5 VCH CEUs

Chesapeake Bay Landscape Professional

1 CEU

Master Gardeners, landscape designers, all others self-report. 5 contact hours.

Landscape Architect Continuing Education System: 5 Horticulture/Plants (available for in person participants only)