

FALL/WINTER 2013

NEW ENGLAND
WILD
FLOWER
SOCIETY




learn+grow

SEPTEMBER 2013 • VOLUME 6, NUMBER 2

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 32 for details.

regional index

GARDEN IN THE WOODS

Date	Course Title	Page
9/5	Native NE Shrubs.....	13
9/17	Design Workshop	4
9/21	Wildflowers in Fall.....	14
9/24	Native Woody Materials.....	4
9/26	Maintaining Motors & Tools	5
10/1	Certificate Orientation.....	2
10/2	Intro to Betulaceae.....	15
10/3	Botanical Illustration.....	15
10/5	Native Woody Vines	6
10/6	East Meets West.....	3
10/8	Framework Trees of NE.....	17
10/18	Horticultural Techniques.....	6
10/22	Mat-forming Natives	7
10/23	Intro to Fagaceae.....	17
10/26	Lichens in Gardens	18
10/30	Structural Plants	7
11/5	Flora Novae Angliae.....	18
11/9	Pruning Fundamentals.....	8
11/10	Botanical Names	19
11/13	Hemlock Forest Change	19
11/17	Climate Change in NE.....	20
11/20	Geographic Tools	20
12/7	Shrubs in Winter	21
12/10	Wildflower Propagation II ..	8
12/11	Garden Master Plan	8
12/14	Wetland ID in Winter.....	29
1/11	Conservation Biology.....	21
1/26	Plant Systematics 5.....	22
1/28	Bringing the Forest Home.....	9
2/5	Wetland Shrubs in Winter ..	29
2/8	Winter Botany	23
2/23	Plant Systematics 3.....	24
2/24	Bones of the Garden.....	10
2/25	Residential Design	9

CHILDREN & FAMILIES

All Programs	30
--------------------	----

EASTERN MASSACHUSETTS

Date	Course Title	Page
9/15	Fungi in the Field	25
9/19	Plant Form & Function	13
9/24	Introduction to Botany	14
9/25	Fall Border Garden	5
9/28	Bold Beautiful Needham	11
10/5	Natural Dyes and More	16
10/8	Back Bay Gardens	12
10/15	Living Lab Wellesley College	12
10/19	Hemlock Gorge	27
10/20	Walden Woods	27
11/20	Naked Shrubs	28
1/25	Naked Shrubs	28
2/1	Backyard Sugaring	22
2/4	Residential Design	9

WESTERN/CENTRAL MASSACHUSETTS

Date	Course Title	Page
9/22	Mount Alander	26
11/2	Bray Lake and Mt. Tom	28
12/7	Wildflower Propagation II ..	8
2/1	Botany in Art	23
2/26	Native Bees and Plants	24

CONNECTICUT/ NEW YORK/ RHODE ISLAND

Date	Course Title	Page
9/21	Asters of RI	25
10/3	Fall Border Garden	5
10/5	The Brine Design	11

MAINE/ NEW HAMPSHIRE/ VERMONT

Date	Course Title	Page
10/4	Invasive Plants.....	16
10/6	Fall in the Bog.....	26
11/30	Naked Shrubs	28

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
Asclepias tuberosa
(butterfly milkweed)
Photo: Steven Ziglar



American
Alliance of
Museums



INSTITUTE of
Museum and Library
SERVICES



FROM THE EDUCATION DEPARTMENT

Happy autumn! Even as you begin to put your garden to bed and the greenery begins to fade, nothing is slowing down at Garden in the Woods. We're offering dozens of courses, lectures, and workshops that will stoke the fires of your fascination with plants all winter long. Join us for classes that will give you great design ideas for your garden, just in time for spring. Learn how to identify trees, wetland plants, shrubs, fungi, asters, and even lichens. Indulge your artistic side in classes on botanical illustration, natural dyes, and the history of botany and art. Get ready for maple syrup season with a workshop on backyard sugaring. Explore connections between native bees and our native flora. Travel farther afield to visit wonderful gardens in New York, Needham, and Boston's Back Bay and participate in field walks in Rhode Island, Massachusetts, New Hampshire, and Maine. Bring your kids on a Turtle Trek, celebrate salamanders with them, or hike by the light of the full moon. Learn about how the landscape is changing as the climate warms.

Things are changing a bit at New England Wild Flower Society, too. Bonnie Drexler, who has been an inspirational Director of Education at the Society, is retiring but promises to stay near and volunteer. Senior Research Ecologist Elizabeth Farnsworth will step in as Interim Director while the Society searches for a new leader for the Education Department. We will greatly miss Bonnie, but understand why she wants to spend more time with her brand-new, absolutely delightful granddaughter.

So don't hibernate this winter. We look forward to seeing you!



Lana Reed

Lana Reed
Registrar

Elizabeth Farnsworth

Elizabeth Farnsworth, Ph.D.
Interim Education Director

TABLE OF CONTENTS

Certificate Program	2
Horticulture & Gardening	4
Horticulture & Design Trips	11
Botany & Conservation	13
Field Trips	25
Wetlands	29
Children & Families	30
Registration Form	32
Membership Info	33

NEW ENGLAND WILD FLOWER SOCIETY
180 Hemenway Road, Framingham, MA 01701
T 508-877-7630 F 508-877-3658
TTY 508-877-6553
registrar@newenglandwild.org
www.newenglandwild.org

Volume 6, Number 2, Fall/Winter 2013

Learn + Grow is published twice a year by New England Wild Flower Society. Members receive discounts on all courses and field trips. Annual membership dues start at \$40 for individuals. See inside back cover for information.

Copyright© 2013 New England Wild Flower Society®. All rights reserved. No material in this publication may be reproduced or used in any way without written consent. For permission, contact Editor, New England Wild Flower Society, 180 Hemenway Road, Framingham, MA 01701.

Printed on recycled paper.
Editor: Julia Homer
Design: Rachel Wolff Lander

certificate program

ENROLL NOW!

Complete the certificate registration form on page 32 of this catalog or online at www.newenglandwild.org/learn/certificate.

Direct questions to Registrar at 508-877-7630, ext. 3303, or 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.

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 in 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 for details.



certificate program

CERTIFICATE ORIENTATION

Join Elizabeth Farnsworth, Interim Education Director, 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.

Tuesday, October 1, 7:00-8:30 p.m.

Garden in the Woods, Framingham, MA

Course Code: CER8000

Instructor: Elizabeth Farnsworth, Ph.D, Interim Education Director,
New England Wild Flower Society

Fee: Free program

FREE LECTURE

Annual Native Plant Lecture and Certificate Awards

EAST MEETS WEST: NEW ENGLAND NATIVE PLANTS AND THEIR ASIAN RELATIVES

See a variety of wildflowers and shrubs of the Himalayan regions of southwestern China and northeastern India that are closely related to plants in New England. *Anemone*, *Aquilegia*, *Arisaema*, *Clematis*, *Cypripedium*, *Gaultheria*, *Primula*, *Rhododendron*, *Trillium*, *Vaccinium*, *Viburnum*, and *Viola* are just some of the genera that have overlapping and in many cases similar-looking species in both regions. Ted shares stories and images from recent Society trips he has led to China, Tibet, and India. For good measure, we may throw in a blue poppy too!

After the talk, certificates will be awarded to our new graduates in our Certificate Program in Native Plant Studies. Refreshments will follow.

Sunday, October 6, 1:30-3:30 p.m.

Garden in the Woods, Framingham, MA

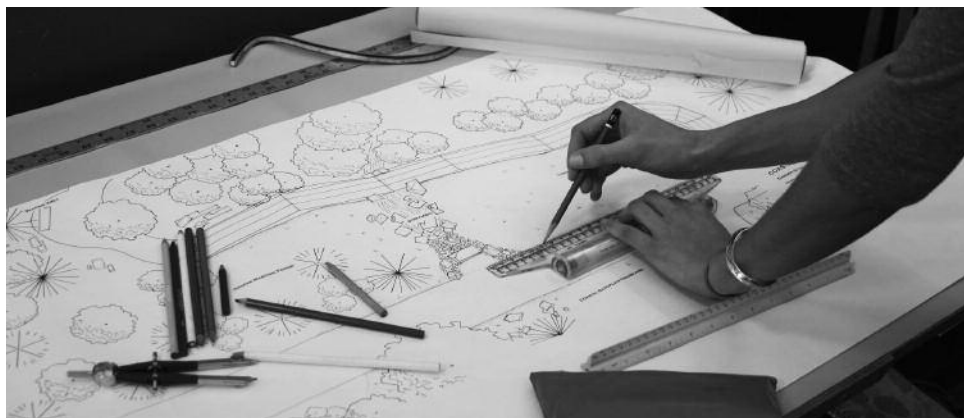
Lecturer: Ted Elliman, Senior Botanist, New England
Wild Flower Society

Course Code: LEC1027

Call Lana Reed to preregister, 508-877-7630 x3303



horticulture & gardening



DRAFTING DESIGN

Gain knowledge and skills to apply to your own landscaping 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. Next, we draft a base map and practice translating 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, New England Wild Flower Society

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

Limit: 16

Credit: Elective-HD/Adv.HD

Cosponsor: Ecological Landscaping Association

NATIVE WOODY PLANT MATERIALS

Native trees, shrubs, and woody vines can provide a year-round framework for 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 the best horticultural uses of the woody plants currently commercially available. 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 color. This intensive class 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 in 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 & gardening

DESIGN A NATIVE MIXED BORDER GARDEN IN THE FALL

Your border garden can have four seasons of beauty! Take advantage of fall planting conditions to establish borders filled with native perennials, shrubs, vines, and small trees. Horticulturist and landscape designer Laura Eisener discusses how to artfully combine a variety of beautiful plants, and explains basic design principles you can apply to planning and planting a mixed border of any size and shape. The Fall bargains abounding in nurseries make this an ideal opportunity to refresh or redesign existing border areas in your garden.

Instructor: Laura Eisener, Principal, Laura D. Eisener Landscape Design

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

Limit: 16

Credit: Elective-HD/Adv.HD

Choose one of two sections:

Wednesday, September 25, 7-9 p.m.

Beverly, MA

Course Code: HOR1514

Cosponsor: The Trustees of Reservations, Long Hill

Thursday, October 3, 6:30-8:30 p.m.

Bristol, RI

Course Code: HOR1518

Cosponsor: Blithewold Mansion, Gardens, & Arboretum

SMALL MOTOR AND GARDEN TOOL MAINTENANCE

Have you ever walked into your shed and become overwhelmed by all the tools in need of maintenance? Do you wonder if that rusty shovel is still good, or that dusty weed-wacker still runs? Learn all the basic maintenance procedures any homeowner can perform to reclaim old tools, extend the life of reliable tools, and retain the value of new ones. Topics include oil changes, greasing, air filter cleaning and replacement, fuel facts, winterization, and storage as well as troubleshooting tips and techniques for maintaining your hand tools. Learn how to sharpen blades, remove rust, replace handles, and keep all your gardening equipment ready for use when you need it.

Thursday, September 26, 10 a.m.-12 p.m.

Garden in the Woods, Framingham, MA

Course Code: HOR3351

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

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

Limit: 16

Credit: Elective-HD/Adv.HD



horticulture & gardening

GOING VERTICAL WITH NATIVE WOODY VINES

Have you always believed that Boston ivy is native to Boston? Not so! This Asian vine has travelled far to take residence up on the city's brownstones, but there are plenty of beautiful native vines that can take its place in your garden. Explore the ornamental characteristics of native climbers like honeysuckle, wisteria, clematis, and some lesser-known species. In this lecture and walk through Garden in the Woods, learn how vines climb, what support structures are needed for each type of vine, the best planting practices, and tips for maintenance.

Saturday, October 5, 10 a.m.-12 p.m.

Garden in the Woods, Framingham, MA

Course Code: HOR2804

Instructor: Jen Kettell, Horticulturalist, Arnold Arboretum of Harvard University

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

Limit: 16

Credit: Elective-HD/Adv.HD

Cosponsor: MA Audubon Drumlin Farm

HORTICULTURAL TECHNIQUES

Good horticultural practices form the backbone of any successful garden. Understanding how to apply the basics of plant care is the essential first step to becoming a horticulturist. In this three-session course, we discuss how to select and plant native plants and demonstrate how to choose the right plant for the right place. Students practice proper techniques for transplanting woody and herbaceous plant material and learn the correct methods for preparing soil, mulching, and watering. Other topics include maintaining plants properly, pruning techniques, and steps for winterizing the garden and preparing it for spring.

**Fridays, October 18, 25, November 1,
10 a.m.-3 p.m.**

Garden in the Woods, Framingham, MA

Course Code: HOR3600

Instructors: Horticulture Staff, New England Wild Flower Society

Fee: \$216 (Member) / \$254 (Nonmember)

Limit: 16

Credit: Core-HD; Elective-all certificates



horticulture & gardening

MAKE LIFE EASIER USING MAT-FORMING NATIVES

Learn to use quick-spreading native plants to advantage in your garden. Plants like Canada windflower and Canada mayflower create bold statements whether viewed from a distance or up close. Once established, such groundcovers can grow thickly enough to reduce weeding and other maintenance to a minimum. From the lush woodland lawn of Pennsylvania sedge, to the pushing power of hay-scented fern (great for holding back pesky invasives), these plants have a lot to offer the creative gardener. An indoor lecture is followed by a walk to see these plants in the Garden.

Tuesday, October 22, 10 a.m.-2 p.m.

Garden in the Woods, Framingham, MA

Course Code: HOR1554

Instructor: Dan Jaffe, Propagator and Stockbed Grower, New England Wild Flower Society

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

Limit: 16

Credit: Elective-HD/Adv.HD

STRUCTURAL PLANTS: SETTING THE TONE OF THE GARDEN

Memorable gardens are defined by structural shrubs and trees. These essential beauties provide both the ambiance and the organizing principles of any landscape design. Boggy, dry shade, part sun – no matter what the conditions, there are structural plants to suit. The evening class is followed by a weekend session, including a walk through the Garden that highlights several of the species featured. Although the focus is on native varieties, we also cover a group of non-New England native ornamental shrubs and trees that work well in our local environment.



Wednesday, October 30, 6:30-9:00 p.m.;

Saturday, November 2, 9:30 a.m.-1:00 p.m.

Garden in the Woods, Framingham, MA

Course Code: HOR4224

Instructor: Cheryl Salatino, Landscape Designer, Dancing Shadows Garden Design, and Massachusetts Certified Horticulturist

Fee: \$80 (Member) / \$96 (Nonmember)

Limit: 16

Credit: Elective-HD/Adv.HD

Cosponsor: The Landscape Institute

horticulture & gardening

PRUNING FUNDAMENTALS

Proper pruning improves both the health and structure of woody plants and allows the gardener to enhance the aesthetic qualities of trees and shrubs. This workshop covers pruning methods for established plantings in the home landscape. Learn when to prune different species and how to select basic tools, make a proper cut, and determine which branches to cut. Bring hand pruners so you can try your hand at various cuts.

Saturday, November 9, 9:30 a.m.-12:30 p.m.

Garden in the Woods, Framingham, MA

Course Code: HOR3120

Instructor: Dave Ropes, Arborist, Tree Specialists, Inc.

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

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

GARDEN IN THE WOODS MASTER PLAN

Garden in the Woods has long been a model of naturalistic garden design, and was among the first public gardens in the nation to highlight native plants. Now the Garden must grapple with a future of uncertainty in the face of climate change. Get a behind-the-scenes look at the master plan recently completed by Andropogon Associates to envision the future and advance the sustainable operations of this botanical gem. Appropriate for professionals, discuss the in-depth site analysis, including studies of the soil, tree canopy, hydrology, topography as well as stakeholder involvement.

Wednesday, December 11, 7-9 p.m.

Garden in the Woods, Framingham, MA

Course Code: HOR4203

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

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

Limit: 30 **Credit:** Elective HD/Adv.HD

Cosponsors: Ecological Landscape Association, The Landscape Institute



WILDFLOWER PROPAGATION II

Learn tips for raising wildflowers from seed, which enables you to grow an astonishing variety of species not often seen in garden centers or nurseries. Develop a deeper appreciation of plant physiology and evolution. Discuss seed physiology and ecology as well as the various techniques used to germinate and grow a wide variety of native species, including such challenging genera as *Trillium*. Discuss seed and spore collection and storage. Clean and sow a variety of seed to take home and grow. All materials provided. Bring a bag lunch.

Instructor: Kate Stafford, Plant Propagator, New England Wild Flower Society

Fee: \$62 (Member) / \$73 (Nonmember)

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

Choose one of two sections:

Saturday, December 7, 10 a.m.-2 p.m.

Nasami Farm, Whately, MA

Course Code: HOR3203

Tuesday, December 10, 10 a.m.-2 p.m.

Garden in the Woods, Framingham, MA

Course Code: HOR3201

horticulture & gardening

BRINGING THE FOREST HOME

Have you ever marveled at the thick moss covering an old stump in the forest, or relaxed next to a trickling stream in the woods? From the lush woodland growth of Pennsylvania sedge to the rich fragrance of hay-scented fern, the forests of New England inspire us in ways that are hard to put to words. Take inspiration from New England forests and all their diversity to recreate elements of forest scenes in a home garden setting. Emphasis is placed on choosing plants that can create rich scenes with high ecological value and low upkeep. Bring a bag lunch.

Tuesday, January 28, 10 a.m.-1 p.m.

Garden in the Woods, Framingham, MA

Course Code: HOR1525

Instructor: Dan Jaffe, Propagator and Stockbed Grower, New England Wild Flower Society

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

Limit: 30

Credit: Elective-HD/Adv.HD

Cosponsors: Ecological Landscape Association, MA Audubon Drumlin Farm

RESIDENTIAL LANDSCAPE DESIGN

In this multi-session course appropriate for beginners, learn different aspects of the landscape design process, with special emphasis on the use of native plants in the residential landscape. Workshop sessions focus on design methods involving site analysis techniques and schematic design tools. Consulting with the instructor, work on a project of your own choosing. Interspersed with design work are lectures 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.

Choose one of two sections:

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

Limit: 12

Credit: Core-HD

**Tuesdays, February 4, 11, 18, 25,
March 4, 11, 18, 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

**Tuesdays, February 25, March 4, 11, 18, 25,
April 1, 8, 7:00-9:15 p.m.**

Garden in the Woods, Framingham, MA

Course Code: HOR4000

Instructor: Laura Eisener, Principal, Laura D. Eisener Landscape Design



horticulture & gardening

BONES OF THE GARDEN: STRENGTHENING THE DESIGN

All memorable landscapes have one thing in common – strong “bones.” The placement of trees and shrubs creates form, directs movement, and organizes the garden. Learn to situate and integrate these stately elements into the cultivated landscape. Explore the concepts of scale, the creation of space, and the impact of change over time. You will experience first-hand how these concepts can change your approach. Using these concepts, develop your own site-specific design and receive feedback on designs and

plant combinations. During the final session, inspect the “bones” of Garden in the Woods with a late winter walk.

Monday, February 24, Wednesday, February 26, 6:30-9:00 p.m., Saturday, March 1, 9:30 a.m.-1:30 p.m.

Garden in the Woods, Framingham, MA

Course Code: HOR4223

Instructor: Cheryl Salatino, Landscape Designer, Dancing Shadows Garden Design, and Massachusetts Certified Horticulturist

Fee: \$132 (Member) / \$160 (Nonmember)

Limit: 16

Credit: Core-Adv.HD; Elective-HD

Cosponsor: The Landscape Institute



horticulture & design trips

BOLD AND BEAUTIFUL IN NEEDHAM

Discover a fall garden that glows in the autumn light, highlighting a collection of brilliant maples, golden birches, and deciduous conifers, beech, bamboos, and grasses of every type. Using variation in foliage size, color, and texture, Ellen Lathi has achieved a bold and colorful effect for four-season interest. Natural stone, a bog filled with large-leaved plants, a stream, and a new foliage garden in the woods add to the fall scene.

Saturday, September 28, 10 a.m.-12 p.m.
Needham, MA

Course Code: HDT1025

Leader: Ellen Lathi, gardener extraordinaire

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

Limit: 20

Credit: Field-HD/Adv.HD

BRINE DESIGN: PRINCIPLES IN PRACTICE

Join an on-site seminar in landscape designer Duncan Brine's widely published six-acre garden, featured in the book, *Gardens of the Hudson Valley*, and in *Horticulture Magazine*. In its 23rd year, the Brine Garden resembles a public garden, with multiple areas, each of which has its own character. Duncan incorporates select non-natives and many native plants from his on-site nursery, blending planted naturalistic areas with adjacent public land. Anne Raver of the *New York Times* describes the garden as a "dream-like landscape." Author Ruah Donnelly writes that the Brine Garden is "a naturalistic display garden of remarkable artistry and diversity." Duncan will discuss his landscape design

process and respond to your observations and questions during this roaming seminar.

Saturday, October 5, 1-4 p.m.

Pawling, NY

Course Code: HDT8008

Leader: Duncan Brine, landscape designer, nurseryman

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

Limit: 20

Credit: Field-HD/Adv.HD



horticulture & design trips

BACK BAY GARDEN TRANSFORMATIONS

What do a hard-paved, windswept rooftop and a block-long, ten-foot wide, dry mulch bed have in common? Both are spaces recently re-envisioned as lush urban gardens. Join us for a visit to the rooftop sitting grove at the Mandarin Oriental Hotel and the Boylston Street Border at Boston Public Garden. Creating a beautiful, healthy planting in the harsh urban environment requires an understanding of how plants grow, how water moves through soils, and how people perceive the nature around them. Learn the technical and design principles that underpin both gardens, and see how these principles and an informed maintenance regime can create beauty in the city.

Tuesday, October 8, 10:00 a.m.-12:30 p.m.

Boston, MA

Course Code: HDT1010

Leaders: Tobias Wolf, Deborah Howe, Landscape Architects, and Principals, Wolf Lighthall, Inc.

Fee: \$30 (Member) / \$34 (Nonmember)

Limit: 20

Credit: Field HD/Adv.HD

LIVING LABORATORY AT WELLESLEY COLLEGE

The Wellesley College Botanic Gardens have some exciting new research gardens that are engaging students and visitors in multiple ways. See the green roof, planted with native species, and its accompanying experimental bed of the same species planted in the ground; the Climate Change Monitoring Garden with five different growing zones, and the in-progress Edible Ecosystem Garden, a designed plant community that mimics the properties of a natural ecosystem but produces food and other products useful to humans with a minimum of maintenance. Enjoy the Creighton Educational Garden, with specimen conifers, a rock garden, and a collection of plants to attract local butterflies. All this lies within a short walk from our starting point at the Greenhouse Visitor Center.

Tuesday, October 15, 1-3 p.m.

Wellesley, MA

Course Code: HDT1044

Leader: Kristina Jones, Ph.D, Director, Wellesley College Botanic Gardens

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

Limit: 24

Credit: Field-HD/Adv.HD

Cosponsor: Wellesley College Botanic Garden Friends



botany & conservation



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 off-site locations; directions will be provided during the first class.

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

Garden in the Woods, Framingham, MA and field sites

Course Code: BOT3301

Instructor: Roland "Boot" Boutwell, naturalist

Fee: \$215 (Member) / \$258 (Nonmember)

Limit: 16

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

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, 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

botany & conservation

WILDFLOWERS IN FALL

A follow-up to our spring course, “Wildflowers of New England,” this class highlights flora in the last stages of the growing season. What fruits have the spring wildflowers produced, and how are they dispersed? Which



flowers are blooming in the fall and why? Which pollinators are active? The program includes a walk in the Garden, a power-point presentation to illustrate key points, and samples for dissection and close observation. References for fruits and winter identification will be provided. Bring *Newcomb's Wildflower Guide* and a 10x hand lens.

Saturday, September 21, 9:30 a.m.-12:30 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT3009

Instructor: Dr. Neela de Zoysa, author and botanist

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

Limit: 16

Credit: Elective-all certificates

INTRODUCTION TO BOTANY

Learn botany from dedicated instructor and plant nomenclature specialist Kanchi Gandhi. Among the topics to be explored: plant cells and tissues; anatomy and morphology; reproduction; nutrition; growth and development; plant diversity; evolution; classification; and nomenclature. This course, offering both lecture and laboratory activities, introduces botany to students or serves as a refresher course. Required text: *Botany for Gardeners* by Brian Capon.

Tuesdays, September 24, October 1, 8, 15, 22, 29, November 5, 12, 6:30-8:30 p.m.

Harvard University Herbaria, Cambridge, MA

Course Code: BOT1010

Instructor: K.N. Gandhi, Ph.D., Botanist, Harvard University Herbaria

Fee: \$225 (Member) / \$270 (Nonmember)

Limit: 18

Credit: Core-FB or HD; Elective-all certificates: MCLP: 1ceu; MCA: 1ceu

Sponsor: Arnold Arboretum of Harvard University

botany & conservation

BETULACEAE FAMILY

Several interesting woody trees and shrub species form the Betulaceae family, which includes birches and their relatives, alders, hazelnuts, and hornbeams. Their wind-pollinated flowers are inconspicuous but very interesting, as is their method of seed dispersal. This course provides an overview of what to look for when studying plant families, then examines similarities and differences among genera and individual species. Learn about the importance of Betulaceae to the New England economy, and explore the Garden for members of this family.

Wednesday, October 2, 9:30 a.m.-12:30 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT2313

Instructor: Carol Govan, botanist

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

Limit: 16

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

INTRODUCTION TO BOTANICAL ILLUSTRATION

Looking for a unique opportunity to practice your observation skills, which are important to botanists and artists alike? Learn how to appreciate the structure of plants in the fall and how to record what you see with paper, pencil, and paint. This course, open to all levels of experience and skill, includes two pencil sessions and two introductory watercolor sessions under the guidance of an exceptionally experienced, gentle, and encouraging instructor. Focus on accurate rendering of live plants, correct proportions, shading for form and dimension, and get tips for adding color to your drawing. As Carol likes to remind students, “the act of drawing is much more important than what ends up on the page.”

**Thursdays, October 3, 10, 17, 24,
9:30 a.m.-12:30 p.m.**

Garden in the Woods, Framingham, MA

Course Code: ART1061

Instructor: Carol Govan, botanist and artist

Fee: \$114 (Member) / \$138 (Nonmember)

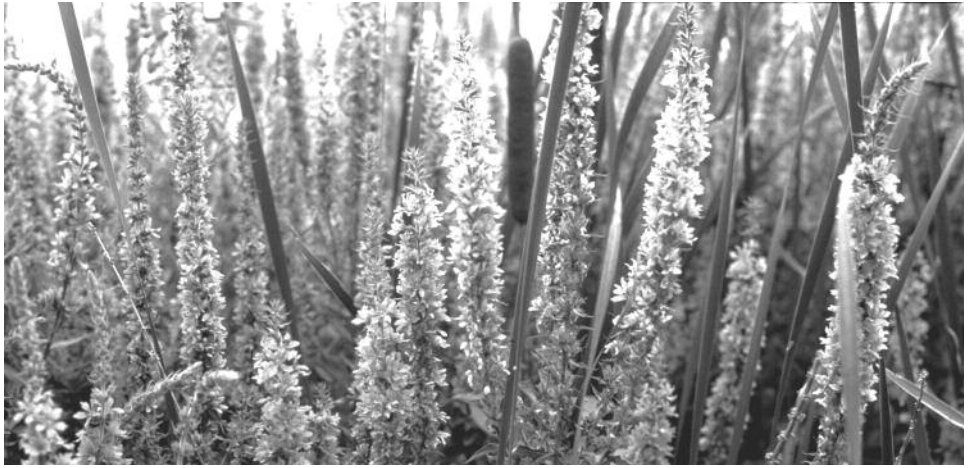
Limit: 12

Credit: Elective-all certificates

Cosponsor: MA Audubon Drumlin Farm



botany & conservation



INVASIVE PLANTS: ISSUES, IDENTIFICATION, AND ECOLOGY

What's all the fuss? Invasive plant species have been getting a lot of bad lip service from botany, ecology, horticulture, and conservation professionals alike. Learn the basic ecological problems created by these aggressive and tenacious plants. Hear about the complicated (and sometimes political) issues surrounding invasive plant species, including the process by which a plant becomes labeled "invasive." Meet some of New England's most common invasive species through images, specimens, and short local field visits. Bring a lunch, hand lens, water, and warm clothes appropriate for field walks.

Friday, Saturday, October 4, 5, 10 a.m.-4 p.m.

Boothbay, ME and local field destinations

Course Code: BOT5125

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

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

Limit: 12

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

Cosponsor: Coastal Maine Botanical Gardens

WILD COLOR – NATURAL DYES AND MORE

Thousands of years ago the color purple was worth more than gold and was reserved for emperors and popes. Join this exploration of natural dyes and learn how to make them yourself. During the first session, we investigate natural dyes in general, walk Drumlin Farm to see what materials we can find – both cultivated and wild – and start some dye pots. In the second session, we continue our studies, refine techniques, and produce some beautiful dyed samples. Working mostly with fiber or fabric, learn about using natural dyes as paints and inks. All materials are included, but you are welcome to bring your own natural fiber or fabric with which to experiment.

**Saturdays, October 5, 12-4 p.m.,
October 19, 1-4 p.m.**

Drumlin Farm, Lincoln, MA

Course Code: ART2701

Instructor: Tia Pinney, Naturalist, MA Audubon

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

Limit: 16

Cosponsor: MA Audubon Drumlin Farm

botany & conservation

FRAMEWORK TREES OF NEW ENGLAND

Trees are the dominant plant type in New England, where forests cover most of the land area. This survey course addresses the identification and natural history of individual species as well as forest ecology. Since understanding today's forests requires familiarity with their history, we review the changing landscape from the Ice Age through European settlement. Students learn to identify native New England trees and their habitats, to recognize differently aged stands (pioneer, second growth, and other growth), and to become familiar with forest communities of the northeastern temperate region. Discuss the impact of natural conditions and human disturbances on different communities. Weekend field trips take us to a variety of forest types off-site. Bring a bag lunch and water for field trips.

Tuesdays, October 8, 15, 22, 29, 6:30-8:30 p.m., Saturdays, October 19, 12-4 p.m., October 26, 9 a.m.-1 p.m.

Garden in the Woods, Framingham, MA, and off-site locations

Course Code: BOT3200

Instructor: Karen Sebastian, Principal, Karen Sebastian, LLC, Landscape Architecture

Fee: \$231 (Member) / \$277 (Nonmember)

Limit: 16

Credit: Core-FB; Elective-all certificates

FAGACEAE FAMILY

Understand the general characteristics of this woody plant family which includes oaks and their relatives, beeches, and American chestnuts. After an introduction to woody plants, learn plant features are useful in understanding and comparing plant families. Examine acorns, twigs, and leaves to learn to distinguish among the common oaks in

our area. Discover the historical importance of these trees in New England's history and walk the Garden to compare form, barks, leaves, and growth habit.

Wednesday, October 23, 9:30 a.m.-12:30 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT2314

Instructor: Carol Govan, botanist

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

Limit: 16

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



botany & conservation



LICHEN DIVERSITY IN GARDENS

Gardens can be rich in lichens because lichens grow happily on boulders, rock walls, soil, wooden benches, and decorative sculptures, as well as on the bark of woody plants. Learn about the growth forms and substrate preferences of 20 lichen species common to suburban Boston gardens. Workshop activity includes the use of stereomicroscopes, spot tests, keys, and internet resources. A practice lichen survey will be done on a small area of the Garden to determine its lichen diversity. Photographing study materials is encouraged. Bring a 10x hand lens and a lunch.

Saturday, October 26, 10 a.m.-3 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT3602

Instructor: Elizabeth Kneiper, lichenologist

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

Limit: 16

Credit: Elective-FB/Adv.FB

Cosponsor: MA Audubon Drumlin Farm

DEMYSTIFYING THE FLORA

The newly published *Flora Nova Angliae* is now the most up-to-date and comprehensive compendium of the plants in the New England region. Are you reluctant to delve into it because of the technical terms and the unfamiliar format? Receive an introduction to the organization of the *Flora* and learn some simple techniques for verifying the plants you may have already identified. Practice your skills during class with a couple of plant families and a few species. Bring a copy of the *Flora* if you have one; otherwise, all other materials are provided.

Tuesday, November 5, 10 a.m.-12 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT2222

Instructor: Neela DeZoysa, Ph.D, botanist and author

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

Limit: 16

Credit: Electives-all certificates

Cosponsor: Arnold Arboretum of Harvard University

botany & conservation

UNDERSTANDING BOTANICAL AND HORTICULTURAL NAMES

During this workshop on plant nomenclature, students have the opportunity to sort out the confusion often associated with plant names. Discuss common names, binomial scientific names, and the history of nomenclature since Linnaeus. Review the current rules of nomenclature and see why and how plant names sometimes change. Practice looking at a variety of plant names and deducing clues to plant characteristics from the names. Attention is also given to the names of species and hybrids in cultivation and the meaning of cultivar names. This course is equivalent to “Introduction to Plant Systematics Module 1” of the five-part series on plant systematics.

Sunday, November 10, 1-4 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT2205

Instructor: Judith Sumner, Ph.D, botanist and author

Fee: \$46 (Member) / \$54 (Nonmember)

Limit: 20

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

Cosponsor: Arnold Arboretum of Harvard University

FORESTS IN TRANSITION: DISAPPEARING EASTERN HEMLOCK FORESTS AND THE ORGANISMS THAT DEPEND ON THEM

In decline due to the hemlock woolly adelgid, an invasive, aphid-like insect introduced from Japan in the 1950s, hemlock forests and their inhabitants are under serious threat. Utilizing his award-winning photography, Brooks discusses the diverse group of organisms associated with the hemlock-dom-

inated forest type and shares his research on how the most abundant vertebrates in the forest, terrestrial salamanders, may be impacted by the loss of this forest type.

Wednesday, November 13, 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: LEC1026

Instructor: Brooks Mathewson, ecologist and nature photographer

Free lecture: Preregistration required



botany & conservation

ECOLOGICAL IMPACTS OF CLIMATE CHANGE IN NEW ENGLAND

Are alpine environments threatened because forests may expand uphill with global warming? Is maple syrup likely to remain a viable product in New England? How will salt marshes and other coastal habitats be affected by sea level rise? Will we see more invasive plants in New England? Learn what scientists know about climate change, including past warmings, and what we can expect for the future. Hear about what remains uncertain and what can be expected for New England's flora, fauna, and unique habitats. Find out about resources for continued learning and ways to take action yourself on climate change.

Sunday, November 17, 1:30-3:30 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT5207

Instructor: Ailene Kane Ettiger, Ph.D, botanist and ecologist

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

Limit: 40

Credit: Elective-all certificates

Cosponsors: Arnold Arboretum of Harvard University, MA Audubon Drumlin Farm, Ecological Landscaping Association

FINDING YOUR WAY: GEOGRAPHIC TOOLS FOR THE FIELD NATURALIST

This hands-on workshop teaches the basics of map and compass use and provides an introduction to online mapping tools such as Google Earth, Bing Maps, and online GIS Servers. Each of these tools continues to have a use in the field sciences for safety, trip planning, and documentation of a neat find. Through a combination of lecture and hands-on practice, gain comfort with the wide range of tools at your fingertips for mapping and delineating, looking at different kinds of maps and their features, and learning how they relate to your experience. If you have them, bring a compass, a topographic map of a region you like to visit, a GPS unit, an iPad or laptop computer.

Wednesday, November 20, 7-9 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT7034

Instructor: John Burns, self-proclaimed "techie," and Plant Conservation Volunteer Coordinator, New England Wild Flower Society

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

Limit: 16

Credit: Elective-all certificates



botany & conservation



SHRUBS IN WINTER

Even without leaves, many shrubs are still recognizable at this time of year. Focus on some macro-characteristics like branching patterns, growth habits, bark, persistent fruit, galls, and habitats to identify more than 20 native New England shrubs in late fall and winter. We also discuss the natural history of the shrubs we see. The program begins with a classroom session and then moves into the field. Look for such species as witch-hazel (*Hamamelis virginiana*), highbush blueberry (*Vaccinium corymbosum*), and, of course, winterberry (*Ilex verticillata*) and wintergreen (*Gaultheria procumbens*). Bring a bag lunch and a hand lens.

Saturday, December 7, 10 a.m.-2:30 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT3312

Instructor: Roland "Boot" Boutwell, naturalist

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

Limit: 16

Credit: Elective-all certificates

CONSERVATION BIOLOGY: SAVING BIODIVERSITY IN TODAY'S CLIMATE

The core mission of conservation organizations is to preserve plants, animals, and their habitats. How do we best go about this essential work at the level of your interest: state; local; or your own backyard? Participants discuss the definition of biodiversity, why we care about it as a society, the pervasive threats, and on-the-ground solutions. Using power-point presentations and case studies, we cover protection strategies and stewardship tools and discuss how climate change alters our thinking about traditional conservation approaches. The intention is to provide a background in the principles of conservation biology in order to help you to become a more effective conservation advocate and/or steward of your own land. A series of articles and web links are provided to aid in the discussion.

Saturdays, January 11, 25, 10 a.m.-3 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT5100

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

Fee: \$154 (Member) / \$182 (Nonmember)

Limit: 16

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

botany & conservation

PLANT SYSTEMATICS MODULE 5

This module culminates the series of five modules on plant systematics. Building on topics from previous modules, students gain an understanding of the breadth and complexity of plant classification. Hybridization, including its consequences and detection, is a key topic. Phylogeny reconstruction, taxonomic characters, reproductive biology, molecular data, and chromosomes are additional subjects to be discussed. A fundamental theme of this module is the importance of evolutionary history in understanding the relationships among organisms. Recommended text is *Plant Systematics: A Phylogenetic Approach* by Judd et al.

Sunday, January 26, 1-4 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT2246

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

Fee: \$49 (Member) / \$58 (Nonmember)

Limit: 20

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

BACKYARD SUGARING

Do you have a maple tree or two in your yard? Do you love maple syrup? If so, come and learn how to make your own delicious syrup. We cover everything—tree identification, equipment, tapping, weather, boiling, finishing, and storing—you need to know to get started on a sweet project.

Saturday, Feb 1, 1:00-3:30pm

Drumlin Farm, Lincoln, MA

Course Code: BOT7013

Instructor: Tia Pinney, Naturalist, MA Audubon Drumlin Farm

Fee: \$25 (Member) / \$29 (Nonmember)

Limit: 16

Cosponsor: MA Audubon Drumlin Farm



botany & conservation



BOTANY IN ART—A BOTANICAL TOUR OF THE WORCESTER ART MUSEUM

Meet at the Worcester Art Museum for a gallery tour with a twist. Explore the collection for botanical images, from the bonsai and lingzhi fungus of the Chinese jade collection to the stylized fruit depicted in the highly regarded Antioch mosaics. Paintings also reveal subtle botanical symbolism, as in wildflowers that appear in Renaissance religious art. Investigate floral paintings and tulipomania, idealized landscapes of the 19th century, and John Singer Sargent's painting of Lady Warwick (a socialist who later abandoned society and founded a women's horticultural college).

Saturday, February 1, 10 a.m.-12 p.m.

Worcester Art Museum, Worcester, MA

Course Code: ART6020

Instructor: Judith Sumner, Ph.D, botanist and author

Fee: \$24 (Member) / \$29 (Nonmember)

Limit: 16

Credit: Elective-all certificates

Cosponsor: Tower Hill Botanic Garden

WINTER BOTANY

This course includes a classroom lecture on the taxonomic characteristics of trees, shrubs, and herbaceous and evergreen plants in winter, including hands-on identification of twig and plant specimens, followed by a walk around Garden in the Woods to put your classroom knowledge to work. Learn the significance of macro and micro characteristics including growth habit, bud morphology, phyllotaxy, leaf and bundle scars, floral patterns, and fruits. Acquire experience with an extensive array of classroom specimens and field identification of woody plants. Gain confidence using a key to identify unknown specimens, whether you are a beginning or experienced botanist. The program provides lecture notes and twig samples to take home. Bring a hand lens and bag lunch and dress for the weather.

Saturday, February 8, 9:30 a.m.-3:30 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT3317

Instructor: Dr. William Kuriger, botanist

Fee: \$80 (Member) / \$96 (Nonmember)

Limit: 16

Credit: Elective-all certificates

botany & conservation

PLANT SYSTEMATICS MODULE 3

The third of five Plant Systematics modules examines tracheophyte families referred to as the tricolpates (i.e., the majority of dicot plants). Discussion includes primitive tricolpates (such as Ranunculaceae, Papaveraceae, Amaranthaceae) and eurosids (such as Rosaceae, Betulaceae, Brassicaceae). The lecture uses text and images that describe both critical characters for identification of families and representative genera in New England.

Sunday, February 23, 1-4 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT2236

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

Fee: \$49 (Member) / \$58 (Nonmember)

Limit: 20

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

THE NATIVE BEE AND NATIVE PLANT CONNECTION

With the demise of the European honeybee, awareness of the pollination crisis is on the rise. But the most biodiverse pollinators in New England are native bees, who are four times more likely to be attracted to native plants. Learn the basic needs of native bees, their nesting strategies, and native flower resources that offer solutions for meeting the double-whammy of preserving our crop seed while ensuring pollinator diversity and terrestrial ecosystem health. Discover strategies for “bee-scaping”—attracting high numbers of native bees to your landscape by creating a beautiful, pesticide-free restored habitat.

Wednesday, February 26, 6:30-8:30 p.m.

Nasami Farm, Whately, MA

Course Code: BOT5044

Instructor: Tom Sullivan, pollinator-habitat landscape designer

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

Limit: 20

Credit: Elective-all certificates

Cosponsor: Hitchcock Center for the Environment



field trips

FUNGI IN THE FALL

Can you distinguish a bolete from a gilled mushroom? What is a mushroom anyway? While fall is considered fungi season in the Northeast, fungi are seasonally cyclical and different species and types can be found almost any time except deep winter. Join us for a walk around the sanctuary to discover as many fungi as we can. Learn about the crucial and sometimes astonishing roles these fascinating life forms play in the ecosystem and some methods for identifying mushrooms and other fungi in the field.

Sunday, September 15, 1:00-3:30 p.m.

MA Audubon Drumlin Farm, Lincoln, MA

Course Code: FDT1079

Leader: Jef Taylor, naturalist

Fee: \$25 (Member) / \$29 (Nonmember)

Limit: 16

Cosponsor: MA Audubon Drumlin Farm

INTRODUCTION TO THE ASTERS OF RHODE ISLAND

Among the more challenging species to identify in the field, asters comprise a large proportion of the late summer and fall-blooming herbaceous flora of the Northeast and serve as an important food source for a host of insects. Learn to identify 15 of the most common species during this workshop, which includes a brief indoor presentation followed by a field trip to a nearby natural area. An identification key and other handouts will be provided. Bring a bag lunch, hand lens, field guide, and, if you like, a camera.

Saturday, September 21, 10:00 a.m.-2:30 p.m.

(Rain date- Sunday, September 22, 10:00 a.m.-2:30 p.m.)

South Kingston, RI

Course Code: FDT7041

Instructor: Arie Tal, aster aficionado and naturalist

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

Limit: 12

Credit: Field-FB/Adv.FB

Cosponsor: Rhode Island Wild Plant Society



field trips

MOUNT ALANDER

At 2,250 feet, Mt. Alander is one of the highest peaks in the southern Taconic Mountains and lies atop the three-state junction of Connecticut, New York, and Massachusetts. Our 7-mile loop hike will begin at Mt. Washington State Forest Headquarters. On the way to the summit, pass through northern hardwood forest, oak forest, and hemlock ravines into a large open bald with scrub oak, low-bush blueberry, huckleberry, and a variety of other low shrubs. En route, look at a variety of asters, goldenrods, and other late-blooming plants. The peak has spectacular views of the Berkshires, Taconics, Hudson valley, and Catskills, as well as migrating birds. The hike is fairly strenuous and rocky in sections. Bring a bag lunch, water, and suitable footwear.

Sunday, September 22, 10 a.m.-4 p.m.

South Egremont, MA

Course Code: FDT2044

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

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

Limit: 16

Credit: Field-FB/Adv.FB

FALL IN THE BOG

A thick, floating mass of sphagnum moss, oxygen-poor water, and plants adapted to very low nutrient conditions characterize quaking bogs. The Philbrick-Criscenti Quaking Bog, one of the best examples of these unique peatlands, offers a chance to explore a mile-long trail while staying high and dry atop a boardwalk. A host of bog plants are to be discovered as we transition from a red maple-sphagnum swamp, through a black spruce-larch swamp, to the Tundra Garden Loop, where we find vegetation similar to that in more northern areas where boreal forest meets the open Arctic tundra. Bring a bag lunch, water, and a hand lens if you have one.

Sunday, October 6, 10 a.m.-2:00 p.m.

New London, NH

Course Code: FDT4007

Leader: Roland "Boot" Boutwell, naturalist

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

Limit: 10

Credit: Field-all certificates



field trips



HEMLOCK GORGE: TREE ID USING BARK AND HABITAT CLUES

Explore this little gem, set in the midst of an urban area and known as an important site in pre-colonial days. Look at the diversity of trees that dominate this small stream habitat and learn why they differ in various areas of the park. Bring binoculars, water, warm clothes in layers, lunch, warm boots, and the book *Bark*, by Michael Wojtech, if you have a copy.

Saturday, October 19, 10 a.m.-2 p.m.

Needham, MA

Course Code: FDT1122

Leader: Nancy Goodman, naturalist

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

Limit: 16

Credit: Field-FB/Adv.FB

BOGGY KETTLEHOLES IN WALDEN WOODS

To the south and west of Walden Pond, itself a large kettlehole pond, lie several smaller kettleholes made famous by Thoreau's descriptions of their floating sphagnum mats and boggy flora. Explore these intimate glacial landscapes and their plant communities, going over Emerson's Cliff, down into Heywood Meadow and along the terraced Andromeda Ponds toward Fairhaven Bay on the Sudbury River. The return route passes by Thoreau's historic cabin site, Wyman's Meadow, and through mixed hardwoods, remnant stands of pitch pine, and still-flowering groves of witch-hazel with beautiful views of the pond along the way. Wear sturdy footwear, and bring a snack and water.

Sunday, October 20, 1-4 p.m.

Concord, MA

Course Code: FDT1120

Leader: Cherrie Correy, naturalist and photographer

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

Limit: 18

Credit: Field-FB/Adv.FB

field trips

BRAY LAKE AND MT. TOM: TREE ID USING BARK AND HABITAT CLUES

For nearly half the year, bark provides the best clue to tree identification. Become familiar with the characteristic bark of different trees in different habitats and at different stages of growth. We visit a wetland and a dry, upland woodland to see the differences in the trees. Bring binoculars, water, warm clothes in many layers, lunch, warm boots, and the book *Bark* by Michael Wojtech, if you have a copy.

Saturday, November 2, 10 a.m.-3 p.m.

Holyoke, MA

Course Code: FDT2062

Leader: Nancy Goodman, naturalist

Fee: \$30 (Member) / \$35 (Nonmember)

Cosponsor: Hitchcock Center for the Environment



NAKED SHRUBS

No leaves? No problem! Use a combination of branching patterns, bud and bark characteristics, habitat, persistent fruits, galls, and marcescent leaves to identify shrubs in winter. The program begins with a short session indoors, then we travel to a nearby site for a close look at 15-20 native New England shrubs plus a couple of non-native invasives. Return indoors for a twig or slide quiz and a cup of something hot. This course serves as a good introduction to shrub identification in winter or a good review for those who have taken "Native New England Shrubs." Bring lunch and a hand lens if you have one, and dress for the weather.

Leader: Roland "Boot" Boutwell, naturalist

Fee: \$20 (Member) / \$25 (Nonmember)

Limit: 16

Credit: Field-FB/Adv.FB

Choose one of three sections

Wednesday, November 20, 10 a.m.-2 p.m.

Lexington, MA

Course Code: FDT1116

Saturday, November 30, 10 a.m.-2 p.m.

Wells, ME

Course Code: FDT1117

Cosponsor: Wells National Estuarine Research Reserve

Saturday, January 25, 10 a.m.-2 p.m.

Belmont, MA

Course Code: FDT1114

Cosponsor: MA Audubon Habitat

wetlands

WETLAND SPECIES IDENTIFICATION IN WINTER

This program builds the knowledge and skills needed for recognizing wetland trees and shrubs in winter. The morning session is spent indoors learning key identification features. After lunch, we go out in the field to see these plants in their habitats and determine wetland boundaries. Some familiarity with common wetland plants and taxonomy is helpful. Dress warmly and prepare for cold, wet, field conditions. Bring a hand lens and a bag lunch.

Saturday, December 14, 9:30 a.m.-3:30 p.m.

Garden in the Woods, Framingham, MA

Course Code: WET1002

Instructor: Dennis Magee, author, environmental consultant

Fee: \$80 (Member) / \$96 (Nonmember)

Limit: 16

Credit: Elective-all certificates

WETLAND SHRUBS IN WINTER

Use a combination of branching patterns, bud and bark characteristics, habitat, persistent fruits, galls and marcescent leaves for the winter identification of wetland shrubs. With a pond, a stream, and a bog, the Garden provides an excellent field site for growth in and around wetlands. We begin with a short session indoors, then head into the Garden for a close look at 15-20 native New England shrubs (plus a non-native invasive or two) that grow in and around wetlands. The class includes some fun and interesting natural history. Bring lunch and a hand lens if you have one, and dress for the weather.

Wednesday, February 5, 10 a.m.-2 p.m.

Garden in the Woods, Framingham, MA

Course Code: WET3020

Leader: Roland "Boot" Boutwell, naturalist

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

Limit: 16

Credit: Elective-all certificates

Cosponsor: Massachusetts Association of Conservation Commissioners



children & families

ALL PROGRAMS AT GARDEN IN THE WOODS, FRAMINGHAM, MA



TURTLE TREK

Can you identify painted turtles, box turtles, and snapping turtles? How can you tell girl turtles from boy turtles? What do they eat and how do they survive when enemies attack? What does the inside of a turtle shell look like? Walk the trails and hunt for turtles in their different habitats. Following the walk, snack on some favorite turtle food. (No—not bugs!) Finally, create a “turtle” craft to take home.

Wednesday, October 16, 3:30-5:30 p.m.

Children in Grades K-2

Course Code: CHP3800

Instructors: Janet Springfield, naturalist; Lana Reed, Registrar, New England Wild Flower Society

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

Limit: 12

FULL MOON NIGHT HIKE

Near the night of the “Beaver Moon,” venture out into the dark forest to enjoy the nighttime sights, smells, and sounds. Who is still awake? What stars or planets can we spot? What tricks can we use to find our way? After the walk, enjoy hot cocoa and make a booklet of full-moon activities for months of full moons to come.

Friday, November 15, 6:30-8:30 p.m.

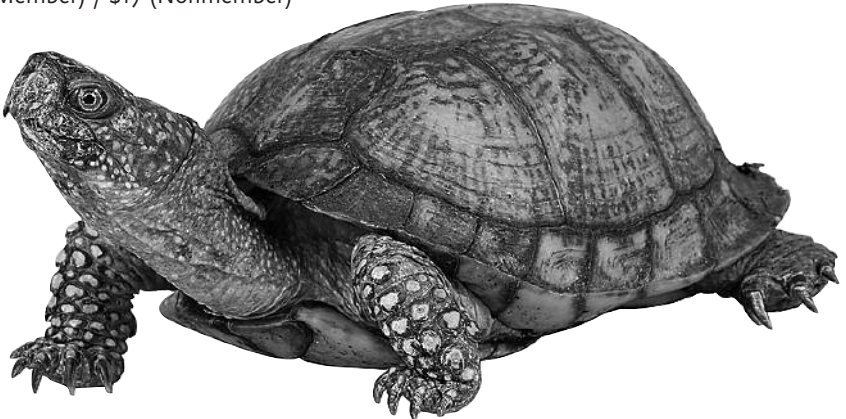
Children with Adult Companion

Course Code: FAM6500

Instructor: Tracy Phipps, naturalist

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

Limit: 24



children & families

WINTER WONDERS WALK

Come to Garden in the Woods to learn how foxes, rabbits, squirrels, turtles, frogs, trees, and wildflowers survive the long winter months. Make a “track-finder” and hike down into the snowy woods, over an icy brook, and through a meadow looking for signs of winter residents and their activities. At afternoon’s end, enjoy hot drinks and a winter craft activity.

Sunday, January 19, 1:30–3:30 p.m.

Children with Adult Companion

Course Code: FAM1800

Instructor: Tracy Phipps, naturalist

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

Limit: 24

SALAMANDER CELEBRATION

Join our annual celebration of this shy and beautiful woodland creature. Come to learn about several special kinds of salamanders that live at Garden in the Woods. Some may even live in your own backyard. Enjoy a puppet show and a short slide program, and then walk to a vernal pool to seek out some salamanders and their eggs. Make a salamander craft and a life-cycle flip-book to take home.

Sunday, March 23, 1:30-3:30 p.m.

Children with Adult Companion

Course Code: FAM3600

Instructor: Janet Springfield, naturalist

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

Limit: 24



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 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 32.

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.

join today!

Enjoy the rewards of membership

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.

JOIN JOHN BURNS
FOR A SOCIETY-SPONSORED TRIP TO THE

MADAGASCAR

October 4-19, 2014

Visit the fourth largest island in the world, isolated from the African continent for 30 million years. Madagascar is home to at least 12,000 plants, many of which are endemic to the island. Ninety-five percent of the lemurs and reptiles, eighty percent of the flower plants and more than 100 birds are found nowhere else. Tour wildlife reserves on both sides of the island for a contrast of rain forest and semi-arid habitats.

Details at
www.newenglandwild.org/learn/travel



NEW ENGLAND WILD FLOWER SOCIETY
HEADQUARTERS & GARDEN IN THE WOODS
180 Hemenway Road
Framingham, Massachusetts 01701-2699

ADDRESS SERVICE REQUESTED