



**Citizens for
Lexington
Conservation**

PO BOX 292, LEXINGTON, MA 02420-0003
<http://www.clclex.org>

NONPROFIT ORG.
U.S. POSTAGE
PAID
LEXINGTON MA
PERMIT NO 3314

ADDRESS SERVICE REQUESTED

Kate Fricker, Editor April, 2012 Eileen Entin & Keith Ohmart, Co-Chairs

IN THIS ISSUE

Page

CLC Annual Meeting	2
Spring Walks	3
CLC 45 Years On	5
<i>Weeds</i> , a book review	6
How to get ACROSS Lexington	7
The new Cotton Farm Conservation Area	8
Paint Mine Trail Improvements	9
Five Great Lexington Trees	10
Photo Credits	12
Answers to Photo Quizzes	12
Cheerful Ferns for Landscaping	12



Photo Quiz: Where is this boardwalk?

Printed on Recycled Paper



Citizens for Lexington Conservation is a non-profit 5013(b) organization that relies on dues paid by members to cover its expenses. Look at your mailing label to check your membership status. If it says "Dues paid 2012," you are up to date. If it says "Dues paid 2011" (or earlier), then it is time to renew your membership for 2012. If it says "Complimentary Copy," you are receiving a complimentary copy of our newsletter because you are a Town Meeting member or other public official in Lexington. We hope that those who receive complimentary copies will find our organization of value and will become dues-paying members. **To join CLC or renew your membership**, please send \$15.00 to Citizens for Lexington Conservation, P.O. Box 292, Lexington, MA 02420-0003.

There is an electronic version of the CLC newsletter, sent as a link to the newsletter by e-mail. The e-mail version of the newsletter has illustrations in color and live links. It also arrives much sooner than the snail mail version, saves paper, and costs CLC about \$1 less per copy. If you are currently receiving your newsletter by snail mail, but would like to get it by e-mail, (or if you would like to be removed from our mailing list) contact Kate Fricker at kfricker@alum.swarthmore.edu.

CLC Publications

Over the years CLC has encouraged members to write guides to the open spaces in Lexington. These guides have been scanned and are available at no charge on our web site, <http://www.clclex.org/>. You may also use the web site to contact us about conservation-related happenings or sightings of unusual birds and wildlife that we can use on our web site and in our newsletter.

CLC Annual Meeting

A Year in the Life of a Honeybee Colony and its Beekeeper

Date: Monday, April 23, 2012; 7:00-9:00 pm

Location: Cary Memorial Library, Lexington, Large Lecture Room (lower level)

Sponsor: Citizens for Lexington Conservation – Annual Meeting

Speaker: Birgit deWeerd

Birgit deWeerd became fascinated with beekeeping more than 25 years ago and has been committed ever since to expanding the understanding of, and the respect for, the importance of honeybees in our environment.

deWeerd's illustrated talk takes her audiences through the activities in and around a beehive, starting in January and ending in the fall with the honey harvest. A Bedford native, deWeerd will also talk about many of the backyard pollen- and nectar-producing blossoms our local bees visit on their foraging trips throughout the seasons. deWeerd's audiences often leave with ideas for adding a new dimension to their gardening efforts, and for some the seed is planted for the start of a most interesting hobby, that of becoming a backyard beekeeper.



A short business meeting to elect CLC officers for the coming year will precede the lecture. Light refreshments will be served. Free and open to the public.

Citizens for Lexington Conservation Spring Walks, 2012

All walks are in Lexington, and are free and open to the public

Saturday, April 21, 8 – 10 AM

Bird Walk in Dunback Meadow

Meet at the Allen St. entrance to Dunback Meadow. In mid-April we can witness the beginning stages of the migrating birds coming through there. Species, such as Eastern Phoebe, Tree Swallow, several early warblers and sparrows, and Golden- and Ruby-Crowned Kinglets are likely. Although the ground is slightly rough, the pace is slow so the walk is accessible to most. Children with adults and beginning birders are welcome. We will enjoy a varied habitat, including mixed woods, open fields, and a stream. Bring binoculars if you have them. Boots are recommended as the trails may be muddy. Rain or lightning will cancel the walk. Leader: Bobbie Hodson (781-861-9421; mrobertahodson@comcast.net)

Saturday, April 21, 1- 3 PM or later

Garlic Mustard Pull

Sunday, April 22, 1 - 3 PM or later

Meet at the bike path entrance on Worthen Rd. to clear garlic mustard plants from the area. This annual event, effective in early spring, has helped to slow the advance of garlic mustard plants in Lincoln Park. Garlic mustard is an aggressive non-native species that crowds out native plants. Bring a digging tool and a plastic bag for depositing the plants in nearby trash barrels. Encourage your friends and neighbors to come, too. Stay later than 3 PM if you have time. Heavy rain or lightning will cancel the event for that day. Leader: Nell Walker (781-862-6943; nelwalk@earthlink.net)

Sunday, April 22, 10 – 11 AM

Spring Butterfly Walk

Meet in the parking lot at Golden Living Center–Lexington, 840 Emerson Gardens Rd. (off Maple St.). Drive to the right and park at the far end of the parking lot. Lexington butterfly enthusiast Tom Whelan will lead a walk to see spring butterflies at Arlington's Great Meadows. People of all ages are welcome; an adult must accompany children. Participants should see two species of spring butterflies, Brown Elfin and Henry's Elfin. These small, easily overlooked butterflies, are found in many parts of the US and Canada. Since these species overwinter in the chrysalis stage, their lives as adults begin early in the spring. We may also see Mourning Cloak and Spring Azure butterflies. If time permits, additional insects will be sought at adjacent Infinity Pond, a certified vernal pool. Please sign up for the walk in advance, preferably by email (tom@whelanphoto.com) or phone (781-863-1880). Walk leader Tom Whelan will notify those who sign up by email if the weather requires postponing the event. The rain date is Sunday, April 29.

Saturday, April 28, 1- 2 PM

Tour of Lexington's Tree Farm

Meet at the Tree Farm: Take Maureen Rd. off East St., take the first right onto East Emerson Rd., and park at the end of the pavement. You will be facing a dirt road; walk or cycle left (no cars) to the entry to the Tree Farm on the left. This is a family friendly walk for children and adults. We will learn about Lexington's effort to replant its streets and parks with shade trees, using conservation land for the Tree Farm. Children may have fun racing up and down the grassy rows in this beautiful meadow. Continue your walking or cycling afterward on the adjacent bike path along Vine Brook. More than light rain or lightning will cancel the event. If the weather is "iffy" call the leader. Rain date is April 29. Leader: Karen Longeteig (781-862-4094; karen.longeteig@gmail.com)

Sunday, April 29, 9 - 11 AM

Warbler Walks in Lower Vine Brook

Sunday, May 6, 9 - 11 AM

Meet at 116 Vine Street; call if you are lost. Check out the spring warbler migration in the Lower Vine Brook conservation area. Warblers are small, beautiful tropical birds that come north to breed. Many different species of warbler stop off in this sheltered area on their way to the forests in northern New England and Canada. Some stay, but as trees leaf they are more difficult to see. In the spring, depending on the weather and the foliage, you can sometimes find a dozen species in a morning. If you go on the walk on consecutive Sundays, you may see different warbler species or more warblers on different days. Children with adults are welcome. Bring warm clothes, boots if it is wet, binoculars, and a bird book. No dogs. More than light rain or lightning will cancel the event. If the weather is uncertain call the leader. Leader: Harry West (617-461-9500 mobile; hwest2020@gmail.com)

Thursday, May 17, 2 - 3 PM

Pond Exploration at Parker Meadow

Geared for children in grades K – 5 accompanied by an adult.

Meet at the Revere St. entrance to Parker Meadow. Limited parking is there; additional parking is available on neighborhood streets across Revere St. Join Emily Schadler for a prowl around Parker Meadow to look for signs of beavers, bugs, tadpoles, and toads. We'll dip a net into the water to see what kinds of critters are wriggling around below the surface. Bring rain boots if you have them, and be prepared to get dirty. If you have a small bug box or magnifier, bring it along. Rain or lightning will cancel the event.

Leader: Emily Schadler, Conservation Assistant
(781-862-0500 x 240; eschadler@lexingtonma.gov)

Sunday, May 20, 1:30 – 3 PM

Spring at the Paint Mine

Meet at the parking lot at Estabrook School. Come and experience nature waking up in the woods and wetlands of the Paint Mine conservation area. Explore the north-facing slope that provides habitat for uncommon Lexington tree species. Search for the purple whorled polygala, wild columbine, Jack-in-the-pulpit, and other spring blooms. Walkers should wear boots or other terrain footwear. If there is steady rain or lightning, the walk will be cancelled. Leader:

Fran Ludwig (781-861-7231; fludwig12@yahoo.com)

Thank You, Fall Walk Leaders

Many thanks to the leaders of our Fall Walks: Tom Whelan, Emily Schadler, Fran Ludwig, Bobbie Hodson, Karen Longeteig, David Kehs, George Darcy, Chris Floyd, Keith Ohmart, Gerry Paul, and Bonnie Newman.



Photo Quiz: Where is this boardwalk?

For maps of conservation land: <http://www.lexingtonma.gov/conservation/conland.cfm>

CLC 45 Years On

By Keith Ohmart

It may be hard to believe, but Citizens for Lexington Conservation celebrates its 45th year of existence this year. Founded in 1967, the primary mission in CLC's early years involved actively working to preserve open space in the town as conservation land. The existence today of over 1300 acres of protected open space distributed throughout the town in some 26 separate parcels is ample testimony to the success of this vision by CLC's founders.

Another early activity adopted by CLC involved efforts to encourage Lexington residents to recycle. Many are the stories of stalwart CLC members combing through mounds of trash separating recyclables from the town's solid waste stream. During the early 1980's, when CLC was overseeing the recycling facility on Hartwell Avenue, members of CLC would stop by periodically to check the facility. All too frequently, they would find non-recyclables in one of the dumpsters, and would have to reach in or crawl in and throw the non-recyclable material out and pile it up so the town would throw it away.

As the organization has evolved, educating the community on community-relevant environmental and conservation concerns has become CLC's primary mission. The tools for fulfilling this mission are centered on articles and other timely information and notices published on CLC's website (ciclex.org); the annual calendar of guided walks on town conservation parcels and other open space, and the publication of our spring and fall newsletters containing articles ranging across the conservation spectrum. A third newsletter, the annual Candidates' Newsletter, is devoted to responses from candidates for elected town offices to questions posed by CLC on environmental issues affecting the community.

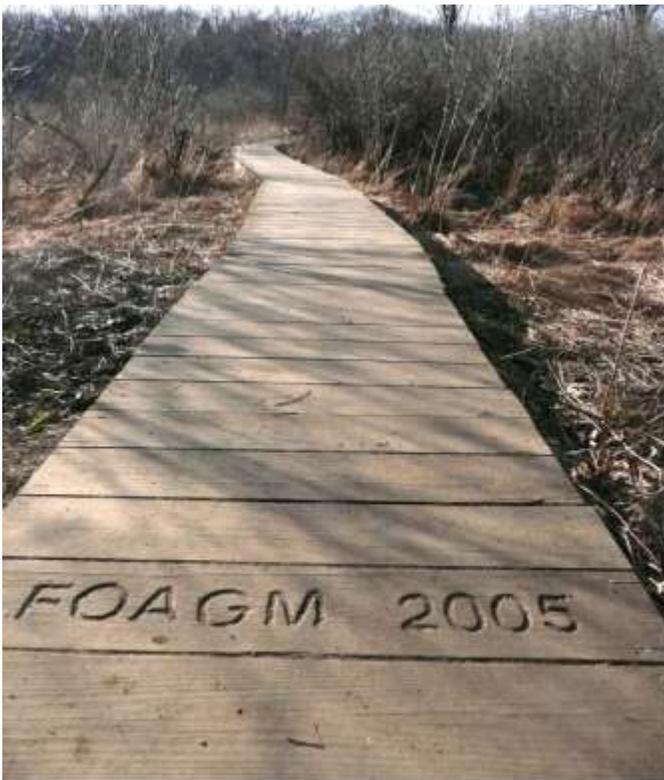


Photo Quiz: Where is this boardwalk?

As a registered 501(c)3 tax exempt organization, CLC has served as fiscal sponsor in a number of different ways for a range of Lexington community organizations across the environmental spectrum, including the Global Warming Action Coalition, the Conservation Stewards, Friends of the Minuteman Bikeway, and LexFarm. Individuals have also availed themselves of CLC's tax exempt status by designating the organization as the repository of Memorial gifts on the passing of a family member. CLC is presently in the process of responding to one such situation with the intent of offering a suitable memorial to the town possibly in the form of an inscribed bench to be located on one of the town's conservation properties. An additional advantage that CLC's organization as a tax exempt non-profit corporation confers is the ability to hold Conservation Restrictions for

both public and private property should this need arise in future years.

No recounting of CLC's accomplishments over the years would be complete without acknowledging the generous active contributions of its members over the years, both in terms of time as well as maintenance of our annual modest membership dues. CLC is a member-



driven organization that has succeeded thanks to commitment of both its board members and its membership at large. To help CLC in continuing its educational and advocacy activities, we urge CLC members and other readers of this newsletter to continue to support the organization by keeping their membership up to date, considering CLC for gifts in honor or memory of a deserving individual, and urging others to join CLC. We also invite interested members to explore the possibility of joining the CLC Board of Directors by contacting one of our co-presidents, Eileen Entin or Keith Ohmart, or our webmaster,

<http://www.clclex.org/contact-us/>.



Photo Quiz: Where is this boardwalk?

Weeds

By Richard Mabey

Reviewed by Kate Fricker

This book in defense of nature's most unloved plants carries the reader in every direction, from recovering wastelands to the history of agriculture, climate change, biological research, evolution, ancient history, literature and much more.

Every now and then I read a book that turns around my way of looking at things. Here is one of those books. After reading this book I see weeds as interesting and often beautiful wildflowers that have become weeds simply because they are growing where one would prefer other plants to grow. Ralph Waldo Emerson is quoted as saying, a weed is "simply a plant whose virtues have not yet been discovered." Among the other authors quoted are: Chaucer, Shakespeare, Durer, Euell Gibbons, the Bible, John Ruskin, the Quran, Goethe, Coleridge, oral histories and the Internet. The book is full of delightfully descriptive phrases, such as "feral gourds", "vegetable guerillas", "escapees and trespassers", and "botanical thugs".

Weeds also have a place in geology, in archeology, in the fine arts and in history. The author follows threads such as the role of weeds in helping eroded soil recover, and the great flowering of weeds in bomb craters after the blitz in London. There are stories here of how various weeds have gotten into our lawns and gardens, as well as descriptions of our attempts to control them. Many famous artists included weeds in their paintings. Read this book and weeds will never look the same again.



How to get ACROSS Lexington

By Alex Dohan (adapted from Lexington Outside, Lexington Minuteman, 2/2/12)



Depending on where you live, you might want to get across Lexington for exercise, to do errands, to go to an appointment or to meet a friend. And there are many ways to do this – walking, biking, driving; on sidewalks, paths, streets. You might go right through the center of town, or you might meander through a conservation area. A new initiative in town could make such trips more fun and interesting.

Last year the Board of Selectmen created the Greenways Corridor Committee (GCC) with the goal of identifying pedestrian, bicycle and other “greenway” connections throughout town and with neighboring towns. The committee is now developing a project called *ACROSS Lexington: Accessing Conservation land, Recreation areas, Open spaces, Schools and Streets in Lexington*. The goal is to get you to almost anywhere in town without having to use a car. You’ll get some exercise and enjoy the scenery.

Currently under development is the first 5.5-mile loop of a planned series of routes totaling around 40 miles. This pilot route heads north from the town center and includes the Bikeway, Lower Vine Brook, Willard’s Woods, Chiesa Farm, Parker Meadow and various streets in between those conservation lands. It takes you through the Lexington Tree Farm, along old cart paths, and past a stream where Ted Williams is rumored to have fished. Diamond Middle School is on the route, and a slight deviation off the basic route will get you to Fiske Elementary School.

There will be signs all along the route marking the trail for users, whom we hope will include walkers, runners, cyclists, strollers and both Lexington residents and visitors to our town. Once this initial route is created and we’ve gained experience with signage, usage and any other issues that come up, we will plot, mark, and introduce the rest of the network in stages. In most cases we are not making any new trails; we are simply amplifying connections between places – connections that may have gone unnoticed by many users. Using existing open spaces, streets, sidewalks and public ways, travelers will find it easy to go by bike or on foot to all areas of the town, including the town center, schools, historic sites, recreations areas and even trail networks in the neighboring towns of Arlington, Bedford, Belmont, Burlington, Lincoln, Waltham, Winchester and Woburn.

The Greenway Corridor Committee is an outgrowth of the West Lexington Greenway Task Force, which is working to connect various trail segments along the western side of town,

outside Route 128. When completed, the *ACROSS Lexington* route system will accomplish much of that plan, including Katahdin Woods and Tophet Swamp in the circuit and connecting the Bikeway to the Battle Road trail in the Minute Man National Historical Park.

With the support of various town boards and committees and the labor of the Conservation Stewards, the GCC hopes to have the first route mapped and marked by the time the Lexington 300th celebrations wrap up in the spring of 2013. Use the map above for the first loop, and keep looking for the signs.



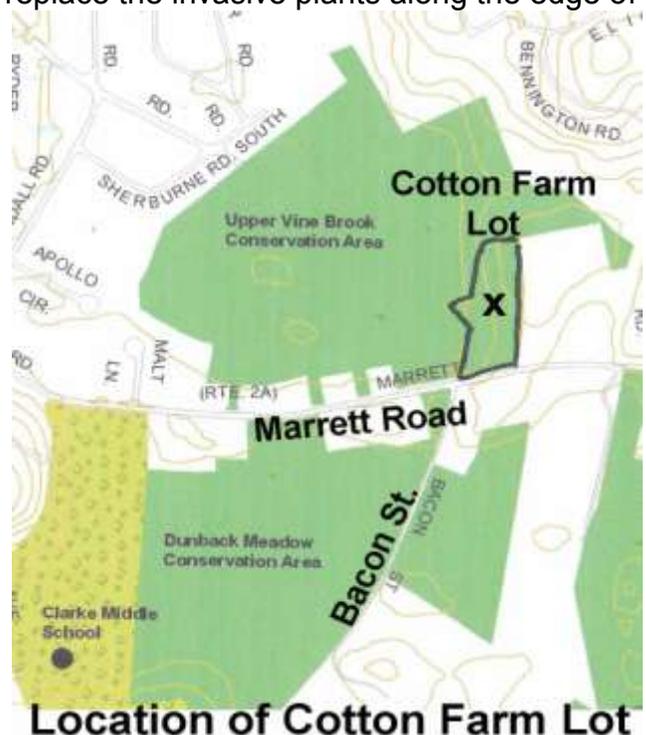
The New Cotton Farm Conservation Area

By Bob Haussein

Cotton Farm, which was acquired by the town early last year, has been designated a Conservation Area and is being gradually transformed into a more user friendly destination. It is being integrated into the adjoining Upper Vine Brook Conservation Area while keeping its open visual appeal. Much of the work has been done in the past year by the Conservation Stewards and the summer interns. The changes are noticeable upon entering via the driveway on Marrett Road, starting with the big entry sign on the right. Just past the old apple orchard is a new 2-car parking area on the right. An informational kiosk will soon be erected next to it, which will display maps of trails and other features. In addition, the adjoining private property boundary to the east will be better demarcated.

On the left side of the driveway, the open park-like area is intended to be maintained as such. Note that a picnic table has been added and that the view to the pond is improving. The old wooden fence that was next to the pond has been removed, along with the dock. The arbor that extends into the pond will also be removed. It is now so covered with invasive vines as to be barely recognizable. We also plan to gradually replace the invasive plants along the edge of the pond with native species. A low wooden platform is planned for construction along a portion of the edge of the pond to allow viewing of wildlife while protecting the fragile shore.

Trails in the area are a work in progress. Two of them are being better defined to reduce overall wear and tear of the area. Starting from the northern edge of the property, both trails begin where the trail from Highland Avenue emerges from the woods of the Upper Vine Brook Conservation Area. From there, looking toward Marrett Road, one trail goes more or less straight ahead and slightly uphill to join the driveway to Marrett Road. The other trail takes a sharp right downhill to the old shed (former Pump House), then follows the pond to emerge on Marrett Road just across from the Bacon Street entrance to Dunback Meadow.



Work is also underway on the well-established trail to Highland Avenue in the Upper Vine Brook Area. An Eagle Scout candidate is building a rugged boardwalk over the stream that is similar to the ones that are now standard on other conservation properties. We would like to mark the trail better from the Highland Avenue entrance. We hope to put up a small sign after getting approvals. A larger one is ready for installation inside the actual conservation property.

Other items under discussion include investigating the possibility of a trail to Pelham Road and what to do with the old shed and the apple orchard. Your comments are appreciated. 🌲

Paint Mine Trail Improvements

By Keith Ohmart



Paint Mine Boardwalk

Those of our readers who have hiked through the Paint Mine conservation area during the fall or over the winter have no doubt marveled at the newly constructed section of boardwalk as well as the ample supplies of lumber stacked along the main trail waiting construction. This work is the result of the Conservation Department's successful grant application to the Department of Conservation and Recreation's (DCR) Recreational Trails Program for funds to cover trail improvements throughout the Paint Mine property.

The Stewards made the decision to pursue the DCR trail grant because of the perennially muddy conditions of trails throughout the Paint Mine property, due to extensive runoff throughout the year from the steep bank on the eastern side of the property. Prior efforts to improve trail conditions over the years had not proven adequate to this challenge.

The current trail improvements and the boardwalks now being constructed will also significantly improve conditions for the use of the Paint Mine property by the Estabrook School's Big Backyard program.

The project began last September when the Lexington High School boys and girls cross country teams turned out on a beautiful Saturday and moved the first twelve tons of lumber into position for construction. Subsequent work days last fall, led by Conservation Steward volunteers directing additional volunteers from the community, completed the first 288 feet of what will eventual total over 1400 feet of new boardwalk.

With the mild winter, the Stewards have already resumed work and have completed a shorter 80 foot bridge that will allow further movement of an additional 10-12 tons of lumber in April, again by the LHS cross country teams. This additional lumber will then allow the Stewards and community volunteers to complete the longest portion of these improvements, totaling over 900 feet, later this spring. The remaining work is scheduled for completion in the fall.

As with prior projects of this nature, the Conservation Stewards welcome interested volunteers who wish to participate in these construction projects. No prior training or experience is necessary. Tools will be provided. Check the Current Events section of the Conservation Department's web site (<http://www.lexingtonma.gov/conservation/>) for scheduled work day dates in May and throughout the summer.



Five Great Lexington Trees

By Karen Longeteig



Copper Beech, 389 Concord Ave.

A bicycle or driving tour of some old Lexington trees yields wonderful sights. The key is to stop (if in a car, get out of it) and look! Plan a pilgrimage in the near future to see these five beauties. All are on private property, so please admire them from the street.

There is a venerable **Copper Beech** (*Fagus sylvatica*) at 389 Concord Avenue. This tree is 70 feet tall with a crown spread of 100 feet, and measures a gallant 18 feet around its mid-section. It occupies a whole house lot. This species comes from Europe; our native American Beeches are usually more tall and slender. European beeches

are useful in landscaping; you can even make hedges out of them, with regular pruning.

The **Sugar Maple** (*Acer saccharum*) at 38 Wachusett Drive measures 13' around. This particular tree still enjoys great beauty of form, having retained most of its major branches while defying storm and rot. This is a good reason to go see it before it leafs out. Sugar Maples used to be planted alongside rural roads and were called "Line Maples." Notice the shaggy texture of the Sugar's bark compared to the gritty-smooth texture of a large Norway Maple's bark, behind you on Fair Oaks Drive, both typical of their species. Sugar Maples prefer cool climates and cold winters. With global warming, they may gradually say goodbye to Lexington.



Sugar Maple Bark

The **Tuliptree**, on the other hand, has been thought to be at the northern edge of its range here in Lexington, but now may make itself quite at home. Tuliptrees (*Liriodendron tulipifera*) are the tallest native deciduous trees on the East Coast. One lovely example is at 2 Stratham Road (watch out for potholes on this road). This one is approximately 90 feet in height and nearly 9 feet in circumference. In late spring the branches are full of yellow tulip-shaped flowers, and the tree retains its graceful seed clusters all winter. Another Tuliptree



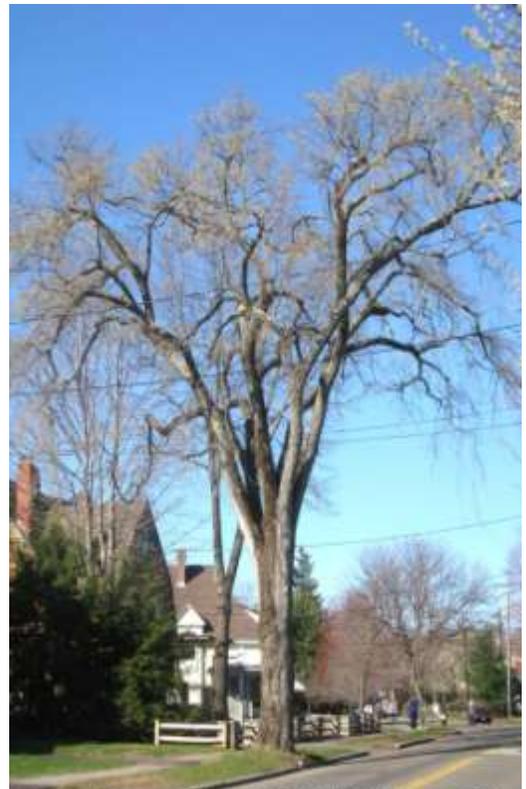
**American Sycamore
627 Massachusetts Ave.**

marvel is in front of Buckman Tavern, and yet another one is near 561 Massachusetts Avenue – an old character with an iron bar driven into the trunk. Did it once display a shop or tavern sign?

You have surely noticed the **American Sycamore** (*Platanus occidentalis*) in front of 627 Mass. Avenue, just beyond the Pleasant Street intersection. It is a stout 15'-6" in circumference and so tall that it is difficult to measure – maybe 100' ? There are written records of sycamores in East Lexington from the 1830s, when they were called "Buttonwoods." They are now less often seen than their hybrid, the London Planetree. Our native Sycamore's stark white bark on the upper branches is dramatically beautiful, and best viewed from the sidewalk looking up against a blue sky.

Yes, there are still **American Elms** (*Ulmus americana*) in Lexington, despite the massive Elm die-off in the second half of the 20th century from Dutch Elm Disease. A few lovelies still remain; one of the best is in front of 191 Waltham Street. At about 65' tall, it exhibits that soaring "vase-like" form with a main trunk bare of branches that eventually swoops, with divided trunks,

into an umbrella at the top. It is big -- it has been here a while. Who knows why some old Elms managed to resist the disease? It helped if they were planted in isolation from other Elms, as the infection spread quickly from one tree to another. It may also have been purchased as a 'Princeton' Elm, scion of a tree in Princeton NJ (under which Aaron Burr is buried) that has proven since the 1920s to be very resistant to disease. Another good cultivar to plant is the Valley Forge American Elm, which local arborist Matt Foti says has even better form.



American Elm, 191 Waltham St.

Photo Credits

- Karen Longeteig, p. 10, 11
- Kate Fricker, p. 1, 2, 4, 5, 6
- Keith Ohmart, p. 9
- Jane Warren, p. 12, 13, 14

Cheerful Ferns for Landscaping

By Jane Warren

Ferns have been on earth for about 450 million years whereas flowering plants have been around a mere 90 million years. Thirty-three families, 300 genera, and 11,000 species of ferns exist around the world. Ferns occupy diverse habitats, including fields, forests, deserts, mountaintops, swamps—and especially tropical rain forests. Unlike flowering plants that bear seeds, ferns have spores that are almost too tiny to see and can travel enormous distances. Large numbers of spores are contained in sporangia; a cluster of sporangia is called a sorus. A frond has 2 parts, the leafy part called the blade and the stalk or stipe. If the blade is divided once, the lobes are called pinnae or leaflets. If the blade is cut twice, each lobe is a pinnule or sub-leaflet and the blade is called bipinnate. If the blade is cut three times, the lobes are called segments or pinulets and the blade is called tripinnate. The more times the blade is cut, the finer and more delicate it appears.

Though ferns aren't generally thought to provide much food or shelter for wildlife, they have a place in nature's web. Many of the ferns discussed in this article provide shelter for toads, frogs, salamanders, and newts. Larger ferns also provide shelter for birds as well as the amphibians mentioned. Cinnamon ferns provide cover to many small animals, including squirrels, birds, snakes, and insects. Hummingbirds, warblers, and some other birds use fuzz from the fiddleheads of Cinnamon ferns to line their nests. Some ferns provide food for wild turkey, ruffed grouse, deer, and other wildlife. I was surprised to learn that some ferns are larval hosts to caterpillars that turn into moths. They are Cinnamon ferns, Christmas ferns, and ferns in the genus *Matteuccia*.

The Plant Materials Guide for Lexington MA

(http://www.lexingtonma.org/clc/Publications/recommended_species_list.pdf) lists ferns native to Lexington. Several Lexington ferns make good groundcovers, because they are relatively short. Larger ferns look beautiful as a backdrop for smaller flowering plants or placed in front of shrubs.

Groundcovers

The bright lime-green once-cut fronds of the **Rock Polypody** (*Polypodium virginianum*) have a slightly upward curve. They are 6 to 12 inches long and may have as many as 20 leaflets. The



Northern Maidenhair Fern

evergreen blades are cheerful even in winter. This fern has a random growth pattern, creeping around rocks and growing on top of mossy rocks. The sori are on the underside of the blades. Rock Polypody grows in dry or moist well-drained acidic or neutral soil that is often rocky. Though these ferns are difficult to establish at first, when adapted, they may grow into large colonies. The light should be partial to full shade.

The **Northern Maidenhair** (*Adiantum pedatum*) has graceful, deciduous fronds that grow 1 – 2 feet high. Burgundy fiddleheads appear in early spring. The

stipes are dark, thin, wiry stems that array 5 or more delicate bright-green leaflets horizontally in an arc. The spores are on the outer edges of the leaflets. Its native habitat is rich, deciduous, moist woodlands, usually in limestone areas. It may help to add lime to soil if you want to grow Maidenhair ferns. They do well in partial to full shade. These ferns are slow in spreading.



Christmas Fern

Christmas Fern

(Polystichum acrostichoides) has evergreen blades that range from 1 to 2 feet high and about the same width. The once-cut fronds with pointed pinnae have a nice sheen and fine teeth on the margins. The leaflets near the top of the blade are distinctly smaller than those lower on the blade. The sori are on the undersides of the upper leaflets. As the foliage gets battered in winter, it looks leathery and less perky, but the silvery fiddleheads emerge in early spring and new fronds unfurl. They flourish in both dry and moist woods so they are easy to grow in gardens. They prefer partial shade, but will tolerate some direct sunlight if the soil is

moist.

Larger ferns

Lady fern (*Athyrium filis-femina*) grows to 2 – 3 feet high and up to 9 inches wide. The arching bright green, deciduous fronds are bipinnate with finely-toothed pinnules, giving a delicate look to this fern. The sori are on the underside of the fronds. Lady ferns grow in rich soil with medium moisture in partial to full shade, but can tolerate full sun if the soil is kept wet. In the wild they grow in moist woodlands and thickets.

The fronds of **Eastern Hay-Scented fern** (*Dennstaedtia punctilobula*) are 1 – 3 feet tall and about 1 foot wide. The light-green, deciduous fronds, 3-times cut, look lacy and have a soft, hairy surface. The fronds turn a pretty bronze color in the fall. The round sori are on the undersides of the blades. If the blades are crushed, a sweet scent of fresh mown hay is emitted. These ferns grow well in moist, well-drained, acidic soil. They like partial to full shade, but will tolerate full sun with enough moisture. In the wild, hay-scented ferns form large colonies.

The handsome **Cinnamon fern** (*Osmunda cinnamomea*) grows 2 to 5 feet tall. The fertile fronds look much different from those of the sterile fronds. The fertile fronds first emerge as fiddleheads that have golden fuzz and then



Cinnamon Fern Fertile Fronds

unfurl into a dark-green stick covered with specialized pinnae that produce bumpy clusters of sporangia. The sporangia turn a rich cinnamon color when they mature. The sterile (vegetative), deciduous fronds emerge later, surrounding the fertile fronds. Cinnamon ferns grow in moist or wet acidic soils, including clay, sand, and loam. They prefer partial or full shade, but can grow in full sun if they are in standing water.

The enchanting **Royal fern** (*Osmunda regalis* var. *spectabilis*) grows 2 – 6 feet tall and about 18 inches wide. The thin light-green infertile pinnules resemble compound tree-leaves with each leaflet usually having 10 or more sub-leaflets. The ends of the upper fronds have fertile leaflets that are oblong clusters of small sub-leaflets that are bead-like in shape. Each of the sub-leaflets has numerous sporangia that become golden brown and split open to release the spores. The protruding golden clusters look like flowers, hence another common name for this fern is “flowering fern”. The normal habitat of Royal ferns is wet soil along streams, bogs, and wet meadows. These ferns like moist, acidic, sandy or loamy soil, and partial or full shade.



Ostrich Fern

The glorious, deciduous, sterile fronds of the **Ostrich fern** (*Matteuccia struthiopteris*) form vase-shaped clumps 3 – 6 feet tall. The feather-shaped fronds are made up of long, thin pinnae that taper at both ends of the stipe. The separate rigid and shorter fertile fronds mature from green to brown by fall. The edges of their pinnae are highly modified and curl over the sporangia—they look like they are covered with beads. These fertile fronds persist through winter, releasing spores. Ostrich ferns grow in moist soils with near-neutral pH. They like partial to full shade and do not do well if the soil is dry. Ostrich ferns are aggressive, so you have to be diligent if you don’t want them to take over your yard.

Note: There is a picture key to the ferns of Lexington on the CLC web site, <http://www.lexingtonma.org/clc/Fernkey/Fern1.htm>.

Answers to Photo Quizzes

- p. 1, Hayden Woods, at end of Valleyfield St.
- p. 4, Meadow between Potter Pond and Avalon at Lexington Hills
- p. 5, Arlington’s Great Meadow (in Lexington)
- p. 6, Hayden Woods, near Hayden Ave. entrance



Rock Polypody

