

NATIVE PLANT PROGRAMS

VIRTUAL PROGRAMS EDITION

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

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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This publication was made possible through the generosity of Jackie and Tom Stone.

ON THE COVER

Feathery false Solomon's-seal
(*Maianthemum racemosum*)
by Dan Jaffe



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Courtney E. Allen



COURTNEY ALLEN
Director of Public Programs

2020 has presented natural and social challenges on a global scale. But with challenges come opportunities. By expanding online learning during our collective health crisis, we discovered and developed creative digital approaches and tools to continue engaging our community. Online learning has also sparked innovative new virtual programs and collaborations, such as the university herbaria series and the fall symposium. Importantly, it has empowered more diverse audiences from a wider geographic range to have greater access to our programs. No matter where we are, learning unites us and nature's resilience offers us hope. We will explore plant-inspired hope together at our new fall virtual event, THRIVE.

Throughout this trying year, the enthusiasm and dedication of our students, instructors, partners, and volunteers has offered hope to Native Plant Trust staff. You can continue to foster hope for the future of native plant education through a contribution to our 2020 Public Programs Challenge Match, made possible by a generous donor. Further details about the match and ways to contribute are included at the conclusion of this catalog. We thank you, our community, for your hope and your generosity as we navigate exciting new ways to learn together.



Red chokeberry
(*Aronia arbutifolia*)

Events

THRIVE: A Plant-Art Virtual Experience

Join Native Plant Trust for an evening of innovative, interdisciplinary exploration inspired by plants' perseverance. Cutting-edge visual, musical, and literary performance art will lead us on a hopeful journey, revealing how plants thrive through challenges and how humans can do the same. In a time of social distancing, this online social and educational event will reconnect us with nature and with each other.

Friday, September 25, 2020, 6-8 p.m.

Fee: \$15 (Members)/\$25 (Nonmembers)



01



Plant Diversity Symposium

Join us for our first-ever virtual symposium to unveil a new analysis of plant diversity in New England. A collaboration between Native Plant Trust and The Nature Conservancy, this symposium delves into goals and strategies for conserving plant diversity in the wake of development and climate change. Through multiple interactive digital formats, we will address what the new data analysis tells us about the current status of plant diversity, how it guides priorities for plant conservation, and what approaches are being used to meet conservation goals. The Plant Diversity Symposium sheds new light on the intersection between plant conservation, land management, and land protection. Register at www.NativePlantTrust.org and keep checking our website for the most up-to-date details.

Thursday, October 29, 2020, 9 a.m.-1 p.m.

Program Code: SYM1008

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

Certificate: Elective: all certificates

02

Native Plant Trust Book Club: Around the World in 80 Trees

Join Courtney Allen, Native Plant Trust's Director of Public Programs, for an engaging group video discussion about the power and impact of trees on human history and culture. In *Around the World in 80 Trees*, author and former Kew Gardens trustee Jonathan Drori leads us on a wild plant journey across continents with tales of self-mummifying monks, tree-climbing goats, and radioactive nuts. This program is sure to keep up the fun and momentum started by Native Plant Trust's 2019 Arbor Day featured speaker—Jonathan Drori!

Thursday, January 21, 2021, 1-3 p.m.

Program Code: BKC1101

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

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

Certificate: Elective: all certificates

03



Tales from the Field

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. In the case of a public health need, the event will be adapted to be held exclusively online.

Saturday, February 20, 2021, 6-8 p.m.

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

04



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.

Rolling registration and access until April 15, 2021

Program Code: CERO100

Instructor: Nancy Eyster-Smith, botanist

Fee: \$180 (Members)/\$216 (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.

Rolling registration and access until April 15, 2021

Program Code: CERO101

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

Fee: \$180 (Members)/\$216 (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. This Basic Certificate online core course is self-paced, with opportunities for peer discussion, expert access for questions, and field projects.

Rolling registration and access until April 15, 2021

Program Code: CERO102

Instructor: Neela De Zoysa, botanist

Fee: \$180 (Members)/\$216 (Nonmembers)

Certificate: Basic Core

Plants 101

Explore New England's plant life in this online course. Learn what plants are, how they function, and why they are essential to all life on earth. The course introduces many of the region's native and non-native plants. You can complete the course at your own pace.

Rolling registration and access until April 15, 2021

Program Code: BOTO101

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

Certificate: Elective: Basic

Plants 102

Delve deeper into the New England flora in this online course. Learn how plants change as they grow; how they interact with other species; and how geology, soils, land-use history, hydrology, and climate shape the plant communities of the region. Plants 101 is a foundation for Plants 102, but it is not a prerequisite. You can complete the course at your own pace.

Rolling registration and access until April 15, 2021

Program Code: BOTO102

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

Certificate: Elective: Advanced, Botany

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.

Rolling registration and access until April 15, 2021

Program Code: HOR100

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

Certificate: Elective: Basic

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.

Rolling registration and access until April 15, 2021

Program Code: HORO101

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

Certificate: Elective: all certificates

Online Learning

Live Virtual Programs

Strategies for Invasive Plant 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 to combat 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, August 20, 2020, 1-2 p.m.

Program Code: BOTW901

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

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

Certificate: Elective: Advanced, Botany

The Role of Native Plant Cultivars in Landscape Design and Habitat Restoration

Native plant species are often recommended to provide optimal foraging and nesting habitats for pollinators, birds, and other wildlife. The growing demand for native plants, coupled with the horticulture industry's desire for plants with unique characteristics, has led to the increased breeding and availability of native cultivars or "nativars." But do native cultivars provide the same valuable habitat as the straight native species? Dr. Annie White will share her field research on this topic and discuss the complex benefits and challenges of using both native species and native cultivars in landscape design.

Friday, August 21, 2020, 1-2 p.m.

Program Code: HOR1091

Instructor: Annie White, lecturer, University of Vermont

Fee: \$13 (Members)/\$15 (Nonmembers)

Certificate: Elective: Basic and Advanced, Horticulture



01



02

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, September 1, 2020, 6:30-7:30 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

Plant-Insect Interactions

Ever wonder how plants and insects interact beyond pollination and herbivory? In this program, we will explore plant-insect interactions through a combination of discussion and field examination. This class is a great opportunity to improve your identification skills for insects and the plants they call home.

Wednesday, September 23, 2020, 9:30-11 a.m.

Program Code: BOT1514

Instructor: George LoCascio, lecturer, UMASS Amherst

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

Certificate: Elective: all certificates

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.

Thursday, October 8, 2020, 6:30-7:30 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

Introduction to Species Distribution Modeling

Modeling species distribution has become essential to identifying which areas to protect in order to effectively conserve a given species now and into the future. During this program, we will explore niche development and environmental envelopes and learn how they can be used to predict what areas are best suited as habitat for a given species. The program will conclude by looking at the different applications of species distribution models to help conserve species and predict future threats.

Tuesday, October 20, 2020, 1-2 p.m.

Program Code: BOTW902

Instructor: Micah Jasny, Botanical Coordinator,
Native Plant Trust

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

Certificate: Elective: Basic and Advanced, Botany



03

Aquatic Habitats of the Northeast

In this webinar, you will learn about aquatic plants and the amazing adaptations that enable them to live their lives almost entirely underwater. We will make virtual visits to lakes, streams, and other wet places to explore the native and invasive inhabitants of our waterways.

Wednesday, October 28, 2020, 1-2 p.m.

Program Code: BOTW506

Instructor: Lori Benoit, Ph.D., wetland scientist and
environmental consultant

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

Certificate: Elective: Basic and Advanced, Botany

Rare Flora of the Sanctuaries

Native Plant Trust acquired our seven plant sanctuaries for the exceptional flora present in each space. Each sanctuary has a different habitat characterized by unique flora. In this webinar, Native Plant Trust's Ecological Programs Coordinator Bud Sechler focuses on the ecology and characteristics of the unique and rare plant species found in these natural areas.

Tuesday, November 17, 2020, 1-2 p.m.

Program Code: BOTW405

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

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

Certificate: Elective: all certificates

Ecological Gardening

04

Wondering when to cut back perennials, and how long into autumn perennials, trees, and shrubs can be planted or pruned? Want to know about the most wildlife-friendly approach? Anna Fialkoff explains how to transition a garden into winter dormancy while balancing winter and spring preparation, beauty, and wildlife value.

Thursday, December 3, 2020, 6:30-7:30 p.m.

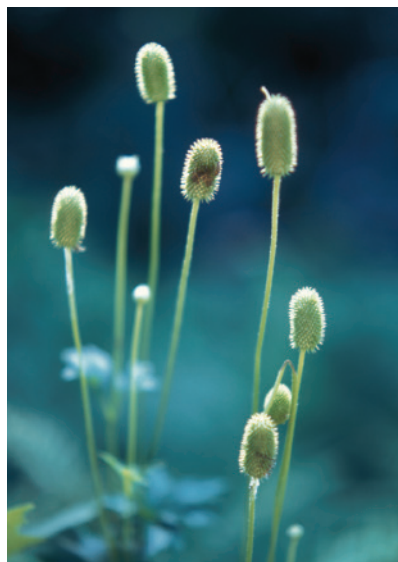
Program Code: HORW343

Instructor: Anna Fialkoff, program manager, Wild Seed Project

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

Certificate: Elective: Basic and Advanced, Horticulture

Cosponsor: Wild Seed Project



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, December 8, 2020, 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

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.

Tuesday, December 15, 2020, 1-2 p.m.

Program Code: BOTW312

Instructor: Lori Benoit, Ph.D., wetland scientist and environmental consultant

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

Certificate: Elective: Basic and Advanced, Botany

Online Learning

Live Virtual Programs

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.

Thursday, January 14, 2021, 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

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.

Saturday, January 23, 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

05



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. Jessa 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.

Tuesday, February 2, 2021, 1-2 p.m.

Program Code: BOTW516

Instructor: Jessamine Finch, Ph.D., Research Botanist, Native Plant Trust

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

Certificate: Elective: all certificates



07

06



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 underway at each plant sanctuary.

Thursday, February 11, 2021, 1-2 p.m.

Program Code: BOTW406

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

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

Certificate: Elective: all certificates

Online Learning

Live Virtual Programs

Reading Landscapes: Place as Creation and Reflection

08

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 18, 2021, 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

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).

Tuesday, February 23, 2021, 1-2 p.m.

Program Code: BOTW313

Instructor: Lori Benoit, Ph.D., wetland scientist and environmental consultant

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

Certificate: Elective: Basic and Advanced, Botany



09

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 to record and assess existing conditions, practice basic measuring and drawing techniques, and master the use of scales for documentation and communication.

Wednesdays, March 17, 24, 31, 2021, 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

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 to incorporate new plants that create a rich, wildlife-friendly tapestry.

Tuesday, March 23, 2021, 6:30-7:30 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



Heart-leaved golden Alexanders
(*Zizia aurea*)

Conservation Library Talks

Native Plant Trust presents the 2020 Conservation Lecture Series, sharing the “Plant Communities of Massachusetts” talk for libraries around the state, free of charge. “Plant Communities of Massachusetts” offers audiences an overview of the extraordinary diversity of native plant communities in the state, with example plants and environmental features. You will gain greater awareness of and appreciation for the area’s habitats as well as knowledge about plant communities’ current status and ways to conserve local natural resources. This statewide initiative is made possible with the support of Local Cultural Council grants. Please check www.NativePlantTrust.org throughout the fall for the date and program format for each library.

Barnstable
Falmouth
Greenfield
Lawrence
Newburyport
Springfield
Taunton
Williamstown



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. All programs will be conducted virtually.

All herbaria programs are \$12 (Members)/\$15 (Nonmembers).

University of Vermont Pringle Herbarium

Monday, October 19, 2020, 1-2 p.m.

Dr. David Barrington, director

Program Code: BOT6016

Harvard University Herbaria

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

Dr. Michaela Schull, director of collections

Program Code: BOT6014

Brown University Herbarium

Wednesday, November 18, 2020, 1-2 p.m.

Dr. Rebecca Y. Kartzinell, director

Program Code: BOT6013

University of Maine Herbarium

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

Dr. Jose Eduardo Meireles, director

Program Code: BOT6015

University of Connecticut George Safford
Torrey Herbarium

Tuesday, January 12, 2021, 1-2 p.m.

Dr. Sarah Taylor, collections manager

Program Code: BOT6017



Botany & Conservation

If a botany program cannot be conducted in person for public health reasons, most programs can be conducted virtually. Staff will determine which format will be used one month ahead of time to allow instructors to prepare appropriately and to notify students.

Yellow Composites

The yellow-flowered members of the Asteraceae family are ubiquitous: dandelions (*Taraxacum*), coneflower (*Rudbeckia laciniata*), hawkweeds (*Hieracium*), lettuces (*Lactuca*), sow-thistles (*Sonchus*), sunflowers (*Helianthus*), and more. But they can be confusing to differentiate! Through a visual presentation, herbarium specimens, and a field excursion, you will learn many of the yellow-flowered members of the composite family in New England, the key field features that distinguish them, and the different habitats in which they occur.

Sunday, August 9, 2020, 10 a.m.-4 p.m.

Nasami Farm, Whately, MA

Program Code: BOT3022

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

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

Certificate: Elective: Basic and Advanced, Botany

01



Introduction to Ferns

New England boasts habitats with numerous, distinct native fern species—but to a beginner, they can look quite similar. This survey addresses fern identification techniques, biology, and ecology. Through a visual presentation and field application, you will learn to use macro features to identify New England's most common fern species, their associated plant communities, and shifts in communities due to site conditions.

Saturday, August 15, 2020, 10 a.m.-2 p.m.

Nasami Farm, Whately, MA and field site

Program Code: BOT3431

Instructor: Randy Stone, Pioneer Valley Fern Society

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

Certificate: Elective: Basic and Advanced, Botany

02



Carnivorous and Parasitic Plants

Explore the weird world of native plants that employ nontraditional nourishment strategies, from catching and devouring their own prey to stealing from neighbors. With classroom discussion and field application, this program examines the evolution and motivations of carnivory as an adaptation, distinguishing characteristics across and within carnivorous and parasitic families, and the role of parasitic plants in their environments.

Saturday, August 29, 2020, 1-3:30 p.m.

South Shore Natural Science Center and Jacobs Pond Conservation Area, Norwell, MA

Program Code: BOT3701

Instructor: Irina Kadis, botanist

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

Certificate: Elective: Basic and Advanced, Botany

Cosponsor: South Shore Natural Science Center

Introduction to Go Botany

Native Plant Trust's Go Botany online platform is a critical tool for New England native plant identification. This program serves as a review of field guide identification terms and principles and forms a bridge between identification by book and identification by online resource. We will use common wildflower identification guidebooks to review how to use a key to identify plants, including terminology and plant characteristics. From there, we learn how to apply similar skills to use Go Botany to identify plants.

Wednesdays, September 9, 16, 2020, 10:30 a.m.-2:30 p.m.

Garden in the Woods, Framingham, MA

Program Code: BOT3805

Instructor: Leslie Duthie, botanist

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

Certificate: Elective: Basic

Asters and Goldenrods

Asters (Asteraceae) and goldenrods (*Solidago*) are autumn showstoppers, but they can be a large and complex group to identify. Through a visual presentation, herbarium specimens, and field application, you will learn several species of asters and goldenrods, their habitats, and how to use identification keys to distinguish between visually similar species by subtle characteristics.

Saturday, September 19, 2020, 10 a.m.-3 p.m. and Sunday, September 20, 2020, 10 a.m.-2 p.m.

Garden in the Woods, Framingham, MA and field site

Program Code: PDW4400

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

Fee: \$136 (Members)/\$162 (Nonmembers)

Certificate: Elective: Basic and Advanced, Botany

03



Botany & Conservation

Introduction to Grasses Identification

Join Lauren Brown, author of *Grasses: An Identification Guide*, as she shares information about the beautiful and abundant grasses in Connecticut. Through classroom and field study, you will learn the vocabulary for grasses and practice identifying several common native New England grasses using clear key characteristics.

Saturday, September 26, 2020, 9:30 a.m.-1:30 p.m.

Peabody Museum of Natural History, Yale University, New Haven, CT

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

Certificate: Elective: Basic

Cosponsor: Peabody Museum of Natural History, Yale University

Rock Lichens

Rocks are excellent places to study lichen growth forms, biology, and ecology. Native rock walls, cement walls, and cemetery monuments made from different rocks boast a diversity of rock-colonizing lichens common to New England. During this class, you will learn about lichen identification, reproduction and growth, and habitat

interactions through a stereoscope workshop and field application at local cemeteries.

Saturday, October 10, 2020, 10:30 a.m.-3:30 p.m.

Garden in the Woods, Framingham, MA and field site

Program Code: BOT3604

Instructor: Elizabeth Kneiper, lichenologist

Fee: \$75 (Members)/\$90 (Nonmembers)

Certificate: Elective: Basic and Advanced, Botany

Shrubs in Winter

Even without leaves, most shrubs are easily recognizable in winter. Learn to identify 20 native New England shrubs through such characteristics as branching patterns, bark, persistent flowers and fruits, growth forms, galls, and habitats. We begin indoors looking at twig samples and slides, then head into the Garden for a close look at our subjects. We will also consider the natural history of these shrubs, and finish indoors with a twig quiz.

Saturday, November 21, 2020, 10:30 a.m.- 3 p.m.

Garden in the Woods, Framingham, MA

Program Code: WET3020

Instructor: Roland "Boot" Boutwell, naturalist

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

Certificate: Elective: Basic and Advanced, Botany

Cosponsor: Massachusetts Association of Conservation Commissions

Plant Genetic Diversity

While conservation is primarily considered at the species level, genetic diversity is a fundamental, but often overlooked, element of biodiversity. Join Native Plant Trust's Research Botanist, Dr. Jessa Finch, for this introductory course on the role of population genetics in species conservation, both as potential drivers of species decline and as a key element of species recovery. We will explore measures of genetic diversity, identify genetic drivers of extinction, and discuss best practices for maintaining genetic diversity in both in situ and ex situ conservation efforts.

Wednesday, December 2, 2020, 1-3 p.m.

Garden in the Woods, Framingham, MA

Program Code: BOT1402

Instructor: Jessamine Finch, Ph.D., Research Botanist, Native Plant Trust

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

Certificate: Elective: Basic and Advanced, Botany

Cosponsor: Massachusetts Association of Conservation Commissions

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 15, 2021, 10 a.m.-4 p.m.

Garden in the Woods, Framingham, MA

Program Code: BOT3317

Instructor: William E. Kuriger, botanist

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

Certificate: Elective: Basic and Advanced, Botany

Bedstraws

The 22 native New England species of Galium can be challenging to distinguish—many of these species look alike, and identification requires careful observation of leaf, stem, flower, and fruit characteristics. In this class, you will learn bedstraw morphological features, habitats, distributions, and conservation status through images and herbarium specimens.

Thursday, February 25, 2021, 1-3 p.m.

Garden in the Woods, Framingham, MA

Program Code: BOT3023

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

04



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, February 26, 2021, 10 a.m.-1 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: all certificates

Cosponsor: Massachusetts Association of Conservation Commissions

Green in the Winterscape

A walk in the woods in the quiet of winter reveals a surprising number of plants that stay green through the cold season: lichens, mosses and liverworts, ferns, ericaceous shrubs and evergreen trees, and many more. Which plants stay green, how, and why? In this class, you will learn how to recognize and identify the groups of plants

that are star attractions during the winter. We will also explore the plants' evolution and strategies for year-round foliage.

Saturday, March 20, 2021, 10:30 a.m.-2:30 p.m.

Garden in the Woods, Framingham, MA

Program Code: BOT3326

Instructor: Neela De Zoysa, botanist

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

Certificate: Elective: Basic and Advanced, Botany

Cosponsor: Massachusetts Association of Conservation Commissions

Vernal Mustards

The Brassicaceae family is a widespread and challenging group of plants. In this class, you will learn to identify 20 spring-blooming mustard species through a combination of images, herbarium specimens, and field application. We will review distinguishing flower and leaf characteristics, and discuss which family members are invasive.

Saturday, March 27, 2021, 1-4 p.m.

Garden in the Woods, Framingham, MA


Program Code: PDW3333

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

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

Certificate: Elective: Basic and Advanced, Botany

Cosponsor: Massachusetts Association of Conservation Commissions

A close-up photograph of an evergreen winterberry branch. The branch is covered with numerous small, dark, round berries, each attached to a thin, reddish-brown stem. The leaves are green, elongated, and have a slightly waxy texture. The background is a soft, out-of-focus brown, suggesting a natural outdoor setting.

Evergreen winterberry
(*Ilex glabra*)

Field Studies

If a field study cannot be conducted in person for public health reasons, it will be canceled.

Botany in the Salt Marsh

Barnstable Great Marsh is an integral part of the ecologically significant 3,800-acre Sandy Neck salt marsh and barrier beach system. Join Director of Conservation Michael Piantedosi to explore this critical coastal ecosystem and learn about its resident flora.

Saturday, September 12, 2020, 10 a.m.-1 p.m.

Barnstable Great Marsh Wildlife Sanctuary,
Barnstable, MA

Program Code: FDT8041

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

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

Certificate: Field: Basic and Advanced, Botany

Saturday, September 12, 2020, 10 a.m.-3 p.m.

Schoodic Point, Acadia National Park, Winter
Harbor, ME

Program Code: FDT9012

Instructor: Jill Weber, botanist

Fee: \$66 (Members)/\$75 (Nonmembers)

Certificate: Field: Basic and Advanced, Botany

Cosponsor: Maine Audubon

Botany of the Connecticut Coast

Explore the special coastal habitats of the 900-acre Hammonasset Beach State Park and Natural Area Preserve to learn the flora and ecology of tidal marsh, dune, and near-shore upland habitats. Participants also visit a tidal marsh restoration site within the park.

Sunday, September 13, 2020, 12:30-3:30 p.m.

Hammonasset Beach State Park, Madison, CT

Program Code: FDT8050

Instructor: Lori Benoit, wetland scientist and
environmental consultant

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

Certificate: Field: Basic and Advanced, Botany

Habitats of the Schoodic Peninsula

We will explore an exciting variety of habitats on the breathtaking Schoodic Peninsula, such as maritime spruce-fir, coastal headland, salt marsh, and Jack pine-broom crowberry woodland. Botanical highlights on this field study include coastal communities and rare arctic plant species that reach their southern range limit in this area. Please note, this moderate hike is intended for experienced hikers.

01



Eshqua Bog

Join Bud Sechler, staff Ecological Programs Coordinator, for a boardwalk stroll through Native Plant Trust's 40-acre fen and learn about efforts to protect the wetland habitat from encroaching invasive plants from the forest. We will also enjoy the surrounding red maple-tamarack swamp and the northern hardwood forest.

Friday, September 18, 2020, 11 a.m.-2 p.m.

Hartland, VT

Program Code: FDT5007

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

Fee: \$40 (Members)/\$45 (Nonmembers)

Certificate: Field: Basic and Advanced, Botany

marsh make up the 177-acre area, which borders lovely Merrymeeting Bay, well-known for its diversity of waterfowl. Hike the mixed hardwood-conifer forest trails along the east side of the bay to a large, old stand of bigtooth aspen (*Populus grandidentata*) and fascinating freshwater estuary plants that are limited to this rare habitat type.

Sunday, September 20, 2020, 11 a.m.-2 p.m.

Woolwich, ME

Program Code: FDT8029

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

Fee: \$40 (Members)/\$45 (Nonmembers)

Certificate: Field: Basic and Advanced, Botany

Robert P. Tristram Coffin Wild Flower Sanctuary

This sanctuary is one of seven owned by Native Plant Trust. Hilly woods, a brook, and 1,256 feet of sandy shore and tidal

LaPlatte River Marsh

Join us at the LaPlatte River mouth 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. 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 25, 2020, 10 a.m.-2 p.m.

LaPlatte River Marsh, Shelburne, VT

Program Code: FDT9011

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

Fee: \$53 (Members)/\$60 (Nonmembers)

Certificate: Field: Basic and Advanced, Botany



02

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.

If a certificate course is not able to be conducted in person for public health reasons, every effort will be made to provide a virtual alternative. Staff will determine the format one month ahead of time to allow instructors to prepare appropriately and to notify students.

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.

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

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

If a certificate course is not able to be conducted in person for public health reasons, every effort will be made to provide a virtual alternative. Staff will determine the format one month ahead of time to allow instructors to prepare appropriately and to notify students.

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

Certificate: Basic Core

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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).

Offered exclusively online this semester

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.

Offered exclusively online this semester

Certificate: Basic Core

Wildflowers of New England

This course provides a comprehensive introduction to spring-blooming 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, pollination and coevolution of flower structure and design, habitats and ecology, and conservation concerns.

Wednesdays, October 7, 14, 21, 28, 2020,
12:30-3:30 p.m.

Garden in the Woods, Framingham, MA

Program Code: BOT3000

Instructor: Neela De Zoysa, botanist

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

Certificate: Basic Core

Framework Trees of New England

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.

Thursdays, November 5, 19, 2020, 5-8 p.m. and
Saturdays November 7, 21, 2020, 9:30 a.m.-12:30 p.m.

Nasami Farm, Whately, MA and field sites

Program Code: BOT3200

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

Fee: \$180 (Members)/\$216 (Nonmembers)

Certificate: Basic Core

Cosponsor: Massachusetts Association of Conservation Commissions

Understanding and Managing Soils

This one-day intensive 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.

Offered twice:

Friday, September 4, 2020, 10 a.m.-4 p.m.

Friday, February 19, 2021, 10 a.m.-4 p.m.

Nasami Farm, Whately, MA

Program Code: HOR3604

Instructor: Alexis Doshas, Propagator and Facilities Coordinator, Nasami Farm, Native Plant Trust

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

Certificate: Basic Core

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Certificate Courses

Advanced Core, Botany & Conservation

If a certificate course cannot be conducted in person for public health reasons, every effort will be made to provide a virtual alternative. Staff will determine the format one month ahead of time to allow instructors to prepare appropriately and to notify students.

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.

Sundays, March 7, 14, 21, 2021, 10 a.m.-2 p.m.

Garden in the Woods, Framingham, MA

Program Code: BOT5100

Instructor: George LoCascio, lecturer, UMASS Amherst

Fee: \$180 (Members)/\$216 (Nonmembers)

Certificate: Advanced Core, Botany

Cosponsor: Massachusetts Association of Conservation Commissions

New England Plant Communities

For a relatively small region, New England boasts an astonishing variety of plant communities, ranging from freshwater and tidal wetlands to coastal dunes, grasslands, forests, and montane. We study the dominant canopy, structure, range, and characteristic species of each community and then apply this knowledge in the field. You will learn how soil, topography, moisture, geological conditions, glaciation, and historical use affect the vegetation of each community.

Sundays, September 27 and October 4, 2020, 10 a.m.- 4 p.m.

Nasami Farm, Whately, MA

Program Code: BOT4000

Instructor: Lori Benoit, Ph.D., wetland scientist and environmental consultant

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

Certificate: Advanced Core, Botany

Cosponsor: Massachusetts Association of Conservation Commissions



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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 a foundational 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 provide a deeper appreciation for the role of evolutionary history in understanding organismal relationships.

Saturday, February 6, 2020, 10 a.m.-12 p.m., and
Wednesdays, February 17, 24, 2020, 5:30-7:30 p.m.

Offered virtually

Program Code: BOT2206

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

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

Certificate: Advanced Core, Botany

Field Identification Techniques

Equip yourself with the skills and confidence you need to identify native plants in the field. We will learn how to use field guides and professional keys, observe floral structures, recognize reliable family characteristics, and become familiar with botanical Latin.

Mondays, September 14, 21, 28, 2020,
10:30 a.m.-2:30 p.m.

Garden in the Woods, Framingham, MA

Program Code: BOT2000

Instructor: Leslie Duthie, botanist

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

Certificate: Advanced Core, Botany

Botanical Inventory Methods and Techniques

This one-day intensive begins by covering the fundamentals of field preparation, including the use of field guides, aerial photography, GIS (geographic information system) resources, sampling strategies, and preparation of field data forms. Next, we will conduct an extensive field inventory of the flora on nearby conservation land, identifying and recording the species we encounter and putting into practice the methods discussed. You will learn botanical survey approaches and methods for cataloguing the vascular plants on conservation land.

Monday, October 5, 2020, 9:30 a.m.-4:30 p.m.

Garden in the Woods, Framingham, MA

Program Code: BOT2050

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

Fee: \$126 (Members)/\$154 (Nonmembers)

Certificate: Advanced Core, Botany

Cosponsor: Massachusetts Association of
Conservation Commissions

Wetland Identification and Delineation

This one-day intensive introduces the principal elements of wetland identification, including wetland hydrology, hydric soils, and hydrophytic plants. We identify plants in the field, place a delineation line, and utilize web resources. Recommended gear includes a field notebook, field guides, soil color charts, an auger, and rainwear. Bring a bag lunch.

Thursday, October 15, 2020, 9:30 a.m.-4:30 p.m.

Garden in the Woods, Framingham, MA

Program Code: WET2010

Instructor: William E. Kuriger, botanist

Fee: \$105 (Members)/\$126 (Nonmembers)

Certificate: Advanced Core, Botany

Seed Conservation

Seed banking, or ex situ conservation, is an effective method of conserving our 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



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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.

Fridays, October 2, 16, 30, 2020, 10 a.m.-1 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: \$135 (Members)/\$162 (Nonmembers)

Certificate: Advanced Core, Botany

Cosponsor: Massachusetts Association of Conservation Commissions

Invasive Plants: Identification, Impacts, and Management

This one-day intensive 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.

Saturday, October 3, 2020, 9 a.m.-4 p.m.

Garden in the Woods, Framingham, MA and Barber Reservation, Sherborn, MA

Program Code: BOT5130

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

Fee: \$126 (Members)/\$154 (Nonmembers)

Certificate: Advanced Core, Botany

Advanced Core, Horticulture & Design

If a certificate course cannot be conducted in person for public health reasons, every effort will be made to provide a virtual alternative. Staff will determine the format one month ahead of time to allow instructors to prepare appropriately and to notify students.

Landscape for Life

This intensive introductory 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.

Thursdays, March 4, 11, 18, 25, 2021, 1-4 p.m.

Garden in the Woods, Framingham, MA

Program Code: HOR3720

Instructor: Trevor Smith, lead designer, Land Escapes

Fee: \$180 (Members)/\$216 (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 20, 27, February 3, 10, 2021, 1-4 p.m.

Garden in the Woods, Framingham, MA

Program Code: HOR8040

Instructor: Staci Jasin, landscape designer

Fee: \$180 (Members)/\$216 (Nonmembers)

Certificate: Advanced Core, Horticulture

Cosponsor: Ecological Landscape Alliance

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.

Tuesdays, September 15, 22, 2020, 1-3 p.m.

Garden in the Woods, Framingham, MA

Program Code: HOR3600

Instructor: Horticultural Staff, Native Plant Trust

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

Certificate: Advanced Core, Horticulture

Residential Landscape Design

This multi-session 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 design final product.

Tuesdays, November 3, 10, 17, December 1, 8, 2020, 1-4 p.m.

Garden in the Woods, Framingham, MA

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

Native Woody Plant Materials

Explore the huge variety of native trees, shrubs, and woody vines. Learn which species grow well in shade, which support local wildlife, and how to stagger plantings for continual bloom, fruit production, and fall color. The class discusses growth characteristics, cultural requirements, and best horticultural uses. It includes lectures and walks in the Garden as well as a field trip to The Arnold Arboretum. Bring a bag lunch.

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Fridays, January 22, 29, 2021, 9:30 a.m.-12:30 p.m.

Nasami Farm, Whately, MA

Program Code: HOR1100

Instructor: Instructor: Trevor Smith, lead designer, Land Escapes

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

Certificate: Advanced Core, Horticulture

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 here at Nasami Farm.

Saturday, October 17, 2020, 10 a.m.-2 p.m.

Nasami Farm, Whately, MA

Program Code: HOR1221

Instructor: Alexis Doshas, Propagator and Facilities Coordinator, Nasami Farm, Native Plant Trust

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

Certificate: Advanced Core, Horticulture

Cosponsor: Ecological Landscape Alliance



Sugar maple
(*Acer saccharum*)

Horticulture & Design

If a horticulture program cannot be conducted in person for public health reasons, most programs can be conducted virtually. Staff will determine the format one month ahead of time to allow instructors to prepare appropriately and to notify students.

Shade Gardens: Embracing the Dark Side

Creating lush and vibrant gardens in the shade tends to frustrate even the best gardeners. How do we infuse more color, adventure, and intrigue into those spaces? The mood, plants, and conditions act as our guide. This workshop blends site-specific assessment, design strategies, and plant options to help enliven your imagination. Bring your project to participate in a flash design collaboration.

Saturday, August 22, 2020, 1-4 p.m.

Garden in the Woods, Framingham, MA

Program Code: HOR1214

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

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

Certificate: Elective: Basic and Advanced, Horticulture

Cosponsor: Ecological Landscape Alliance

01



Gardening for the Birds

Go beyond conventional bird feeders—use native plants to turn your backyard into a diverse, year-round avian habitat! Learn what the birds of New England actually need from us and become part of the new, natural approach to meeting their needs using planting aesthetics that embrace the ecological value of native species, variety, and untidiness. This program addresses fruit-bearing shrubs, pollinators, and birds' feeding and nesting preferences.

Friday, August 28, 2020, 10:30 a.m.-12:30 p.m.

Garden in the Woods, Framingham, MA

Program Code: HOR4228

Instructor: Chris Leahy, Overseer, Native Plant Trust and Gerard A. Bertrand Chair of Natural History and Field Ornithology (Emeritus), Mass Audubon

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

Certificate: Elective: all certificates

02



Plant Adaptations

Have you ever wondered why plants look the way they do? Every feature of the plant is a result of an adaptation designed to afford reproductive, environmental, or cultural success. This class will explore the myriad ways plants have adapted to different habitats, soil types, and pollination and dispersal schemes. You will not look at plants the same way again!

Wednesday, September 2, 2020, 10 a.m.-12 p.m.

Garden in the Woods, Framingham, MA

Program Code: HOR8027

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

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

Certificate: Elective: all certificates

Site Preparation for Landscape Transformation

Many people consider reducing lawns, converting hayfields, cleaning out weed patches, and otherwise transforming landscapes into pollinator gardens



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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 a comparison of weed removal methods.

Saturday, September 12, 2020, 9:30 a.m.-12:30 p.m.

Nasami Farm, Whately, MA

Program Code: HOR8028

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

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

Certificate: Elective: Basic and Advanced,
Horticulture

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.

Fridays, September 18, 25, October 9, 2020, 1-4 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

Horticulture & Design

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 create landscapes with both aesthetic and ecological value to attract wildlife. The spring session focuses on flowers, shrubs, and trees as nectar and insect sources for birds; the fall session concentrates on berry-producing shrubs and trees and on seed-producing perennials and annuals.

Thursday, October 8, 2020, 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: \$63 (Members)/\$77 (Nonmembers)

Certificate: Elective: all certificates

Cosponsor: New Canaan Nature Center

Eco-restorative Garden Design

What does it take to create a conservation and restoration landscape project in your own backyard? In this half-day workshop, we will explore the principles and specific steps to keep you engaged and confident in small-scale projects. You will learn tips, techniques, and a well-defined process for transforming a small plot of land to a native plant landscape. Topics cover everything

from removing invasives to analyzing the site, conserving resources, and enhancing aesthetics and wildlife habitat.

Saturday, October 24, 2020, 10 a.m.-12:30 p.m.

Garden in the Woods, Framingham, MA

Program Code: HOR4224

Instructor: Staci Jasin, landscape designer

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

Certificate: Elective: Basic and Advanced, Horticulture

Native Species, Cultivars, and Selections: What's the Difference?

“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.

Tuesday, October 27, 2020, 10 a.m.-12 p.m.

Garden in the Woods, Framingham, MA

Program Code: HOR1090

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

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

Certificate: Elective: Basic and Advanced, Horticulture

Cosponsor: Ecological Landscape Alliance

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.

Friday, November 6, 2020, 10:30 a.m.-12:30 p.m.

Garden in the Woods, Framingham, MA

Program Code: HOW8035

Instructor: Trevor Smith, lead designer, Land Escapes

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

Certificate: Elective: all certificates

Cosponsor: Ecological Landscape Alliance

Slow Gardening

Why wait to the last minute to plan and prepare your gardens? Save your back and knees from all that weed and turf removal! Learn some passive, elegant, and simple techniques to let nature do the work for you. A little prep now will give you a fresh start come next spring.

Saturday, November 14, 2020, 1-3 p.m.

Nasami Farm, Whately, MA

Program Code: HOR4045

Instructor: Alexis Doshas, Propagator and Facilities Coordinator, Nasami Farm, Native Plant Trust

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

Certificate: Elective: Basic and Advanced, Horticulture

Garden Design for Child Development

Whether in a home setting or a schoolyard habitat, children's gardens requires not only an understanding of basic landscape design but also special consideration of the development of children for their safety, engagement, and socialization. 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.

Fridays, February 5, 12, 2021, 10:30 a.m.-1:30 p.m.

Garden in the Woods, Framingham, MA

Program Code: HOW8036

Instructor: Staci Jasin, landscape designer

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

Certificate: Elective: Basic and Advanced, Horticulture

Cosponsor: Ecological Landscape Alliance

04



Horticulture & Design

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 foundations through an overview of soils, chemistry, and plant anatomy. We will explore how plants acquire, use, and translocate mineral nutrients. We will also learn skills to identify how mineral nutrients are impacting a plant's health and how to remedy plants suffering from improper nutrition.

Sundays, February 7, 14, 21, 2021, 10:30 a.m.-12 p.m.
Nasami Farm, Whately, MA
Program Code: HOR3908

Instructor: George LoCascio, lecturer, UMASS Amherst

Fee: \$68 (Members)/\$81 (Nonmembers)

Certificate: Elective: all certificates

Cosponsor: Ecological Landscape Alliance

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.

05



Offered twice:

Saturday, February 13, 2021, 10:30 a.m.-12:30 p.m.

Wednesday, March 10, 2021, 1-3 p.m.

Garden in the Woods, Framingham, MA

Program Code: HOR1213

Instructor: Horticultural staff

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

Certificate: Elective: Basic

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 one-day intensive is appropriate for all learning levels, and extensive resource material is provided.

Friday, March 26, 2021, 10 a.m.-4 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: Advanced, Horticulture

Winterberry
(*Ilex verticillata*)



Landscape Studies

If a landscape study cannot be conducted in person for public health reasons, it will be canceled.

Upper Cape Landscapes

Join landscape architects from award-winning STIMSON for a landscape study of their Falmouth public design gems. We begin on the 100-acre Quissett Campus at the heart of the Woods Hole Oceanographic Institution, where we will see innovative, ecologically sound projects demonstrating the Institution's commitment to making its environmental ethic visible through the built landscape. From there, we will explore STIMSON's Teaticket Park grassland habitat and Gateway Park wetland restoration.

Friday, August 14, 2020, 12:30-3:30 p.m.

Falmouth, MA

Program Code: HDT5009

Instructor: Edward Marshall and Joe Wahler, principals, STIMSON

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

Certificate: Landscape: Basic and Advanced, Horticulture

Cosponsor: Boston Society of Landscape Architects

Tracing Landscape History: Cambridge

What can the presence (or absence) of greenery teach about the layered history of a place? Together, we walk and analyze the

changing landscape, guided by evidence from significant trees in the neighborhood. The discussion addresses local inhabitants' relationship to native plants over generations.

Wednesday, September 30, 2020, 1:30-3:30 p.m.

Cambridge, MA

Program Code: HDT8050

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

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

Certificate: Landscape: Basic and Advanced, Horticulture

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.

Monday, October 19, 2020, 1:30-3 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

A photograph of the Woods Hole Oceanographic Institution building, a modern structure with a light-colored wood-clad facade and a long, horizontal window band. In the foreground, a lush garden is in bloom, featuring tall, slender purple spikes of flowers and several large, bright yellow flowers with dark brown centers. The scene is set against a clear blue sky with a few wispy clouds.

Woods Hole Oceanographic
Institution, Quissett, MA

Registration

Please visit NativePlantTrust.org/education to register for our programs. Visa and MasterCard accepted. For questions regarding registration, call (508) 877-7630, ext. 3303.

ADVANCE REGISTRATION is required for all fee-based programs and is accepted on a firstcome, 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.

EQUAL ACCESS If you need assistance or special accommodations, call (508) 877-7630, ext. 3303, or email education@NativePlantTrust.org, 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 Partner 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

Challenge Match

Throughout the shutdown and the current distancing, nature has been a constant source of solace to people everywhere. Now you have a wonderful opportunity to show your appreciation for the native plants that are bringing you peace and joy—and for the programs that help you identify, protect, and grow them. Your kind support for Native Plant Trust’s public programs will be matched by a generous donor, dollar for dollar, up to a total of \$100,000.

With the spike in demand for our online classes, we need your support to help fund the ongoing conversion of in-person programs to online formats people can access from home. Program fees alone simply do not cover the costs of the changes we must make. We need your help to keep more than 200 yearly educational experiences available and affordable to everyone.

A PERSONAL MESSAGE FOR YOU

“I am excited to provide funding for the Public Programs Challenge Match, and I urge you to take advantage of this opportunity to support the unique and innovative public programs created by Native Plant Trust. Together, we can continue to lead the way forward for native plant education in New England. Thank you.”

DONATE ONLINE

www.NativePlantTrust.org/fundprograms

DONATE BY MAIL*

Use the envelope provided in this catalog

DONATE BY PHONE*

508-877-7630 x3802

*Please note that while staff are mostly working remotely, donating online is the fastest and most effective way for you to take part in the Public Programs Challenge Match and bring native plant education to everyone, everywhere. Thank you.

BRING THE GREEN DREAM TO LIFE

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. Right now your support will be doubled, thanks to a fabulous match!

www.NativePlantTrust.org/fundprograms

Native Plant Trust

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ADDRESS SERVICE REQUESTED