

SPRING/SUMMER 2013


NEW ENGLAND  
WILD  
FLOWER  
SOCIETY



# learn+grow

MARCH 2013 • VOLUME 6, NUMBER 1

THE COURSE CATALOG OF NEW ENGLAND WILD FLOWER SOCIETY



The mission of  
New England Wild Flower Society  
is to conserve and promote  
the region's native plants to  
ensure healthy, biologically  
diverse landscapes.

Register Online,  
by Phone or Fax  
See page 36 for details

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*This publication was made possible through the generosity of Jackie and Tom Stone, and members and friends of New England Wild Flower Society.*

**ON THE COVER**  
Blue iris (*Iris versicolor*)  
Photo: Steven Ziglar



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## FROM THE EDUCATION DEPARTMENT

Whether you are a seasoned botanist, a curious naturalist, a beginning gardener, or a professional designer, we hope you will find something within these pages to engage you this spring and summer.

Some highlights include:

“Landscape for Life,” a two-day introductory course, taught by Horticulture Director Mark Richardson, to provide you with the knowledge, skills, and understanding to work with nature in your garden. You’ll learn techniques for working with soil, water, energy, and native plants to help make your garden more earth-friendly and sustainable.

“Flora of Mount Desert Island,” a multi-day field experience with Research Botanist Arthur Haines, exploring the coastal flora of downeast Maine. Study the flora of several plant communities in stunning settings, including coastal mountains and headlands, shorelines, and peatlands.

“Horticultural and Design Trips” to explore Blue Hill Peninsula; an ethno-botanical herb garden; and historic homes and gardens in Maine; as well as a beautiful wildflower garden in Belmont, MA designed many years ago by Will Curtis, founder of Garden in the Woods.

Looking forward to seeing you in class, in the field, or in some distant garden soon!



*Bonnie Drexler*

Bonnie Drexler  
Education Director

*Lana Reed*

Lana Reed  
Registrar

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### Volume 6, Number 1, Spring/Winter 2013

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# symposia

## Northern Gardening Symposium

The morning session features New England Wild Flower Society Horticulture Director, Mark Richardson, speaking on “Gardening with Nature.” Coastal Maine Botanical Gardens Horticulturist Justin Nichols then speaks on landscaping with native woody trees, shrubs, and vines. After lunch, there will be a presentation by nationally-recognized author and botanist Arthur Haines on “Preserving Knowledge of Native Plants for their Future,” with an emphasis on wild food and medicine.

**Saturday, April 13, 9 a.m.-2 p.m.**

Vermont Technical College, Randolph Center

**Course Code:** SYM1002

**Fee:** \$47 (Member) / \$53 (Nonmember)

Member fee applies to members of any of the cosponsoring organizations. No refunds for cancellations after April 6.

**Cosponsored with the Fells, Hardy Plant Club, Friends of the Hort Farm, and Master Gardeners**

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## Dynamics of Your New England Landscape

Keynote speaker, William Cullina, Executive Director of Coastal Maine Botanical Gardens, provides perspective with “New England Landscape Dynamics – a Long View.” Breakout sessions include: “Improving Your Patch of Woods,” “Designless Gardening—a Naturalistic Approach,” “Principles of Stewardship,” “Subterranean Soil Societies,” “Ecosystem Gardening in the Shade Using RI Native Plants,” and “Indigenous Knowledge and the Land.”

**Saturday, April 13, 8:30 a.m.- 2:00 p.m.**

Quonset ‘O’ Club, North Kingston, RI

**Course Code:** SYM1001

**Fee:** \$65 early registration; \$80 after March 23

Includes registration, morning coffee and pastries, lunch, parking

**Cosponsor:** Rhode Island Wild Plant Society

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**More information about the symposia speakers and registration options at [www.newenglandwild.org/learn](http://www.newenglandwild.org/learn)**

# certificate program

## Native Plant Studies

New England Wild Flower Society's Certificate in Native Plant Studies offers dedicated students a comprehensive series of programs in the identification, cultivation, ecology, and conservation of native New England plants. Participants proceed through the program at their own pace.

Students gain a greater appreciation and understanding of native plant habitats, common and rare species, conservation issues, and uses of native plants in horticulture and design. Certificate students engage in ongoing public and private efforts to preserve and restore native New England flora.

We offer four opportunities for concentrated study:

1. Certificate in Field Botany
2. Advanced Certificate in Field Botany
3. Certificate in Native Plant Horticulture and Design
4. Advanced Certificate in Native Plant Horticulture and Design

Each certificate requires completion of core courses, elective courses, field trips, and community service.

See [www.newenglandwild.org/learn/certificate](http://www.newenglandwild.org/learn/certificate) for details.

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### CERTIFICATE ORIENTATION

Join Bonnie Drexler, Education Director, and certificate program graduates for an illustrated talk that includes some of the fascinating stories that native plants have to tell, along with a look at the Society's efforts to conserve the region's native flora. Hear about the structure of the Society's Certificate in Native Plant Studies program and how it can guide your learning. Everyone is welcome at this free presentation. Preregistration is requested, but not required.

**Wednesday, April 3, 7-8:30 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** CER8000

**Instructor:** Bonnie Drexler, Education Director, New England Wild Flower Society

**Fee:** Free program

### ENROLL NOW!

Complete the certificate registration form on page 36 of this catalog or online at [www.newenglandwild.org/learn/certificate](http://www.newenglandwild.org/learn/certificate).

Direct questions to Registrar at 508-877-7630, ext. 3303, or [lreed@newenglandwild.org](mailto:lreed@newenglandwild.org). There is a one-time certificate enrollment fee of \$30.

**Classes in this catalog are open to all adults, regardless of certificate enrollment. Join the Society to receive discounts. (See inside back cover.)**

### CERTIFICATE CREDIT DESIGNATIONS

**FB**=Field Botany

**Adv. FB**=Advanced Field Botany

**HD**=Native Plant Horticulture & Design

**Adv. HD**=Advanced Native Plant Horticulture & Design

*Some courses satisfy more than one requirement, for example Elective-FB; Core-Adv. FB can be used as an elective for a certificate in Field Botany or as a Core requirement for a certificate in Advanced Field Botany.*

# horticulture & gardening

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## RESIDENTIAL LANDSCAPE DESIGN

In this multi-session course appropriate for beginners, learn different aspects of the landscape design process with special emphasis on native plants in the residential landscape. Workshop sessions focus on design methods using site analysis techniques and schematic design tools. Consulting with the instructor, work on a project of your own choosing. Interspersed with design work, lectures focus on plants and habitats, including information on plant choice and placement in the landscape. A list of required materials will be discussed at the first class.

**Fee:** \$209 (Member) / \$235 (Nonmember)

**Limit:** 12

**Credit:** Core-HD; Elective-all certificates

*Choose one of two sections:*

**Saturdays, March 16, 23, 30, April 6, 13, 9:30 a.m.-12:30 p.m.**

Hitchcock Center, Amherst, MA

**Course Code:** HOR4004

**Instructor:** Melinda Reid, landscape designer, former partner, Little and Reid, Innovative Gardens

**Cosponsor:** Hitchcock Center for the Environment

**Thursdays, April 11, 18, 25, May 2, 9, 16, 23, 5:45-7:45 p.m.**

Cambridge, MA

**Course Code:** HOR4002

**Instructor:** Karen Sebastian, principal, Karen Sebastian, LLC, Landscape Architecture

**Cosponsor:** Cambridge Center for Adult Education



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## WATERGARDENS: THE VOICE OF OUR LANDSCAPE

Water is the key to life on this planet, yet it is the one resource we take most for granted. Trevor Smith shows how we can add water to our landscape in both large and small ways to reduce urban noise pollution, create habitat, attract wildlife, and create our own everyday getaway. Find out about different types of rainwater harvesting methods, and the many benefits of capturing and reusing storm water. In addition, learn about holistic swimming ponds and how easy they are to install in your garden.

**Thursday, April 4, 6:30-8:30 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** HOR4074

**Instructor:** Trevor Smith, landscape designer, LEED Green Associate, Land Escapes

**Fee:** \$26 (Member) / \$32 (Nonmember)

**Limit:** 20

**Credit:** Elective-HD/Adv.HD

**Cosponsor:** Ecological Landscaping Association

# horticulture & gardening

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## PRUNING SHRUBS WITH THE PROS

Early spring is an excellent time to prune many woody plants. In this hands-on workshop, participants work in small groups for guided practice on woody members of the Garden's shrub collection. Discover ways to enhance a plant's vigor, health, and appearance and learn which tools to use, when to prune, and how the plant responds. Bring hand-pruners and dress for working outdoors--rain, snow, or shine.

**Saturday, April 6, 1:30-4:30 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** HOR3115

**Instructor:** Deborah Howe, landscape architect, principal of Lighthall Co.

**Fee:** \$36 (Member) / \$43 (Nonmember)

**Limit:** 16

**Credit:** Elective-HD/Adv.HD

**Cosponsor:** MA Audubon Drumlin Farm

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## NATIVE HERBACEOUS PLANT MATERIALS: EARLY SEASON

Many native North American herbaceous plants are suitable for growing in New England. This course examines the characteristics of horticulturally important native plants that grow and/or flower early in the season. We look at how various species can be used in a designed landscape and how knowing a plant's native habitat can make us better gardeners and designers. For each class, we spend time both in the classroom and walking in the Garden. Designed for anyone wanting to work at a professional level with native plants, this course is also appropriate for the avid home gardener.

**Wednesdays, April 24, May 8, 12:30-4 p.m.,  
May 29, 12:30-3:30 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** HOR1000

**Instructor:** Jessie Panek, landscape designer

**Fee:** \$142 (Member) / \$167 (Nonmember)

**Limit:** 16

**Credit:** Core-HD; Elective-all certificates

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## LOW-MAINTENANCE DESIGN STRATEGIES USING NATIVE PLANTS

Learn how to design unique garden spaces that strengthen your connection to our wonderfully varied New England landscape. Discover important functional and aesthetic qualities of native plants that provide the building blocks for creating easy-care, sustainable gardens. Using strategies based on the observation and emulation of naturally existing plant communities, landscape designer Owen Wormser assists you in understanding key techniques for creating enjoyable, low-maintenance garden spaces. In this interactive format, you are encouraged to bring your ideas, along with photographs, plans, or sketches of your own property.

**Sunday, April 28, 1-4 p.m.**

Nasami Farm, Whately, MA

**Course Code:** HOR4045

**Instructor:** Owen Wormser, principal at Abound Design

**Fee:** \$36 (Member) / \$43 (Nonmember)

**Limit:** 16

**Credit:** Elective-HD/Adv.HD

**Cosponsor:** Hitchcock Center for the Environment



# horticulture & gardening



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## DEER-RESISTANT LANDSCAPING

Take your landscape off the menu at the deer café. There is no such thing as a deer-proof plant, but some come close. In this seminar, landscape designer Kathy Connolly presents ideas that will help your landscape become a “deer survivor.” Learn how to select the best plants for deer resistance, especially those among our New England natives. Learn about the products that work. Review fence ideas and their relative value. The seminar also touches on strategies for managing other uninvited critters.

**Monday, May 20, 6-8 p.m.**

Haddam, CT

**Course Code:** HOR6502

**Instructor:** Kathy Connolly, landscape designer, Advanced Master Gardener, principal, Speaking of Landscapes

**Fee:** \$40 (Member) / \$50 (Nonmember)

**Credit:** Elective-HD/Adv. HD

**Cosponsor:** Connecticut Master Gardeners

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## NATIVE SHRUB HEROES

Learn about plants that offer color and form to our landscapes, but also provide nourishment and habitat for birds, mammals, and insects. Find out which shrubs can replace any non-native invasive shrubs lingering in a back corner of your garden—burning bush anyone? Discover the reasons for going native in your plant selection, as Robin Wilkerson introduces you to a choice collection of beautiful and “well behaved” indigenous plants. Following a lecture and slide program, walk the Garden to see these shrubs in their early summer glory.

**Tuesday, June 4, 10 a.m.-1 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** HOR2112

**Instructor:** Robin Wilkerson, landscape designer

**Fee:** \$40 (Member) / \$48 (Nonmember)

**Limit:** 16      **Credit:** Elective-all certificates

**Cosponsor:** Ecological Landscaping Association

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## BONSAI FOR ALL

Create a living work of art using native plants and easy bonsai techniques. Join Dan Jaffe for a beginner’s bonsai workshop to create low maintenance, beautiful bonsai with methods that anybody can approach, regardless of past bonsai experience. While traditional bonsai gardening with high-maintenance non-native species can be very intensive, we focus on techniques that allow this practice to be available to everyone. Plants and pots are available at the Garden Shop at a discount; all other materials are included. Bring your favorite hand pruners if you have them.

**Thursday, June 6, 10 a.m.-1 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** HOR2957

**Instructor:** Dan Jaffe, Propagator and Stock Bed Grower, New England Wild Flower Society

**Fee:** \$46 (Member) / \$56 (Nonmember)

**Limit:** 16      **Credit:** Elective-HD/ Adv. HD



# horticulture & gardening

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## CONTAINER GARDENING WITH NATIVE PLANTS

Forget the petunias and potato vines; create container plantings using native perennials adapted to our New England environment. Learn which natives are ideal for containers and how to combine them effectively. First, explore design elements, container and plant selection, lighting requirements, temperature, growing media, irrigation, fertilization, overwintering, and long-term maintenance. Then assemble and plant your own container under the instructor's guidance. BYOC—bring your own container or purchase one at a discount at the Garden Shop that day. Fee includes potting mix and fertilizer for your container. Plants will be available at a discount to class participants.

**Tuesday, June 11, 1-3 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** HOR2950

**Instructor:** Carrie Waterman, gardener extraordinaire

**Fee:** \$30 (Member) / \$36 (Nonmember)

**Limit:** 16      **Credit:** Elective-HD/Adv.HD

**Cosponsor:** Cambridge Center for Adult Education

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## COMPOSTING 101: A BEGINNER'S LOOK AT THE WORLD OF COMPOSTING

Learn the basic hows and whys of backyard composting from Horticulturalist Nate McCullin, composting guru at Garden in the Woods. What can you compost and how much of it can you use? How do you monitor moisture and aeration, keep pesky critters away, kill weed seeds, and eliminate the need to buy potting soil every year? Join us for this fun and interactive learning session, and get all these questions answered and more. The class includes a lecture followed by a Garden walk, paired with hands-on demonstrations.

**Wednesday, June 12, 10 a.m.-12 noon**

Garden in the Woods, Framingham, MA

**Course Code:** HOR3911

**Instructor:** Nate McCullin, Horticulturalist and Facilities Coordinator, New England Wild Flower Society

**Fee:** \$26 (Member) / \$32 (Nonmember)

**Limit:** 16      **Credit:** Elective-HD/Adv.HD



# horticulture & gardening

## GARDENING WITH GRASSES OF THE NORTHEAST

Learn an aesthetic approach to the functional uses of ornamental grasses. Join Horticulturalist Nate McCullin as he weaves and winds through the propagation, care, functionality, and horticultural value of select native grasses. Learn how to select site-appropriate species that can help you manage storm water and erosion, create wind /view blocks, and provide habitat for wildlife. In addition to these ecological considerations, learn how to use grasses with a “designer’s eye” to extract all the color, form, and texture available within our native



palette. The class includes a lecture followed by a Garden walk, paired with hands-on demonstrations.

**Wednesday, July 10, 10 a.m.-12 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** HOR1078

**Instructor:** Nate McCullin, Horticulturalist and Facilities Coordinator, New England Wild Flower Society

**Fee:** \$26 (Member) / \$32 (Nonmember)

**Limit:** 16      **Credit:** Elective-HD/Adv.HD

## LANDSCAPE FOR LIFE

This two-day introductory course provides you with the knowledge, skills, and understanding to work with nature in your garden. Conventional gardens often work against nature, damaging the environment’s ability to clean air and water, reduce flooding, combat climate change and provide all the other natural benefits that support life on earth – including us. The good news is that even one home garden can begin to repair the web of life. Find out how it is possible to create a great-looking garden that is healthier for you, your family, your pets, and the environment, while saving you time and money. Learn techniques for working with soil, water, energy, and native plants to help make your garden more earth-friendly and sustainable. Bring a bag lunch each day.

**Tuesday, Wednesday, July 16, 17, 10 a.m.-3 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** HOR3720

**Instructor:** Mark Richardson, Horticulture Director, and Horticulture Staff, New England Wild Flower Society

**Fee:** \$75 (Member) / \$90 (Nonmember)

**Limit:** 16      **Credit:** Elective-HD

# horticulture & gardening



## A GARDENER'S CHALLENGE: GROWING TRILLIUMS, LADY'S-SLIPPERS, AND OTHER COMPLICATED SPECIES

Despite their reputation for being difficult to grow, many of our most beloved wildflowers can be grown successfully with a little inside knowledge. Dan Jaffe shares tips about some of the methods used at New England Wild Flower Society to grow such plants as lady's-slippers (*Cypripedium*), trilliums (*Trillium*), trailing-arbutus, (*Epigaea repens*), and other complicated genera and species. Emphasis is placed on creating the correct growing conditions for these species, allowing the plants to take care of themselves more successfully, without the constant attention that many of these plants are reputed to need. After the lecture, we walk the Garden to see these plants in place. Bring a bag lunch. Special discounts on the featured plants will be available in the Garden Shop that day.

**Tuesday, July 23, 10:00 a.m.-1:30 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** HOR2076

**Instructor:** Dan Jaffe, Propagator and Stock Bed Grower, New England Wild Flower society

**Fee:** \$46 (Member) / \$56 (Nonmember)

**Limit:** 16

**Credit:** Elective-HD/Adv.HD

## NATIVE HERBACEOUS PLANT MATERIALS: LATE SEASON

This course covers many of the best native North American herbaceous plants for New England landscapes and gardens, looking at those which bloom in the second half of the growing season. We focus on identification, cultural requirements, and how these species can be used effectively in designed and managed spaces. We take advantage of Garden in the Woods as our primary classroom, so be prepared for walking and weather. This course is a companion to HOR1000, but either can be taken separately.

**Wednesdays, July 31, August 21, 1-3:30 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** HOR1050

**Instructor:** Jessie Panek, landscape designer

**Fee:** \$70 (Member) / \$82 (Nonmember)

**Limit:** 16

**Credit:** Core-HD; Elective-all certificates

# horticulture & gardening

## RAIN GARDENS AND MORE

Rain gardens take advantage of the natural abundance of rainfall, rather than wasting it as runoff—using water flowing from roofs, driveways, or lawns to create beautiful gardens. Learn about additional rainwater-retention strategies such as bog gardens, roof gardens, swales, and terraces, tailored for particular situations or to solve problems such as erosion, icy walkways, or wet basements. With an inspirational slide program, we review design options, construction details, and case studies. Feel free to bring photos of a site issue to discuss. This course submitted for NOFA credits.

**Friday, August 9, 1-3 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** HOR4073

**Instructor:** Dori Smith, M.Ed., Designer, Gardens for Life, Acton, MA

**Fee:** \$26 (Member) / \$32 (Nonmember)

**Limit:** 16      **Credit:** Elective-HD/Adv.HD

**Cosponsors:** Cambridge Center for Adult Education and MA Audubon Drumlin Farm

## INTRODUCTION TO SEED SAVING

Learn the basics of harvesting, processing, cleaning, and storing a wide spectrum of native plant seeds in this hands-on workshop. Start with a discussion about the timing of collection, plant identification, determining ripeness, harvesting methods, processing techniques, and proper storage to maintain seed viability. Then venture out into Nasami Farm Sanctuary for some botanizing and seed collection. Returning indoors, we try our hands at cleaning and processing various types of seeds. Bring home the seeds that you clean, and learn first-hand the tremendous benefits that seed-saving brings to the willing gardener. Bring a bag lunch.

**Saturday, August 24, 10 a.m.-2 p.m.**

Nasami Farm, Whately, MA

**Course Code:** HOR3205

**Instructor:** Kate Stafford, Propagator and Operations Manager, New England Wild Flower Society

**Fee:** \$54 (Member) / \$65 (Nonmember) includes cost for seeds, supplies

**Limit:** 16      **Credit:** Elective-all certificates



# horticulture & gardening

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## CREATING AND SUSTAINING MEADOWS

Grasslands are plant communities that can create wonderful spatial interest in a landscape, especially in more natural settings. But they are challenging to sustain, and without regular maintenance, will succumb to successional dynamics. In this workshop, review the history and ecology of New England grasslands, consider the different demands of cool and warm season species, and discuss a range of management practices for sustaining grassy spaces. Wildflower species that can survive the rigors of grassland stewardship are also discussed. Following the classroom program, the discussion continues in the field where the instructor has experimented with meadow ecology for 25 years.

**Saturday, August 24, 10:00 a.m.-1:30 p.m.**

Tiverton Four Corners, RI

**Course Code:** HOR4302

**Instructor:** Garry Plunkett, conservation land manager

**Fee:** \$46 (Member) / \$56 (Nonmember)

**Limit:** 16

**Credit:** Elective-all certificates

**Cosponsor:** Rhode Island Wild Plant Society

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## DRAFTING DESIGN WORKSHOP

Gain knowledge and skills to apply to your own projects during this hands-on drafting workshop. Kristin DeSouza draws on her training in landscape architecture to teach you some useful drafting techniques. Using the Idea Garden at Garden in the Woods as a case study, we go into the field with drafting pens, notebooks, and a tape measure to record what we see. From here we draft a base map and practice putting a three-dimensional landscape into a two-dimensional plan and section.

**Tuesday, September 17, 10 a.m.-12 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** HOR1524

**Instructor:** Kristin DeSouza, Senior Horticulturalist

**Fee:** \$26 (Member) / \$32 (Nonmember)

**Limit:** 16

**Credit:** Elective-HD/Adv.HD

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## NATIVE WOODY PLANT MATERIALS

Native trees, shrubs, and woody vines can provide the year-round framework for our New England gardens. This course explores the diversity of our native woody species and their uses in home gardens and surrounding landscapes. We stress growth characteristics, cultural requirements, and best horticultural uses of the woody plants currently available in the trade. Which species grow well in heavy shade? Which can be used to support local wildlife and/or humans? Learn how to stagger your plantings for continuous bloom, fruit production and fall colors. This intensive class is structured to take your knowledge of woody species to the next level. It will serve anyone wanting to work at a professional level but is also appropriate for the avid home gardener. The course includes lectures and walks at the Garden as well as a field trip to the Arnold Arboretum. Bring a bag lunch each day.

**Tuesday, Wednesday, September 24, 25, 10 a.m.-2 p.m., Friday, September 27, 10 a.m.-1 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** HOR1100

**Instructor:** Dan Jaffe, Propagator and Stock Bed Grower, New England Wild Flower Society

**Fee:** \$144 (Member) / \$182 (Nonmember)

**Limit:** 16

**Credit:** Core HD; elective-all certificates

# horticulture & design trips

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## WILDFLOWER GARDEN AT HABITAT SANCTUARY

In his later years, Garden in the Woods founder, William Curtis, designed and installed a wildflower garden for Ruth Churchill's Belmont, MA estate. The property subsequently became part of Mass Audubon's Habitat Education Center and Wildlife Sanctuary. Learn how Habitat has integrated ecological landscaping techniques in managing the old estate gardens, discover the cultural and historical nature of the property, and hear plans for the future. We discuss how the gardens have changed, including the impact of invasive species, and the challenges and rewards of gardening with and for wildlife. Bring a hand lens and field guides if possible.

**Wednesday, May 8, 10 a.m.-12 p.m.**

Belmont, MA

**Course Code:** HDT1030

**Leader:** Sandy Vorce, Property Manager, MA Audubon Habitat; Jan Ford, Certificate Graduate, volunteer researcher of the Curtis plantings

**Fee:** \$15 (Member) / \$20 (Nonmember)

**Limit:** 16

**Credit:** Field-all certificates

**Cosponsor:** MA Audubon Habitat

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## STEWARDSHIP AND SUSTAINABILITY: GARDENS OF A COHOUSING COMMUNITY

Visit a beautiful, varied 20-acre residential landscape in a rural setting, where sustainable, organic practices have been used for 17 years. Learn from successes and mistakes: siting and establishing the most durable native shrubs, trees, and ground covers; maintaining organic lawns and wildflower meadows; controlling invasives; using compost, mulches, and weed

controls. Explore wildlife-friendly gardens made by residents; observe site water management systems (including rain gardens and barrels); see community produce gardens; and enjoy a short slideshow on building cohousing in our solar-powered community house. Discuss the future of sustainable design in an age of climate change and economic stress. Of interest to homeowners, landscape designers, land managers, and conservationists. Bring your lunch or food to share. Eligible for NOFA Organic Land Care re-accreditation credits.

**Saturday, May 18, 11:00 a.m.-2:30 p.m.**

New View Cohousing, West Acton, MA

**Course Code:** HDT1020

**Leader:** Dori Smith, community resident, landscape designer, owner/ Gardens for Life

**Fee:** \$42 (Member) / \$48 (Nonmember)

**Limit:** 20

**Credit:** Field-HD/Adv. HD

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## SPRING IN(TO) THE GARDEN

Visit a diverse and abundant garden as it comes to life in the spring. Be introduced to a variety of established native shrubs that provided cover and forage for birds in the winter. Discuss planting techniques, spring chores, and methods to divide perennials and propagate shrubs. This combination garden walk and gardening workshop is set in a beautiful two-acre garden that includes a native plant woodland, a large vegetable garden and orchard, an herb garden and diverse perennial beds. No one goes home without a plant in hand!

**Sunday, June 2, 2-4 p.m.**

Lincoln, MA

**Course Code:** HDT1042

**Leader:** Robin Wilkerson, gardener extraordinaire

**Fee:** \$24 (Member) / \$28 (Nonmember)

**Limit:** 20

**Credit:** Field-HD/Adv.HD

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# horticulture & design trips



## AN ESTATE GARDEN IN WELLESLEY

The 39-acre Walter Hunnewell Estate, with its ten-acre Pinetum, was started in 1851 and has some of the tallest and oldest evergreen trees of their kind in the United States. Founder H.H. Hunnewell was determined to collect every conifer, native and foreign, that was sufficiently hardy to survive the New England climate. Practicing horticulture for nearly six decades on his Wellesley estate, he amassed a huge collection of evergreens and was perhaps the first person to cultivate and popularize rhododendrons in the United States. Tour the property to see an astounding array of woody plants, including masses of rhododendrons in full spring bloom, and the renowned “Italian Garden” of giant topiary trees along the shores of Lake Waban.

**Wednesday, June 5, 10 a.m.-12 p.m.**

Wellesley, MA

**Course Code:** HDT1033

**Leader:** David Dusenbury, Estate Horticulturalist and Superintendent

**Fee:** \$24 (Member) / \$28 (Nonmember)

**Limit:** 20

**Credit:** Field-HD/Adv.HD

## POND RENOVATION

Considering a pond renovation or construction project? Benefit from the experience of the staff of Perkins School for the Blind, who undertook a major pond renovation project beginning in 2006. Hear about the ongoing process six years in, which has involved invasive plant removal, dredging to increase pond area and depth, landscaping plans to include natives, a fountain, a bridge and a natural walkway for students to enjoy. We begin with a powerpoint presentation documenting the process, and follow with a walk around the pond and over the new bridge. Bring a brown bag lunch to enjoy afterwards, with an optional tour of the greenhouses. This course has been submitted for NOFA certification.

**Saturday, June 29, 10 a.m.-1 p.m.**

Watertown, MA

**Course Code:** HDT1043

**Leader:** Sonia Baerhuk, Head Groundsperson, Perkins School for the Blind

**Fee:** \$36 (Member) / \$41 (Nonmember)

**Limit:** 20

**Credit:** Field-HD/Adv.HD

**Cosponsor:** Ecological Landscaping Association



# horticulture & design trips

## Maine Coast Gardens

### ETHNOBOTANICAL HERB GARDEN

Avena Botanicals Medicinal Herb Garden, a three-acre garden of unique beauty, contains more than 150 different species of herbs and woody plants from all over the world. Each herb, flower, vine, shrub and tree is planted for its edible and medicinal uses and to attract plant pollinators. Winding paths; large plantings of herbs in varied habitats of woodland, wetlands, meadows; annual production beds; benches for meditation; handmade gates and arbors—all create a large and impressive garden of healing plants. Herbalist Deb Soule and Heather McCargo designed this garden in 1997 and it was featured in *Martha Stewart Living* in the summer of 2012.

**Tuesday, July 9, 1-3 p.m.**

Rockland, ME

**Course Code:** HDT4008

**Leader:** Heather McCargo, landscape designer, former propagator, New England Wild Flower Society

**Fee:** \$24 (Member) / \$28 (Nonmember)

**Limit:** 20      **Credit:** Field-HD/Adv.HD

### BLUE HILL PENINSULA

With a dramatic jagged coastline along Maine's midcoast region, Blue Hill Peninsula offers

stunning natural beauty along with a rich cultural and artistic history. Join this tour of three beautiful landscapes with diverse botanical interest. We start in a private garden in Blue Hill, surrounded by evergreen forest. Designed almost exclusively with native species, the garden includes a woodland, meadow, wet area, and lots of native trees, shrubs, perennials and groundcovers. Next we venture through Buck's Harbor for a short but dramatic climb up John B Mountain, managed by the Blue Hill Heritage Trust. We enjoy a box lunch, surrounded by huckleberries and spruce trees, with an incredible view of the Penobscot Bay. After lunch and a little exploration, we continue to inspiring Four Season Farm, owned by writers and celebrated gardening experts Eliot Coleman and Barbara Damrosch. Four Season Farm grows fresh vegetables year-round and is a nationally-recognized model of small-scale sustainable agriculture. Tour the home garden, farm greenhouses, vegetable beds, chicken and pig pastures, and farm stand.

**Wednesday, July 10, 9:30 a.m.-4:30 p.m.**

Blue Hill, ME

**Course Code:** HDT4009

**Instructor:** Heather McCargo, landscape designer, former propagator, New England Wild Flower Society

**Fee:** \$72 (Member) / \$86 (Nonmember) includes a box lunch

**Limit:** 20      **Credit:** Field-HD/Adv.HD





# horticulture & design trips

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## ONE ACRE IN THE WOODS

Join certified arborist and landscape designer Jim McSweeney for an in-depth look at his own home landscape. Implementation of the landscape design began in 2003 after construction of an off-the-grid solar-powered house. The major goal was to preserve the integrity of the existing forested landscape, while providing for vegetable gardens, fruit trees, animals and perennial beds. Last spring a new tall grass and native wildflower meadow and a dwarf heirloom apple tree orchard were added. With predominately native plants, this low-maintenance landscape features four seasons of interest. Discuss several components of the design, including plants, hardscaping, siting of structures, cultural conditions, and the balance between form and function. Bring a bag lunch.

**Saturday, July 13, 11 a.m.-2 p.m.**

Chesterfield, MA

**Course Code:** HDT2012

**Leader:** Jim McSweeney, owner of Hilltown Tree and Garden

**Fee:** \$36 (Member) / \$42 (Nonmember)

**Limit:** 20

**Credit:** Field-HD/Adv. HD

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## TURKEY HILL BROOK FARM

Visit this four-acre central MA horse farm landscaped as a sanctuary for farm animals, people, and wildlife. Homeowners Ellen and Robert Sousa have "rehabbed" their farm's landscaping using sustainable gardening methods, removing invasive plants, and encouraging native plants to grow as food and housing for birds, pollinators, amphibians and other wildlife. The bird and butterfly borders and pondside gardens should be in full bloom. Please wear comfortable shoes - some terrain is hilly.

**Saturday, August 17, 10:30 a.m.-12:30 p.m.**

Spencer, MA

**Course Code:** HDT2015

**Leader:** Ellen Sousa, landscaper, author, *The Green Garden*

**Fee:** \$24 (Member) / \$28 (Nonmember)

**Limit:** 20

**Credit:** Field-HD/Adv. HD

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## HISTORIC HOMES AND GARDENS

Join a specially-arranged, insider tour of Historic New England's Sarah Orne Jewett House and Hamilton House - and their beautiful period landscapes. We start at the Sarah Orne Jewett House, the stately Georgian residence of the famous author. The gardens contain borders and pots of heirloom varieties, many of which were described by Jewett in her writings, and an herb garden featuring those cited in her masterpiece, *The Country of the Pointed Firs*. The tour continues at the nearby Hamilton House, a striking riverside mansion built by shipping merchant Jonathan Hamilton in 1785. The picturesque landscape includes an elaborate Colonial Revival perennial garden and charming garden cottage. Please bring a bag lunch.

**Wednesday, September 11, 10:30 a.m.-4:00 p.m.**

South Berwick, ME

**Course Code:** HDT4010

**Leaders:** Nancy and Gary Wetzel, garden historians and landscape designers

**Fee:** \$65 (Member) / \$80 (Nonmember)

**Limit:** 24

**Credit:** Field-HD/Adv. HD

**Cosponsor:** Coastal Maine Botanical Gardens

# botany & conservation

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## THE SECRET LIVES OF MOSSES

Join us for a journey into the miniature world of mosses. Learn about moss biology and anatomy, see how mosses differ from other plants, and understand how they affect and are affected by their environment. Identify several common, distinct species at Garden in the Woods, which are also likely found in your own backyard. Come away with a new appreciation for the plant kingdom and some of its tiniest members.

**Friday, March 22, 10:30 a.m.-2:30 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** BOT3637

**Instructor:** Stephanie Stuber, Curatorial Fellow, Arnold Arboretum of Harvard University

**Fee:** \$53 (Member) / \$64 (Nonmember)

**Limit:** 12

**Credit:** Elective-all certificates



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## CLIMATE CHANGE COMES TO THOREAU'S CONCORD: IMPACTS ON WILDFLOWERS, BIRDS, AND BUTTERFLIES

The timing of leaf-out in the spring and leaf-fall in autumn is being actively studied by scientists looking at the effects of a changing climate. Learn more about the study of leaf phenology (study of recurring biological phenomena and their relationship to weather) in this illustrated talk. Hear about on-going research that builds on Thoreau's observations in Concord in the 1850s, and recent observations of leaves in Japan and at the Arnold Arboretum.

**Monday, April 8, 6:30-8:30 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** BOT5206

**Instructor:** Richard Primack, Ph.D, Professor of Biology, Boston University

**Fee:** \$20 (Member) / \$22 (Nonmember)

**Limit:** 30

**Credit:** Elective-all certificates

**Cosponsors:** Arnold Arboretum of Harvard University, MA Audubon Drumlin Farm

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## FORECASTING THE FUTURE

Can ecologists predict the fate of plant and animal populations? Learn how plant ecologists are monitoring populations to predict the way species will respond to changes in habitat management, climate, and more. Hear about successes and failures in forecasting the futures of different plant populations, and how ecologists go about the science of fortune-telling.

**Tuesday, April 16, 6:30-7:30 p.m.**

Arnold Arboretum, Jamaica Plain, MA

**Course Code:** LEC1026

**Instructor:** Elizabeth Crone, Ph.D, Senior Ecologist, Harvard Forest

**Free lecture:** Preregistration required

**Cosponsors:** Arnold Arboretum of Harvard University, Harvard Forest

# botany & conservation



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## WILDFLOWERS OF NEW ENGLAND

A great way to begin the study of native plants, this course focuses on learning to identify wild plants and provides field experience across the spectrum of New England flora. Sessions will cover plant identification using *Newcomb's Wildflower Guide*. Students will become familiar with family characteristics, growth patterns, habitats, and pollination mechanisms of many of our native wildflowers. Practice plant identification and study plant habitats in the field. Bring a hand lens to each class. Required text: *Newcomb's Wildflower Guide*.

Garden in the Woods, Framingham, MA

**Instructor:** Neela de Zoysa, botanist, author

**Fee:** \$142 (Member) / \$167 (Nonmember)

**Limit:** 16

**Credit:** Core-FB or HD

*Choose one of two sections:*

**Tuesdays, April 23, 30, May 14, 21, 10:00 a.m. 12:30 p.m.**

**Course Code:** BOT3000

**Tuesdays, April 23, 30, May 14, 6:30-9:00 p.m.; Saturday, May 25, 10:00 a.m.-12:30 p.m.**

**Course Code:** BOT3001

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## PLANTS OF NEW ENGLAND: A HISTORY IN DEEP TIME

Celebrated as a land of marble and granite, the bedrock of New England also includes patches of sedimentary rock that document ancient landscapes and vegetation. From Earth's deep Precambrian past dominated by bacterial photosynthesis, through the early history of land plants and tropical coal swamps of the Carboniferous Period, and on to warm temperate forests of 25 million years ago and conifer forests established as ice age glaciers melted, New England rocks and fossils shed light on our region's deep photosynthetic past.

**Wednesday, April 24, 7:00-8:30 p.m.**

Arnold Arboretum, Jamaica Plain, MA

**Course Code:** LEC1027

**Instructor:** Andrew Knoll, Ph.D, Professor of Natural History and Professor of Earth and Planetary Sciences, Harvard University; Curator of Paleobotanical Collections, Harvard University Herbaria

**Fee:** Free for members/ \$10 (Nonmember)

**Cosponsor:** Arnold Arboretum of Harvard University

# botany & conservation

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## **SPRING WILDFLOWERS OF THE NORTHEAST: A NATURAL HISTORY**

The wildflowers that brighten our woodlands in spring are more than just a delight for the eye and a lift for the winter-weary spirit. Each has a role in the environment, with often interesting interactions with pollinators and seed dispersers. Learn about the life histories of some of your favorite spring wildflowers. Topics include adaptations for early blooming, medicinal and other uses, the origin of wildflower names, pollination and seed dispersal, and the latest scientific research on these beautiful plants. Following the lecture and book signing, enjoy an optional docent-led walk through Garden in the Woods in its early spring glory.

**Sunday, April 28, 1:30-3:00 p.m.**

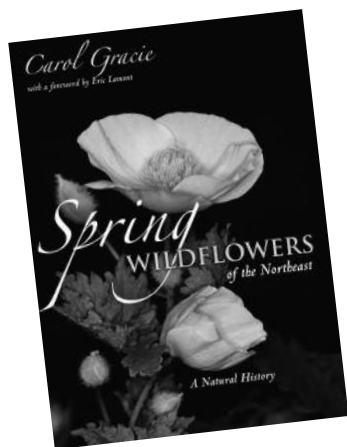
Garden in the Woods, Framingham, MA

**Course Code:** LEC1029

**Instructor:** Carol Gracie, author, *Spring Wildflowers of the Northeast: A Natural History*

**Fee:** \$15 (Member) / \$18 (Nonmember)

**Cosponsors:** Arnold Arboretum of Harvard University, Ecological Landscaping Association, MA Audubon Drumlin Farm, Tower Hill Botanic Garden



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## **MYCORRHIZAL SYMBIOSES AND ECOSYSTEM FUNCTION**

Mutualistic associations between plant roots and soil fungi are very common—found in the vast majority of terrestrial plants. Plants benefit from increased nutrient and water uptake, and also from increased protection from root pathogens. Recent research has shown that the symbiosis also promotes higher diversity and productivity within plant communities. Learn about the structure and functioning of mycorrhizal symbioses and the potential for their application and management.

**Tuesday, April 30, 10 a.m.-12 p.m.**

Arnold Arboretum, Jamaica Plain, MA

**Course Code:** LEC1028

**Instructor:** John Klironomos, Professor of Biology, University of British Columbia - Okanagan

**Fee:** \$25 (Member) / \$30 (Nonmember)

**Credit:** Elective-all certificates

**Cosponsors:** Arnold Arboretum of Harvard University, Ecological Landscaping Association, Boston Mycological Club

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## **RANUNCULACEAE FAMILY**

Enjoy meeting members of the spring-blooming buttercup family, or Ranunculaceae, growing at Garden in the Woods. We start with images and a description of the attributes of this broad family group, including a demonstration of *Go Botany* to see the various genera and new members now included. Then walk the Garden to visit baneberries, anemones, meadow rues, columbines, marsh-marigolds, goldenseals and more. Understand why they might be related to, and how they differ, from each other.

**Tuesday, May 7, 9:30 a.m.-12:30 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** BOT2311

**Instructor:** Carol Govan, botanist

**Fee:** \$40 (Member) / \$48 (Nonmember)

**Limit:** 16

**Credit:** Core-Adv.FB; Elective-all certificates

# botany & conservation



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## FIELD IDENTIFICATION TECHNIQUES

This course is designed to equip students with the skills to identify plants in the field. See a variety of floral structures, learn to recognize reliable family characteristics, and develop familiarity with botanical Latin, advancing from using amateur field guides to using professional keys. Designed for students who have taken “Wildflowers of New England” or have previous experience identifying wildflowers, the course increases your confidence and skill in field identification. Bring a hand lens and a bag lunch. Information on required texts will be sent upon registration.

**Saturdays, May 18, June 8, 10 a.m.-4 p.m.**

Norcross Wildlife Sanctuary, Monson, MA

**Course Code:** BOT2008

**Instructor:** Leslie Duthie, botanist

**Fee:** \$190 (Member) / \$228 (Nonmember)

**Limit:** 16

**Credit:** Core-FB/Adv.FB; Elective-all certificates

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## NATIVE NEW ENGLAND SHRUBS

The many species of native New England shrubs display a wide variation in size, shape, color, and characteristics of bark, flowers, and fruits. This course introduces students to about 50 species growing in this region. We emphasize identification and familiarity with family characteristics and historic uses. Bring a hand lens to each session. Weekend sessions are held in locations off-site with directions provided during the first class.

Garden in the Woods, Framingham, MA and field sites

**Instructor:** Roland “Boot” Boutwell, naturalist  
**Fee:** \$215 (Member) / \$258 (Nonmember)

**Limit:** 16

**Credit:** Core-FB or HD; Elective-all certificates

*Choose one of two sections:*

**Wednesdays, May 29, June 5, 12, 6:30-8:45 p.m.; Saturdays, June 1, 8, 9:00 a.m.-1:30 p.m.**

**Course Code:** BOT3300

**Cosponsor:** MA Audubon Drumlin Farm

**Thursdays, September 5, 12, 19, 6:30-8:45 p.m.; Sundays, Sept. 8, 15, 9:00 a.m.-1:30 p.m.**

**Course Code:** BOT3301

# botany & conservation

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## SPRING GRASSES OF NEW ENGLAND

Learn the simple way of identifying these beautiful and important plants that are all around us. Though many manuals require an understanding of technical terms and an examination of minute flower structures, this is not necessary. In fact, you don't even need a hand lens. Learn to recognize common species in the area and how to pursue identification on your own. Our field trip focuses on grasses that flower in the spring, as opposed to those seen in the fall.

**Thursday, May 30, 5:30-7:00 p.m.,**

**Saturday, June 1, 9:00-11:00 a.m.**

Yale Peabody Museum, New Haven, CT and local field site

**Course Code:** BOT3509

**Instructor:** Lauren Brown, author, *Grasses: an Identification Guide*, and *Weeds and Wildflowers in Winter*

**Fee:** \$42 (Member) / \$49 (Nonmember)

**Limit:** 12

**Credit:** Elective-all certificates

**Cosponsor:** Yale Peabody Museum

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## NEW ENGLAND PLANT COMMUNITIES

The diversity of plant communities in New England is truly astounding, including multiple forest types, freshwater wetlands, coastal dunes, grasslands, heathlands, tidal marshes, and montane communities. Understanding the dominant canopy species, indicator species, and range helps us to interpret our own landscape's ecological identity. Lectures cover effects of soils, topography, moisture, geological conditions, and glaciation. Field trips to study the composition and structure of some distinctive plant communities complement the lectures. Extensive handouts included.

**Thursdays, June 6, 13, 20, 6:30-8:30 p.m.;**

**Saturdays, June 8, 15, 10 a.m.-2 p.m.**

Garden in the Woods, Framingham, MA and field sites

**Course Code:** BOT4000

**Instructor:** Pat Swain, Community Ecologist, MA Natural Heritage Endangered Species Program

**Fee:** \$227 (Member) / \$267 (Nonmember)

**Limit:** 16

**Credit:** Core-FB; Elective-all certificates

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## ERICACEAE FAMILY

Many different members of the Ericaceae, or heath family, thrive in New England's acidic soils. We start with images and a description of the attributes of this family, including a demonstration of *Go Botany* to see the various genera. We then walk the Garden to visit the azaleas, rhododendrons, blueberries, cranberries, leatherleaf, highland dog-laurel, and more, also looking for evidence of nectar thieves and buzz pollination.

**Tuesday, June 18, 9:30 a.m.-12:30 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** BOT2312

**Instructor:** Carol Govan, botanist

**Fee:** \$40 (Member) / \$48 (Nonmember)

**Limit:** 16

**Credit:** Core-Adv.FB; Elective-all certificates

**Cosponsor:** Arnold Arboretum of Harvard University



# botany & conservation

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## BATS IN THE BALANCE

Bats provide important ecosystem services including flower pollination, seed dispersal and consumption of herbivorous arthropods. Here in New England, white-nose syndrome has decimated populations of hibernating bat species, threatening the equilibrium of natural and agricultural systems. Receive an introduction to the fascinating world of bats as well as a critical look at conservation concerns affecting our local bat species. An interactive lecture will be followed by a walk to look and listen for bats using a thermal imaging camera and a bat detector that picks up echolocation calls. Depending on conditions, we will set up a net and hope to catch some bats. Dress for the weather and bring a headlamp or flashlight if possible.

**Tuesday, June 18, 7:30-9:30 p.m.**

**(Rain date: Wednesday, June 19, 7:30-9:30 p.m.)**

Garden in the Woods, Framingham, MA

**Course Code:** BOT5043

**Instructor:** Elizabeth Braun de Torrez, Center for Ecology and Conservation Biology, Boston University

**Fee:** \$26 (Member) / \$32 (Nonmember)

**Limit:** 24      **Credit:** Elective-all certificates

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## FORGOTTEN PLANTS THAT SAVED HUMANITY

The search for alternative, remote, or historical food sources is an emerging field of interest. Hear about a visually rich study of locally common plants that have been relied on as so called “famine foods” in New England and worldwide as well. Representative food sources include all types of plants: lichens, sea algae, ferns, perennial plants, and trees.

**Wednesday, June 19, 12:00-1:30 p.m.**

**Brown bag lunch at noon, program at 12:30 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** LEC1025

**Instructor:** Arnon Vered, artist and naturalist

**Free lecture:** Preregistration required

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## SURVEY OF GRASSES OF THE NORTHEAST

This workshop focuses on the grasses which are in identifiable condition in late spring and early summer. Key identification characteristics are given for 10 tribes and about 60 genera of common grasses using dried specimens and microscope displays. Following a morning session of lecture and observation of plant materials, there is an afternoon field trip to observe as many grasses as can be found in the time available. Students are expected to have a good understanding of basic botanical nomenclature and concepts for this upper level class. Bring a bag lunch and a good 10x to 15x hand lens.

**Thursday, June 20, 9 a.m.-3 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** BOT3516

**Instructor:** Dennis Magee, author, environmental consultant

**Fee:** \$77 (Member) / \$91 (Nonmember)

**Limit:** 16

**Credit:** Core-Adv.FB; Elective-all certificates

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# botany & conservation



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## DRAGONFLIES AND DAMSELFLIES

From their pond-bottom beginnings to their brief but beautiful aerial lives, dragonflies and damselflies add winged drama to our gardens. This beginner's class introduces their characteristics from head to tail and wingtip to wingtip. Learn to tell the damsels from the dragons, the males from the females, and which of our most common species we can expect to find during which months. Following a brief presentation, walk the Garden to look for such creatures as pond damsels, green darners, blue dashers, and golden amberwings.

**Sunday, June 23, 1:30-3:00 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** BOT5042

**Instructor:** Jini Foster, naturalist

**Fee:** \$20 (Member) / \$22 (Nonmember)

**Limit:** 16

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## CONTROLLING INVASIVES AT HOME

Take control of your home landscape with information and tips from the Society's invasive plant expert. Receive an introduction to about 30 of the most common invasive non-native plants in our local landscapes. Through lecture, discussion, powerpoint presentation, herbarium specimens, and a visit to a local invasive control site, become familiar with identification clues, as well as the habits of a number of these plants that are so disruptive to natural ecosystems. Discuss management techniques for many of these species, on both a home and a landscape scale. The *Invaders* issue of the Society's magazine, as well as the *MA Field Guide to Invasives*, will be available for purchase at a discount.

**Friday, July 12, 9 a.m.-3 p.m.**

Garden in the Woods, Framingham, MA and local site

**Course Code:** BOT5126

**Instructor:** Ted Elliman, Senior Botanist, New England Wild Flower Society

**Fee:** \$66 (Member) / \$80 (Nonmember)

**Limit:** 16

**Credit:** Elective-all certificates



# botany & conservation

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## INTRODUCTION TO PLANT FAMILIES

Rosaceae, Liliaceae, Violaceae, Ericaceae. . . Expand your understanding of New England's wild plants by learning interesting clues about their family relationships. Use microscopes and walk the Garden to study real plants and find diagnostic characteristics. Examine plants belonging to several families of woody and herbaceous plants to observe their similarities and differences. Learn basic formulas for plant structure and how to apply these to other families encountered. Handouts will be provided before class begins, so novices can become familiar with basic botanical terminology included in *Go Botany* and *Newcomb's Wildflower Guide* which will help you enjoy looking at plant structure. Bring lunch and a hand lens to class.

**Saturdays, July 13, 20, 27, 10 a.m.-2 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** BOT2260

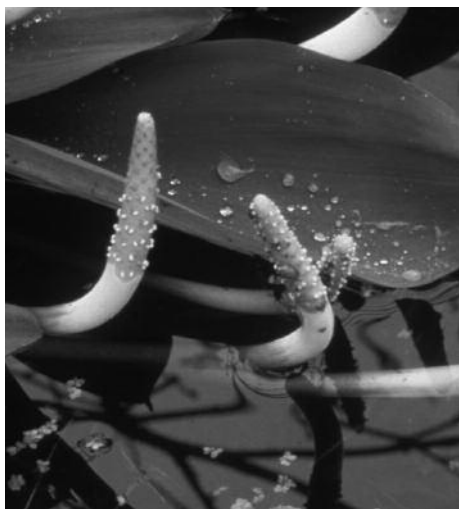
**Instructor:** Carol Govan, botanist, artist

**Fee:** \$180 (Member) / \$216 (Nonmember)

**Limit:** 16

**Credit:** Core-FB; Elective-all certificates

**Cosponsor:** Arnold Arboretum of Harvard University



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## NATURAL COMMUNITIES OF MAINE

Become familiar with Maine's characteristic assemblages of plants, their defining physical environments, and the natural processes that affect them. In the classroom and in the field, learn the differences between community types such as salt marshes, red maple swamps, northern hardwood forests, bogs, and floodplain forests. Find out which common plants occur in each natural community type, and what plant adaptations are key to competing successfully in the various communities. The primary reference for this course will be *Natural Landscapes of Maine: A Guide to Natural Communities and Ecosystems* by Susan Gawler and Andrew Cutko. Bring lunch and wear sturdy shoes that can get wet.

**Friday, July 26, Saturday, July 27, 10 a.m.-4 p.m.**

Boothbay, ME and local field sites

**Course Code:** BOT4004

**Instructor:** Ted Elliman, Senior Botanist, New England Wild Flower Society

**Fee:** \$100 (Member) / \$120 (Nonmember)

**Credit:** Core-Adv.FB; Elective-FB

**Cosponsor:** Coastal Maine Botanical Gardens

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## PTERIDOPHYTES IN VERMONT

The Montshire Museum, which abuts the Connecticut River, has extensive grounds with a limey geology that enhances plant biodiversity. We visit the extensive variety of ferns, club-mosses, and horsetails, and explain how to identify each of them. We begin the class with indoor instruction using slides of drawings and photographs. Wear long pants and bring bug spray, a hand lens, and lunch.

**Saturday, July 27, 10 a.m.-2 p.m.**

Montshire Museum, Norwich, VT

**Course Code:** BOT3444

**Instructors:** Don Lubin, Ray Abair, fern enthusiasts

**Fee:** \$46 (member) / \$56 (Nonmember)

**Limit:** 16      **Credit:** Elective-all certificates

**Cosponsor:** Montshire Museum of Science

# botany & conservation

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## DISCOVERING NATIVE FERNS

Learn to identify and distinguish between the 21 or so of the most common ferns of New England. Through lecture, slides, drawings, and microscopic examination of fresh material, become familiar with around 95% of the ferns you will see in the woods. We end with a tour of these ferns in the Garden. Bring lunch and a hand lens if you have one.

**Saturday, August 3, 10:00 a.m.-2:30 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** BOT3410

**Instructors:** Don Lubin, Ray Abair, fern enthusiasts

**Fee:** \$60 (Member) / \$72 (Nonmember)

**Limit:** 16      **Credit:** Elective-all certificates

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## BOTANIC INVENTORY METHODS

Learn how to inventory the flora and describe the vegetation communities on public and private land for the purpose of conservation planning and management. The evening session covers the elements of field preparation: maps, aerial photography, GPS units, field equipment, data sheets, rare plant and community documentation, and the fundamentals of state and national vegetation community classification systems. The field investigation includes sampling a variety of forest and meadow communities, applying data on geology, soils, and hydrology as well as information on species associations. Practice the application of rapid and comprehensive sampling techniques. Sturdy footgear is recommended, as are a compass and hand lens. Bring a bag lunch for the field session.

**Thursday, August 15, 6:30-8:30 p.m.; Friday, August 16, 10 a.m.-4 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** BOT2050

**Instructor:** Ted Elliman, Senior Botanist, New

England Wild Flower Society

**Fee:** \$112 (Member) / \$146 (Nonmember)

**Limit:** 16      **Credit:** Core- FB; Elective-Adv.FB

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## GO BOTANY: EVEN BIGGER, EVEN BETTER!

New England Wild Flower Society's *Go Botany* web tool represents the new, cutting edge in plant identification for our region and beyond. Whether or not you have used our amazing online flora, you'll want to experience all of *Go Botany's* newest features. Learn to identify all 3500 taxa in our region. See how to integrate *Go Botany's* many resources into your botanizing, landscape design, teaching, and other activities. Discover brand new features, including our innovative, interactive dichotomous key and *PlantShare*, a collaborative network where plant enthusiasts can share discoveries, ask questions of each other, and create customized checklists of plants. Bring your computer, tablet, or iPhone and see all that *Go Botany* can do for you!

**Instructor:** Elizabeth Farnsworth, Senior Research Ecologist, New England Wild Flower Society

**Free program:** Preregistration required

*Choose one of two sections:*

**Friday, September 6, 1:00-3:00 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** LEC5006

**Sunday, September 8, 1:00-3:00 p.m.**

Nasami Farm, Whately, MA

**Course Code:** LEC5005

# botany & conservation



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## **SURVEY OF LATE SEASON GRASSES OF THE NORTHEAST**

This workshop focuses on the grasses which are in identifiable condition in late summer and early fall. Key identification characteristics are given for 10 tribes and about 60 genera of common grasses using dried specimens and microscope displays. Following a morning session of lecture and observation of the plant materials, there is an afternoon field trip to observe as many grasses as can be found in the time available. Students are expected to have a good understanding of basic botanical nomenclature and concepts for this higher level class. Bring a bag lunch and a good 10x to 15x hand lens.

**Thursday, September 12, 9 a.m.-3 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** BOT3517

**Instructor:** Dennis Magee, author, environmental consultant

**Fee:** \$77 (Member) / \$91 (Nonmember)

**Limit:** 16

**Credit:** Core-Adv.FB; Elective-all certificates

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## **PLANT FORM AND FUNCTION**

This course, formerly known as “Basic Botany,” provides an introduction to general plant anatomy and physiology. Students are introduced to the plant kingdom through slides and live materials. Microscopic study allows for detailed observation of roots, stems and leaves, and their component tissues. Examination of flowers, fruits, and seeds reveals the details of pollination, fertilization, dispersal and germination, emphasizing the relationship between plant form and function.

**Thursdays, September 19, 26; October 3, 10, 17, 24, 6:30-9:00 p.m.**

Bentley University, Waltham, MA

**Course Code:** BOT1000

**Instructor:** Nancy Eyster-Smith, Ph.D, botanist

**Fee:** \$230 (Member) / \$276 (Nonmember)

**Limit:** 16

**Credit:** Core-FB or HD; Elective-all certificates

# field trips



## ESTABROOK WOODS

Explore this glacially-carved landscape of mature woodland, swampland, and ponds supporting locally rare plants, exemplary natural communities, and many layers of historic significance. Its 1200+ acres comprise the largest contiguous, undeveloped woodland tract in suburban Boston. Early spring walks reveal violets, bloodroot, trout lilies, marsh marigolds, Jack-in-the-pulpit, and a menagerie of fiddleheads. Drumlins, eskers, stonewalls, mill races and streams, quiet ponds, an historic kiln, beaverworks, and historic foundations offer layers of discovery along the way.

**Sunday, April 14, 1:30-4:30 pm**

Concord, MA

**Course Code:** FDT1119

**Leader:** Cherrie Corey, naturalist and photographer

**Fee:** \$28 (Member) / \$35 (Nonmember)

**Limit:** 18      **Credit:** Field-FB/Adv.FB

## FOREST FORENSICS IN BLACK GUM SWAMP

Join Tom Wessels for an interpretive hike in an area he describes as “the most exemplary site I know for reading landscape histories.” This town forest has old-growth, black gum trees over 600 years in age. Identify logging and wind histories, and explore a site with a very complicated history. Learn how to develop a “disturbance chronology” to identify each stand-altering event, and date those events by decade at this site. For this gentle half-mile walk over moderate terrain, bring water and light snacks.

**Saturday, April 27, 10 a.m.-1 p.m.**

Vernon, VT

**Course Code:** FDT5013

**Leader:** Tom Wessels, professor emeritus, Antioch University New England, author, *Reading the Forested Landscape*

**Fee:** \$46 (Member) / \$56 (Nonmember)

**Limit:** 20      **Credit:** Field-FB/Adv.FB

## BOTANY TRAIL AT FLANDERS NATURE CENTER

Enjoy the wonders of native wildflowers found on this mile-long trail through 45 acres of mixed woodland with vernal pools and streams. Look for blue phlox and creeping phlox, spring beauty, bloodroot, marsh marigold, Dutchman’s breeches, and four varieties of trillium. Bring your favorite guide book, as there are more than 150 wildflowers documented on this trail. Bring a lunch to enjoy after the walk, and then explore the trails to the Art Studio and the Sugar House at the Van Vleck Sanctuary.

**Saturday, May 4, 10 a.m.-12 p.m.**

Woodbury, CT

**Course Code:** FDT6022

**Leader:** Lucinda Hunt, naturalist, Flanders Nature Center and Land Trust

**Fee:** \$21 (Member) / \$25 (Nonmember)

**Limit:** 20      **Credit:** Field-FB/Adv.FB

# field trips

## SPRING ON MOUNT TOBY

Explore this interesting area, composed of sedimentary Mt. Toby conglomerate, with rocky streams and rich forests that harbor many early spring wildflowers. Search for leatherwood (*Dirca palustris*), hepatica (*Anemone* spp.), early blue cohosh, (*Caulophyllum giganteum*), blue cohosh (*Caulophyllum thalictroides*), and lance-leaved twistedstalk (*Streptopus lanceolatus*), among others. Look at the changing habitats, and discuss what might be causing these changes. Dress for the weather, and bring water, lunch, and binoculars if you have them.

**Sunday, May 5, 12-4 p.m.**

Leverett, MA

**Course Code:** FDT2034

**Leader:** Nancy Goodman, naturalist

**Fee:** \$15 (Member) / \$20 (Nonmember)

**Limit:** 12      **Credit:** Field-FB/Adv.FB

**Cosponsor:** Hitchcock Center for the Environment

## PONEMAH BOG

The centerpiece of a 75-acre sanctuary in southern New Hampshire, Ponemah Bog is less than an hour's drive from Boston. In the middle of the property is a three-acre kettle hole pond, encircled by a floating mass of sphagnum. The pond and bog are easily accessible by a narrow boardwalk, which includes spur trails to three viewing platforms. We expect to see rhodora (*Rhododendron canadense*) in bloom as well as blueberries (*Vaccinium* spp.), cottongrass (*Eriophorum* spp.), and bog plants, including pitcherplants, sundews and tamaracks. Bring a bag lunch as well as a hand lens if you have one.

**Tuesday, May 14, 10 a.m.-2 p.m.**

Amherst, NH

**Course Code:** FDT1092

**Leader:** Roland "Boot" Boutwell, naturalist

**Fee:** \$38 (Member) / \$46 (Nonmember)

**Limit:** 10      **Credit:** Field-FB/Adv.FB

## NATURAL HISTORY OF PLUM ISLAND

Explore the major vegetative and wildlife communities of Plum Island spread over salt marshes, dunes and beach habitats. Learn about various management strategies associated with these communities including threatened and endangered species. Think piping plovers! Don't forget your binoculars, water, and a snack.

**Sunday, May 19, 9:30 a.m.-12:30 p.m.**

Newburyport, MA

**Course Code:** FDT1005

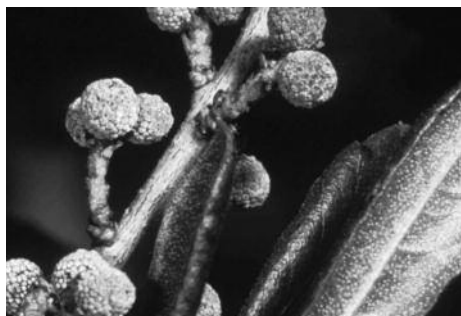
**Leader:** Bill Lee, wildlife biologist

**Fee:** \$28 (Member) / \$35 (Nonmember)

**Limit:** 15      **Credit:** Field-FB/Adv.FB



# field trips



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## DUNES AND SWALES OF THE CHERRY AND WEBB CONSERVATION AREA

Located on a barrier spit at the mouth of the Westport River, this property preserves the unique plant communities characteristic of a well-established dune system. American beach grass stabilizes the primary dunes. Cranberry and pitcherplants thrive in the bogs of the interdunal swales, while sand false heather, beach plum, bayberry, pitch pine, and scrub oak inhabit the drier sandplains. The walk focuses on plant identification as well as fun and interesting natural history. Bring water, lunch, and a hand lens if you have one. Be prepared for wind, biting insects, and bright sun.

**Thursday, May 23, 10 a.m.-2 p.m.**

Westport, MA

**Course Code:** FDT1118

**Leader:** Roland "Boot" Boutwell, naturalist

**Fee:** \$38 (Member) / \$46 (Nonmember)

**Limit:** 15

**Credit:** Field-FB/Adv.FB

**Cosponsor:** Westport Land Trust

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## SPRING TREASURES OF HIGH LEDGES

Noted for its fabulous views of the Deerfield River valley and Mount Greylock, this sanc-

tuary is home to an extraordinary variety of native flora and fauna. Explore the incredible diversity of the sanctuary's woodlands, wetlands, and ledges. Look at middle to late spring flowers of acidic and rich woods, uncommon ferns, trees, and whatever else crosses our path. The trails are rugged so participants should have sturdy hiking shoes, strong legs, and a good sense of balance. Bring water and trail snacks or lunch.

**Saturday, May 25, 10 a.m.-1 p.m.**

Shelburne, MA

**Course Code:** FDT2005

**Leader:** Ron Wolanin, Regional Property Director, MA Audubon Society

**Fee:** \$28 (Member) / \$35 (Nonmember)

**Limit:** 12

**Credit:** Field-FB/Adv.FB

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## COASTAL EDIBLE PLANTS FORAY

Join foraging expert Russ Cohen to seek out edible woodland and wetland species, and, as low tide approaches, hike over a sand spit to a wooded oceanfront island. In addition to sylvan species like juneberry and sassafras, encounter dulce, a tasty and healthful substitute for chewing tobacco, and laver, otherwise known as nori, the seaweed used for sushi rolls. ID tips for each species provided with information on edible portion(s), season(s) of availability and preparation, with guidelines for safe and responsible foraging. Prepare to take notes and to get your feet wet and muddy. Following the walk, we regroup at a nearby private home to nibble and sip some tasty wild treats that Russ has prepared.

**Saturday, June 1, 9:30 a.m.-1:00 p.m.**

Marblehead, MA

**Course Code:** FDT1038

**Leader:** Russ Cohen, author and naturalist

**Fee:** \$28 (Member) / \$35 (Nonmember)

**Limit:** 20

**Credit:** Field-FB/Adv.FB

**Cosponsor:** The Trustees of Reservations

# field trips

## FERNS ET AL. OF THE MIDDLESEX FELLS

The Fells has been a protected natural area within metropolitan Boston since 1896. As such, it has retained significant biodiversity. One of the trip leaders, Don Lubin, recently co-authored the first complete botanical inventory of the Reservation in 106 years. See a variety of ferns and club-mosses. Wear long pants and bring lunch, insect repellent, and a hand lens.

**Sunday, June 2, 1:00-4:30 p.m.**

Medford, MA

**Course Code:** FDT1085

**Leaders:** Don Lubin, Ray Abair, fern enthusiasts

**Fee:** \$33 (Member) / \$40 (Nonmember)

**Limit:** 16      **Credit:** Field-FB/Adv.FB



## WANTASTIQUET MOUNTAIN AND INDIAN POND

This moderate, three-mile hike takes us from the shore of the Connecticut River to the summit of Wantastiquet Mountain, from which we ramble along the Mine Ledge Trail, and lunch at the Mine Ledge overlook. The terrain and geology are varied and fascinating, with spectacular views, majestic acidic talus forests, and diverse understory vegetation. There's even a legend about a volcano! Bring water and lunch. Brattleboro, Vermont is nearby, and definitely worth exploring for its restaurants and bookstores.

**Saturday, June 15, 10 a.m.-3 p.m.**

**(Rain date- Sunday, June 16, 10 a.m.-3 p.m.)**

Hinsdale, NH

**Course Code:** FDT4044

**Leader:** Elizabeth Farnsworth, Senior Research Ecologist, New England Wild Flower Society

**Fee:** \$42 (Member) / \$50 (Nonmember)

**Limit:** 16      **Credit:** Field-FB/Adv.FB

## LATE SPRING WILDFLOWERS AT WELLS RESERVE

Join Boot Boutwell as we enjoy this property's beautiful wildflowers, learn some basic identification characteristics, and hear some wildflower natural history and lore. With luck we will catch an orchid or two in bloom, as well as the wildflower that is often associated with the rapidly approaching summer solstice.

**Sunday, June 16, 10 a.m.-1 p.m.**

Wells, Maine

**Course Code:** FDT3018

**Leader:** Roland "Boot" Boutwell, naturalist

**Fee:** \$10 (Member) / \$14 (Nonmember)

**Limit:** 16 (ages 10 and up)

**Credit:** Field-FB/Adv.FB

**Cosponsor:** Wells Reserve



## WILDFLOWERS OF HORN POND MOUNTAIN

Horn Pond, over 100 acres in size, nestles beneath Horn Pond Mountain, which “towers” 287 feet above sea level. Pond and mountain are set amidst 550 acres of open space filled with a rich diversity of plant life. According to Tom Sileo in his book, *The Great Spirit of Horn Pond*, “members of New England Wild Flower Society ... have located over 600 species of plants on the mountain alone.” The walk focuses on late spring wildflower identification, as well as interesting natural history and lore. Bring a bag lunch, a copy of *Newcomb’s Wildflower Guide*, and a hand lens if you have them.

**Wednesday, June 19, 10 a.m.-2 p.m.**

Horn Pond Conservation Area, Woburn, MA

**Course Code:** FDT1052

**Leader:** Roland “Boot” Boutwell, naturalist

**Fee:** \$38 (Member) / \$46 (Nonmember)

**Limit:** 15      **Credit:** Field-FB/Adv.FB

## HOP BROOK FLOODPLAIN & TYRINGHAM COBBLE

The secluded Tyringham Valley is one of the most scenic areas in the southern Berkshires. This field trip takes us through a variety of natural and pastoral landscapes, climaxing with a panoramic view from the top of the Tyringham Cobble. Look closely at the flora of the Hop Brook floodplain, a calcareous wetland community with a remarkable variety of grasses, sedges, ferns, and wildflowers, including several rare species. Songbirds and butterflies, as well as wildflowers, grace the meadows of this special area. The hike is about four miles long and moderately strenuous. Wear suitable footwear (feet may get wet in the floodplain) and bring a lunch.

**Saturday, June 22, 11 a.m.-3 p.m.**

Tyringham, MA

**Course Code:** FDT1370

**Leader:** Ted Elliman, Senior Botanist, New England Wild Flower Society

**Fee:** \$38 (Member) / \$46 (Nonmember)

**Limit:** 15      **Credit:** Field-FB/Adv.FB

**Cosponsor:** The Trustees of Reservations

## A RIVER, A FLOODPLAIN AND A FEN

Explore a riparian habitat that supported native Americans for thousands of years. Look for coastal plain Joe-Pye weed, foxglove beardtongue, and cancer-root. If time permits, visit a local fen where we encounter cottongrass and another plant that should be familiar to every bog haunter, as it is capable of causing a severe allergic response. Wear proper footwear, bring water, and a lunch.

**Sunday, June 23, 10 a.m.-1 p.m.**

West Falmouth, ME

**Course Code:** FDT3019

**Leader:** Barbara Grunden, naturalist

**Fee:** \$18 (Member) / \$22 (Nonmember)

**Limit:** 15      **Credit:** Field-FB/Adv.FB



# field trips

## PERCHED SWAMP AT NASAMI FARM

This property lies within the Great Swamp, one of the largest and best examples of a perched swamp left in Massachusetts. “A perched swamp” lies above the water table, and does not drain away, due to layers usually associated with glacial lake beds. We focus mostly on trees and their bark, but look for any wildflowers we might encounter at this time of year. Walk a level three mile-long trail at an easy pace. Dress for the weather and bring water-resistant boots, water, lunch, binoculars, insect repellent, and a copy of Michael Wojtech’s book, *Bark*, if you have one.

**Saturday, June 29, 10 a.m.-2 p.m.**

Whately, MA

**Course Code:** FDT2o6o

**Leader:** Nancy Goodman, naturalist

**Fee:** free (Members) / \$5 (Nonmember)

**Limit:** 20

**Credit:** Field-FB/Adv.FB

**Cosponsor:** Pioneer Valley Institute

## BELLEVUE POND

Enjoy a summer stroll to study a wide range of wildflowers in bloom along the edge of Bellevue Pond, a beautiful site within the 2,500-acre rocky woodland known as Middlesex Fells. Then hike up Pine Hill, one of the many rocky outcrops or “fells” in the area for a panoramic view of downtown Boston. After lunch, if we have time, hike to a small meadowy area to study one more very different type of habitat. The walk focuses on plant ID as well as fun and interesting natural history about the plants we see. Bring lunch, a field guide or two, and a hand lens if you have one.

**Tuesday, August 6, 10 a.m.-2 p.m.**

Middlesex Fells, Medford, MA

**Course Code:** FDT1o29

**Leader:** Roland “Boot” Boutwell, naturalist

**Fee:** \$38 (Member) / \$46 (Nonmember)

**Limit:** 15

**Credit:** Field-FB/Adv.FB

## Mount Desert Island Flora

Join botanist Arthur Haines for an exploration of the coastal flora of downeast Maine, utilizing Mount Desert Island and nearby portions of Acadia National Park. This region includes north-temperate and boreal ecosystems that are known for their interesting plants with northern affinity. The rugged landscape underlain by the famous pink granite has been shaped by glaciers, the relentless pounding of ocean surf, and the well-documented 1947 fire. Participants study the flora through field trips to several different plant communities, including coastal mountains and headlands, shorelines, and peatlands. Amazing scenery, salt-laden breezes, and interesting plants will be the norm during this three-day trip.

## BAR HARBOR, ME AND ENVIRONS

**Friday, 12 noon, August 9 to**

**Sunday, 12 noon, August 11**

**Course Code:** FDT8o19

**Leader:** Arthur Haines, Research Botanist, New England Wild Flower Society, author, *Flora Novae Angliae*

**Fee:** \$380 (Member) / \$456 (Nonmember)

**Limit:** 10

**Credit:** Two field trip credits-FB/Adv.FB

**Details:** This trip is designed for avid botanists and not for beginners.

Fee includes two night’s double occupancy lodging at the Shore Path Cottage, a fine B&B located on the waterfront in Bar Harbor. Included in the fee are breakfasts on Saturday and Sunday, and both lunch and dinner on Saturday. Participants will provide their own transportation to Bar Harbor and will carpool to botanical sites. Registration includes a \$50 non-refundable fee. Deadline for registration or refunds is July 8, 2013.

# field trips

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## PONKAPOAG MARSH

In a boggy corner of the Blue Hills is a lovely diversity of ferns. It is the site where Massachusetts fern was discovered, and an excellent location for netted chain fern. Discover two different wood fern hybrids as well, and see how they compare with their parent species. Wear long pants and bring insect repellent and a hand lens.

**Sunday, August 18, 1-4 p.m.**

Canton, MA

**Course Code:** FDT1121

**Instructors:** Don Lubin, Ray Abair, fern enthusiasts

**Fee:** \$28 (Member) / \$35 (Nonmember)

**Limit:** 16      **Credit:** Field-FB/Adv.FB

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## OLD GROWTH AT DUNBAR BROOK

Monroe State Forest in northwestern Massachusetts has some of the wildest terrain in the Bay State. It harbors 60–100 acres of old growth forest, and is known for its abundance of big trees. Join old growth expert Bob Leverett as he shares his knowledge of this very special place, which includes eastern hemlocks over 400 years old and some of the largest and tallest white pines in New England. Discuss the ecology of the northern hardwood–hemlock association. Consider the future of this forest as a consequence of climate change, invasive insects, and fungi. For this strenuous hike, participants should have strong legs and good balance. Wear proper footwear, and bring lunch and water.

**Saturday, September 7, 10 a.m.-3 p.m.**

Monroe, MA

**Course Code:** FDT2061

**Leader:** Bob Leverett, Executive Director of ENTS, Eastern Native Tree Society

**Fee:** \$47 (Member) / \$58 (Nonmember)

**Limit:** 15      **Credit:** Field-FB/Adv.FB



# wetlands

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## VERNAL POOL ECOLOGY

During the end of the last ice age, retreating glaciers carved some of New England's most unique habitats, vernal pools. These ephemeral bodies of water harbor an array of plants, invertebrates, reptiles, amphibians, and other wildlife. We begin with an introduction to the geology and ecology of these pools. We discuss the natural history of the organisms inhabiting them, devoting particular attention to those that rely upon vernal pools for successful reproduction. Our afternoon session brings us into the field where we take a first-hand look at the Garden's Lost Pond, a classic woodland vernal pool. Bring a lunch and rubber boots.

**Saturday, April 13, 10 a.m.-3 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** WET3011

**Instructor:** Mark D. Cooperman, vernal pool ecologist

**Fee:** \$66 (Member) / \$80 (Nonmember)

**Limit:** 15      **Credit:** Elective-FB/Adv.FB

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## EXPLORING WETLAND SHRUBS

With a pond, a stream and a bog, the Garden provides us with an excellent field site to examine shrubs that grow in and around wetlands. We also cover a few shrubs that grow in higher and drier habitats. In addition to identification of 15-20 New England shrubs, the class includes some fun and interesting natural history. Please bring lunch, and a hand lens and shrub field guide, if you have them.

**Thursday, July 11, 10 a.m.-2 p.m.**

Garden in the Woods, Framingham, MA

**Course Code:** WET3019

**Leader:** Roland "Boot" Boutwell, naturalist

**Fee:** \$53 (Member) / \$64 (Nonmember)

**Limit:** 16      **Credit:** Elective-FB/Adv.FB

**Cosponsor:** Massachusetts Association of Conservation Commissioners

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## WETLAND PLANT IDENTIFICATION

In this workshop we focus on a variety of wetland community types, their ecology, and common indicator species. Following a short introductory lecture, we visit wetland habitats, including a red-maple swamp, a flood-plain marsh, and a pond. While in the field, take advantage of the season by exploring ferns, sedges, and various aquatic species, as well as shrubs and trees. Bring a hand lens, lunch, and come prepared for wet feet in the field.

**Wednesday, July 24, 9:30 a.m.-3:00 p.m.**

Garden in the Woods, Framingham, MA and field site

**Course Code:** WET1000

**Instructor:** Ted Elliman, Senior Botanist, New England Wild Flower Society

**Fee:** \$66 (Member) / \$80 (Nonmember)

**Limit:** 12      **Credit:** Elective-all certificates

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## BASIC WETLAND ID & DELINEATION

This two-day introductory course provides a foundation in the principal elements of wetland identification -- wetland hydrology, hydric soils, and hydrophytic plants. Participants directly participate in field ID, the placement of a delineation line, and utilize web resources for preparation. Recommended gear: field notebook, field guides, soil color charts and auger (if you already own), and rain gear. Bring a bag lunch. Extensive handouts provided and some pre-class reading required.

**Thursday, Friday, August 1, 2, 9 a.m.-4 p.m.**

Garden in the Woods, Framingham, MA and field sites

**Course Code:** WET2010

**Instructor:** Alan Anacheka-Nasemann, ecologist, wetland scientist

**Fee:** \$169 (Member) / \$203 (Nonmember)

**Limit:** 12      **Credit:** Core-Adv.FB; Elective-FB

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# children & families

ALL PROGRAMS AT GARDEN IN THE WOODS, FRAMINGHAM, MA

## FROG MOON NIGHT HIKE

What strange quacks, trills, and peeps can be heard coming from ponds and bogs on a spring evening? Who is making all that racket, and why? Watch a slide program about some amazing amphibian singers, practice some croaky calls yourself, then walk through the woods to experience the swamp sounds. The evening ends with snacks and some “froggy” crafts to take home.

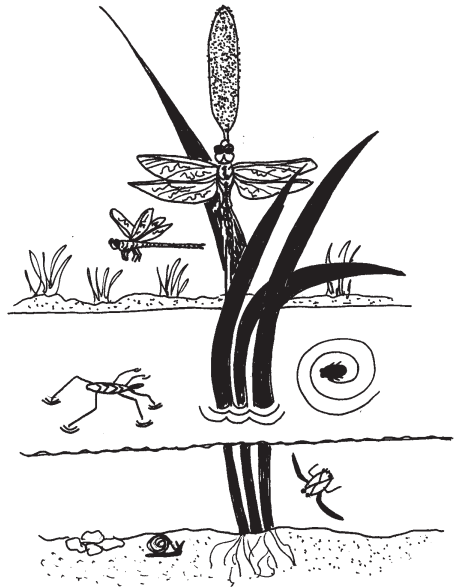
**Friday, April 5, 6:30-8:00 p.m.**

Children with Adult Companion

**Course Code:** FAM3700

**Fee:** \$10 (Member) / \$12 (Nonmember) per person, for each adult and for each child

**Limit:** 24



## FAIRIES IN THE GARDEN

Let's use our sharpest senses to find where tiny woodland fairies might be living in our Garden. Maybe under the lady's-slipper orchids? Perhaps near the fairybell wildflowers? Listen to a story about woodland fairies, take a walk to look at wildflowers with a magical fairy connection, build a fairy house for the Garden and make a fairy to take home.

**Wednesday, May 15,  
3:30-5:30 p.m.**

Children in  
Grades K-2

**Course Code:**  
CHP9200

**Fee:** \$14 (Member) /  
\$17 (Nonmember)

**Limit:** 12



## WHAT'S ALIVE AT THE POND?

Visit the hotspot for wildlife at Garden in the Woods to look for insects, amphibians, and reptiles who live above, on, or under the pond surface. We'll stalk our prey with insect nets, hand lenses, and dip nets to learn more about these creatures and how they have adapted for aquatic life. After our talk, walk, and snack, make a pond collage to take home.

**Thursday, June 6, 3:30-5:30 p.m.**

Children in Grades 2-5

**Course Code:** CHP5001

**Instructor:** Jini Foster, naturalist

**Fee:** \$14 (Member) / \$17 (Nonmember)

**Limit:** 12

# children & families

## SUMMER SOLSTICE NIGHT HIKE

The summer solstice marks the longest day and shortest night of the year. Celebrate the season with solstice history and lore, poetry, songs, stories, and a short ceremony to welcome in the solstice. Enjoy a walk in the woods to enjoy the beauty of summer's longest day, watch the sunset, and see the lighting of Garden's "Fireball" sculpture. Refreshments follow.

**Thursday, June 20, 7-9 p.m.**

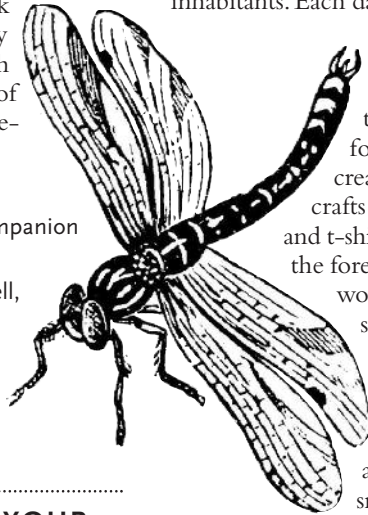
Adults or Children with Adult Companion

**Course Code:** FAM6503

**Instructor:** Roland "Boot" Boutwell, naturalist

**Fee:** \$10 (Member) / \$12 (Nonmember) per person, for each adult and for each child

**Limit:** 24



## POND DIPPING WITH YOUR CHILD

What splashes into the pond just as you come near? How hard is it to catch a dragonfly? Do you know any plants that like "wet feet"? What is the scummy green stuff that grows in ponds? Who is eating the water lilies? What can we catch in our dip nets? Come along together and enjoy what a lovely lily pond can offer curious children on a summer's morning.

**Thursday, July 18, 10 a.m.-12 p.m.**

Children with Adult Companion

**Course Code:** FAM5020

**Instructor:** Janet Springfield, naturalist

**Fee:** \$10 (Member) / \$12 (Nonmember) per person, for each adult and for each child

**Limit:** 24

## CATTAIL NATURE KIDS

Cattail Nature Kids offers children an exciting way to experience nature's wonders and have fun at the same time. Garden in the Woods is ours to explore, including ponds, streams, forests and all their plant and animal inhabitants. Each day includes hands-on science activities, games, and crafts. Search the pond edge for frogs and turtles, dip in its waters for newts and pond life, create many nature-inspired crafts such as insect habitats and t-shirts, visit with creatures of the forest floor, marvel at natural wonders with our powerful stereo-microscopes and much more. We meet each day, rain or shine. Each child should wear insect repellent. For ages 5-6, bring a healthy snack and a drink, for ages 7-9, bring a healthy lunch and a drink.

**Instructor:** Tracy Phipps, educator and naturalist

**Limit:** 12

**Tuesday- Friday, July 23, 24, 25, 26, 9:30 a.m.-12:00 p.m.**

Ages 5-6

**Course Code:** CHP8500

**Fee:** \$115 (Member) / \$140 (Nonmember)

**Tuesday-Friday, July 30, 31, August 1, 2, 9:30 a.m.-2:30 p.m.**

Ages 7-9

**Course Code:** CHP8501

**Fee:** \$210 (Member) / \$250 (Nonmember)

# registration

## REGISTER BY MAIL

Send completed registration form with your payment to: Registrar, New England Wild Flower Society, 180 Hemenway Road, Framingham, MA 01701. Use a separate copy of the form for each applicant. Please do not mail cash.

## REGISTER BY PHONE, FAX OR ONLINE

We accept Visa or Mastercard

- Call 508-877-7630 ext 3303
- Fax 508-877-3658
- Visit [www.newenglandwild.org/learn/adult](http://www.newenglandwild.org/learn/adult) and go to individual course descriptions to register online.

## Registration Form

Name of person filling out form: .....

Participant's name (if different): ..... Age (if under 18): .....

Address: .....

City, State, ZIP: .....

Email: .....

Phone: Day ..... Evening .....

Course code	Course name	Start date	Fee
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....
.....	.....	.....	.....

I want to join the Society. Please indicate membership level fee here (see inside back cover).

I would like to enroll in the Certificate Program (see page 2).  \$30 (This is a one-time fee.)

I would like to make a gift to the Annual Fund

## PAYMENT

Total: \$ .....

Check enclosed (payable to New England Wild Flower Society)

Credit card # .....

Visa  MasterCard ..... Exp. date ..... CVC code .....

Name on card .....

Billing address (if different from above) .....

Signature .....

## MEMBERSHIP STATUS & POLICY STATEMENT

I am a current member of New England Wild Flower Society:

Yes, membership # .....  No

I am a current a member of ..... (Cosponsor organization)

I have read and accept the Cancellation & Refund Policy (inside back cover). Yes  No

# registration information

*For registration form, see page 36.*

Advance registration is required for all fee-based courses and is accepted on a first-come, first-served basis upon full payment. Upon registration, you will receive a confirmation email, including course locations and any recommended reading and supplies. Early registration is encouraged; programs with insufficient registration may be cancelled three to five business days before the scheduled start date. If your requested course is filled, you will be put on a waiting list and your credit card will not be charged or your check will be returned. When space becomes available, you will be contacted according to your position on the waiting list. **Sorry, we cannot accept walk-in registrations.**

## CANCELLATION & REFUND POLICY

**SOCIETY CANCELLATIONS, CHANGES & INCLEMENT WEATHER:** The Society reserves the right to cancel courses, change times or locations, and substitute instructors. If a class is cancelled by the

Society, you will receive a full refund. In the event of any course change, you will be notified as soon as possible. Courses and field trips run rain or shine. However, in the event of extremely inclement weather, the Registrar or instructor will make every effort to inform you by telephone or email of any change. Please include day and evening phone numbers and your current email address on the registration form.

**YOUR CANCELLATION & REFUND:** No refunds or transfers can be given for withdrawals within a week of the course start date, from courses already in progress, or for class sessions you have not attended.

## EQUAL ACCESS

If you need assistance or special accommodations, please inform the Registrar, 508-877-7630, ext. 3303, at the time you register, or as soon as possible, in order to allow us to make the best efforts to meet your needs.

# membership information

## Join a Community of Stewards

Members help conserve and promote the region's native plants to ensure healthy, biologically diverse landscapes.

### Membership levels

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

### Membership benefits include:

- 20% discount on education programs throughout New England. **Join when you register for immediate discounts on courses.**

- Priority course registration
- Annual subscription to Society publications
- Monthly member e-newsletter
- Discounts at a wide range of regional and mail order nurseries through our Nursery Partner Program
- Borrowing privileges at our 4,500-volume botanical library (*Individual with Garden Access level and up*)
- Invitations to special, members-only events (*Individual with Garden Access level and up*)

For a full description of member benefits by level, please visit [www.newenglandwild.org/membership](http://www.newenglandwild.org/membership).



# Certificate in Native Plant Studies Program

Field Botany – Native Plant  
Horticulture and Design

With an emphasis on participatory learning, courses provide a supportive yet challenging learning atmosphere. Appropriate for all interested students – from amateur botanists and gardeners to green industry professionals and conservation activists.

- Work at your own pace
- Gain knowledge and skills for personal or professional use
- Meet inspiring instructors and like-minded fellow students

Details at  
[www.newenglandwild.org/learn/certificate](http://www.newenglandwild.org/learn/certificate)  
or see page 3 inside.



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HEADQUARTERS & GARDEN IN THE WOODS  
180 Hemenway Road  
Framingham, Massachusetts 01701-2699

ADDRESS SERVICE REQUESTED