



Sustaining the Living Landscape

The 25th Annual ELA Conference & Eco-Marketplace
March 6 & 7, 2019 at the UMass Murray D. Lincoln Campus Center, Amherst, MA



ELA's 25th Annual Conference & Eco-Marketplace March 6 & 7, 2019

Looking for New Ideas? Solutions? Inspiration?

Forests and natural systems are under enormous pressure from the effects of climate change, insect damage, invasive plants, and rapid urbanization. What can you do to protect these systems? Join ELA's 25th Annual Conference to learn more about how to restore lost ecological connections, better manage urban land, and create beautiful, highly functioning landscapes! Wednesday's sessions focus on the science and management of natural and urban forests and on managing stormwater naturally, effectively, and aesthetically. More on the wild side, Thursday's sessions range from an in-depth look at insects, plants, and fungi to larger concepts of creating urban habitat, repairing degraded land, and restoring human connections to the natural world.

Intensive Sessions: March 6th

► Forest Dynamics in a Changing Climate

Devolving or Evolving? From fragmentation to the threat of invasive insects and plants, forest systems are facing significant pressures. Join our speakers as they take a closer look at what's happening in the forest as the climate changes and land becomes increasingly urbanized. What's being observed and what does the science say? How do we engage politicians, urban planners, landscape professionals, and the public to value and actively protect forest systems? Learn the science and help find solutions to protect forests and the life they support.

► Form, Function, & Flow: Managing Stormwater Naturally

The importance of managing stormwater is now well recognized by municipalities. However, designing and constructing treatment systems that are effective and attractive in the long term remain a challenge. Looking at a variety of treatment methods, from vegetated systems in urban areas to constructed wetlands, today's speakers discuss the science behind the treatment and examine the many challenges involved with siting, constructing, and maintaining these systems. Presentations include examples of built systems that both effectively manage stormwater and provide beautiful landscapes.

Wednesday, March 6
Keynote Dinner 6:30-8:30pm

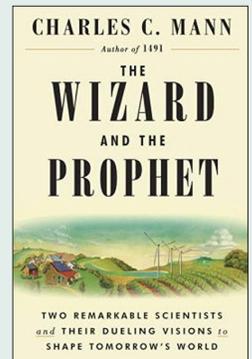
with

Charles C. Mann

author of

The Wizard and the Prophet:
Two Remarkable Scientists and
Their Dueling Visions to Shape Tomorrow's World

Complex environmental issues and how to solve them are critical topics as we approach the alarming milestone of an earth population of 10 billion humans. In his compelling new book, acclaimed journalist Charles Mann examines divergent viewpoints on the alarming questions about human survival.



The Wizard and the Prophet explores two influential yet overlooked scientists whose opposing viewpoints underlie the two primary approaches to this dilemma. Norman Borlaug is the Wizard, a tenacious plant geneticist who launched the '60s Green Revolution and believed that science could solve all human needs. William Vogt is the Prophet, a pioneering ecologist who believed that humans had exceeded Earth's carrying capacity and were heading for disaster unless consumption was drastically reduced. Mann delves into these differing theories in the context of global use of resources: energy, fresh water, and agriculture as climate change accelerates and humankind approaches ten billion.

Mann's meticulous research synthesizes and analyses the challenges and paradoxes of modern environmentalism as we struggle toward a viable future. Join us for Mann's keynote address to learn about the premise of his compelling new book.



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DAY ONE Conference Schedule Wednesday, March 6, 2019

| 3/6 | Forest Dynamics in a Changing Climate | Form, Function, & Flow: Managing Stormwater Naturally |
|-------------------|--|--|
| 9:00am - 10:30am | Dr. Dan Herms The Davey Tree Expert Company Climate Change and Its Effects on Trees and Their Relationship to Insects | Dr. Allen Davis University of Maryland Bioretention Technology for Stormwater Management: Engineering for Better Water Quality |
| 11:00am - 12:30pm | Dr. Lucy Hutyra Boston University What Is the Carbon Value of Trees Across Developed Landscapes? | Michele Adams Meliora Environmental Design Julie Snell TEND Landscape Reconnecting Water, Soils, and Vegetation: Green Infrastructure in the Urban Environment |
| 2:00pm - 3:30pm | Dr. Susannah Lerman USDA Forest Service The Birds and the Trees: Managing the Urban Forest for Wildlife | Brian Kuchar, Jennifer Relstab & Michele West Horsley Witten Group The Wet and Wild World of Constructed Wetlands |
| 4:00pm - 5:30pm | Dr. Ann Hazelrigg University of Vermont When to Call an Arborist: Diagnosing Tree Ailments | Steven Torgenson A. Morton Thomas & Associates The Art of Integrating Rainwater – A Case Study |
| 6:30pm - 8:30pm | Keynote Dinner with Charles C. Mann: The Wizard and the Prophet | |

GENERAL INFORMATION

Online Registration

Visit www.ecolandscaping.org to register online!

Continuing Education Credits

CEU credits have been requested from APLD, ASLA, ISA, LA CES, MAA, MLP, MNLA, , NOFA, OLCF, and others.

ELA Bookstore

Open throughout the ELA Conference. Your bookstore purchase helps to support ELA educational programs.

Contact Information

Visit www.ecolandscaping.org for online registration, general information, and conference details.

Attendee information

Penny Lewis at (617) 436-5838

Exhibitor information

Trevor Smith at (617) 308-7063

On-site Registration

Walk-in registrations welcome, or register at the event: March 6 and 7.

Hotel:

Rooms at Hotel UMass are available to participants for \$115 per night. Reservations will be taken no later than February 20, 2019. Register online or call (877) 822-2110 and specify the ELA group promotional code: ELC19C. The discount is NOT available at check-in.

Cancellation Policy

To receive a refund, your request must be received prior to February

25, 2019. A \$60 handling fee will be deducted. No refunds will be made after that date unless the conference is canceled. For recorded cancellation information, call (617) 436-5838.

Disclaimer

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DAY 2 Conference Schedule Thursday, March 7, 2019

| 3/7 | Design & Restoration: Landscapes that Connect People to Place | Keeping the Wild In (Mind): Insects, Fungi & Plants | Idea Exchanges |
|-------------------------|---|--|---|
| 9:00am - 10:30am | Bryan Quinn RLA (CT) One Nature The Role of Landscape in our Global Environmental Crisis | Dr. Ann Hazelrigg University of Vermont Who Is Eating My Trees? An Overview of Insects Pests in the Managed Landscape | Dr. Lisa Trimby Physical Therapist Landscape Readiness: Strengthen, Stretch, and Reduce Your Risk |
| 11:00am - 12:30pm | Ann Kearsley RLA, MLAUD Ann Kearsley Design Landscapes for Learning: Wolfe's Neck Center Discovery Garden | Tara Mitchell MassDOT Life on the Dark Side: Exploring the Relationship between Fungi and Plants | Panelists: John Engwer, Clarisse Hart, Tom Rawinski Moderator: M.L. Altobelli Friend or Foe: Perspectives on Pests Topics: climate change, insect threats, invasives, black locust |
| 2:00pm - 3:30pm | Dr. Steven Handel Rutgers University The Challenges of Restoring Urban Native Habitat | Andi Pettis The High Line The High Line's Urban Nature: Tenacious Plants for Tough Places | Panelists: Dr. Pamela Breyer, Dr. Martin Michener, Nick Novick, Jess Toro, Laney Widener Moderator: Mark Richardson Glyphosate: Considerations and Concerns |
| 4:00pm - 5:30pm | Przemek Walczak Chanticleer Garden Bell's Woodland: Creating a Native Garden from Disturbed Woodland at Chanticleer | Donald Pell Donald Pell Gardens Creating Beautiful Gardens While Rewilding the Landscape | Dr. Jack Ahern UMass Amherst Walking Tour: Notable Trees on the UMass Amherst Campus |



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WEDNESDAY March 6, 2019 Intensive Sessions

FOREST DYNAMICS IN A CHANGING CLIMATE

9:00-10:30am

Climate Change and Its Effects on Trees and Their Relationship to Insects

Dr. Dan Herms, *The Davey Tree Expert Company*

After slowly cooling throughout the past millennium, Earth has substantially warmed over the last 40 years, and effects on trees and insects are already apparent. There is a strong scientific consensus that this warming is caused by human emission of greenhouse gases. There also is a substantial discrepancy between this scientific consensus and perceptions of the public regarding climate change. Dr. Herms will examine the evidence for anthropogenic climate change, including changes in patterns of precipitation; consider current and future impacts; and look at the implications for trees in urban and natural forests, especially their interactions with insects. He will also address the potential for trees to sequester carbon in urban forests as a climate change mitigation strategy.

11:00am–12:30pm

What Is the Carbon Value of Trees Across Developed Landscapes?

Dr. Lucy R. Hutyra, *Boston University*

In this session, Dr. Hutyra will provide a primer on the global carbon cycle and the role of vegetation in controlling the concentrations of CO₂ in the Earth's atmosphere. Moving from pristine, natural ecosystem, she will explore the role of forest fragmentation on the structure and productivity of ecosystems. Today the majority of global forests are <1 km from an edge, but most of our understanding of ecosystem carbon cycling dynamics is derived from intact forest systems. Fragmentation and edge effects vary by biome in their direction and magnitude, but current forest carbon accounting methods and ecosystem models generally fail to include edge effects. In the mesic northeastern US,

we find large increases in carbon stocks and productivity of forest patches near forest edges. In contrast, changes in the wind, fire, and moisture regimes near tropical and more arid forests result in decreases in carbon stocks and productivity near the edge. Dr. Hutyra will contrast carbon dynamics in large expanses of forest, small patches of urban forest, and street trees through a trade-offs framework that considers microenvironmental changes and limiting factors to productivity.

2:00–3:30pm

The Birds and the Trees: Managing the Urban Forest for Wildlife

Dr. Susannah Lerman, *University of Massachusetts*

As forested land continues to be lost to development, identifying effective urban forest management strategies becomes paramount to ensure that the urban forest provides habitat that can sustain bird and other wildlife populations. In this presentation, Dr. Lerman will describe how different landscaping choices in private yards have consequences for native bird communities. These relationships have subsequent implications for human well-being since this is where people have their primary interaction with the natural world. She will also describe a wildlife module for i-Tree (an urban forest assessment tool). The wildlife module quantifies and qualifies available habitat within the urban forest by linking bird habitat suitability models with urban forest structure. The tool and research described will benefit urban foresters, wildlife managers, urban planners, landscape designers and homeowners by providing specific information on the habitat conditions required for supporting vibrant wildlife communities in our cities, suburbs and neighborhoods.

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WEDNESDAY March 6, 2019 Intensive Sessions, continued

FOREST DYNAMICS IN A CHANGING CLIMATE (continued)

4:00–5:30pm

When to Call an Arborist: Diagnosing Tree Ailments

Dr. Ann Hazelrigg, University of Vermont

This presentation will cover plant disease basics and discuss how to analyze plant symptoms and other critical clues to discern whether you are dealing with an infectious disease or an abiotic problem. Dr. Hazelrigg will also discuss several of the common abiotic and infectious disease problems prevalent in the Northeast and will share information on the management of infectious diseases based on IPM principles.

FORM, FUNCTION, AND FLOW: MANAGING STORMWATER NATURALLY

9:00–10:30am

Bioretention Technology for Stormwater Management: Engineering for Better Water Quality

Dr. Allen P. Davis, University of Maryland

As (sub)urban growth continues to consume undeveloped land, stormwater runoff from impervious surfaces grows in importance as a contributor to water resources degradation. Bioretention (a soil/vegetation management practice) has been promoted as a “low impact” stormwater management practice to mitigate impacts of impervious surfaces. Fundamental, applied, and monitoring research has been completed demonstrating the performance of bioretention technologies. Dr. Davis will address bioretention design for hydrologic performance, bioretention media selection for particulate and phosphorus removal, and the challenges of nitrogen removal.

11:00am–12:30pm

Reconnecting Water, Soils, and Vegetation: Green Infrastructure in the Urban Environment

**Michele Adams, Meliora Design
Julie Snell, TEND Landscape**

Green stormwater infrastructure (GSI) can restore healthy waterways and revitalize urban communities but requires a multi-disciplinary design approach informed by ecology, community, engineering, and long-term maintenance. This presentation will explore several case studies of successful GSI projects in Philadelphia, focusing on examples of community engagement and ecological restoration to successfully improve water quality and healthy neighborhoods. Philadelphia’s long-term stormwater and combined sewer overflow plan, Green Cities Clean Waters, is a national model for GSI implementation in economically challenged urban areas.

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WEDNESDAY March 6, 2019 Intensive Sessions, *continued*

FORM, FUNCTION, AND FLOW: MANAGING STORMWATER NATURALLY (continued)

2:00–3:30pm

The Wet and Wild World of Constructed Wetlands

Brian Kuchar, Jennifer Relstab & Michelle West, Horsley Witten Group

Constructed stormwater wetlands utilize a complex system of physical, chemical, and biological processes to address stormwater pollutants from impervious surfaces. They are one of many green infrastructure tools to manage and protect the quality of stormwater into nearby water bodies and beyond. Furthermore, as a stormwater asset, these practices are adaptable and can often capture and treat large volumes of runoff, allowing for a cost-effective opportunity for communities to address regulatory requirements, water quality goals, and climate resiliency. Beyond treatment, these features provide an opportunity to enhance aesthetics in a neighborhood while providing natural habitat and public amenity when implemented in parks and open space. However, constructed stormwater wetlands can also have siting, design and construction challenges that require innovative approaches. This session will focus on three main topics: overview of constructed stormwater wetland design, case studies of construction projects implemented by the Horsley Witten Group in New England over the past five years, and lessons learned during the various phases of those projects.

4:00pm–5:30pm

The Art of Integrating Rainwater – A Case Study

Steven Torgerson, A. Morton Thomas & Associates

Brookside Gardens, an award-winning public parking garden, is a showcase for celebrating rainwater within a high-profile public space and to over a million visitors a year. The site design and green infrastructure were developed in tandem allowing for harmonious stormwater solutions within the overall site design. The design for the entry, parking garden, and associated plaza spaces solved numerous problems including pedestrian and vehicular access, flexible and beautiful gathering spaces, security, and expanded parking, while highlighting Brookside's philosophy of sustainability by incorporating ecological systems, green infrastructure techniques, sustainable building materials, and native plant communities. Artful stormwater management techniques are highlighted across the site and include permeable pavement, structured and unstructured micro-biorientation facilities, green walls, pavement reduction, expanded root volumes, and bio-swales. The rain-harvesting landscapes focus on plant diversity, pollinators, habitat, texture, contextual themes, and seasonal interest.



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THURSDAY March 7, 2019 Conference Sessions

DESIGN & RESTORATION: LANDSCAPES THAT CONNECT PEOPLE TO PLACE

9:00–10:30am

The Role of Landscape in Our Global Environmental Crisis

Bryan Quinn RLA (CT), *One Nature LLC*

Many professionals in the green economy have environmentally noble goals but find it difficult to confirm that their work makes a measurable, positive impact on our global environmental crisis. Mr. Quinn will provide an overview of his company's approach toward creating landscapes that positively influence the biosphere. He will discuss his company's action-oriented, vertically-integrated approach by examining a series of projects which have been completed over the past five years. In addition to describing the science and design behind his work, Mr. Quinn will discuss the power of social entrepreneurship, especially in relation to One Nature's status as a Certified B Corp. Special emphasis will be placed on the connection between environmental ethics and aesthetics, qualitative vs quantitative metrics in assessing the impact of work, maximizing public access to ecologically regenerate resources, and social entrepreneurship.

11:00am–12:30pm

Landscapes for Learning: Wolfe's Neck Center Discovery Garden

Ann Kearsley, *Ann Kearsley Design*

Wolfe's Neck Center (WNC) is a beautiful 626-acre saltwater farm on the shores of Casco Bay, Maine. Since the mid-20th century, the farm has been a regional leader in implementing and testing sustainable agriculture techniques while providing both educational and recreational resources for the community. Ms. Kearsley and her team have been working with the farm since 2014, developing a masterplan and landscape design proposals integrating the farm operations with WNC's diverse educational and recreational programming. At the center of the project is the Discovery Garden, an experiential

education landscape where visitors learn about both the sustainable practices behind Regenerative Farming and the functional ecological and biological processes that make these practices successful. This session will present the Wolfe's Neck Center Discovery Garden, a landscape designed to connect people to the plant communities, biological processes, and ecological function of their environment through experience and observation.

2:00–3:30pm

The Challenges of Restoring Urban Native Habitat

Dr. Steven N. Handel, *Rutgers University*

Patches of native habitat in urban and other degraded areas provide important ecological services. A design team developed and tested a series of planting that attempted to restore ecological connections between fragmented and degraded remnant habitats in large, urban areas. Old, urban landfills were planted with woodland patches of various sizes to determine how quickly mutualisms, including seed dispersal and pollination, occurred. Focusing on Brooklyn Bridge Park in New York and Orange County Great Park in California, Dr. Handel will explore how these types of ecological solutions can be applied to many urban designs.

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THURSDAY March 7, 2019 Conference Sessions, *continued*

DESIGN & RESTORATION: LANDSCAPES THAT CONNECT PEOPLE TO PLACE (continued)

4:00–5:30pm

Bell's Woodland: Creating a Native Garden from Disturbed Woodland at Chanticleer

Przemek Walczak, Chanticleer Garden

Developing a native woodland garden, in suburban areas, comes with specific challenges such as soil degradations and erosion, abundance of invasive exotic plant species, and a need to manage stormwater runoff. In his presentation, Mr. Walczak will discuss soil restoration, evaluating the effectiveness of different methods for a variety of situations; invasive plant species removal eradication versus suppression; and Hugelculture both as a way of gardening and as a tool for restoring woodland soil by addressing surface runoff and creating specific conditions for plants.

KEEPING THE WILD IN (MIND): INSECTS, FUNGI, AND PLANTS

9:00–10:30am

Who Is Eating My Trees? An Overview of Insect Pests in the Managed Landscape

Dr. Ann Hazelrigg, University of Vermont

Dr. Hazelrigg will review key pests of 2018 and will look ahead to potential problem pests in 2019. She will discuss how to narrow down pest identification from feeding damage, whether or not to manage the insects on your plants, and strategies for organic and IPM control when management is required. Additionally, Dr. Hazelrigg will bring some practical knowledge to the management of pests in the landscape.

11:00am–12:30pm

Life on the Dark Side: Exploring the Relationship between Fungi and Plants

Tara Mitchell, Massachusetts Department of Transportation

Ms. Mitchell will discuss forest fungi and their ancient and complex relationship with plants. She will provide an overview of the different types and general characteristics of mushrooms found in the forest; discuss the ecological role of fungi, from surface dwellers (lichen) to those that inhabit soil (mycorrhizae) and wood (decomposers); and illustrate how fungi are essential to soil and water management, the creation of forest habitat, and the regeneration of forests. She will also touch upon the human connection and how, by allowing fungi more living space in our increasingly urbanized environments, we can take advantage of the benefits provided by these fascinating, but little understood inhabitants that occupy the dark places of the earth.

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THURSDAY March 7, 2019 Conference Sessions, *continued*

KEEPING THE WILD IN (MIND): INSECTS, FUNGI, AND PLANTS (continued)

2:00–3:30pm

The High Line's Urban Nature: Tenacious Plants for Tough Places

Andi Pettis, High Line

The High Line's renowned plantings are inspired by the natural landscape that grew wild there, before the elevated rail line was transformed into a New York City public park. In this session, Ms. Pettis will present some of the toughest plants growing on the High Line: cultivated species as well as the plants that grew wild on the rail tracks, spontaneously and without any care or thought from human beings. She will explore how we can study the spontaneous nature in urban environments in order to glean lessons about the tenacity of plants, and how we can apply those lessons to our ecological landscapes.

4:00–5:30pm

Creating Beautiful Gardens While Rewilding the Regional Landscape

Donald Pell, Donald Pell Gardens

There are several aspects of effective landscape designs that make them successful. Understanding the technology of specific plants and how they may integrate into any given landscape is the key to composing beautiful plantings. Designed space can bring us a dynamic life experience when we have an understanding of specific plants and their adaptive strategies. In this presentation, we'll look at how to utilize cool and warm season plant characteristics to stabilize soils and create desirable compositions. We'll discuss the role of ephemeral plants to build desirable seed banks while a garden is evolving and examine the role of aggressive and invasive plants and how they may be used successfully to manage grand scale and limited budgets. Finally, we'll examine the successes and failures of projects as well as what inspires these gardens.



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THURSDAY, March 7, 2019 Idea Exchanges

Landscaping Readiness: Strengthen, Stretch, and Reduce Your Risk

– Dr. Lisa Trimby, Physical Therapist

The periodic and seasonal nature of landscape work combined with many physically demanding tasks takes a toll on the human body. What can we do to prevent injury and how can we prepare our bodies for the hard work ahead? Come learn and relearn steps you can take to keep your body tuned during the offseason and strategies you can use to reduce injury risk throughout the long landscape season.

Friend or Foe: Perspectives on Pests

– John Engwer, Clarisse Hart, Tom Rawinski | Moderator: M.L. Altobelli

Many insects, plants, and animals that were once harmless have become hugely problematic as habitat shrinks and urbanization changes the land. High populations of deer threaten the regeneration of forests. Cute, voracious bunnies are rampant in the urban environment. Black locust, native to the Appalachian Mountains and once valued for wood, is considered an invasive plant in New England. From friend to foe – how do we address these problematic species on both the large scale and the small scale? Are these species really the problem – or merely symptoms of bigger problems? Can we reduce insect and animal damage by changing the plants or planting techniques that we use? Or should we be changing our expectations to turn overabundance into bounty? Are there solutions? Or are humans simply not adapting to the rapidly changing environment? Bring your questions and share your solutions.

Glyphosate: Considerations and Concerns

– Dr. Pamela Breyer, Dr. Martin Michener, Nick Novick, Jess Toro, Laney Widener | Moderator: Mark Richardson

Glyphosate, marketed and considered to be relatively safe, makes weed control fast and efficient. Many invasive plants are nearly impossible to control without the use of chemicals. But is glyphosate as safe as we think? Is it being misused and overused in the residential landscape? And what happens when common weeds become resistant? How do we balance what we perceive to be the health of ecological systems (i.e., maintaining native species) with the invisible and cumulative effects that glyphosate may have on the long term health of insects, wildlife, and the humans who use and consume plants treated with herbicides? Join the debate! Hear from scientists and practitioners and share your own thoughts and experiences.

Walking Tour: Notable Trees on the UMass Amherst Campus

– Dr. Jack Ahern, UMass

Take a campus walk with Professor Jack Ahern. The 1.5 mile tour will include the historic rhododendron garden, an ecologically-renovated urban landscape in the Southwest residential area with attractive and functional green infrastructure, numerous notable mature tree specimens and the new Design Building landscape with native plantings, rain gardens and a roof terrace featuring native species. The tour will start from and return to the Campus Center.



The 25th Annual ELA Conference & Eco-Marketplace

CONFERENCE REGISTRATION FORM

Wednesday & Thursday
March 6 & 7, 2019

Early Registration, Member or Group Discounts are valid through **February 25th. Sign up today!**

Discounts available for ELA members and groups of three or more. Only one discount per person applies. Become an ELA member on this form and receive an immediate member discount.

*****Visit www.ecolandscaping.org to register online or to download the registration form for mailing*****

| | | |
|--|----------------------------------|---------------------|
| Enter Name as it should appear on Conference Name Badge. | Company/Organization Affiliation | ELA member (Yes/No) |
| Name: | | |
| Email: | Contact Address: | |
| Home Phone: | Business Phone: | |

NOTE: Group discount is the same as the member pricing when three or more register as a group. Complete one form per group member.

| Offerings | Member Before 2/25 | Member After 2/25 | Non-Member Before 2/25 | Non-Member After 2/25 | Amount Due |
|--|--------------------|-------------------|------------------------|-----------------------|------------|
| 3/6 Breakfast with Eco-Experts | \$ 20 | \$ 25 | \$ 20 | \$ 25 | \$ |
| 3/6 Sessions | \$145 | \$200 | \$170 | \$235 | \$ |
| 3/6 Sessions with Keynote Dinner | \$195 | \$270 | \$230 | \$320 | \$ |
| 3/6 Keynote Dinner Only | \$ 85 | \$115 | \$100 | \$135 | \$ |
| 3/7 Breakfast with Eco-Experts | \$ 20 | \$ 25 | \$ 20 | \$ 25 | \$ |
| 3/7 Sessions Only | \$145 | \$200 | \$170 | \$235 | \$ |
| 3/6 and 3/7 Sessions Only | \$230 | \$320 | \$270 | \$375 | \$ |
| 3/7 Sessions with Keynote Dinner on 3/6 | \$195 | \$270 | \$230 | \$320 | \$ |
| 3/6 and 3/7 Sessions with 3/6 Keynote Dinner | \$280 | \$390 | \$330 | \$460 | \$ |

Full-Time Student Registration *No other discounts apply. Enclose a copy of student ID with registration & present ID at conference.*

| | |
|---|----|
| Full-Time Student, 3/6 Sessions – \$85 | \$ |
| Full-Time Student, 3/7 Sessions – \$85 | \$ |
| Full-Time Student, Keynote Dinner 3/6 Only – \$60 | \$ |

ELA Membership—Join or Renew *ELA is a 501(c)3 nonprofit organization; membership fees and donations are tax-deductible*

| | |
|--|-----------|
| Join or Renew ELA membership at Company Level – \$250 | \$ |
| Join or Renew ELA membership at Professional Level – \$100 | \$ |
| GRAND TOTAL ENCLOSED | \$ |

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Information Sharing

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FOR INFORMATION, call (617) 436-5838 or visit www.ecolandscaping.org.

MAKE CHECK PAYABLE TO ELA and return with this form to: ELA Conference, P.O. Box 3, Sandown, NH 03873.

CANCELLATION POLICY: refund requests must be received prior to February 25, 2019. A \$60 handling fee will be deducted.

No refunds will be made after that date unless the Event is cancelled. For recorded cancellation info, call (617) 436-5838.

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CONSENT, WAIVER OF LIABILITY, AND RELEASE: When you enter the ELA Conference, you will be entering an area where photography, video, and audio recording may occur. By registering and attending the event, you:

1. Consent to the use of photography, audio recording, video recording and its/their release, publication, exhibition, or reproduction for news, webcasts, promotional purposes, telecasts, advertising, inclusion on websites, or any other purpose by ELA and its affiliates and representatives without payment/royalties or inspection/approval of materials;
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Speaker Biographies

Michele Adams, PE LEED AP, is a Water Resources Engineer and founder of Meliora Design. Her work focuses on sustainability, green infrastructure, and engineering designs informed by ecology, including many LEED and SITES certified projects. She was one of the authors of the Pennsylvania Stormwater Manual as well as the NYC High Performance Landscape Guidelines, and currently serves on the USGBC Sustainable Sites Committee (SS TAG), as well as American Rivers Science and Technical Advisory Committee. Recent projects include the Philadelphia KidZooU, Shoemaker Plaza at the University of Pennsylvania, the Stroud Water Research Environmental Education Center, and the Meadow Expansion at Longwood Gardens.

Dr. Jack Ahern is a professor of landscape architecture and urban planning at the University of Massachusetts Amherst. His work is focused on urban landscapes and enhancing ecosystem services in urban areas. He is currently focusing on new theories of “novel urban ecosystems” to better understand how “new nature” in contemporary cities can be understood, classified, designed, and managed for beauty and ecological functions.

Dr. Allen P. Davis is Professor and Charles A. Irish Sr. Chair in Civil Engineering in the Department of Civil and Environmental Engineering at the University of Maryland. He earned his BS, MCE and PhD degrees all from the University of Delaware. For over two decades, Dr. Davis has been investigating sources and treatment of pollutants in urban stormwater runoff with a focus on nature-based practices, particularly bioretention. In 2010 he was awarded the A. James Clark School

of Engineering Faculty Outstanding Research Award recognizing exceptionally influential research accomplishments related to urban storm water quality, its management, and the concept of Low Impact Development. He is author or co-author of over 120 peer-reviewed journal articles and a text on Stormwater Management for Smart Growth. From 2001 to 2010, he was Director of the Maryland Water Resources Research Center.

Dr. Steven N. Handel is a Distinguished Professor of Ecology and Evolution at Rutgers University where he studies the potential to restore native plant communities, adding sustainable ecological services, biodiversity, and amenities to the landscape. His research explores pollination, seed dispersal, population growth, and problems of urban and heavily degraded lands. Previously, Dr. Handel was Director of the Marsh Botanic Garden at Yale University, a Visiting Professor at Stockholm University, and Research Scholar at Macquarie University in Sydney, Australia. He is the Editor of the professional journal *Ecological Restoration* and an Aldo Leopold Leadership Fellow of the Ecological Society of America. He was elected an Honorary Member of the American Society of Landscape Architects and also received the Society for Ecological Restoration's highest research honor, the Theodore M. Sperry Award. Dr. Handel received his BA from Columbia College in Biology and MS and PhD degrees from Cornell University in the Field of Ecology and Evolution.

Dr. Ann Hazelrigg is a plant pathologist with University of Vermont Extension and is the Director of the Plant Diagnostic Clinic. She has a BS degree in Horticulture Science from Colorado State University, a MS degree from Cornell in Pomology and

Plant Pathology, and a PhD from University of Vermont in Plant and Soil Science. She has been in her position for over 30 years and enjoys working with landscapers, growers, and the gardening public. Dr. Hazelrigg is the IPM Coordinator for the state and oversees both the Master Gardener Program and the Pesticide Education and Safety Program in addition to doing applied research. She still finds the job fun and learns something new every season.

Dr. Dan Herms is Vice President of Research and Development at The Davey Tree Expert Company. Prior to joining Davey in January 2018, Dr. Herms was a professor in the Department of Entomology at The Ohio State University, where he served on the faculty for 21 years. His research has focused on interactions between trees and insects, including effects of climate change, and he was a member of The Ohio State University Climate Change Outreach Team. Dr. Herms received his BS in landscape horticulture from The Ohio State University, his MS in horticulture and entomology from The Ohio State University, and his PhD in forest entomology from Michigan State University. In 2014, he was inducted as a Fellow of the American Association for the Advancement of Science.

Dr. Lucy Hutyra is an Associate Professor in the Department of Earth & Environment at Boston University. She received her PhD in Earth and Planetary Sciences in 2007 from Harvard University for her thesis “Carbon and Water Exchange in Amazonian Rain Forests.” In 1998 she received BS in Forest Ecology and Management from the University of Washington. Professor Hutyra's

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current research interests center on characterization of the urban carbon cycle, including quantifying the effects of urbanization on vegetation structure and productivity, developing urban greenhouse gas monitoring systems, and refining fossil fuel emissions estimates. She is an Investigator on several large NASA research projects linking remote sensing, atmospheric observations, field measurements, and models to study the urban carbon cycle. She was the recipient of an NSF CAREER award in 2012, serves on the North American Carbon Program Scientific Steering Group, and is a member of the NASA Earth Sciences Federal Advisory Group.

Ann Kearsley RLA, MLAUD, is a landscape architect and urban designer and the owner and founding principal of Ann Kearsley Design based in Portland, Maine. Ann has over 35 years' experience designing and building landscapes for institutions, communities and individuals. Her work ranges from the planning and design of productive agricultural landscapes where farming operations are integrated with experiential education and recreational programming, to public parks, urban plazas and private residential gardens, and includes numerous public and private landscapes for sculpture. She teaches in the landscape architecture programs at Northeastern University and the Rhode Island School of Design.

Brian Kuchar, P.E., R.L.A., LEED AP, has 20 years of experience in the combined fields of landscape architecture and civil engineering. His passion for the preservation of the natural environment provides the foundation for all his design work. He is a registered landscape

architect as well as a professional engineer and served as an adjunct professor in the Landscape Architecture Department at the University of Rhode Island.

Dr. Susannah Lerman is a Research Ecologist in the Communities and Landscapes of the Urban Northeast unit of the USDA Forest Service. Dr. Lerman earned her BA in American History from the University of Delaware, an MS in Conservation Biology from Antioch University, and a PhD in Organismic and Evolutionary Biology from the University of Massachusetts in 2011. Her research identifies creative strategies for managing yards, neighborhood parks, and other open spaces with the dual objective of creating vibrant habitats for wildlife and people. Dr. Lerman seeks opportunities to explain scientific findings to varying audiences while trying to facilitate connections between the public's personal lives and their local environment. Her research has been highlighted in a number of national and international media outlets including NPR's Science Friday, The National Audubon Magazine, and The Guardian. Dr. Lerman is a keen birder, who also enjoys running in the woods and along back roads and hiking in the desert.

Tara Mitchell has been a landscape architect with the Massachusetts Department of Transportation for 19 years. Her focus is on roadside restoration, native seeding, naturalistic landscape design for urban areas, and urban gardening for food and habitat. More recently, she's been focusing on the realm of fungi and the hidden connections between plants and fungi.

Donald Pell stumbled upon his passion in the extreme. Having grown up

propagating plants in his parents' nursery, Mr. Pell became fascinated with all things horticulture from very early on. He also was inspired hiking through neighboring remnant prairies, spontaneous hedgerows, and an abandoned nursery in his youth. He started his company at the age of 20 and soon began working under landscape designer and mentor Susan Jones. Mr. Pell designs immersive gardens that are evocative of the regional landscapes. These gardens look to realize the possibilities of place. Donald Pell Garden is situated on a 14 acre farm where gardens are being developed for pleasure and education.

Andi Pettis is the Director of Horticulture at the High Line, where she leads a world-class team of gardeners in the ecological management of a unique and sophisticated urban landscape. Her horticulture career in New York City spans nearly two decades and includes gardening in both private and public gardens, managing parks, and teaching at the New York Botanical Garden. Ms. Pettis is dedicated to organizing around access and equity within the profession of horticulture, as well as passionately advocating for access to quality green space for all. She serves on the board of directors of Metro Hort Group and the advisory board for the Ornamental Landscaping program at Bronx Community College.

Bryan Quinn RLA (CT), is the founder and principal of One Nature. Technically trained in restoration ecology, environmental philosophy, and landscape architecture, his vision is a world where our development activities improve the environment, rather than destroy it. Mr. Quinn's lifelong

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dedication to landscapes and the environment is evident in One Nature's diverse body of work, including gardens, parks of all sizes, campuses, agricultural land, and urban design. Regardless of size, he strives to bring out the potential for every project to inspire people through ecological design. Part scientist and part artist, his design methodology is place-based and relies on a sensitivity to the particular qualities of each location.

Jennifer Relstab, P.E., has over 14 years of professional experience in civil and environmental engineering. Her expertise is in stormwater management and Low Impact Development planning, assessment, design, and implementation. She also performs extensive GIS mapping, analysis, and modeling to support many of her projects. She is currently working with several municipalities in the New England area to identify new and retrofit green infrastructure projects using tools such as ArcCollector and Survey123; develop designs for priority sites; and install innovative stormwater practices, including a recently completed constructed stormwater wetland in the Town of Milford, Massachusetts.

Julie Snell, ISA, has worked closely with city agencies, corporations, volunteers, and other nonprofit entities to advise on the daily operations of the landscapes under their purview. Her work at TEND Landscape, primarily in the public realm, focuses on the bridge between design and landscape management. As founder and co-chair of the Landscape Management Forum, she has forged a partnership with landscape managers from arboreta, public gardens and campus landscape throughout the Philadelphia region. Since 2013, Ms. Snell

is also an adjunct instructor for "Green vs. Gray: Improving and Sustaining Urban Ecosystems" at Temple University in the Department Landscape Architecture and Horticulture. She earned a Master's degree in landscape architecture from the University of Pennsylvania, is a certified arborist, accredited organic land care professional, and a founding principal of TEND landscape inc.

Steven Torgerson is a Registered Landscape Architect and an Associate at AMT Landscape Architecture + Design Division. He has nationwide experience in planning and design within an ecologically resilient framework, and is passionate about creating spaces that are catalyst for people to interact with their environment and community. Mr. Torgerson's multidisciplinary design approach encourages alternative solutions to complex rainwater problems. He delights in community engagement and the opportunity to integrate public preferences into the design outcome. Before coming to AMT, Steve served as the Cultural Landscape Architect at Yosemite National Park and was the led landscape architect for the Forest Service during the 2002 Winter Olympics. He has won numerous awards for his work in landscape architecture including the 2018 ASLA Potomac Chapter Honor Award for Brookside Gardens and the 2017 ASLA, Potomac Chapter Honor Award for Greening DC's Streetscapes. Mr. Torgerson holds a Master in Landscape Architecture from the Pennsylvania State University with an emphasis in watershed planning and a Bachelor of Landscape Architecture from Utah State University.

Przemek Walczak is a horticulturist at Chanticleer Garden, his place of employment for the past 22 years. Before that he interned as an arborist at Morris

Arboretum of University of Pennsylvania and Winterthur Museum and Garden in Wilmington, Delaware. In Poland, prior to moving to the United States, Mr. Walczak worked in the Studio for Applied Dendrology at The Center for the Preservation of Historic Landscapes. He lectures and teaches classes on topics such as pruning, native plant gardening, springs wildflowers and ephemerals, ferns, moss gardening, native pollinators, gardening for the birds, aquatic gardening, and woodland and shade gardening. Mr. Walczak graduated from Academy of Life Sciences in Warsaw, Poland as a Master of Economics and Agriculture.

Michelle West, P.E., has more than 14 years of professional experience in civil and environmental engineering. Her specific expertise is in stormwater management assessment and policy, watershed planning, hydraulic/hydrologic modeling, and GI planning, assessment, design, and implementation. She is the lead author on the following stormwater manuals: Rhode Island Stormwater Design and Installation Standards Manual (2010 Update), CNMI and Guam Stormwater Management Manual, and the Palau Stormwater Management Manual. She has also assisted with several other technical stormwater-related manuals and guides, including the recent update of the Vermont Stormwater Manual and the RI LID Site Planning and Design Guidance for Communities. Ms. West has presented at several technical and policy-related training workshops, and has many years of experience with public education and outreach.