

NATIVE PLANT PROGRAMS

A close-up photograph of a plant branch with several large, ovate leaves. The leaves are in various stages of autumn color change, ranging from bright yellow and orange to deep red and magenta. The veins on the leaves are clearly visible. The background is a soft, out-of-focus green, suggesting a natural outdoor setting.

Conserving and promoting
New England's native plants
to ensure healthy, biologically
diverse landscapes

ABOUT NATIVE PLANT TRUST

Native Plant Trust is the nation's first plant conservation organization and the only one solely focused on New England's native plants. We save native plants in the wild, grow them for gardens and restorations, and educate others on their value and use. We are based at Garden in the Woods, a renowned native plant botanic garden that attracts visitors from all over the world. From this flagship property in Framingham, Massachusetts, 25 staff and many of our 1,500 trained volunteers work throughout New England each year to monitor and protect rare and endangered plants, collect and preserve seeds to ensure biological diversity, detect and control invasive species, conduct research, and offer a range of educational programs. Native Plant Trust also operates a nursery at Nasami Farm in western Massachusetts and manages six sanctuaries in Maine, New Hampshire, and Vermont that are open to the public. Native Plant Trust is among the first organizations worldwide to receive Advanced Conservation Practitioner accreditation by London-based Botanic Gardens Conservation International (BGCI), which included an endorsement by an International Advisory Council representing six continents. Please visit www.NativePlantTrust.org.

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Many of our programs qualify for continuing education units. Below is a list of CEUs we offer. Visit NativePlantTrust.org/education for a list of qualifying programs.

AOLCP - Northeast Organic Farming Association Accredited Organic Land Care Professionals

CERP - Society for Ecological Restoration's Continuing Education

CFE - Society of American Foresters' Continuing Forestry Education

LACES - American Society of Landscape Architects' Continuing Education

MCA - Massachusetts Certified Arborist

MCH - Massachusetts Certified Horticulturist

MCLP - Massachusetts Certified Landscape Professional

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Program catalog is published twice a year by Native Plant Trust. Members receive discounts on all programs. Annual membership dues start at \$40 for individuals. See page 46 for information.

Printed on recycled paper.

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ON THE COVER

Winged sumac (*Rhus copallinum* var. *latifolia*) Dan Jaffe © Native Plant Trust



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Courtney E. Allen




COURTNEY ALLEN
Director of Public Programs

We are delighted that this fall we are again able to offer people throughout New England an exciting set of in-person and online learning opportunities. Building on the release in June of our groundbreaking report with The Nature Conservancy on saving plant diversity as the climate changes, we are featuring a symposium on climate resilience with some of the region's most innovative conservationists. New programs highlighting plants' cultural and historical contexts include People & Plants of the World with Wambui Ippolito and Understanding Plants Over Time with Dr. Noel Kingsbury.

Native Plant Trust continues to prioritize access to its learning opportunities. We are presenting fee-free conservation talks at local libraries around Massachusetts. Beginning this fall, we are offering virtual versions of all basic courses for the Native Plant Studies Certificate. We continue to expand our partnerships to bring programs to a wider range of locations throughout New England. Wherever you are and whatever your plant passion, we look forward to welcoming you to Native Plant Trust programs!

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For more information and
to register online visit:
NativePlantTrust.org/education 

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American Hazelnut
(*Corylus americana*)
Dan Jaffe © Native Plant Trust

Events

Climate Resilience Virtual Symposium

Join Native Plant Trust for a symposium on the changing climate and New England's native plants, featuring the region's prominent conservationists and environmentalists. Through a keynote lecture, workshop, and panel discussion, we will examine current climate change patterns and their implications for the future of the region's plant life, key factors for building climate resilience, and how key players can make resilience possible. Reserve your spot at NativePlantTrust.org and keep checking our website for the most up-to-date details.

Friday, October 29, 2021, 1-4 p.m.

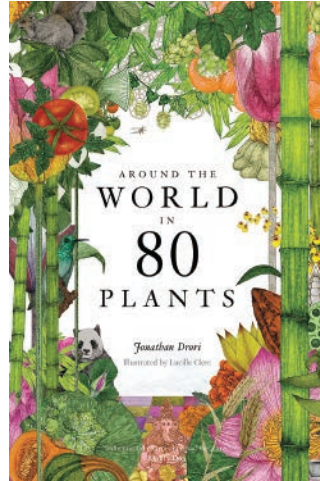
Program Code: SYM1010

Fee: \$45 (Members)/\$54 (Nonmembers)

Certificate: Elective: all certificates



01



Native Plant Trust Book Club: *Around the World in 80 Plants*

Join Courtney Allen, Native Plant Trust's Director of Public Programs, for an engaging group video discussion about the power and impact of plants on human history and culture. In his 2021 book, *Around the World in 80 Plants*, author and former Kew Gardens Trustee Jonathan Drori shares tales of plants both familiar and surprising. Some have troubling pasts, while others have ignited human creativity or enabled whole civilizations to flourish. This program is a sequel to last winter's book club on Drori's first book, *Around the World in 80 Trees*.

Friday, January 14, 2022, 1-2:30 p.m.

Program Code: BKC1102

Fee: \$15 (Members)/\$18 (Nonmembers)

Certificate: Elective: all certificates

Botany Story Slam

Join Native Plant Trust for an evening of plant adventure storytelling. Listen to some of the region's top botanists, horticulturists, and fellow plant geeks share their most riveting and hilarious tales from the field, then cast your vote for the night's best storyteller! This one-of-a-kind event will be moderated by Michael Piantedosi, Director of Conservation, with audience participation.

Saturday, February 26, 2022, 6-8 p.m.

Garden in the Woods, Framingham, MA

Fee: \$30 (Members)/\$36 (Nonmembers)



Author Book Talk: *The Northeast Native Plant Primer: 235 Plants for an Earth Friendly Garden*

Join Uli Lorimer, Native Plant Trust's Director of Horticulture, for the debut of his new book highlighting our region's spectacular plant diversity and varied habitats. *The Northeast Native Plant Primer* provides a roadmap to help you to include native plants in your garden whether you are new to gardening or a seasoned professional. For those of us who care about the natural world, the decision to plant natives in the garden is one of the most impactful and important choices we can make. With so much under threat from a changing climate, invasive species, habitat loss and fragmentation, and declining numbers of birds and insects, planting natives in your garden shows you are trying to make a difference. Native plants have the power to heal our landscapes, welcome wildlife into our gardens, and inspire us.

Friday, April 1, 2022, 12:30-2 p.m.

Garden in the Woods, Framingham, MA

Program Code: LEC9005

Fee: \$15 (Members)/\$18 (Nonmembers)



02

Online Learning

Self-Paced Courses

Plant Form and Function

This introduction to botany covers the basics of plant anatomy and physiology and addresses the fundamentals of the plant kingdom. We will take a microscopic look at roots, stems, leaves, and their component tissues. We will also examine flowers, fruits, and seeds and discuss pollination, fertilization, dispersal, and germination, with an emphasis on the relationship between plant form and function. This Basic Certificate online core course is self-paced, with opportunities for peer discussion, expert access for questions, and field projects. A facilitator will guide you in your learning, review your assignments, and answer your questions.

Course access available from October 18, 2021 to March 14, 2022

Program Code: CERO100

Instructor: George LoCascio, conservation biologist

Fee: \$150 (Members)/\$200 (Nonmembers)

Certificate: Basic Core

Plant Ecology

This overview of plant ecology addresses the distribution and abundance of plants and their interactions with other organisms and the physical environment. We will explore factors that affect plants as individuals, populations, and communities, such as life history, resource use, competition, and animal-plant interactions (e.g., pollination, dispersal, herbivory). This Basic Certificate online core course is self-paced, with opportunities for peer discussion, expert access for questions, and field projects. A facilitator will guide you in your learning, review your assignments, and answer your questions.

Course access available from October 18, 2021 to March 14, 2022

Program Code: CERO101

Instructor: Jennifer McCarthy, division chief (emerita), U.S. Army Corps of Engineers, New England District

Fee: \$150 (Members)/\$200 (Nonmembers)

Certificate: Basic Core



01

Plant Families

What are the underlying evolutionary relationships and patterns in plants? In this foundational course, you will learn the botanical terms used to describe plants and flowers, the evolutionary/phylogenetic basis for classification, and the identifying characteristics for several major plant families common to New England. With diagrams, images, and further resources offered to reinforce the concepts, you will apply the new material through indoor and outdoor assignments and peer forums. This Basic Certificate online core course is self-paced, with opportunities for peer discussion, expert access for questions, and field projects. A facilitator will guide you in your learning, review your assignments, and answer your questions.

Course access available from October 18, 2021 to March 14, 2022

Program Code: CERO102

Instructor: Neela de Zoysa, botanist

Fee: \$150 (Members)/\$200 (Nonmembers)

Certificate: Basic Core



02

Designing with Native Plants

This online course teaches the basics of designing with native plants and shows how to incorporate native plants into the garden and landscape. Discover the variety of native plants found throughout New England and learn how to design a visually interesting landscape that also supports biodiversity. You can complete the course at your own pace.

Course access available from October 18, 2021 to March 14, 2022

Program Code: HORO100

Fee: \$80 (Members)/\$98 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture

Gardening for Pollinators

This online course teaches how to convert a yard into productive pollinator habitat. Learn about issues associated with pollinator decline and current conservation efforts, then explore a variety of pollinators and the native plants that support their life cycles. The course also covers basic pollinator garden design and provides step-by-step instructions for selecting plants and installing and maintaining these habitats. You can complete the course at your own pace.

Course access available from October 18, 2021 to March 14, 2022

Program Code: HORO101

Fee: \$80 (Members)/\$98 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture

Online Learning

Live Virtual Programs

The Meaning of Gardens

For garden makers and visitors alike, the beauty or symbolism of a garden may kindle a sense of connection to a larger world, physical or imaginary. Garden creation begins in the imagination as a quest for meaning. We will explore the process of imagining a garden that holds personal meaning and look at examples of types of gardens that fulfill meaning-making for their creators or for visitors.

Saturday, September 25, 2021, 1-2 p.m.

Program Code: HORW502

Instructor: Jane Roy Brown, Writer-Editor, Native Plant Trust

Fee: \$12 (Members)/\$15 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture

Gathering Seeds in the Clouds: Conservation on Katahdin

Join Senior Research Botanist Arthur Haines for a virtual presentation describing his two years of work gathering seeds of rare alpine species on Mount Katahdin in north-central Maine. This peak, the highest in the state, harbors many species of conservation concern, some of which had not been observed for decades. With lots of stunning visuals, including close-ups of regionally rare species, this webinar will be of interest to all those excited about the high-mountain flora of New England.

03



Sunday, September 26, 2021, 2-3 p.m.

Program Code: BOTW408

Instructor: Arthur Haines, Senior Research Botanist, Native Plant Trust and author of *Flora Nova Angliae*

Fee: \$12 (Members)/\$15 (Nonmembers)

Certificate: Elective: Basic and Advanced, Botany

Introduction to Grasses Identification

Many people are apprehensive about identifying grasses. With a little practice, however, you can learn to recognize common native and non-native species using an everyday vocabulary and easy-to-see characteristics. Lauren Brown, coauthor with Ted Elliman of *Grasses, Sedges, Rushes: An Identification Guide*, will provide an introduction to these beautiful and abundant plants.

Thursday, September 30, 2021, 9 a.m.-12:30 p.m.

Program Code: BOT3523

Instructor: Lauren Brown, author of *Weeds and Wildflowers in Winter*, *Grasses: An Identification Guide*, and *Grasses, Sedges, Rushes: An Identification Guide*

Fee: \$53 (Members)/\$63 (Nonmembers)

Certificate: Elective: Basic and Advanced, Botany

People & Plants of the World: Landscape Commonalities

Viewing landscapes and plants through the lenses of different cultures will help designers create panoramas that are not only aesthetically pleasing but are spaces where Nature is no longer reorganized and alien. Working with Nature to create landscapes in which both people and plants are considered is the new frontier for landscape designers.

Tuesday, October 5, 2021, 6:30-8 p.m.

Program Code: HORW700

Instructor: Wambui Ippolito, horticulturist

Fee: \$15 (Members)/\$18 (Nonmembers)

Certificate: Elective: all certificates

Botanical Phenology

Join Native Plant Trust's Botanical Coordinator Micah Jasny in this webinar exploring phenology: the study of the timing of biological events in a plant's life cycle. Understanding when plants will be in certain life stages, from leaf to flower to seed, plays a critical role in monitoring and protecting key plant species. We will also address how seasonal and annual variations in habitat and climate can impact phenology.

Tuesday, October 19, 2021, 1-2 p.m.

Program Code: BOTW904

Instructor: Micah Jasny, Botanical Coordinator, Native Plant Trust

Fee: \$12 (Members)/\$15 (Nonmembers)

Certificate: Elective: Basic and Advanced, Botany

Garden Design for Child Development

Whether in a home setting or a schoolyard habitat, designing children's gardens requires not only an understanding of basic landscape design but also special attention to children's safety, engagement, and socialization needs. In this class, you will learn how to design a children's garden that appeals to all five senses, evokes playfulness and learning, and instills a love of nature that will grow into stewardship and environmental sensitivity.

Thursdays, October 14, 28, 2021, 1-3 p.m.

Program Code: HOR8036

Instructor: Staci Jasin, landscape designer

Fee: \$60 (Members)/\$72 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture

Gardening for Habitat

Gardens are habitats, but the degree to which they support local wildlife depends on our gardening practices. When and how we decide to clean up leaves or cut plants back can affect the life cycles of salamanders, bees, birds, moths, and butterflies. Our plant choices determine who visits, stays, or passes by as they look for food, shelter, and places to lay eggs. Learn more from Anna Fialkoff as she shares her own observations, practices, and research from working at Garden in the Woods.

Tuesday, November 9, 2021, 1-2 p.m.

Program Code: HORW215

Instructor: Anna Fialkoff, program manager, Wild Seed Project

Fee: \$12 (Members)/\$15 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture

Cosponsor: Wild Seed Project

Online Learning

Live Virtual Programs

Native Plants in American Gardens: A Brief History

At various times in American history, conservationists, landscape architects, and backyard gardeners have encouraged the use of native plants in public and private landscapes. This illustrated lecture will provide a historical overview of these movements, spanning the late-nineteenth-century Chicago Prairie School and the late-twentieth-century grassroots resurgence among gardeners and conservationists throughout the United States. Among other questions, this talk explores the platforms and concerns of native plants advocates over the course of the twentieth century.

Friday, November 12, 2021, 1-2 p.m.

Program Code: HORW501

Instructor: Jane Roy Brown, Writer-Editor,
Native Plant Trust

Fee: \$12 (Members)/\$15 (Nonmembers)

Certificate: Elective: Basic and Advanced,
Horticulture



04

05



Strategies for Invasive Plants Management

Invasive plants continue to be one of the main threats to the ecological integrity of natural communities and to populations of rare plants. Native Plant Trust's Ecological Programs Coordinator, Bud Sechler, examines different strategies for combating invasive plants, drawing on invasive plant management experiences with Native Plant Trust, the Massachusetts Invasive Plant Advisory Group, and the Sudbury-Assabet-Concord Watershed Cooperative Invasive Species Management Area.

Thursday, November 18, 2021, 1-2 p.m.

Program Code: BOTW901

Instructor: Bud Sechler, Ecological Programs
Coordinator, Native Plant Trust

Fee: \$12 (Members)/\$15 (Nonmembers)

Certificate: Elective: Basic and Advanced, Botany

Seeds: Wild versus Commercial

We all know the importance of planting and promoting native plants, but what are the differences between wild seeds and those you can purchase from a commercial vendor? While seed farming is needed to meet the demand from restoration practitioners and homeowners, the end product can differ considerably from local wild material. Join Native Plant Trust's Research Botanist, Dr. Jessamine Finch, for this interactive online session to explore the impact of seed sourcing and cultivation techniques on commercial seed and to equip yourself with the information you need to be an informed purchaser of native seeds.

Wednesday, December 1, 2021, 1-2 p.m.

Program Code: BOTW516

Instructor: Dr. Jessamine Finch, Research Botanist, Native Plant Trust

Fee: \$12 (Members)/\$15 (Nonmembers)

Certificate: Elective: Basic and Advanced, Botany

Plant Evolution, Part 1

In this webinar, you will learn current knowledge and theories for early plant evolution. We'll review the evidence for plant evolution, including fossils, DNA, and morphology, to understand how photosynthetic organisms from ancient seas evolved and adapted to life on land.

Thursday, December 2, 2021, 6-7 p.m.

Program Code: BOTW312

Instructor: Dr. Lori Benoit, wetland scientist and environmental consultant

Fee: \$12 (Members)/\$15 (Nonmembers)

Certificate: Elective: Basic and Advanced, Botany

Blackberries

Blackberries (*Rubus* subgenus *Rubus*) are a group of woody plants in the rose family whose members are notoriously difficult to classify and distinguish. However, much of the difficulty has been created by botanists, with their numerous opinions on how the group should be treated. Examination of living plants demonstrates that differentiating members of this subgenus is possible for anyone willing to study the important identifying features of these beautiful shrubs.

Thursday, December 9, 2021, 1-2 p.m.

Program Code: BOTW704

Instructor: Arthur Haines, Senior Research Botanist, Native Plant Trust and author of *Flora Nova Angliae*

Fee: \$12 (Members)/\$15 (Nonmembers)

Certificate: Elective: Basic and Advanced, Botany

Introduction to Designing with Native Plants

Although most often associated with natural settings such as meadows, forests, and pond edges, native plants can work beautifully in built landscapes. Learn which native plants work best for gardens, and what principles of design enhance their aesthetic appeal.

Tuesday, December 14, 2021, 1-2 p.m.

Program Code: HORW210

Instructor: Anna Fialkoff, program manager, Wild Seed Project

Fee: \$12 (Members)/\$15 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture

Cosponsor: Wild Seed Project

Online Learning

Live Virtual Programs

Research at the Sanctuaries

Native Plant Trust's seven sanctuaries hold a wealth of information about the unique and rare plant life and natural communities that occur throughout New England. In this webinar, Native Plant Trust's Ecological Programs Coordinator Bud Sechler will go beyond applied management to discuss exciting current research methods and goals for each plant sanctuary.

Tuesday, January 11, 2022, 1-2 p.m.

Program Code: BOTW406

Instructor: Bud Sechler, Ecological Programs Coordinator, Native Plant Trust

Fee: \$12 (Members)/\$15 (Nonmembers)

Certificate: Elective: Basic and Advanced, Botany

Diversify Your Lawn

Who says lawns need to be monocultures or only made of grasses? Enrich the traditional lawn with other complementary plants that bloom at different times and add intrigue. Learn how to identify the plants that already grow in lawn as "weeds" and incorporate new plants that create a rich, wildlife-friendly tapestry.

Saturday, January 15, 2022, 1-2 p.m.

Program Code: HORW110

Instructor: Anna Fialkoff, program manager, Wild Seed Project

Fee: \$12 (Members)/\$15 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture

Cosponsor: Wild Seed Project

Native Species, Cultivars, and Selections

What is a native plant? How do I decide what is best for my garden and for the environment? This session will help you answer these frequently asked questions. You will learn about the nuances that distinguish cultivars from native plant selections and the implications for the garden and beyond.

Thursday, January 13, 2022, 1-3 p.m.

Program Code: HOR1090

Instructor: Uli Lorimer, Director of Horticulture, Native Plant Trust

Fee: \$30 (Members)/\$36 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture

05



Demystifying Willows

Willows (*Salix*) are a well-known and taxonomically difficult group of woody plants whose members can be found from sea level to the tops of the highest mountains in New England. With 30 species (and hybrids between some of them), willows present identification challenges that can seem insurmountable. However, everyone can learn how to distinguish the different willows. This webinar is designed to give novice and skilled botanists a chance to understand the vegetative morphology of this genus and organize the diversity present on the regional landscape into manageable groups.

Thursday, January 20, 2022, 1-2 p.m.

Program Code: BOTW705

Instructor: Arthur Haines, Senior Research Botanist, Native Plant Trust and author of *Flora Nova Angliae*

Fee: \$12 (Members)/\$15 (Nonmembers)

Certificate: Elective: Basic and Advanced, Botany

Gardening for Climate Change

What shifts are we already seeing in our native gardens and landscapes due to changing climate, and what can we expect to see? What steps can we take to address these changes, and what do they mean for our local ecology? Using the latest scientific modeling and information, we will explore these big questions and dig deep to identify factors affecting our flora and the ways native plants respond. Most importantly, we will discuss our role as stewards of our gardens, forests, and fields.

Friday, January 21, 2022, 6-8 p.m.

Program Code: HOR8037

Instructor: Alexis Doshas, Nursery Manager, Native Plant Trust

Fee: \$30 (Members)/\$36 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture

Climate Change and Native Plants

Climate change is a multifaceted challenge with numerous—and sometimes unexpected—contributing factors. To create solutions on a personal and manageable scale, we need to turn to the science. This class will cover a brief history of climate change and address carbon and hydrological cycles, the earth's heating and cooling systems, and the importance of wise landscape design, construction, and agriculture to mitigate climate change. We will also discuss the role of native plants in the climate change conversation.

Tuesday, January 25, 2022, 12:30-3:00 p.m.

Program Code: HOR8035

Instructor: Trevor Smith, lead designer, Land Escapes

Fee: \$38 (Members)/\$45 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture

Cosponsor: Ecological Landscape Alliance

06



Online Learning

Live Virtual Programs

Recording the Garden

Long-term gardening is easier when there's a sense of continuity. Individual gardeners and community gardening teams can greatly benefit from recordkeeping to maintain consistency and direction over time. In this webinar, we discuss strategies to track what is planted in the garden and where, where plants came from, how well plantings survive over time, which gardening practices work best for a given location, and basic phenology concepts to help track the timing of plants' life history events. Participants will also learn how to use garden records to track gardening experiments whose results can help inform future decisions about planting and maintenance.

Thursday, January 27, 2022, 12:30-2:00 p.m.

Program Code: HORW601

Instructor: Melanie Kenney, Plant Records Coordinator, Native Plant Trust

Fee: \$18 (Members)/\$23 (Nonmembers)

Certificate: Elective: all certificates

Cosponsor: Ecological Landscape Alliance

Plant Nutrients

What are mineral nutrients, and how do plants use them? What are the signs of deficiencies and toxicities? In this course, you will learn some mineral nutrient basics through an overview of soils, chemistry, and plant anatomy. We will explore how

plants acquire, use, and translocate mineral nutrients. We will also learn how to determine the impact of mineral nutrients on a plant's health and how to help plants suffering from improper nutrition.

Saturdays, January 29, February 5, 12, 2022, 10 a.m.-12 p.m.

Program Code: HOR3908

Instructor: George LoCascio, conservation biologist

Fee: \$90 (Members)/\$108 (Nonmembers)

Certificate: Elective: all certificates

Cosponsor: Ecological Landscape Alliance

Roots of Black Botany

While many conservationists are familiar with white botanists such as Carl Linnaeus and Gregor Mendel, fewer know of the many ways Black botanists have revolutionized the field, contributing to our understanding of everything from crop rotation techniques to slime mold behavior. In this webinar, we will explore the accomplishments of three notable Black botanists: George Washington Carver, Marie Clark Taylor, and O'Neil Ray Collins.

Tuesday, February 1, 2022, 1-2 p.m.

Program Code: BOTW351

Instructor: Micah Jasny, Botanical Coordinator, Native Plant Trust

Fee: \$12 (Members)/\$15 (Nonmembers)

Certificate: Elective: all certificates

Predatory Plants

Insectivorous and parasitic plants are an anomaly in the plant world, where self-sufficiency is the norm. This class covers the more familiar pitcher plants (*Sarracenia*), sundews (*Drosera*), and dodder vines (*Cuscuta*) as well as lesser-known groups such as the bladderworts (*Utricularia*) and broom rapes (Orobanchaceae). Learn about the habitats, unusual life cycles, and curious behavior of these New England plants.

Thursday, February 3, 2022, 1-4 p.m.

Program Code: BOT2317

Instructor: Neela de Zoysa, botanist

Fee: \$45 (Members)/\$54 (Nonmembers)

Certificate: Elective: Basic and Advanced, Botany

Cosponsor: Massachusetts Association of Conservation Commissions

Color and Texture in the Garden

The excitement and wonder of a colorful garden grabs our attention and imprints its beauty on our memory. While color attracts us and stimulates our imagination, it also confounds most of us. We will explore the vocabulary of color, the garden dynamics that affect it, and the importance of observation—as well as color theory—as a tool for creating successful color combinations.

Friday, February 4, 2022, 1-4 p.m.

Program Code: HOR4048

Instructor: Cheryl Salatino, landscape designer, Dancing Shadows Garden Design, and MA certified horticulturist

Fee: \$45 (Members)/\$54 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture

Decolonizing Botany

Join Professor Banu Subramaniam as she shares how the foundational language and theories of modern botany are rooted in the violence of its colonial pasts. The complex biologies of plants and animals shaped agricultural labor practices. The plantation was a global enterprise, where botanical knowledge and practices circulated across the globe; where humans went, their flora and fauna quickly followed. Using case studies on such topics as invasion biology, biogeography, and plant reproductive biology, we will explore how the sciences of gender, race, class, and sexuality were shaped by the global circulations of colonialism. We will also consider strategies for decolonizing our knowledge of the botanical and the human.

Tuesday, February 8, 2022, 6-8 p.m.

Program Code: BOTW350

Instructor: Dr. Banu Subramaniam, professor and chair, Department of Women, Gender, Sexuality Studies, University of Massachusetts Amherst

Fee: \$24 (Members)/\$30 (Nonmembers)

Certificate: Elective: all certificates

07



Online Learning

Live Virtual Programs

Building the Green Industry

Based on his article, “Sus-tain-a-bil-i-ty: Discovering the True Definition, Defining the New Paradigm,” Trevor Smith shares his award-winning approach to collaborations, community outreach, and professional training to help you secure the green infrastructure we need and to build a green industry workforce. You will learn about opportunities to guide your own projects in the green industry, strategies for doing so, and the challenges involved.

Wednesday, February 16, 2022, 12:30-3 p.m.

Program Code: HOR8030

Instructor: Trevor Smith, lead designer,
Land Escapes

Fee: \$45 (Members)/\$54 (Nonmembers)

Certificate: Elective: Basic and Advanced,
Horticulture

Cosponsor: Massachusetts Nursery and
Landscape Association

09



Finding Your Environmental Ethic

Why should we care about the environment? In this introductory webinar, you will learn four philosophical models of human relationship with nature in order to gain deeper understanding of your own and others’ environmental ethics. We will consider our roles and the ways obligation to our surroundings forms the foundation of efforts such as recycling, preservation of endangered species, and habitat restoration.

Thursday, February 17, 2022, 6-7 p.m.

Program Code: BOTW352

Instructor: Dr. Kendy Hess, environmental lawyer
and ethics professor, College of the Holy Cross

Fee: \$15 (Members)/\$18 (Nonmembers)

Certificate: Elective: all certificates

Cosponsor: Ecological Landscape Alliance

08



Rewild in 10 Action Steps

We need a minimum of 70 percent native plant biomass in our landscapes to safeguard wildlife habitat, support biodiversity, and mitigate the effects of climate change, according to entomologist Douglas Tallamy. Native Plant Trust's partner, Wild Seed Project, recently launched an initiative that motivates people to meet this threshold through a holistic approach called rewilding. Whether you have farmland, a yard in the suburbs, or a shared urban garden, this webinar will teach you how to rewild in 10 action steps.

Tuesday, February 22, 2022, 6-7 p.m.

Program Code: HORW111

Instructor: Anna Fialkoff, program manager, Wild Seed Project

Fee: \$12 (Members)/\$15 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture

Cosponsor: Wild Seed Project



10

Reading Landscapes: Place as Creation and Reflection

Join Courtney Allen, landscape historian and Director of Public Programs at Native Plant Trust, for a journey to discover the layers of our relationships to our surroundings. Together, we delve into why and how we define and understand place through the lenses of history, design, experience, and memory. This talk is a primer on how to “read” landscapes in our daily lives, and what those landscapes can reveal about us.

Thursday, February 24, 2022, 1-2 p.m.

Program Code: LEC2001

Instructor: Courtney Allen, landscape historian and Director of Public Programs, Native Plant Trust

Fee: \$15 (Members)/\$18 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture

Navigating Public Design, Part 1

Community spaces are exciting projects to envision and realize. In this workshop, you will learn a process for bringing stakeholders together to collaborate in creating outdoor spaces of meaning and beauty. We will explore how to use your creative ideas to build partnerships, fundraise, overcome obstacles, and draw visitors to your public landscape, with an emphasis on the creation of spaces that are both ecologically and operationally sustainable.

Wednesdays, March 2, 9, 2022, 6-8 p.m.

Program Code: HOR8026

Instructor: Staci Jasin, landscape designer

Fee: \$60 (Members)/\$72 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture

Cosponsor: Ecological Landscape Alliance

Online Learning

Live Virtual Programs

Understanding Plants over Time

Join Noel Kingsbury, author of 25 books on ecological garden design and collaborator with Pied Oudolf, to learn plant ecology for gardeners. Plants behave very differently over time: trilliums can be painfully slow to establish; asters can seed and spread rapidly. We look at plants' different strategies for survival and reproduction and how gardeners can learn to "read" the plants to predict how they will perform over time.

Thursday, March 3, 2022, 1-2 p.m.

Program Code: HORW600

Instructor: Dr. Noel Kingsbury, coauthor of *Designing with Plants and Planting: A New Perspective*

Fee: \$15 (Members)/\$18 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture

Plant Evolution, Part 2

Join evolutionary biologist Dr. Lori Benoit to learn how land plants evolved into the major plant groups we know today. We will focus on the evolution of gymnosperms and angiosperms (conifers and flowering plants).

Thursday, March 3, 2022, 6-7 p.m.

Program Code: BOTW313

Instructor: Dr. Lori Benoit, wetland scientist and environmental consultant

Fee: \$12 (Members)/\$15 (Nonmembers)

Certificate: Elective: Basic and Advanced, Botany

Site Analysis

Thinking about making changes to your landscape or gardens? Before doing so, it is important to understand what is there and how to capture the relevant information. A thorough site analysis is the foundation for any successful design. We will learn how to record and assess existing conditions, practice basic measuring and drawing techniques, and master the use of scales for documentation and communication.

Wednesdays, March 16, 23, 30, 2022, 6:30-8:30 p.m.

Program Code: HOR4050

Instructor: Cheryl Salatino, landscape designer, Dancing Shadows Garden Design, and MA certified horticulturist

Fee: \$90 (Members)/\$108 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture



11

Riparian Communities

River shores and stream banks have unique riparian vegetation that is adapted to changing water levels. In this virtual program, we will follow the Sudbury and Assabet rivers from the watershed's headwaters in Westborough to its junction with the Merrimac River in Lowell. Along the way, we will encounter Atlantic cedar swamps, floodplain forests, shrub swamps, emergent marshes, and oxbow lakes as well as the species that characterize them. We will also learn about threats posed by dams, clearing, and pollution.

Friday, March 25, 2022, 1-3 p.m.

Program Code: BOT1151

Instructor: Neela de Zoysa, botanist

Fee: \$30 (Members)/\$36 (Nonmembers)

Certificate: Elective: Basic and Advanced, Botany

Cosponsor: Massachusetts Association of Conservation Commissions



12



Northern spicebush
(*Lindera benzoin*)
Dan Jaffe © Native Plant Trust

Conservation Library Talks

The Conservation Lecture Series shares the “Plant Communities of Massachusetts” talk at libraries around the state, free of charge. The talk offers audiences an overview of the extraordinary diversity of native plant communities and shares plants’ habitats, resources, and health status. This statewide initiative is made possible with the support of local cultural council grants.

PLYMOUTH PUBLIC LIBRARY

Saturday, October 2, 2021, 3-4 p.m.

Plymouth Public Library, 132 South Street,
Plymouth, MA

Speaker: Irina Kadis, botanist

GREENFIELD PUBLIC LIBRARY

Wednesday, October 6, 2021, 6-7 p.m.

Live Virtual

Speaker: Dr. Lori Benoit, wetland scientist
and environmental consultant

SPRINGFIELD CITY LIBRARY

Wednesday, October 13, 2021, 6-7 p.m.

Live Virtual

Speaker: Dr. Lori Benoit, wetland scientist
and environmental consultant

BARNSTABLE LIBRARY

Saturday, October 16, 2021, 11 a.m.-12 p.m.

Osterville Village Library, 43 Wianno
Avenue, Barnstable, MA

Speaker: Staci Jasin, landscape designer

LAWRENCE PUBLIC LIBRARY

Wednesday, November 3, 2021, 1-2 p.m.

Lawrence Public Library, 51 Lawrence Street,
Lawrence, MA

Speaker: Jennifer McCarthy, division chief
(emerita), U.S. Army Corps of Engineers,
New England District

STOUGHTON PUBLIC LIBRARY

Saturday, November 6, 2021, 2:30-3:30 p.m.

Stoughton Public Library, 84 Park Street,
Stoughton, MA

Speaker: Irina Kadis, botanist

WESTPORT FREE PUBLIC LIBRARY

Saturday, December 11, 2021, 10-11 a.m.

Westport Free Public Library, 408 Old County
Road, Westport, MA

Speaker: Dr. Robert Gegear, professor, University
of Massachusetts Dartmouth and founder of The
Beecology Project

Herbaria Series

Native Plant Trust has partnered with staff at university herbaria throughout New England to offer a special inside look at the region's most impressive plant specimen collections.

For all herbaria programs:

Fee: \$15 (Members)/\$18 (Nonmembers)

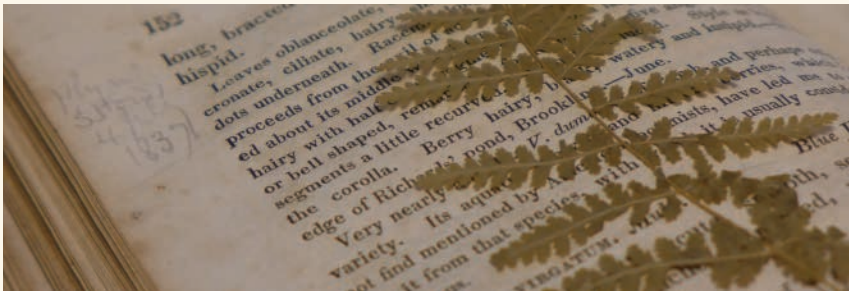
Certificate: Elective: Basic and Advanced, Botany

Brown University Herbarium
Friday, January 21, 2022, 10-11 a.m.
Providence, RI
Program Code: BOT6013
Instructor: Dr. Rebecca Kartzinel, director

University of New Hampshire
Hodgdon Herbarium
Friday, February 18, 2022, 1-2 p.m.
Durham, NH
Program Code: BOT6018
Instructor: Dr. Erin Sigel, collections manager

Harvard University Herbaria
Wednesday, February 9, 2022, 1-2 p.m.
Cambridge, MA
Program Code: BOT6014
Instructor: Dr. Michaela Schumler, director of collections

University of Connecticut George Safford
Torrey Herbarium
Thursday, March 10, 2022, 1-2 p.m.
Storrs, CT
Program Code: BOT6017
Instructor: Dr. Sarah Taylor, collections manager



Botany & Conservation

Asters and Goldenrods

Asters (Asteraceae) and goldenrods (*Solidago*) are autumn showstoppers, but they are also large and taxonomically complex groups—sometimes it can be hard to distinguish one aster from another. Through a visual presentation, herbarium specimens, and field application, you will learn how to identify several species of asters and goldenrods and how to use identification keys to differentiate between visually similar species based on subtle characteristics and habitats.

Saturday, September 11, 2021 and Sunday, September 12, 2021, 10 a.m.-2 p.m.

Garden in the Woods, Framingham, MA

Program Code: PDW4400

Instructor: Ted Elliman, botanist and author of *Wildflowers of New England*

Fee: \$120 (Members)/\$144 (Nonmembers)

Certificate: Elective: Basic and Advanced, Botany

Cosponsor: Massachusetts Association of Conservation Commissions



01

02



New England Climbers

Native climbers are an ecologically and taxonomically varied group of plants. They range from rare and vulnerable species, such as Allegheny vine (*Adlumia fungosa*) and the American climbing fern (*Lygodium palmatum*) to those proliferating due to forest fragmentation and warming climate, such as wild grapes (*Vitis* spp) and poison ivy (*Toxicodendron radicans*). Learn about 50 climbers and become familiar with identification characteristics.

Tuesday, October 12, 2021, 10:30 a.m.-2:30 p.m.

Garden in the Woods, Framingham, MA

Program Code: BOT3020

Instructor: Neela de Zoysa, botanist

Fee: \$60 (Members)/\$72 (Nonmembers)

Certificate: Elective: Basic and Advanced, Botany

Cosponsor: Massachusetts Association of Conservation Commissions

Around the Region on a Spore: The Diversity of New England Ferns

What makes ferns so alluring? In this talk, we'll examine the region's native ferns and seek to uncover the aesthetics, biology, and ecology that contribute to the fascination. From sea level to the tops of the region's highest mountains, ferns occupy a wide range of habitats and have a host of specialties that build adaptation to place.

Wednesday, October 13, 2021, 6-8 p.m.

Gilsland Farm, Falmouth, ME

Program Code: BOT3424

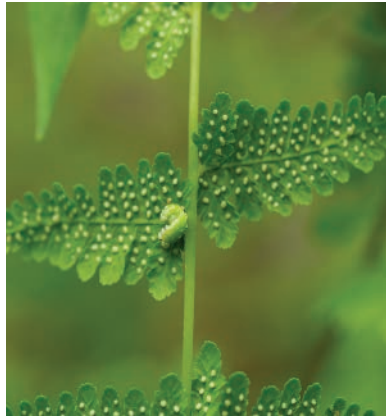
Instructor: Arthur Haines, Senior Research Botanist,
Native Plant Trust and author of *Flora Nova Angliae*

Fee: \$30 (Members)/\$36 (Nonmembers)

Certificate: Elective: Basic and Advanced, Botany

Cosponsor: Maine Audubon

04



03

Winter Botany

Join us to investigate the taxonomic characteristics of deciduous, evergreen, and some herbaceous plants in winter. You will learn to use a dichotomous key and then identify a large inventory of twig and plant specimens before practicing these skills outdoors.

Friday, January 28, 2022, 9:30 a.m.-3:30 p.m.

Garden in the Woods, Framingham, MA

Program Code: BOT3317

Instructor: Dr. William Kuriger, botanist

Fee: \$90 (Members)/\$108 (Nonmembers)

Certificate: Elective: Basic and Advanced, Botany

Botany & Conservation

Rare Plant Families

Where have all the flowers gone? Many are in decline; some more than others. In this class, we will gain a better understanding of the most threatened New England plant families. We will assess the varied effects of conservation concern on plant families ranging from the orchid family (Orchidaceae) to moonworts (*Botrychium*). In addition, we will discuss actions that Native Plant Trust and conservationists in the region are conducting to protect the taxa most in need.

Friday, March 11, 2022, 10:30 a.m.-1:30 p.m.

Garden in the Woods, Framingham, MA

Program Code: BOT2270

Instructor: Michael Piantedosi, Director of Conservation, Native Plant Trust

Fee: \$45 (Members)/\$54 (Nonmembers)

Certificate: Elective: Basic and Advanced, Botany

Cosponsor: Massachusetts Association of Conservation Commissions

Buttercups

The buttercups (*Ranunculus*) are fascinating plants, with habitats ranging from aquatic systems to upland forests. Some are very common; others are very rare, and a few are invasive. This class will examine the identification and ecological features that distinguish each of them. You will learn 20 species of buttercups present in New England, including their identification features, ranges, habitats, and management considerations.

Sunday, March 20, 2022, 2-4 p.m.

Garden in the Woods, Framingham, MA

Program Code: BOT3019

Instructor: Ted Elliman, botanist and author of *Wildflowers of New England*

Fee: \$30 (Members)/\$36 (Nonmembers)

Certificate: Elective: Basic and Advanced, Botany

Cosponsor: Massachusetts Association of Conservation Commissions



05



Highbush blueberry
(*Vaccinium corymbosum*)
© Native Plant Trust

Field Studies

LaPlatte River Marsh

Join us at the mouth of the LaPlatte River to learn what makes its wetlands one of just eight wetland complexes in Vermont with Class I wetland status. We will explore a diversity of floodplain forests, sand beaches, marshes, and rich uplands. The LaPlatte River Marsh Natural Area is filled with numerous rare and unusual wetland species, including plants in the Beggar-ticks genus (*Bidens*) and in the sedge family (Cyperaceae).

Friday, September 24, 2021, 10 a.m.-2 p.m.

LaPlatte River Marsh, Shelburne, VT

Program Code: FDT9011

Instructor: Aaron Marcus, assistant botanist,
Vermont Fish & Wildlife Service

Fee: \$48 (Members)/\$60 (Nonmembers)

Certificate: Field: Basic and Advanced, Botany

Great Marsh

Salt marshes exist at the boundary of land and sea. The plants that inhabit the marsh must be able to tolerate being periodically inundated with salt water, which is fatal to most other plants. Marsh plants, which have adapted to these stressful conditions, are incredibly productive and unique. Join us in this exploration of the largest salt marsh in New England. This easy, muddy hike will feature salt marsh plants such as *Spartina*, *Triglochin*, *Pluchea*, *Suaeda*, and *Salicornia*.

Sunday, October 17, 2021, 3-5 p.m.

Rowley, MA

Program Code: FDT8060

Instructor: Dr. Robert Buchsbaum,
conservation scientist

Fee: \$30 (Members)/\$36 (Nonmembers)

Certificate: Field: Basic and Advanced, Botany

Glacial Legacies

Glaciers shaped the New England landscape and gave rise to its soils and several landform types. In this field study, you will learn how glacial movement created features such as kettle bogs and eskers, and what types of plants are able to grow in these habitats. Hiking along sandplains and bogs, we will identify tree and understory species, such as chestnut oaks (*Quercus montana*), pines (*Pinus*), and swamp azaleas (*Rhododendron viscosum*) growing in different soils and hydrology. We will also discuss forest succession on this easy hike.

Saturday, October 23, 2021, 10 a.m.-12 p.m.

McLean Game Refuge, Granby, CT

Program Code: FDT9013

Instructor: Yoni Glogower, director of conservation
and sustainability, City of Holyoke

Fee: \$30 (Members)/\$36 (Nonmembers)

Certificate: Field: Basic and Advanced, Botany

Vines and Creepers

Wetland and disturbed areas are often a tangle of woody and herbaceous vines, creepers, brambles, and briars. Ever wondered about the differences among these groups of plants and how they twine, creep, climb, and scramble? Learn to identify a dozen species on this easy walk through successional vegetation.

Saturday, October 30, 2021, 2-4 p.m.

Wolbach Farm, Sudbury Valley Trustees,
Sudbury, MA

Program Code: FDT8059

Instructor: Neela de Zoysa, botanist

Fee: \$30 (Members)/\$36 (Nonmembers)

Certificate: Field: Basic and Advanced, Botany

Inland Pine Barrens

Glacial outwash creates an unusual inland sandplain habitat of pitch pine (*Pinus rigida*) and scrub oak (*Quercus ilicifolia*) amidst forest and wetland in this 600-acre area known as “The Desert.” Come observe this special plant community and its associated wildlife while learning about efforts to restore fire-dependent sandplain habitats through prescribed burns. This easy hike will also feature red pine and black huckleberry.

Saturday, November 6, 2021, 1-4 p.m.

Memorial Forest of Sudbury Valley Trustees,
Sudbury, MA

Program Code: FDT8053

Instructor: Neela de Zoysa, botanist

Fee: \$45 (Members)/\$54 (Nonmembers)

Certificate: Field: Basic and Advanced, Botany

Plants of Black Gum Swamp

Come explore a series of ancient wetlands with rare, old-growth black gum (*Nyssa sylvatica*) trees and learn how to identify historical disturbances in the landscape. Though the group stays on trails, muddy feet are a distinct possibility on this easy hike!

Sunday, November 14, 2021, 10 a.m.-12 p.m.

Vernon, VT

Program Code: FDT5020

Instructor: Yoni Glogower, director of conservation and sustainability, City of Holyoke

Fee: \$30 (Members)/\$36 (Nonmembers)

Certificate: Field: Basic and Advanced, Botany

01



Certificate Program

Whether you are interested in taking classes for fun, to add breadth and depth to your existing knowledge and skills, or to advance your career, our self-paced certificate programs in Native Plant Studies offer a unique opportunity to learn about the region's flora. Students enrolled in our certificate programs learn to identify, cultivate, and conserve native New England plants while gaining a greater appreciation for their ecological importance. Students also actively participate in ongoing public and private efforts to preserve and restore native New England flora.

Enrollment in the Certificate Program is not required to register for a certificate core course. However, please be aware that courses are designed for the level of certificate students.



01

The Basic Certificate track familiarizes students with the plants of New England, emphasizing structures, skills, and processes. We highly recommend beginning with the Foundations courses, which introduce students to native plant vocabulary, morphology, physiology, ecological context, evolution, and relationships. This knowledge is applied to subsequent courses.

All Basic Certificate core courses are now offered every semester, both in person and virtually.

Foundations:

Plant Form and Function

Plant Ecology

Plant Families

Plants and Their Habitats:

Wildflowers of New England

Native New England Shrubs

Framework Trees of New England

Specialty:

Understanding and Managing Soils

Two Electives (one Botany, one Horticulture)

Application:

Two Studies (one Field, one Landscape)

Community Service: 15 hours

Final Portfolio

The Advanced Certificate tracks encourage students to apply their plant knowledge in a Botany & Conservation specialty or a Horticulture & Design specialty. To enter an Advanced track, students must complete the Basic Certificate or have enough experience to qualify for a Basic Certificate. We recommend beginning with the Foundations courses, which provide context for the field or landscape application. All Advanced core courses are offered every year.

Advanced Botany & Conservation:

Foundations:

Conservation Biology
New England Plant Communities
Plant Systematics

Field Conservation:

Field Identification Techniques
Botanical Inventory Methods and Techniques
Wetland Identification and Delineation
Seed Conservation

Specialty:

Invasive Plants: Identification, Documentation, and Control
Two Botany Electives

Application:

Two Field Studies
Community Service Leadership Project:
25 hours
Final Portfolio

02



Advanced Horticulture & Design

Foundations:

Landscape for Life
History and Principles of Landscape Design
Horticultural Techniques

Building Your Plant Palette:

Residential Landscape Design
Native Herbaceous Plant Materials:
Early Season
Native Herbaceous Plant Materials:
Late Season
Native Woody Plant Materials

Specialty:

Propagation
Two Horticulture Electives

Application:

Two Landscape Studies
Community Service Leadership Project:
25 hours
Final Portfolio

Certificate Courses

Basic Core

Plant Form and Function

This introduction to botany covers the basics of plant anatomy and physiology and addresses the fundamentals of the plant kingdom. We will take a microscopic look at roots, stems, leaves, and their component tissues. We will also examine flowers, fruits, and seeds and discuss pollination, fertilization, dispersal, and germination, with an emphasis on the relationship between plant form and function. Offered exclusively online this semester.

Course access available from October 18, 2021 to March 14, 2022

This Basic Certificate online core course is self-paced, with opportunities for peer discussion, expert access for questions, and field projects. With diagrams, images, and further resources offered to reinforce the concepts, you will apply the new material through indoor and outdoor assignments and peer forums.

Program Code: CERO100

Fee: \$150 (Members)/\$200 (Nonmembers)

Certificate: Basic Core



03

Plant Ecology

This overview of plant ecology addresses the distribution and abundance of plants and their interactions with other organisms and the physical environment. We will explore factors that affect plants as individuals, populations, and communities, such as life history, resource use, competition, and animal-plant interactions (e.g., pollination, dispersal, herbivory).

Option 1: In Person

Sundays, October 17, 24 and Tuesdays, October 19, 26, 2021, 10 a.m.-1 p.m.

Garden in the Woods, Framingham, MA

Program Code: BOT1003

Instructor: Jennifer McCarthy, division chief (emerita), U.S. Army Corps of Engineers, New England District

Fee: \$216 (Members)/\$264 (Nonmembers)

Certificate: Basic Core

Option 2: Online, self-paced

Course access available from October 18, 2021 to March 14, 2022

This Basic Certificate online core course is self-paced, with opportunities for peer discussion, expert access for questions, and field projects. With diagrams, images, and further resources offered to reinforce the concepts, you will apply the new material through indoor and outdoor assignments and peer forums.

Program Code: CERO101

Fee: \$150 (Members)/\$200 (Nonmembers)

Certificate: Basic Core

Plant Families

What are the underlying evolutionary relationships and patterns in plants? In this class, we use both microscopic and field investigation to decipher the clues to familial relationships and classifications of the region's plants. You will learn botanical terms to describe plants and flowers, the evolutionary/phylogenetic basis for classification, and the identifying characteristics for several major plant families common to New England.

Option 1: In Person

Mondays, October 18, 25, November 1, 2021,
12:30-4:30 p.m.

Garden in the Woods, Framingham, MA

Program Code: BOT2260

Instructor: Neela de Zoysa, botanist

Fee: \$216 (Members)/\$264 (Nonmembers)

Certificate: Basic Core

Option 2: Online, self-paced

Course access available from October 18, 2021 to
March 14, 2022

This Basic Certificate online core course is self-paced; a facilitator will guide you in your learning, review your assignments, and answer your questions. With diagrams, images, and further resources offered to reinforce the concepts, you will apply the new material through indoor and outdoor assignments and peer forums.

Program Code: CERO102

Fee: \$150 (Members)/\$200 (Nonmembers)

Certificate: Basic Core

Wildflowers of New England

This course provides a comprehensive introduction to native plants, including their identification, ecology, and conservation. We explore New England's native plants in a field setting at Garden in the Woods by studying key identification features of flowers, leaves, and stems; family characteristics; growth patterns; pollinators; seed dispersers; and habitats. You will learn basic botanical skills and tools to identify wildflowers and study pollination and coevolution of flower structure and design, habitats and ecology, and conservation concerns.

Option 1: In Person

Wednesdays, October 6, 13, 20, 27, 2021,
12:30-3:30 p.m.

Garden in the Woods, Framingham, MA

Option 2: Live Virtual

Thursdays, October 7, 14, 21, 28, 2021, 6-9 p.m.

Program Code: BOT3000

Instructor: Neela de Zoysa, botanist

Fee: \$216 (Members)/\$264 (Nonmembers)

Certificate: Basic Core

04



Basic Core

Framework Trees

Forests are a dominant feature of the New England landscape. This course covers the history, changes in composition, and ecology of the region's forest from the Ice Age through European settlement. We explore the impact of past natural and human disturbances on the landscape and learn how current forestry practices shape forest communities. You will learn to identify native trees, their habitats, and their communities.

Option 1: In Person

Saturday, October 2 and Sunday, October 3, 2021, 10 a.m.-4 p.m.

Nasami Farm, Whately, MA

Option 2: Live Virtual

Tuesdays, November 9, 16, 2021, 5:30-8:30 p.m. and Saturdays, November 13, 20, 2021, 9:30 a.m.-12:30 p.m.

Program Code: BOT3200

Instructor: Yoni Glogower, director of conservation and sustainability, City of Holyoke

Fee: \$216 (Members)/\$264 (Nonmembers)

Certificate: Basic Core

Native New England Shrubs

Shrubs vary widely in size, shape, color, bark, flower, and fruit. This course introduces you to almost 50 native New England shrub species, emphasizing plant identification, family characteristics, and historical plant uses.

Option 1: In Person

Friday, November 5, 2021, 9:30 a.m.-3:30 p.m.

Garden in the Woods, Framingham, MA

Option 2: Live Virtual

Wednesdays, November 3, 10, 17, 2021, 6-8 p.m.

Program Code: BOT3300

Instructor: Brian Colleran, conservation biologist

Fee: \$108 (Members)/\$132 (Nonmembers)

Certificate: Basic Core

Understanding and Managing Soils

This course explores the biotic and abiotic components that create native soils and explains how these factors inform local flora. We will take a closer look at soil structure and soil biology in miniature lab experiments.

Option 1: In Person (offered twice)

Fridays, September 10, 17, 2021, 1-4 p.m.

Friday, February 25, 2022, 10 a.m.-4 p.m.

Nasami Farm, Whately, MA

Option 2: Live Virtual

Fridays, February 11, 18, 2022, 1-4 p.m.

Program Code: HOR3604

Instructor: Alexis Doshas, Nursery Manager, Native Plant Trust

Fee: \$108 (Members)/\$132 (Nonmembers)

Certificate: Basic Core

Certificate Courses

Advanced Core, Botany & Conservation

Conservation Biology

This introduction to conservation biology and biodiversity covers the factors that make a species vulnerable to extinction and the strategies and tools that can be used to protect plants and ecosystems. The course explores the interdisciplinary nature of conservation biology through readings, group exercises, and video clips. Participants receive a bibliography of resources for further study.

Saturdays, February 19, 26, March 5, 2022,
10 a.m-2 p.m.

Hybrid: Live Virtual and Nasami Farm, Whately, MA

Program Code: BOT5100

Instructor: George LoCascio, conservation biologist

Fee: \$216 (Members)/\$264 (Nonmembers)

Certificate: Advanced Core, Botany

Cosponsor: Massachusetts Association of Conservation Commissions

Plant Systematics

This program builds on your cumulative vocabulary, knowledge, and skills in plant identification and classification based on vegetative and reproductive structures. Arthur Haines, Senior Research Botanist at Native Plant Trust and author of *Flora Novae Angliae*, will share an overview of his work on plant nomenclature, phylogeny, and scientific names. From there, we delve into the breadth and complexity

of plant identification. We will discuss hybridization and phylogeny to develop a deeper appreciation for the role of evolutionary history in understanding organismal relationships.

Thursdays, March 17, 24, 31, 2022, 1-3 p.m.

Live Virtual

Program Code: BOT2206

Instructor: Arthur Haines, Senior Research Botanist, Native Plant Trust and author of *Flora Nova Angliae*

Fee: \$108 (Members)/\$132 (Nonmembers)

Certificate: Advanced Core, Botany

05



Advanced Core, Botany & Conservation

Seed Conservation

Seed banking, or *ex situ* conservation, is an effective method of conserving rare and endangered flora for future generations. Join Michael Piantedosi as we explore the process of procuring, cleaning, and accessioning seeds in a seed bank. We will focus on this process in three parts: seed collection (part 1), seed cleaning and processing (part 2), and seed storage for indefinite freezing at 0°F (part 3). This course is suitable for professional conservationists as well as those interested in peeking behind the curtain at Native Plant Trust's regional seed bank.

Thursdays, October 7, 21, November 4, 2021, 10:30 a.m.-1:30 p.m.

Garden in the Woods, Framingham, MA
and Nasami Farm, Whately, MA

Program Code: BOT5133

Instructor: Michael Piantedosi, Director of Conservation, Native Plant Trust

Fee: \$162 (Members)/\$198 (Nonmembers)

Certificate: Advanced Core, Botany

Cosponsor: Massachusetts Association of Conservation Commissions

07



Invasive Plants: Identification, Documentation, and Control

This course addresses the identification and control of many of the invasive plant species that are an unwelcome and persistent presence in forests, fields, and wetlands. Through visual presentation, close examination of herbarium specimens, and field study, we will examine the impacts of several invasive species and discuss methods for managing invasive plant populations.

Thursday, September 16, 2021, 6:30-8:30 p.m. and
Saturday, September 18, 2021, 10 a.m.-2 p.m.

Garden in the Woods, Framingham, MA

Program Code: BOT5130

Instructor: Bud Sechler, Ecological Programs Coordinator, Native Plant Trust

Fee: \$108 (Members)/\$132 (Nonmembers)

Certificate: Advanced Core, Botany

Cosponsor: Massachusetts Association of Conservation Commissions

06



Certificate Courses

Advanced Core, Horticulture & Design

Landscape for Life

This intensive course will provide the knowledge, skills, and understanding to create a great-looking garden that is healthier for people and for the environment. The course is based on the principles of the Sustainable Sites Initiative, the nation's first rating system for sustainable landscapes. The comprehensive curriculum covers a range of topics, including soils, water, plants, and landscape materials.

Tuesdays, March 8, 15, 22, 29, 2022, 12:30-3:30 p.m.

Garden in the Woods, Framingham, MA

Program Code: HOR3720

Instructor: Trevor Smith, lead designer, Land Escapes

Fee: \$216 (Members)/\$264 (Nonmembers)

Certificate: Advanced Core, Horticulture

History and Principles of Landscape Design

As horticulturists and landscape designers, we need a strong foundation in the cultural history and theory of landscape to fully understand our work in the garden. In this course, we will explore Eastern and Western garden design, including long-practiced principles that encourage sustainable and ecological approaches in the landscape design field. This history

survey will include visual presentations, readings, projects, and discussion.

Wednesdays, January 5, 12, 19, 26, 2022, 6-8:30 p.m.

Live Virtual

Program Code: HOR8040

Instructor: Staci Jasin, landscape designer

Fee: \$180 (Members)/\$220 (Nonmembers)

Certificate: Advanced Core, Horticulture

Horticultural Techniques

Good horticultural practices form the backbone of any successful garden, and understanding how to apply these practices is the first step toward becoming a horticulturist. We will discuss how to select the right plant for the right place and how to plant and care for native plants. You will learn proper techniques for transplanting, preparing soil, mulching, watering, and pruning as well as maintaining, winterizing, and preparing the garden for the next growing season.

Fridays, October 1, 8, 2021, 1-3 p.m.

Garden in the Woods, Framingham, MA

Program Code: HOR3600

Instructor: Horticultural Staff

Fee: \$72 (Members)/\$88 (Nonmembers)

Certificate: Advanced Core, Horticulture

Advanced Core, Botany & Conservation

Residential Landscape Design

This course teaches and applies the landscape design process in personal spaces. Our workshop sessions focus on design methods using site analysis techniques and schematic design tools. We will first address overarching design concepts and then discuss criteria for plant choice and placements within that context. You will learn to create and implement base maps, site analysis, concepts and elements, spatial relationships, plant palettes, and client preferences. You will also learn how to communicate your own final design product.

Mondays, November 1, 8, 15, 29, December 6, 2021, 6-9 p.m.

Live Virtual

Program Code: HOR3999

Instructor: Cheryl Salatino, landscape designer, Dancing Shadows Garden Design, and MA certified horticulturist

Fee: \$225 (Members)/\$270 (Nonmembers)

Certificate: Advanced Core, Horticulture



05

06



Propagation: Native Seeds

In this interactive workshop, we will learn how to grow native plants from seed and the why the skill is relevant in a horticultural context. Topics covered include germination requirements, seed cleaning, and seed-sowing techniques for many of our native species. We will cover proper wild collection protocols and venture into the field to collect some common native species found at Nasami Farm.

Friday, November 19, 2021, 12:30-4:30 p.m.

Nasami Farm, Whately, MA

Program Code: HOR1221

Instructor: Alexis Doshas, Nursery Manager, Native Plant Trust

Fee: \$72 (Members)/\$88 (Nonmembers)

Certificate: Advanced Core, Horticulture



Red spruce (*Picea rubens*)
Dan Jaffe © Native Plant Trust

Horticulture & Design

Cultivating Your Plant Communities

Your backyard has a unique plant community based on the ecology and geology of the area. In this three-part workshop, learn to identify appropriate native plants and groupings for your site and create a personalized plant palette and design that is beautiful and enhances biodiversity. Leave the workshop inspired to integrate science and art in your garden.

Wednesdays, September 15, 22, 2021, 10 a.m.-1 p.m. and Sunday, September 19, 2021, 10 a.m.-1 p.m.

Garden in the Woods, Framingham, MA

Program Code: HOR3607

Instructor: Staci Jasin, landscape designer

Fee: \$135 (Members)/\$162 (Nonmembers)

Certificate: Elective: all certificates

Cosponsor: Ecological Landscape Alliance

02



Site Preparation for Landscape Transformation

Many people consider reducing lawns, converting hayfields, cleaning out weed patches, and otherwise transforming landscapes into pollinator gardens or meadows with native plants. Site preparation is critical, but it is often overlooked in the quest for a finished appearance. This primer covers planning, timelines, and online sources of site information. You will also learn some tips on how to do critical chores, including weed removal.

Saturday, September 18, 2021, 1-4 p.m.

Nasami Farm, Whately, MA

Program Code: HOR8028

Instructor: Kathy Connolly, landscape designer, Speaking of Landscapes, LLC

Fee: \$45 (Members)/\$54 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture

01



Native Plant Dyes

For centuries, people have used natural materials to bring color into everyday life through wardrobe and fashion. Today, approximately 90 percent of dyes used in clothing are synthetic; many are made through unsustainable processes. In New England, we are surrounded by plants that can be turned into vibrant and lush pigments, which in turn can be applied to natural fibers such as wool, hemp, or cotton. In this class, we'll discuss useful dye plants of the Northeast and New England ecoregions and explore how to process, extract, and bind these colors to fabric. Basic terminology of natural dyes, methods of plant identification, and ethical harvest of plant parts will also be covered. As we conclude, a brief showcase of plant-dyed fabrics will be displayed. Join us for a fun, simple introduction to natural dyes from plants.

Thursday, September 23, 2021, 1-3:30 p.m.

Garden in the Woods, Framingham, MA

Program Code: ART2700

Instructor: Michael Piantedosi, Director of Conservation, Native Plant Trust

Fee: \$38 (Members)/\$45 (Nonmembers)

Native Plants for Native Birds

Explore diverse habitats in southern Connecticut and learn to identify plants and the birds that depend on them. Through classroom discussion and field application, we will address ways to attract wildlife by creating aesthetically pleasing landscapes with ecological value. The fall

session concentrates on berry-producing shrubs and trees and on seed-producing perennials and annuals.

Saturday, October 16, 2021, 9 a.m.-12:30 p.m.

New Canaan Nature Center, New Canaan, CT

Program Code: HOR4244

Instructor: Frank Gallo, environmental educator and bird expert

Fee: \$53 (Members)/\$63 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture

Cosponsor: New Canaan Nature Center

A Holistic Guide for the Modern Land Steward

Based on decades of landscape project experience, this land care guide will address regenerative design, green infrastructure, resilient landscapes, adaptive strategies, and how to build your own toolbox and rule book. You will reconnect with your land practices and their impact. This class is appropriate for both professional and personal development.

Friday, October 22, 2021, 12:30-4:30 p.m.

Garden in the Woods, Framingham, MA

Program Code: HOR8029

Instructor: Trevor Smith, lead designer, Land Escapes

Fee: \$60 (Members)/\$72 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture

Cosponsor: Ecological Landscape Alliance

Horticulture & Design

Meadows 1-2-3

Learn how native plant meadow-making differs from other forms of horticulture. We will discuss site selection, community and social factors, site preparation, plant selection, planting, and what to expect in years 1, 2, and 3. This program is appropriate for all learning levels, and extensive resource material is provided.

Friday, December 3, 2021, 9:30 a.m.-3:30 p.m.

Nasami Farm, Whately, MA

Program Code: HOR8001

Instructor: Kathy Connolly, landscape designer, Speaking of Landscapes, LLC

Fee: \$90 (Members)/\$108 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture

Native Plants for Professionals

This class is for garden professionals looking to integrate native plants into their palettes and will introduce participants to a variety of ecological planting concepts as well as to some native plants themselves. Topics will include how to define “native,” basics about native plants’ benefits, selection of the right plants for the right place and purpose, resources and references for plant selection, and nitty-gritty topics such as lawn replacement and plants for typically difficult spots.

Participants will see plenty of examples of successful native plantings and appealing species, and will leave the class with an arsenal of resources, references, and plant lists to get them started.

Thursday, February 10, 2022, 1-4 p.m.

Garden in the Woods, Framingham, MA

Program Code: HOR1199

Instructor: Melanie Kenney, Plant Records Coordinator, Native Plant Trust

Fee: \$45 (Members)/\$54 (Nonmembers)

Certificate: Elective: Advanced, Horticulture

Cosponsor: Massachusetts Nursery and Landscape Association

Winter Pruning

Proper pruning of trees and shrubs improves their health and structure while enhancing their appearance in the landscape. Gain hands-on experience and learn basic pruning principles, including how to make proper cuts, when to prune different species, and how to select and maintain tools.

Offered twice

Wednesday, February 23, 2022, 1-3 p.m.

Friday, March 4, 2022, 1-3 p.m.

Garden in the Woods, Framingham, MA

Program Code: HOR1213

Instructor: David Falk, Horticulturist, Native Plant Trust

Fee: \$30 (Members)/\$36 (Nonmembers)

Certificate: Elective: Basic



Virginia-creeper
(*Parthenocissus quinquefolia*)
Dan Jaffe © Native Plant Trust

Landscape Studies

Collective Gardening in Burlington

Join us to learn about the collective gardening model at Tommy Thompson Community Garden. This landscape study addresses structures and processes for collective gardening and the background of this particular site. We will explore the annual, perennial, and native plants represented, their uses, and the pollinators they attract.

Friday, Sept 17, 2021, 10 a.m.- 12 p.m.

Burlington, VT

Program Code: HDT6001

Instructor: Carolina Lukac, garden education manager, Vermont Community Garden Network

Fee: \$24 (Members)/\$30 (Nonmembers)

Certificate: Landscape: Basic and Advanced, Horticulture

Cosponsor: Vermont Community Garden Network

Tracing Conservation History: Back Bay

Who and what inspired current practices and perspectives in plant protection? Walk the journey of the conservation movement at the turn of the twentieth century. Learn about historic local efforts and their impact on the national conversation right at Native Plant Trust's birthplace.

Wednesday, September 29, 2021, 11 a.m.-12:30 p.m.

Boston, MA

Program Code: BOT5207

Instructor: Courtney Allen, landscape historian and Director of Public Programs, Native Plant Trust

Fee: \$23 (Members)/\$27 (Nonmembers)

Certificate: Landscape: all certificates

New Takes on Historic Landscapes: Bedrock Gardens

Bedrock Gardens is a classic New England farm reimagined as an emerging botanical garden. The landscapes recently transitioned from a 37-acre private sculpture garden and plant collectors' paradise, to a public oasis of artistic horticulture. Reclamation of meadow, pasture, woodland, and wetland offer innovative examples of adaptive reuse and opportunities to create a layered landscape journey. Each of the varied garden rooms melds the enduring fabric of a historic farmstead with native plants and rare botanicals. This landscape study will inspire you to combine landscape history and ecology when creating your own unique gardens.

Sunday, October 3, 2021, 10:30 a.m.-12:30 p.m.

Lee, NH

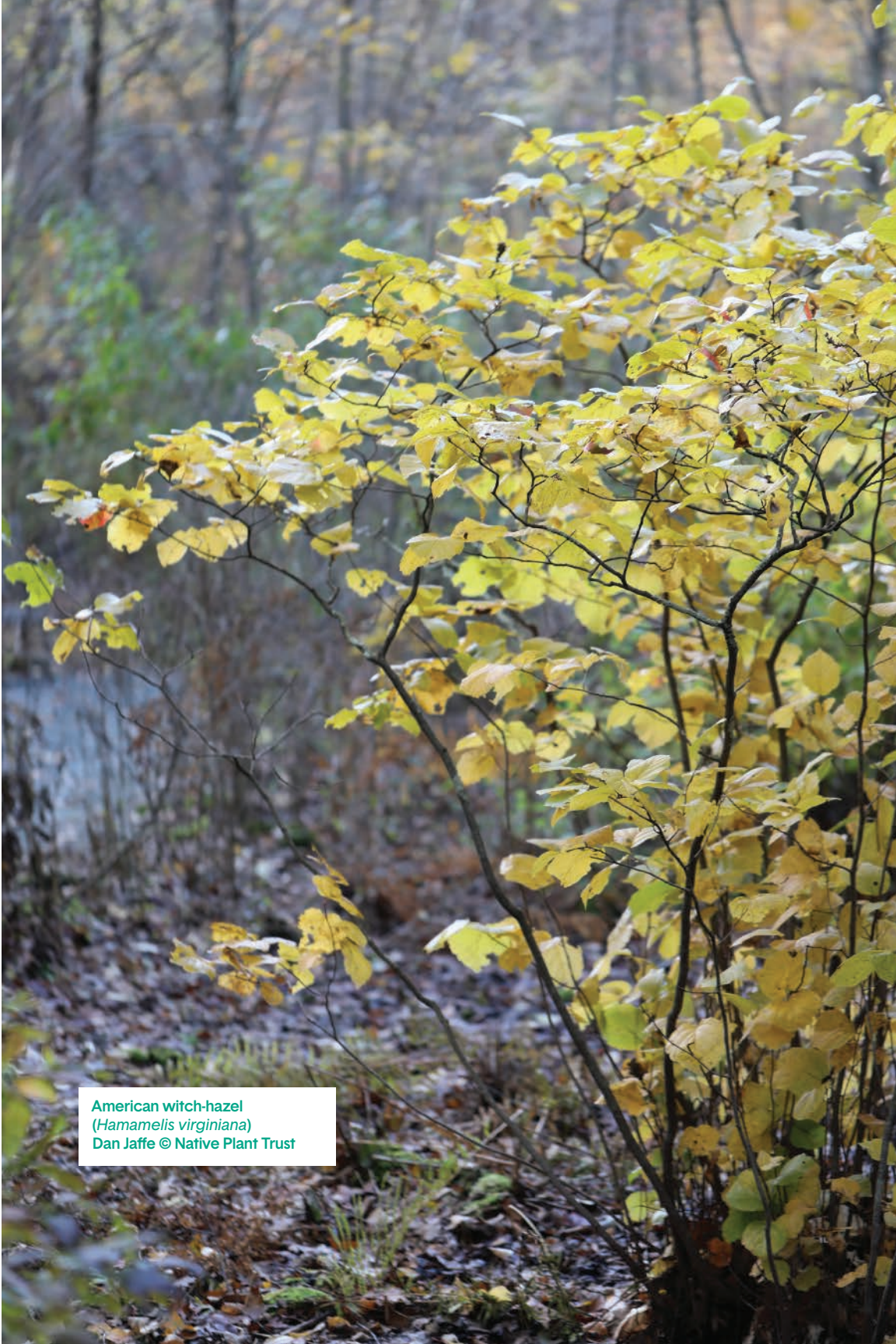
Program Code: HDT5011

Instructor: John Forti, founding director, Bedrock Gardens and author of *The Heirloom Gardener: Traditional Plants and Skills for the Modern World*

Fee: \$30 (Members)/\$36 (Nonmembers) Lee, NH

Certificate: Landscape: Basic and Advanced, Horticulture

Cosponsor: Bedrock Gardens



American witch-hazel
(*Hamamelis virginiana*)
Dan Jaffe © Native Plant Trust

Registration

Please visit NativePlantTrust.org/education to register for our programs. Visa and MasterCard accepted. For questions regarding registration, email education@NativePlantTrust.org.

ADVANCE REGISTRATION is required for all fee-based programs and is accepted on a first come, first-served basis upon full payment. Early registration is encouraged; programs with insufficient registration may be cancelled five business days before the scheduled start date. If your requested program is filled, please add yourself to the waiting list; if space becomes available, you will be contacted according to your position on the waiting list. No refunds or transfers can be given for withdrawals within a week of the program start date, or for class sessions you have not attended, except for COVID-19 related reasons. We believe education is interactive, with instructors and students building a community and culture of learning. For this reason, we do not provide virtual program recordings.

EQUAL ACCESS If you need assistance or special accommodations, email education@NativePlantTrust.org or call 508-877-7630 ext.3303, at the time you register or as soon as possible thereafter.

Membership

For a full description of member benefits, please visit our website or call (508) 877-7630 x3104

NativePlantTrust.org/support

For immediate discounts on programs, join or renew when you register. Members help conserve and promote the region's native plants to ensure healthy, biologically diverse landscapes.

MEMBERSHIP BENEFITS INCLUDE:

- * Discounts on educational programs throughout New England
- * Annual subscription to Native Plant Trust publications
- * Monthly member e-newsletter
- * Discounts at a wide range of regional and mail-order nurseries through our Nursery Connections Program and our Garden Shops
- * Access to member-only on-demand webinars
- * Invitations to special members' only events

MEMBERSHIP LEVELS:

- * Individual \$40
- * Individual with Garden Access \$55
- * Family/Friends \$75
- * Contributor \$115
- * Supporter \$250
- * Sustainer \$500
- * Conservation Circle \$1,000

Donate

This year, you and fellow plant lovers across the country have gone outdoors and online to learn about plants. Today you have a wonderful opportunity to show your appreciation for the native plants that bring you peace and joy—and for the programs that help you identify, protect, and grow them.

With the record-breaking demand for our classes, we need your support to continue providing new content in accessible formats. Participant fees do not cover the costs of developing and delivering innovative programs. We need your help to keep more than 200 educational experiences available and affordable to everyone this year.

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More than ever before, people are turning to Native Plant Trust to learn about the natural world. Your generosity will help provide botany and horticulture programs that inspire thousands of people and benefit our planet.

www.NativePlantTrust.org/fundprograms

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