

FALL/WINTER 2010


NEW ENGLAND
WILD
FLOWER
SOCIETY



learn+grow

SEPTEMBER 2010 • VOLUME 3, NUMBER 2

THE COURSE CATALOG OF NEW ENGLAND WILD FLOWER SOCIETY



OPPORTUNITIES TO LEARN, PARTICIPATE, AND TRAVEL

- Explorations of native plants, gardening, and design at all levels
- Courses and workshops on botany, conservation, and natural history
- Field trips, family programs, lectures, and useful ideas for everyone

regional index

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ON THE COVER

Doellingeria infirma, Arieh Tal.
Endangered in MA.



FROM THE EDUCATION DEPARTMENT

Outside our windows at Garden in the Woods, green and growing native plants are almost humming as they store energy for the winter months to come.

Sunlight is powering the transformation of water and gas into sugar, which will, all too soon, be stored as sweet sap under the frozen ground. When the last courses in this fall/winter catalog occur, the sap will be rising up again, to power another start of spring growth.

As plants cycle into their resting phase in the coming months, look for ways to continue as active learners — designing gardens, discovering ecological horticulture techniques, or exploring native plant habitats on the Boston Harbor Islands, in the forests and fields of New Hampshire, and along the barrier beaches of Cape Cod. Take advantage of our amazingly inspiring cadre of instructors as they share their native plant passion in lectures, hands-on workshops, field trips and garden tours. Look for new courses this session on fire management, using forestry measurement tools, installing rain gardens, and finding design inspiration from natural landscapes.

For those very snowiest of months, come to Garden in the Woods for a Winter Woods Walk, enjoy high tea after a course on Darwinian Botany, or venture into the woods of Vermont to learn winter twig identification. Join forces with other native plant enthusiasts to learn new ways to appreciate our native flora and to preserve its heritage in our gardens and on the local landscape.



Bonnie Drexler

Bonnie Drexler
Education Director

Lana Reed

Lana Reed
Registrar

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certificate program



ENROLL NOW!

Complete the certificate registration form on page 28 of this catalog or online at www.newenglandwild.org. 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 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 for details.

CERTIFICATE ORIENTATION

Join Education Director Bonnie Drexler and certificate program graduates for an illustrated talk that includes some of the fascinating stories that native plants have to tell, a look at the Society's efforts to conserve native flora, and why it is important to "learn the wildflowers." 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, September 29, 7-8:30 p.m.

Garden in the Woods, Framingham, MA

Course Code: CER8000

Fee: Free program

Limit: 20

FREE LECTURE

Annual Native Plant Lecture and Certificate Awards



TEACHING BOTANY WITH TWENTY-FIRST CENTURY TECHNOLOGY

Join Elizabeth Farnsworth, PhD, the Society's Senior Research Ecologist, as she introduces our new initiative, "Go-Botany!"

This four-year project, funded by the National Science Foundation, allows botanical novices and experts alike to use their computer or favorite hand-held device to identify and learn about plants, indeed to access a world of information about them. Yes, technology can actually bring us closer to the natural world. Imagine wandering out into a distant forest, discovering an unusual wildflower and only having to power up your cell phone to key out its identification, learn its geographic distribution, conservation status, medicinal uses, possible pollinators and see images of its fruit.

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

Garden in the Woods, Framingham, MA

Lecturer: Elizabeth Farnsworth, PhD, Senior Research Ecologist

Course Code: LEC4008

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

WHAT OUR GRADUATES TELL US

"I have been able to take the work I did for the Certificate and convert it to a lifestyle that includes vocational and avocational work with plants."

Deb Lievens, Advanced Certificate in Field Botany

"The certificate program advanced my knowledge in native plants and fits well with my sustainable philosophy and residential design practices."

Bridget McManus, Advanced Certificate in Native Plant Horticulture and Design

"The Certificate Program provided me a useful framework and the needed encouragement for pursuing interest in native plants and conservation. The exposure to native plants through a wide range of courses, field trips, experts, and enthusiasts was invaluable and personally rewarding."

Bruce Patterson, Advanced Certificate in Field Botany

horticulture & gardening

PRUNING FUNDAMENTALS

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



Fee: \$33 (Member) / \$39 (Nonmember)

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

Choose one of two sessions:

Friday, September 3, 9:30 a.m.-12:30 p.m.

Coastal Maine Botanical Gardens, Boothbay, ME

Instructor: Rolf Briggs, Tree Specialists, Inc.

Course Code: HOR3126

Cosponsor: Coastal Maine Botanical Gardens

Saturday, November 13, 9:30 a.m.-12:30 p.m.

Garden in the Woods, Framingham, MA

Instructor: Dave Ropes, Tree Specialists, Inc.

Course Code: HOR3120

ORNAMENTAL NATIVE GRASSES: CHOOSING THE BEST GRASSES FOR YOUR GARDEN

Fall in New England isn't just for trees anymore. It's also peak season for a variety of native ornamental grasses and sedges which can add a rich textural element to your garden, large or small. Do you know which non-native grasses have the potential to become invasive on the landscape? Learn the answer to this and other burning questions in a colorful survey of grasses and sedges, species and selections, new and old.

Thursday, September 23, 5:45-7:45 p.m.

Cambridge, MA

Course Code: HOR1081

Instructor: Andrew Keys, landscape architect and designer

Fee: \$22 (Member) / \$26 (Nonmember)

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

Cosponsor: Cambridge Center for Adult Education

horticulture & gardening

RENOVATE AND REPLANT: NATIVE SUBSTITUTES FOR COMMON LANDSCAPE INVASIVES

Our plant choices now extend beyond color and form. We seek plants that won't escape into the natural community and, at the same time, provide valuable nourishment and habitat for birds, mammals, and insects. Learn about ecologically sound substitutes for invasives such as burning bush, Norway maple, and yellow flag iris. Following the lecture, Andrew and the Trustees Horticultural Staff will lead a walk through the 6-acre Sedgwick Gardens, identifying native trees and shrubs thriving within the ornamental gardens and along the woodland edge.

Saturday, September 25, 9:30 a.m.-12 noon
Beverly, MA

Course Code: HOR2113

Instructor: Andrew Keys, landscape designer, staff of Trustees of Reservations Long Hill

Fee: \$22 (Member) / \$26 (Nonmember)

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

Cosponsor: Trustees of Reservations Long Hill

RAIN GARDENS AND MORE: EFFECTIVE USE OF RAINWATER IN THE LANDSCAPE

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-use strategies such as bog 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 project to discuss.

Saturday, September 25, 9 a.m.-12 noon
Garden in the Woods, Framingham, MA

Course Code: HOR4073

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

Fee: \$33 (Member) / \$39 (Nonmember)

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



horticulture & gardening

NATIVE TREES AND SHRUBS FOR FALL AND WINTER INTEREST

Plant for four seasons of interest by including native trees and shrubs with dramatic color in leaves, fruit, or late-blooming flowers. Even the long months of winter can be brightened by native species that have evergreen leaves, interesting bark, striking silhouettes, or persistent fruit. Add interest to the view from your kitchen window, encourage winter birds and wildlife, and improve your home's curb appeal in the "off season." Recommendations for planting design and maintenance included.

Thursday, September 30, 5:45-7:45 p.m.

Cambridge, MA

Course Code: HOR2014

Instructor: Laura Eisener, landscape designer

Fee: \$22 (Member) / \$26 (Nonmember)

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

Cosponsor: Cambridge Center for Adult Education

NATIVE BULBS FOR NEW ENGLAND GARDENS

A large variety of North American species actually perform better if the whole plant is transplanted from a container in the spring rather than bare root in the fall. Discover some of the beautiful native plants that grow from bulbs, corms, rhizomes, and tubers, including spring and summer blooming species. These hardy, long-lasting perennials make delightful additions to your sun or shade garden.

Tuesday, October 5, 7-9 p.m.

Garden in the Woods, Framingham, MA

Course Code: HOR1570

Instructor: Laura Eisener, landscape designer

Fee: \$22 (Member) / \$26 (Nonmember)

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

Cosponsor: Mass Audubon, Drumlin Farm

DESIGNING GARDENS WITH FLORA OF THE AMERICAN EAST

For gardeners of all levels, this day-long program provides a comprehensive foundation for garden design using regionally native plants. Topics include basic design concepts and styles, wildlife benefits, sustainable design and maintenance, and strategies for "safe sex in the garden" to reduce the spread of non-native invasives. Learn to apply basic ecological and design principles in your own or your clients' gardens. Bring a bag lunch. Books available for purchase and signing by the instructor.

Saturday, October 9, 9:30 a.m.-3:30 p.m.

Arnold Arboretum, Jamaica Plain, MA

Course Code: HOR1530

Instructor: Carolyn Summers, author and designer, *Designing Gardens with Flora of the American East*

Fee: \$60 (Member) / \$70 (Nonmember)

Limit: 40 **Credit:** Core-Adv.HD; Elective HD

Cosponsor: Arnold Arboretum of Harvard University



horticulture & gardening



NATIVE GROUNDCOVERS

Groundcovers act as living mulches, preventing erosion and soil compaction, while conserving moisture and moderating soil temperatures. Beyond strictly practical considerations are the aesthetic delights of groundcovers—they bring refreshing seasonal changes and a pleasing rhythmic interplay of form, texture, and color to the ground plane. This workshop, appropriate for garden designers, landscapers and homeowners, focuses on the attributes and availability of native plants for groundcover use.

Instructor: Laura Eisener, landscape designer

Fee: \$22 (Member) / \$26 (Nonmember)

Limit: 20 **Credit:** Elective-HD or Adv. HD

Choose one of three sections:

Saturday, October 16, 2-4 p.m.

Bristol, RI

Course Code: HOR1553

Cosponsor: Blithewold Mansion, Gardens & Arboretum

Wednesday, October 27, 7-9 p.m.

Beverly, MA

Course Code: HOR1552

Cosponsor: Trustees of Reservations Long Hill

Tuesday, February 1, 7-9 p.m.

Garden in the Woods, Framingham, MA

Course Code: HOR1550

Cosponsor: MA Audubon, Drumlin Farm

ECOLOGICAL LANDSCAPING TECHNIQUES

Do you want to be a greener gardener or professional landscaper? Ecological landscaping emphasizes techniques designed to enhance and preserve floral and faunal diversity both above and below the soil line, and to provide sustainability over the long term. Some techniques prevent alteration of existing soil biota and hydrology, while others, such as compost and compost tea, improve soil function and plant health. Receive hands-on training on approaches to site analysis, choosing appropriate plant material for each site, and mitigation of adverse effects of past land uses. Prepare for some outdoor activities including digging and compost tea making. Bring a bag lunch.

**Monday & Tuesday, October 25, 26,
9 a.m.- 4 p.m.**

Garden in the Woods, Framingham, MA

Course Code: HOR3700

Instructors: Scott LaFleur, Horticulture Director, and Staff

Fee: \$154 (Member) / \$185 (Nonmember)

Limit: 16

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

horticulture & gardening

WILDFLOWER PROPAGATION II

Learn tips for raising wildflowers from seed, allowing access to 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 Pawling, Plant Propagator, New England Wild Flower Society

Fee: \$48 (Member) / \$58 (Nonmember)

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

Choose one of two sections:

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

Garden in the Woods, Framingham, MA

Course Code: HOR3201

Saturday, December 4, 10 a.m.-2 p.m.

Nasami Farm, Whately, MA

Course Code: HOR3203

ENERGYWISE LANDSCAPING

Design your landscape so it saves energy and contributes to a healthier environment. Discover tips to lower your home's heating and cooling costs, minimize fuel used in landscape construction, maintenance and everyday living, and choose products and materials with lower embedded energy costs. Our landscapes are full of opportunities to reduce energy consumption—most of them involve little or no cost, and some will actually save money. Find out how to shrink your energy footprint while enhancing your property and adding value to your home. The speaker will sell and sign her widely

acclaimed new book on the topic following the program.

Instructor: Susan Reed, author, *Energywise Landscaping*

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

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

Choose one of two sections:

Wednesday, December 8, 5:30-7:00 p.m.

Nasami Farm, Whately, MA

Course Code: HOR3721

Thursday, December 9, 10:30 a.m.-12 noon

Garden in the Woods, Framingham, MA

Course Code: HOR3722

BORROWED LANDSCAPES: LEARNING FROM WILD PLACES

What are the places that you love the most? Is there a forest, a meadow, a hilltop, or a rocky cove that feels both simple and complex, mysterious and somehow just right? Explore how wild places can provide inspiration for design in spaces large or small. Examine New England's archetypal natural landscapes and native plant communities and identify the qualities that give them the power to intrigue and enchant us. Next, discuss gardens that use the qualities of natural landscapes to create a powerful sense of place, even in the heart of the city. Along the way, discover design strategies that anyone, from a beginner to an experienced designer, can use to create places that are inviting, engaging, and memorable.

Sunday, January 16, 1-4 p.m.

Garden in the Woods, Framingham, MA

Course Code: HOR4020

Instructor: Tobias Wolf, principal, Tobias Wolf Landscape Architecture

Fee: \$33 (Member) / \$39 (Nonmember)

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

horticulture & gardening



NATIVE VINES FOR THE HOME GARDEN

Too often the vertical space in the garden is overlooked and underutilized. Why not expand your garden palette and use colorful vines to fill these spaces? This class explores some of the hardy vines available in the trade, including many native species that attract wildlife and provide texture to the landscape. Information on growing techniques, types of trellises to use, and sources for vines provided.

Sunday, January 30, 2-4 p.m.

Blithewold, Bristol, RI

Instructor: Laura Eisener, landscape designer

Course Code: HOR2803

Fee: \$22 (Member) / \$26 (Nonmember)

Limit: 20 **Credit:** Elective-all certificates

Cosponsor: Blithewold Mansions, Gardens & Arboretum

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 supplied at the first class.

Fee: \$175 (Member) / \$210 (Nonmember)

Limit: 12

Credits: Core-HD; Elective-all certificates

Choose one of three sections:

Tuesdays, February 1, 8, 15, 22, March 1, 8, 15, 22, 5:45-7:45 p.m.

Cambridge, MA

Course Code: HOR4002

Instructor: Karen Sebastian, landscape architect, principal, Karen Sebastian, LLC, Landscape Architecture.

Cosponsor: Cambridge Center for Adult Education

Saturdays, February 12, 19, 26, March 5, 12-3:45 p.m.

Newbury, NH

Course Code: HOR4008

Instructor: Liz Krieg, landscape designer and consultant

Cosponsor: The Fells, Newbury, NH

Tuesdays, February 22, March 1, 8, 15, 22, 29, April 5, 7-9:15 p.m.

Garden in the Woods, Framingham, MA

Course Code: HOR4000

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

horticulture & gardening

PUSHING THE DESIGN ENVELOPE WITH NATIVE PLANTS

Native plants support a variety of design styles from naturalistic to traditional to contemporary. Using Garden in the Woods as a case study, discover the variety of design principles that create this dynamic garden. The naturalistic style unifies the gardens along the main Curtis Path, bringing visitors to habitat-based garden areas and exposing them to contemporary design principals in newer areas such as the Idea Garden. Learn how permaculture theory influences the Edible Garden as it continues to evolve. Then take a look beyond Garden in the Woods to explore how other public gardens are pushing the envelope with native plants.

Thursday, February 10, 10 a.m.-12 noon

Garden in the Woods, Framingham, MA

Course Code: HOR4021

Instructor: Kristin DeSouza, Senior Horticulturist, New England Wild Flower Society

Fee: \$22 (Member) / \$26 (Nonmember)

Limit: 16

Credit: Elective-HD/Adv.HD

BONES OF THE GARDEN: STRENGTHENING THE DESIGN

Every memorable landscape has one thing in common – strong “bones”. The placement of trees and shrubs creates form, directs movement and organizes the garden space. Learn to select, situate, and integrate these stately elements into the cultivated landscape. Explore the concepts of creating space, the impact of plant growth over time in locating structural elements, and review a selection of native plant varieties that are

well-suited for New England sites. Using your new knowledge, develop your own site-specific design. Receive feedback on designs and plant combinations, and during the final session, inspect the “bones” of Garden in the Woods with a late winter walk.

Monday, February 28, Wednesday, March 2, 6:30-9:00 p.m., Saturday, March 5, 9:30 a.m.-1:30 p.m.

Garden in the Woods, Framingham, MA

Course Code: HOR4223

Instructor: Cheryl Salatino, designer and horticulturist

Fee: \$98 (Member) / \$117 (Nonmember)

Limit: 16

Credit: Core-Adv.HD; Elective-HD

Cosponsor: Arnold Arboretum of Harvard University



horticulture & design trips

SUBURBAN SURPRISES

Two diverse Lexington properties offer a wonderful contrast in garden content and gardening styles. Jim Jones, past president of the Rock Garden Society, began gardening with something of a “one of each” mindset. “Reality set in after a while, but not before I had accumulated quite a collection of odd-ball plants.” Recently, his focus has shifted to a week-by-week distribution of bloom across the seasons, with the fall portion dominated by native species. Carolyn Plourde’s garden was designed as a place of beauty for herself and her family with hardscape, a waterfall area, and large plantings. Over time, it has been reworked and expanded in many ways. Learn about “gutter” gardening between sidewalk and road, and how a flock of chickens can add delight to the garden and eggs to your basket.

Friday, September 17, 10 a.m.-1 p.m.

Lexington, MA

Course Code: HDT1031

Instructors: Jim Jones, Carolyn Plourde, gardeners extraordinaire

Fee: \$32 (Member) / \$38 (Nonmember)

Limit: 20

Credit: Field-HD/Adv.HD

AUTUMN SPLENDOR IN TWO GARDENS

Find inspiration at Ellen McFarland’s four-season garden, beautifully designed by Gary L. Koller with a series of garden rooms surrounding the converted carriage house/barn. Mature plantings of trees and shrubs provide a backdrop for the interplay of color and texture from masses of perennials. A landscaped swimming pool with cascading waterfall adds a soothing note midway through the garden. This garden combines

the best in design, plantings, and hardscape, seasoned with works of art. Then travel to Dover where you are invited to “enter and forget from where you’ve come.” This is the intention of designer Kevin Doyle for his garden visitors. Set on a rocky rise in Dover, “Cairn Croft” unfurls down a slope, infused with beauty, plant texture, and moments of surprise and fun. Explore a woodland path, pond, wetland, formal parterre, and driveway courtyard enhanced by elements of sculpture and garden art.

Wednesday, September 22, 10 a.m.-1 p.m.

Westwood and Dover, MA

Course Code: HDT1029

Instructors: Ellen McFarland, Kevin Doyle, gardeners extraordinaire

Fee: \$32 (Member) / \$38 (Nonmember)

Limit: 25

Credit: Field-HD/Adv.HD

FALL IN THE GARDEN

And then get up and do what has to be done! Get inspired by this hands-on opportunity to learn about all the various garden activities to do in the autumn. Get tips on planting, dividing, fall clean-up, pruning, and preparing for the winter months ahead. 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, and diverse perennial beds.

Tuesday, October 19, 10 a.m.-12 noon

(Rain date, Wednesday, Oct 20, 10 a.m.-12 noon)

Lincoln, MA

Course Code: HDT1028

Instructor: Robin Wilkerson, landscape designer

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

Limit: 20

Credit: Field-HD/Adv.HD

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 their bark, flowers, and fruits. This course introduces about 50 species growing in this region. Become familiar with family characteristics and historic uses. Bring a hand lens to each session. Weekend sessions held in locations off-site with directions provided during the first class.

Fee: \$195 (Member) / \$225 (Nonmember)

Limit: 16

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

Choose one of two sections:

Tuesdays, September 7, 14, 21, 6:30-8:45 p.m.

Sundays, September 12, 19, 9 a.m.-1 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT3301

Instructor: Roland "Boot" Boutwell, naturalist

Wednesdays, September 8, 22, 6-9 p.m.,

Sunday, September 12, Saturday, September 18, 9 a.m.-1:30 p.m.

Squam Lakes Natural Science Center,
Holderness, NH and field sites

Course Code: BOT3304

Instructor: Chris Mattrick, Forest Botanist,
White Mtn. National Forest, NH

Cosponsor: Squam Lakes Natural Science
Center

FIELD IDENTIFICATION TECHNIQUES

This course equips students with the skills and knowledge to identify plants in the field. Discover 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 will help increase your confidence and skill in field identification. Please bring a hand lens. Information on required texts will be sent upon registration.

**Sundays, September 12, 19, 26, October 3,
9 a.m.-12 noon**

Garden in the Woods, Framingham, MA

Course Code: BOT2000

Instructor: Leslie Duthie, botanist

Fee: \$175 (Member / \$200 (Nonmember)

Limit: 16

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

botany & conservation

WILDFLOWERS IN FALL

As 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 been produced by spring wildflowers and how are they dispersed? What 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 the key points, and samples for dissection and close observation. References for fruits and winter ID provided. Bring *Newcomb's Wildflower Guide* and a 10x hand lens.

Tuesday, September 21, 10 a.m.-1 p.m.

Garden in the Woods, Framingham, MA

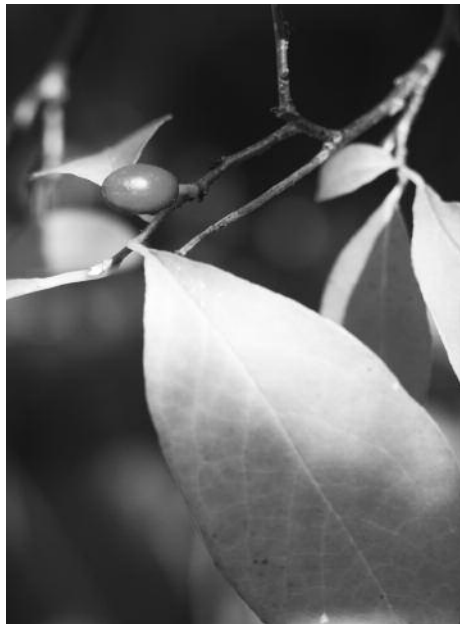
Course Code: BOT3009

Instructor: Frances Clark, botanist, principal of Carex Associates

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

Limit: 16

Credit: Elective-all certificates



INTRODUCTION TO BOTANY

Among the topics to be explored in this course are plant cells and tissues, anatomy and morphology, reproduction, nutrition, growth and development, plant diversity, evolution, classification, and nomenclature. This course, offering both lectures and laboratory time, introduces botany to new students or serves as a refresher course. Required text: *Botany for Gardeners* by Brian Capon.

Tuesdays, September 21, 28, Oct 5, 12, 19, 26, Nov 2, 9, 6:30-8:30 p.m.

Harvard University Herbaria, Cambridge, MA

Course Code: BOT1010

Instructor: Dr. Kanchi Gandhi, botanist, Harvard University

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

Limit: 16

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

Sponsor: Arnold Arboretum of Harvard University

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. Microscope 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 23, 30, October 7, 14, 21, 28, 6:30-9 p.m.

Bentley University, Waltham, MA

Course Code: BOT1000

Instructor: Dr. Nancy Eyster-Smith, botanist, Bentley University

Fee: \$208 (Member) / \$240 (Nonmember)

Limit: 16

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

botany & conservation



ADVANCED PLANT INVENTORY TECHNIQUES

Learn to sample vegetation communities, based on methods developed by The Nature Conservancy and practiced widely by the National Park Service and state Natural Heritage Programs. Evening sessions cover the elements of field preparation; maps, aerial photography, GPS units, field equipment, data sheets, rare plant and community documentation, and classification systems. Our field investigation samples upland and wetland plant associations, collecting data on geology, soils, and hydrology as well as quantitative information on species associations, forest structure, dominance, and cover. Experiment with releve, quadrat, and transect methods of plant sampling and compare the factors that determine species richness and diversity across different vegetation types. Sturdy footwear is recommended, as are a compass and hand lens. Bring a bag lunch for the field session.

Thursdays, September 23, October 7, 6:30-9 p.m., Saturday, September 25, 9 a.m.-5 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT2055

Instructor: Ted Elliman, Vegetation Manager, New England Wild Flower Society

Fee: \$172 (Member) / \$206 (Nonmember)

Limit: 15

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

FRAMEWORK TREES OF NEW ENGLAND

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

Tuesdays, September 28, October 5, 12, 19, 7-9 p.m., Saturdays, October 9, 12-4 p.m., Saturday, October 16, 9 a.m.-1 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT3200

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

Fee: \$176 (Member) / \$204 (Nonmember)

Limit: 16

Credit: Core-FB; Elective-all certificates

botany & conservation

CERTIFICATE ORIENTATION

Join Education Director Bonnie Drexler and certificate program graduates for an illustrated talk that includes some of the fascinating stories that native plants have to tell, a look at the Society's efforts to conserve native flora, and why it is important to "learn the wildflowers." 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, September 29, 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

Limit: 20

INVASIVES: ID, ECOLOGY, AND CONTROL

This course provides an introduction to about 40 of the most common invasive non-native plants in our local landscapes. Through lecture, discussion, power-point presentation, herbarium specimens, and a walk outside, become familiar with identification clues as well as the habits of a number of these plants that are so disruptive of 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. Bring a bag lunch and a hand lens if you have one.

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

Vermont Institute of Natural Science, Quechee, VT

Course Code: BOT5104

Instructor: Ted Elliman, Vegetation Manager, New England Wild Flower Society

Fee: \$44 (Member) / \$52 (Nonmember)

Limit: 20 **Credit:** Elective-all certificates

Cosponsor: Vermont Institute of Natural Science, Quechee, VT

PHOTOGRAPHING FOR THE ONLINE FLORA

New England Wild Flower Society is seeking volunteers to contribute photographs of New England plant species for our forthcoming NSF-funded "*Online Flora of New England*." For each of several thousand plant species of our region, we need photos of habit, leaf, flower and fruit, as well as images of bark and buds for woody species. This fun workshop will prepare you to take aesthetically-appealing "diagnostic photographs," that you may wish to contribute to the forthcoming *Online Flora*. You will learn some of the tips and tricks of successful plant photography from an accomplished botanical photographer. Bring a bag lunch, your digital or film camera, and a tripod for the outdoor practicum, which will follow the indoor slide presentation.

Instructor: Arieh Tal, photographer and naturalist

Fee: \$28 (Member) / \$34 (Nonmember)

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

Choose one of two sessions:

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

Montshire Museum, Norwich, VT

Course Code: BOT6037

Cosponsor: Montshire Museum

Saturday, October 23, 10 a.m.-2 p.m.

Yale Peabody Museum, New Haven, CT

Course Code: BOT6036

Cosponsor: Yale Peabody Museum

botany & conservation

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? Over several class sessions, we 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 to illustrate concepts and case studies to apply our ideas, we cover protection strategies and stewardship tools. We talk about how climate change alters our thinking about traditional conservation approaches. The intention is to provide a background in the principles of conservation biology for 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 aide in the discussion.

Fee: \$120 (Member) / \$140 (Nonmember)

Limit: 16

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

Choose one of two sections

Saturdays, October 23, 30, 9:30 a.m.-12:30 p.m., November 13, 9:30 a.m.-1:30 p.m.

Vermont Technical College, Randolph Center, VT

Course Code: BOT5103

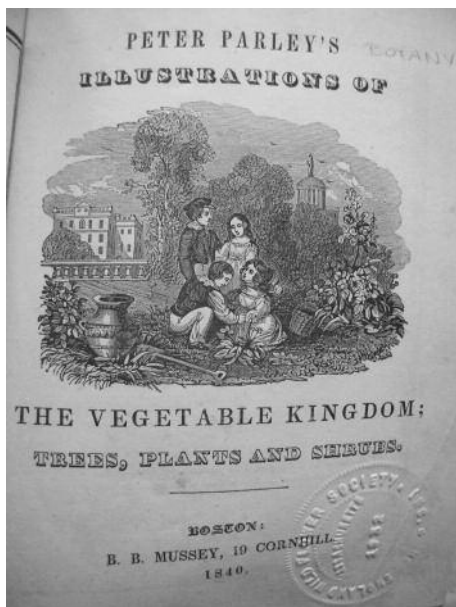
Instructor: Rick Enser, Consulting Conservation Biologist

**Saturdays, January 29,
February 12, 10 a.m-3 p.m.**

Garden in the Woods, Framingham, MA

Course Code: BOT5100

Instructor: Frances Clark, botanist, principal of Carex Associates



BOOKLOVER'S BOTANY

Join two book aficionados who would love to share their favorites from the Society's impressive collection in the Lawrence Newcomb Library. Did you know Asa Gray wrote a beautifully illustrated botany primer for schoolchildren? Are you familiar with Peter Parley's *Illustrations of the Vegetable Kingdom; Trees, Plants and Shrubs* printed in 1840? See rare books illustrating wild flowers, ferns, and woody plants; wonderful children's books any adult would love; serial publications that show the history of American Botany; and Newcomb's original notebooks. Conclude with tea and scones.

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

Garden in the Woods, Framingham, MA

Course Code: BOT1202

Instructors: Carol Govan, Robin Wilkerson, naturalists and bibliophiles

Fee: \$28 (Member) / \$33 (Nonmember)

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

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 the plant characteristics. 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 one of the five-part series in plant systematics.

Saturday, November 13, 1-4 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT2205

Instructor: Dr. Judith Sumner, botanist and author

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

Limit: 20

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

Cosponsor: Arnold Arboretum of Harvard University

IDENTIFYING AND ENJOYING HERBACEOUS PLANTS IN LATE FALL

When herbaceous plants have died back and look “disenchanted,” it is still possible to identify some of them by closely examining their dried leaves, stems, and persistent fruits and seeds. Join Frances Clark for a classroom exploration to investigate 25–30 weeds and native herbaceous species growing in disturbed habitats, fields, and woodland edges. Examine specimens close at hand to learn

identification features and intriguing seed-dispersal mechanisms. This course is valuable for those who are doing fall or winter plant inventories and for anyone who enjoys the outdoors and wants to be fascinated by plants year round. Bring a 10x hand lens. Recommended text: *A Guide to Wildflowers in Winter* by Carol Levine or *Weeds in Winter* by Lauren Brown.

Saturday, December 4, 10 a.m.-1 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT3319

Instructor: Frances Clark, botanist, principal of Carex Associates

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

Limit: 16

Credit: Elective-all certificates



botany & conservation

INTRODUCTION TO FOREST MEASUREMENT TOOLS

Become familiar with tools used to measure trees and other features in the forest environment, such as diameter tapes, calipers, Biltmore sticks, laser measuring devices, clinometers, angle gauges. Discuss the benefits and drawbacks of similar measurement tools. Following classroom discussion, practice the use of these various measurement tools. Bring a bag lunch, water, and dress for the weather, planning on several hours outside at Garden in the Woods. Please bring a hand lens, winter tree ID field guides, compass, and/or any forest measurement tools if you have them.

Saturday, December 11, 10 a.m.-2 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT3230

Instructor: Joel Carlson, certified forester, Northeast Forest & Fire Management LLC

Fee: \$48 (Member) / \$56 (Nonmember)

Limit: 16

Cosponsor: Arnold Arboretum of Harvard University

SHRUBS IN WINTER

The leaves are nearly gone from most shrubs, but you can still learn to recognize them. In this class, we focus on a number of macro-characteristics such as branching patterns, growth habits, bark, persistent fruit, galls, and habitats to help us 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.

Sunday, December 12, 10 a.m.-2 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT3312

Instructor: Roland "Boot" Boutwell, naturalist

Fee: \$48 (Member) / \$56 (Nonmember)

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

Cosponsor: MA Audubon, Drumlin Farm

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 the Garden 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, January 22, 9 a.m.-3:30 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT3317

Instructor: Dr. William Kuriger, botanist

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

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

botany & conservation



DARWINIAN BOTANY

As a young man, Charles Darwin traveled on the HMS Beagle to the Galapagos Archipelago, and later in his life offered to the scientific world the theory of evolution by natural selection. Darwin was also an expert botanist, and in his writings described pollination mechanisms, heterostyly, and insectivory. Join Darwinian student and botanist Dr. Judith Sumner for this exploration of the life and botanical work of Charles Darwin. Discuss Darwin's life, his voyage (1831-36) on the HMS Beagle, and his various botanical works. The course includes hands-on demonstrations and observations of plants that fascinated Darwin, as well as a traditional English tea to celebrate the anniversary of his birth on February 12.

Saturday, February 5, 10 a.m.-3 p.m.

Garden in the Woods, Framingham, MA

Course Code: BOT1201

Instructor: Dr. Judith Sumner, botanist and author

Fee: \$70 (Member) / \$84 (Nonmember)

Limit: 20 **Credit:** Elective-all certificates

Cosponsor: Arnold Arboretum of Harvard University

WINTER TWIG IDENTIFICATION

Discover methods of identifying woody plants in the winter by their twigs. Certain characteristics seen on twigs provide powerful clues to a plant's identity. Other indications include remaining leaves, infructescences, and bark. We'll start in the classroom with color images, guided keying of specimens, and a field walk to round out the day. Bring a lunch and dress for the weather (snowshoes will not be necessary).

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

Montshire Museum, Norwich, VT

Course Code: BOT3318

Instructor: Brett Engstrom, botanist

Fee: \$48 (Member) / \$58 (Nonmember)

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

Cosponsor: Montshire Museum of Science

BACKYARD SUGARING

Do you have a sugar maple or two in your yard? Do you love maple syrup? If so, then come and join us to learn how to make your own delicious syrup. We'll cover everything you need to know to get started on this sweet project: tree identification, equipment needed, tapping, weather, boiling, finishing, and storing. Dress for the weather.

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

Drumlin Farm, Lincoln, MA

Course Code: BOT7013

Instructor: Tia Pinney, naturalist, MA Audubon

Fee: \$24 (Member) / \$32 (Nonmember)

Limit: 16 (open to adults and to children ages 12 and up with an accompanying adult)

Credit: Elective-all certificates

Cosponsor: MA Audubon Drumlin Farm

field trips

THOMPSON ISLAND FLORA

Of the 34 islands in Boston Harbor, Thompson Island is the closest to the city and, at 170 acres, one of the largest. The island has a variety of upland, wetland, and maritime communities, including forests; coastal shrublands; old fields; eroding bluffs; beach-front plant associations; freshwater wetlands; and the largest salt marsh (50 acres) among the Harbor Islands. Our walk around the island introduces us to the island's native and exotic plants, with particular attention to its freshwater wetland and salt marsh communities. Look for unusual, exotic maritime species, such as *Lepidium latifolium* and *Senecio jacobea*, which present issues for managing the island's habitats. The island also has interesting bird life, and binoculars are recommended. Bring lunch, water, and foot-gear that can get wet.

Sunday, September 12, 7:45 a.m.-4:30 p.m.

Boston Harbor Islands, MA

Course Code: FDT1056

Leader: Ted Elliman, Vegetation Manager,
New England Wild Flower Society

Fee: \$78 (Member) / \$86 (Nonmember) fee
includes cost of ferry

Limit: 15 **Credit:** Elective-all certificates



PLUM ISLAND FLORA

Explore the different habitats of Plum Island and learn what grows where and why. We investigate the salt marsh, dune, and beach communities, concentrating on forty to fifty distinctive (to the botanist's eye) plant species. And if we see a bird or two we will look at them as well. Bring a 10x hand lens, *Newcomb's Wildflower Guide*, lunch, water, and, if you have them, binoculars.

Sunday, September 19, 9:30 a.m.-2 p.m.

Newburyport, MA

Course Code: FDT1005

Leader: Frances Clark, botanist, principal,
Carex Associates, Inc.

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

Limit: 15 **Credit:** Field-all certificates

FUNGI IN THE FIELD

Can you distinguish a bolete from a gilled mushroom? And what technically is a mushroom anyway? Fall is fungi season in the Northeast, the best time to discover and identify what's out in the field. Learn about the crucial and sometimes astonishing roles these fascinating life forms have in the ecosystem and some methods for identifying mushrooms and other fungi all around us. Register for one or both field trips.

MA Audubon Drumlin Farm, Lincoln, MA

Leader: Jef Taylor, Drumlin Farm Staff

Fee: \$20 (Member) / \$24 (Nonmember)

Limit: 15 **Credit:** Field-all certificates

Saturday, September 25, 1-3:30 p.m.

Course Code: FDT1079

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

Course Code: FDT1080

field trips



HARMONY HILL FARM AND BEYOND

This field trip offers an insight into a unique collaborative effort at land management and a chance to explore some of a 4,000-acre unfragmented block of fields, forests and wetlands being preserved by the Northwood Land Management Collaborative. Join members of the NLMC, a group of neighbors, working “over stone walls” for this walk through the property, which encompasses the headwaters of the Lamprey River. Find out about the ecological significance of the area, discover wildlife habitats, and study some of the significant botany on the property. Walk part of the 5-mile trail linking properties in the neighborhood, and enjoy lunch by a lake in the state park. Bring lunch and water.

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

Northwood, NH

Course Code: FDT4035

Leaders: Carl Wallman, Ellen Snyder, George Newman, Northwood Land Management Collaborative

Fee: \$32 (Member) / \$36 (Nonmember)

Limit: 15 **Credit:** Field-all certificates

HAROLD PARKER PTERIDOPHYTES

The Harold Parker State Forest is a large conservation area near Andover, MA. Visiting the southern section with a large pond, hills, and swamps, we expect to see more than two dozen ferns and club-mosses. We anticipate the hybrid ground cedar club-moss, ebony spleenwort, perhaps fragile fern, a Woodsia, and a few hybrid Dryopteris. Wear long pants, and bring insect repellent, a bag lunch, and a hand lens if you have one.

Sunday, September 26, 11 a.m.-3 p.m.

Andover, MA

Course Code: FDT1097

Leaders: Don Lubin and Ray Abair, fern enthusiasts

Fee: \$32 (Member) / \$36 (Nonmember)

Limit: 15 **Credit:** Field-all certificates

field trips



FIRE ECOLOGY OF CAMP EDWARDS

Camp Edwards, part of the Massachusetts Military Reservation, comprises 15,000 acres of high quality woodland and shrubland habitat with some grassland areas. The site has a history of both small and large wildfires (thousands of acres). Over the last twenty years, the Natural Resource Management Program has conducted prescribed burns to reduce fuel loads and to promote natural communities that support many state listed plants and animals. Visit several forested, shrubland, and grassland areas of the 1,000 contiguous acres recently burned, and discuss fire history and ecology, in addition to identifying common plants of the area. Meet and carpool to various sites, then expect to walk on uneven ground. Dress for the weather and bring a lunch, water, hand lens, and field guides. A picture ID for is required for base access.

Saturday, October 2, 10 a.m.-2:30 p.m.

Bourne and Sandwich, MA

Course Code: FDT1103

Leader: Joel Carlson, Certified Forester, Northeast Forest & Fire Management LLC

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

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

FERNS IN THE FALL

When fading sunlight and perhaps a frost have shriveled the undergrowth and turned it brown, evergreen ferns and club-mosses stand out in dramatic contrast. On a walk through the Blue Hills Reservation, visit a dozen evergreen species and other pteridophyte taxa, including polypody, Christmas and grape ferns, five wood ferns and maybe a spleenwort, four club-mosses and a horse-tail. Travel about two miles on mostly flat trails with a few hills. A hand lens is suggested.

Sunday, October 3, 12-3:30 p.m.

Milton, MA

Course Code: FDT1013

Leaders: Don Lubin and Ray Abair, fern enthusiasts

Fee: \$28 (Member) / \$32 (Nonmember)

Limit: 15 **Credit:** Field-all certificates

field trips

AUTUMN WALK THROUGH FOREST AND BOG

Acton Arboretum, a little gem of conservation land, offers 53 acres of orchards, meadows, woodlands and wetlands. Hike through old apple orchards, alongside ponds, through woodlands and over a boardwalk through a bog where cranberries were once harvested. Witch hazel (*Hammalis virginiana*) should just be coming into bloom in the woodlands. Discover pitcher plant (*Sarracenia purpurea*), poison sumac (*Toxicodendron vernix*) and black gum (*Nyssa sylvatica*) by the bog. Bring lunch and a hand lens if you have one.

Wednesday, October 6, 11 a.m.-2:30 p.m.

Acton Arboretum, Acton, MA

Course Code: FDT1100

Leader: Roland "Boot" Boutwell, naturalist

Fee: \$28 (Member) / \$32 (Nonmember)

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



BARRIER BEACH ECOLOGY AND TRACKING

Explore one of the Cape's most spectacular barrier beach ecosystems and learn about important natural processes associated with this barrier and the Nauset Marsh. Look for track and sign of some local fauna such as coyote, red fox, mink, river otter and meadow voles. Hiking is fairly easy, but hiking boots and appropriate clothing required. Bring a bag lunch.

Saturday, October 9, 10 a.m.-2 p.m.

Coast Guard Beach, Eastham, MA

Course Code: FDT1102

Leader: C. Diane Boretos, wetland biologist and wildlife tracker

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

Limit: 15 **Credit:** Field-all certificates

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 will begin with a short session indoors. Then head out into MA Audubon Habitat's 86 acres for a close look at 15-20 native shrubs plus a couple of non-native invasives. We will end up back indoors for a twig or slide quiz and a cup of something hot. Review for those who have taken "Native New England Shrubs" and a good introduction to shrub ID in winter. Bring lunch and a hand lens if you have one.

Saturday, January 29, 10 a.m.-2 p.m.

Belmont, MA

Course Code: FDT1101

Leader: Roland "Boot" Boutwell, naturalist

Fee: \$32 (Member) / \$36 (Nonmember)

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

wetlands



INTERMEDIATE WETLAND DELINEATION

This hands-on workshop uses lectures and fieldwork to teach current regulatory standards and allows students to experience wetland delineation in the field. The morning lecture reviews field indicators for vegetation, soils, and hydrology, atypical situations, problem area wetlands and manual requirements by State and Army Corps methods. The afternoon fieldwork occurs at a nearby wetland system featuring challenging soil and hydrological characteristics. Routine delineations take place along a number of transects. Following field work, we review completed data sheets, transect characteristics, and hold a question and discussion session. Bring a field notebook, bag lunch, and clothes for fieldwork.

Friday, October 1, 9 a.m.-4 p.m.

Garden in the Woods, Framingham, MA

Course Code: WET2012

Instructor: Dr. William Kuriger, botanist

Fee: \$98 (Member) / \$115 (Non-member)

Limit: 15 **Credit:** Elective-FB; Core-Adv. FB

WETLAND SPECIES IDENTIFICATION IN WINTER

This program builds knowledge and skills 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 the 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.

Choose one of two sections:

Friday, December 3, 9 a.m.-1 p.m.

Coastal Maine Botanical Gardens, Booth Bay Harbor, ME

Course Code: WET1004

Instructor: Lauren Stockwell, environmental consultant

Fee: \$44 (Member) / \$55 (Nonmember)

Limit: 18 **Credit:** Elective—all certificates

Saturday, January 15, 9 a.m.-3 p.m.

Garden in the Woods, Framingham, MA

Course Code: WET1002

Instructor: Dennis Magee, author, environmental consultant, Normandeau Assoc.

Fee: \$70 (Member) / \$80 (Non-member)

Limit: 18 **Credit:** Elective—all certificates

children & families

ALL PROGRAMS AT GARDEN IN THE WOODS, FRAMINGHAM, MA

ROCK AND ROLL

Come to the Garden to collect rocks and watch them roll in our rock tumbler, becoming shiny and smooth. Study crystals, and learn about quartz, fool's gold and geodes. How do scientists classify rocks? What kinds of things can you learn by smashing rocks open? Investigate these and other geological questions and create a rock collection to take home.

Wednesday, October 6, 3:30-5:30 p.m.

Children in Grades 2-4

Course Code: CHP6151

Instructor: Bonnie Drexler, Education Director

Fee: \$12 (Member) / \$14 (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 our walk, enjoy hot cocoa and make a booklet of full-moon activities for months of full moons to come.

Sunday, November 21, 6:30-8:30 p.m.

Children with Adult Companion

Course Code: FAM6500

Instructor: Tracy Phipps, naturalist

Fee: \$9 (Member) / \$11 (Non-member) per person, for each adult and for each child

Limit: 24

HOLIDAY NATURE CRAFTS

Use "gifts" found in nature to create gifts for friends and families for the holidays. Learn how to string seed pods and cranberries to make chains for a tree or to feed birds. Set up a natural print shop to make wrapping paper, gift tags, and greeting cards. Pot up a topiary wreath that will continue growing for years. With a variety of materials from the woods, make special gifts for special people and have fun too.

Wednesday, December 1, 3:30-5:30 p.m.

Children in Grades 1-4

Course Code: CHP7102

Instructor: Bonnie Drexler, Education Director

Fee: \$14 (Member) / \$16 (Nonmember) (includes materials)

Limit: 12

children & families



WINTER WONDERS WALK

Come to Garden in the Woods to see a puppet show about winter survival. Make a “track-finder.” Walk through the wintry woods. Enjoy hot drinks and a winter craft activity. Hike down into the snowy woods, over an icy brook, and beside a meadow looking for signs of winter residents and their activities. Learn how foxes, rabbits, squirrels, turtles, frogs, trees, and wildflowers survive the long snowy months.

Sunday, January 30, 1:30–3:30 p.m.

Children with Adult Companion

Course Code: FAM1800

Instructor: Tracy Phipps, naturalist

Fee: \$9 (Member) / \$11 (Nonmember) per person, for each adult and for each child

Limit: 24

WINTER DETECTIVES

As we explore the wintry woods, what clues can we find about the animals and plants around us? Whose teeth chewed that branch, whose tracks lead up to that tree stump, and which buds have a furry winter coat? Use all your senses to investigate life above, in, and under the snow. Inside the classroom after warm snacks, conduct experiments with snow and ice to learn more clues about winter survival.

Tuesday, February 22, 1:30-3:30 p.m.

Children in Grades K-2

Course Code: CHP1810

Instructor: Bonnie Drexler, Education Director

Fee: \$12 (Member) / \$14 (Nonmember)

Limit: 12

ANIMAL TRACKING

Come to the Garden to learn some winter tracking skills as we explore the winter woods. Can you tell the difference between rabbit and squirrel tracks? How do coyote tracks differ from fox tracks? Learn to identify other clues that animals leave behind as they hunt for food or escape their predators. Make a track finder to use and take home. Enjoy cocoa and treats after our exploration.

Thursday, February 24, 1:30-3:30 p.m.

Children in Grades 2-5

Course Code: CHP4500

Instructor: Bonnie Drexler, Education Director

Fee: \$12 (Member) / \$14 (Nonmember)

Limit: 12

children & families



FOR THE BIRDS

Our feathered friends could use a little help from humans at this time of year. Come to the Garden to learn how some birds survive the cold and ways we can help them. How do birds' beaks, feet, and feathers work to keep these little bundles of energy alive? How do they find food, water and shelter when the temperatures fall so low? Build several kinds of bird feeders and make a mini-field guide to help us identify which birds might pay you a call.



Sunday, February 27, 1:30-3:30 p.m.

Children with Adult Companion

Course Code: FAM4200

Instructor: Tracy Phipps, naturalist

Fee: \$9 (Member) / \$11 (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 who 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 20, 1:30-3:30 p.m.

Children with Adult Companion

Course Code: FAM3600

Instructor: Bonnie Drexler, Education Director

Fee: \$9 (Member) / \$11 (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 TELEPHONE OR FAX

Credit card registrations (MasterCard or Visa) can be made by calling the Registrar at 508-877-7630, ext. 3303, or by faxing to 508-877-3658.

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
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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.)

PAYMENT

Total: \$

Check enclosed (payable to New England Wild Flower Society)

Credit card #

Visa MasterCard Exp. date

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 28.

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 letter, 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, please call the Registrar, 508-877-7630, ext. 3303, to see if your course has been rescheduled. 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: To cancel and receive a refund, you must withdraw at least one week before a course's start date. 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. Ten percent of the registration fee (minimum of \$5) will be deducted from all refunds, excluding classes cancelled by the Society, except where otherwise noted. No cancellation fee will be assessed if the course fee is less than \$10.

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 us... and strengthen our mission

The ultimate membership benefit is the satisfaction of knowing you are making a difference in the health of our environment and New England's natural habitats.

Additional benefits include:

- Unlimited free admission to Garden in the Woods, the region's premier native wildflower botanic garden (Does not apply to Associate Membership.)
- 10% discount on purchases from our native plant sales area at Garden in the Woods and Nasami Farm
- 10% discount on most book and gift items
- Up to 20% discount on hundreds of courses, workshops, symposia, and field trips. **Join when you register for immediate discounts on courses.** (See course registration form on page 28.)

- Subscriptions to the Society's publications
- Borrowing privileges at our 4,000-volume botanical library
- Discounts at select New England and mail-order nurseries

Membership levels

- Individual \$50
- Dual \$60
- Family/Friends \$70

For more information on membership benefits, Corporate Membership, and discounted Associate and Student memberships, please contact Karen Pierce, Development and Membership Director, at 508-877-7630, ext. 3801, kpierce@newenglandwild.org.



Join Ted Elliman
for a
Society-sponsored
trip to
China's western
Sichuan Province

May 14-30, 2011

Highlights include visits to Omei Shan, a sacred Buddhist mountain with spectacular flora, two wonderfully scenic panda reserves (Wanglang and Tangjiahe) and a national park (Jiuzhaigou) on the northern edge of Sichuan, as well as many cultural sites en route. The trip is timed to coincide with the peak blooming period of mountain and alpine flora, and we expect to see primrose, peony, gentians, wild poppies, and many other wildflowers blooming in the spruce forests and alpine slopes.

Details at
www.newenglandwild.org/learn/travel



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

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