



**Citizens for
Lexington
Conservation**

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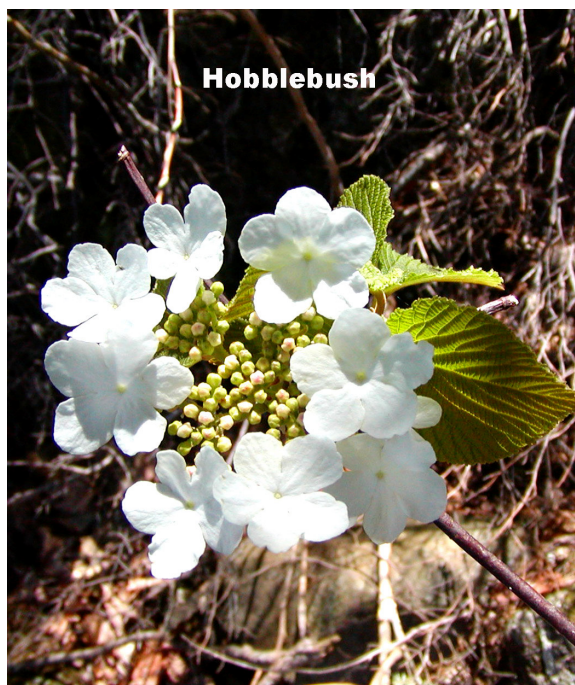
Kate Fricker, Editor

April, 2006

Eileen Entin, President

IN THIS ISSUE

	Page
CLC Publications	2
CLC Spring Walks	3
Trail Work Days	4
Thank You, Fall Walk Leaders	4
Webmaster Wanted	4
CLC Annual Meeting	5
Amphibian and Vernal Pool Websites	5
Lincoln Park Update	6
Picture Credits	6
Idling Happens	7
Japanese Knotweed, What Can We do?	8
Middlesex Plant Sale	10
Book Reviews	10



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Citizens for Lexington Conservation is a non-profit 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 2006," you are up to date. If it says "Dues paid 2005" (or earlier), then it is time to renew your membership for 2006. 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 \$10.00 for a regular membership or \$15.00 for a sustaining membership to CLC, P.O. Box 292, Lexington, MA 02420-0003.

There is an electronic version of the CLC newsletter, sent as an attachment on an e-mail. This version of the newsletter has illustrations in color and live links, it arrives much sooner than the snail mail version, it saves paper, and it costs CLC about \$1 less per copy. If you would like your newsletter by e-mail, 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 now been scanned and are available at no charge on our web site, <http://www.lexingtonma.org/clc/HomePage.htm>. 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.

The files are saved as Adobe Acrobat .pdf files, and require the free Acrobat Reader. You can obtain this reader at <http://adobe.com/prodindex/acrobat/readstep.html>.

Available titles are:

A Wildflower Walk at Whipple Hill
A Walk Through Hayden Woods
Birds of Dunback Meadow
Birds of the Great Meadow
Birds of Whipple Hill
Building a Brushpile
Checklist of Lexington Birds
Discovering the Paint Mine
Ferns of Whipple Hill
Flowers and Shrubs of Whipple Hill, 1982
Flowers and Shrubs of Whipple Hill, 2000
Geological History of Lexington
Guide to the Great Meadows: A Walking Tour
Gypsy Moth
Insect Pests of Shade Trees
Introduction to Hayden Woods
The Red Fox in Lexington
Wildflower List for Lexington
Winter Feeder Checklist



Citizens for Lexington Conservation: Spring Walks, 2006

Woodcock Walk at Arlington's Great Meadow

Friday, April 14 7:30-8:30pm

Join us for a woodcock "walk" at Arlington's Great Meadows. Nearly invisible for most of the year, this wonderful bird and its courtship dance are one of the joys of spring. Spring peepers, other frogs, toads and snipe might also be heard. Binoculars, scopes, a flashlight and a portable beach chair would be useful. Dress warmly, and be prepared for wet ground. Meet promptly at 7:30 in the parking lot behind the East Village Nursing Home, off of Bryant Street.

Co-sponsored by Friends of Arlington's Great Meadows

Leaders: Andrea Golden (781-646-3941), Sandra Ruggiero

Lincoln Park Garlic-Mustard --- Annual Service Walk

Saturday, May 6, 2:00-4:00pm

Our annual eradication efforts in this popular part of town have made significant strides in eliminating this pest and re-introducing native flora. Spend part of your afternoon helping to carry on this campaign and learning to identify both this invasive and examples of our native woodland flora. Meet at the Worthen Road end of the bike path through Lincoln Park. Bring a plastic yard trash bag and a pair of gardening gloves with you.

Leaders: Nell Walker (781-862-6943) Keith Ohmart, Eileen Entin

Spring Birding on Lot 1, Former Middlesex County Hospital

Saturday, May 20, 8:00-11:00am

Experience spring migration at its height on this little-explored part of Lexington. Long sleeves and pants recommended for ticks and poison ivy. Meet at the Falzone Field parking lot (Waltham) on Trapelo Road (1/2 mile east of Waltham Street across from Our Lady's church).

Leader: Keith Ohmart (781-862-6216)

JUNE 10-11 Biodiversity Days In Lexington

June 3-11 is Biodiversity Week in Massachusetts. People of all ages are encouraged to explore their communities and identify and record the wild plants and animals around them. Biodiversity Week is an annual event, part of an effort to build public awareness and support for biodiversity conservation. We'll start the weekend with a bird walk on Saturday, and continue Sunday afternoon with a survey of plants and insects.

Birds in Arlington's Great Meadow in Lexington (part 1)

Saturday, June 10th, 7:30-10:30am

We'll start the morning at the parking lot behind the Waldorf School, 793 Mass. Ave, Lexington, near the intersection of Routes 4 and 225. Trails may be wet in places. Bring insect repellent. Don't forget your binoculars and other optical equipment! Co-sponsored by Friends of Arlington's Great Meadows

Leader: Chris Floyd (781-862-2841)

Biodiversity Day Survey at Arlington's Great Meadow (part 2)

Sunday, June 11 1:00PM-4:00pm

Join us at Arlington's Great Meadows for a survey of the area's plants and insects. Meet in the parking lot behind the East Village Nursing Home, off of Bryant Street. Bring insect repellent. Field guides, magnifiers and a camera would all come in handy. Co-sponsored by Friends of Arlington's Great Meadows

Leaders: Fran Ludwig, Andrea Golden (781-646-3941)

(Continued next page)

Plants of Arlington's Great Meadows.

Saturday, June 17, 10-noon

Join Mass Audubon naturalist and author Hilary Hopkins in an exploration of wetlands, woods and meadows. Hilary is a plant enthusiast and will help us identify and be amazed by what we find. She'll tell stories and lore about plants and other wildlife. You'll never look at a dandelion the same way! Hilary will also bring along a field microscope, because you never know what wonderful little creatures we might find. Be prepared to get your feet wet or at least mucky. Meet in the parking lot behind the East Village Nursing Home off of Bryant St. Co-sponsored by Friends of Arlington's Great Meadows

Leader: Hilary Hopkins, (617-491-8369)

Butterflies and Moths at Dunback Meadows

Saturday, July 15th, 2 to 4:00 pm

At Dunback Meadow, Tom Whelan will help us spot and begin to identify the butterflies that are seasonal in our region. Meet at the entrance to the conservation area near the corner of Allen Street and Pitcairn Place. Allen Street is off Waltham Street. Please check the CLC website, <http://www.lexingtonma.org/clc/HomePage.htm>, to confirm the date and time of this walk.

Leader: Tom Whelan (781-863-1880)

For further information on walks, contact Andrea Golden at (781-646-3941) or andgold@comcast.net.

Trail Work Days

Bowman School

Saturday May 27

Join the Lexington Conservation Stewards in cooperation with the Lexington Bicycle Advisory Committee as we construct a new trail and boardwalk connecting the Bowman School to Blossomcrest Road. Lunch and instruction will be provided. Bring a hammer and drinking water and dress for work in a muddy environment. Some poison ivy may be present. Student community service available. Meet 8:30am in the Bowman School parking lot near the end of Rockville Ave and Worthen Road East.

Contact Mike Tabaczynski at mjt1@rcn.com or 781-929-8748 for more information.

Munroe Brook Bridge

Saturday July 15

The Friends of Arlington's Great Meadows and residents of Orchard Lane in cooperation with the Lexington Conservation Stewards will be constructing a new bridge across Munroe Brook connecting Orchard Lane to Great Meadows. Lunch and instruction will be provided. Bring a hammer and drinking water. Meet 8:30am at the Orchard Lane cul-de-sac. Contact Mike Tabaczynski at mjt1@rcn.com or 781-929-8748 for more information.

Thank you, Fall Walk Leaders

We are grateful to the generous walk leaders, Bert Boutwell, Mike Tabaczynski, Chris Floyd, Fran Ludwig, and Keith Ohmart, who have shared with us their enthusiasm for conservation land in Lexington.

Webmaster Wanted

<http://www.lexingtonma.org/clc/HomePage.htm> needs a volunteer to take charge. Please contact Kate Fricker at kfricker@alum.swarthmore.edu.

CLC Annual Meeting – What is a Vernal Pool? – May 15

Citizens for Lexington Conservation invites the public to its annual meeting on May 15 from 7 to 9pm. at Cary Library. The meeting will feature a presentation by Erika Whitworth and Jeny Ladd, instructors at Mass Audubon Habitat Education Center and Wildlife Sanctuary and local authorities on vernal pools. Vernal pools are a critically important part of our local wetland ecology, providing unique habitat for species that cannot survive in any other setting. Certified vernal pools are protected under the Wetlands Protection Act.

Topics covered will be: what constitutes a vernal pool, where they are typically found, and why they are ecologically important. Examples and illustrations will be drawn from field work that Whitworth, Ladd and their accomplished team of junior high students conducted last year on Lot 1 of the former Middlesex County Hospital. This field work resulted in the identification and certification of five new vernal pools.

A short business meeting will precede the presentation, and there will be an opportunity for questions and discussion following it. Light refreshments will be served.

For further information, contact: Keith Ohmart (kohmart@verizon.net) 781-862-6216.

CLC Board Proposed Slate of Officers For 2006

Co-Chairpersons: Eileen Entin,
Keith Ohmart

Secretary: Ann Schaffner

Treasurer: Diane Carr

Associate Members:

Newsletter: Kate Fricker

Website: TBD

Publicity: Nancy Nolan

Walks Coordinators:

Andrea Golden,

Margaret Heitz

Community Outreach:

Mike Tabaczynski

Legislative Issues:

John Andrews,

Al Levine



Amphibian and Vernal Pool Websites

<http://groups.yahoo.com/group/vernalpool/> :

A Vernal Pool Listserve

<http://midwestfrogs.com/>: Listen to the frog calls.

<http://landscape.acadiau.ca/herpatlas/idguide.htm>: Photos and descriptions to help identify amphibians



New Structure at Lincoln Park

The Lincoln Park Committee invites the public to a dedication of the new deck overlook at Lincoln Park, Sunday, May 6 at 1:30 pm. The overlook will be named in honor of Jeanne and Richard (Dick) Kirk, who were instrumental in the transformation of the site from its humble beginnings as a dump to the popular and beautiful park of today. The location of the Overlook is on the west side of the athletic fields, near the Little League playfield.

Lincoln Park Update

By Nell Walker

This beautiful new overlook off the Roberta and Teresa Lee Fitness-Nature Trail was built over the winter. It was designed by Lincoln Park subcommittee member, Parker Hirtle; John Davies was the architect. The structure was made possible by the Richard and Jeanne Kirk Fund.

There is still work to be done to improve the landscape of Lincoln Park. Water oozes out around Lincoln Field, even during dry periods, disrupting the vegetation and path system. Pat's Meadow, which was built with the help of CLC members in honor of Pat Doherty, is now a hillside wetland. There is a huge stand of invasive Japanese Knotweed on the hill beside the overlook, and there is some ugly brown water below it, which is probably a combination of leachate from the old landfill underneath, silt, and the breakdown of organic material. This shows up when lack of rainfall results in less flushing by fresh water from the hillside above Lincoln Street.

The old landfill under Lincoln Field was closed in the early 60's. In 1967 the Selectmen permitted the addition of Boston Harbor-Mystic River dredgings for additional cover after the closing of the dump, saving \$200,000, since it was "free". The "free" dredgings, however, made it hard to grow turf grass, a major factor in the decision to cover the fields with artificial turf. The 30 feet of organic landfill materials deposited between 1930 and 1963 still come back to haunt us. Now there is an article in the 2006 Town Warrant requesting \$200,000 for subsurface methane gas mitigation and monitoring around the Lincoln athletic fields.

The problems of the old landfill continue, but work is still progressing on the renovated facility. There will be a big Garlic Mustard Day on May 6, with students and CLC members participating, and this summer two experienced students will be returning to work on the park.



Newsletter Picture Credits:

David White and Mike Tabaczynski, p. 9
Kate Fricker, p. 1, 2, 5, 6, 8

Idling Happens

By Ingrid Klimoff

Did you receive a flier along with your January property tax bill?

The Lexington Health Department, along with a committee of diverse composition, is working on reducing vehicle emissions in Lexington in a campaign called "Idle Free Lexington." Thanks to grant money from the New England Grassroots Environment Fund, every taxpayer in Lexington received a pamphlet on the anti-idling campaign from the Board of Health.

What does idling a vehicle have to do with conservation? Why should members of Citizens for Lexington Conservation care about vehicle idling?

Incomplete combustion from running your vehicle gives off nitric oxide (NO) and nitrogen dioxide (NO₂), both of which contribute to acid rain. About 37% of nitrogen oxides in the air currently come from vehicles. They contribute to the formation of ground level ozone, affect the acidification of soil, and cause changes in the development of nitrogen-loving species. This overdevelopment of micro-flora in lakes creates a lack of oxygen in the water, which kills other wildlife. Acid rain slows forest growth, and can injure trees irreparably. This occurs from damaged leaves, limited nutrients, and a combination of other additional threats to the trees. Acidic water can dissolve the water-soluble nutrients and minerals in the soil, and wash them away before plants can use them. Also, acid water releases some toxic substances, such as aluminum, into the soil.

Hydrocarbons (HC), another vehicle emission, and nitrogen oxides (NO_x) react with sunlight and heat to produce low-level ozone (O₃), the main ingredient in photochemical smog. Ozone is the single most important pollutant affecting vegetation. It damages food crops and forests (pines are particularly sensitive). Ground level ozone interferes with the ability of plants to make and store food, thus making them more sensitive to disease, insects, and harsh weather. In addition, sulfurous emissions from vehicles cause soil and water acidification, damage plants, especially trees and mosses, and further contribute to the formation of smog.

Other byproducts of combustion include carbon monoxide (CO), carbon dioxide (CO₂), and methane, all of which are greenhouse gas emissions. Transportation accounts for about 20-25% of all greenhouse gas emissions; greenhouse gas emissions have been conclusively proven to cause global climate change. Other emissions from diesel engines include particulate matter (PM) and harmful chemicals that pollute the air.

Finally and most importantly, vehicle emissions have profound effects on human health. Clearly, clean air is important to all living creatures. Certain diesel emissions are carcinogenic, and can exacerbate asthma and heart disease in human beings. Children and the elderly are particularly at risk.

Massachusetts General Law, Chapter 90, Section 16 A states that: "No person shall cause, suffer, allow, or permit the unnecessary operation of the engine of a motor vehicle while said vehicle is stopped for a foreseeable period in excess of five minutes." This law was written for the environmental and health reasons mentioned above.

In an ideal world, people would walk, bike, or use mass transit to go from one place to another. This would be healthier for us and for the environment. In truth, we are one with the environment. One thing we can do is to remember that when and if we stop a vehicle, we do not idle. 🌲

Japanese Knotweed: What Can We Do?

By David E. White



Japanese Knotweed is currently known by the scientific name *Fallopia japonica*, but was commonly and previously called *Polygonum cuspidatum*. It is an upright, herbaceous perennial that can grow to over 10 feet in height, and forms a dense leafy mass allowing very little else to grow in its shade. The stalks are hollow and bamboo-like, and are very weak. The plant, however, is not a bamboo but a member of the buckwheat family. Its roots can go as deep as 7 feet and spread as far as 50 feet. Japanese Knotweed is native to Asia and was introduced to Europe and the US when it appeared in

nursery catalogs in the late 18th century. The plant did not become fully naturalized, and recognized as potentially invasive, until the early 20th century. In the last several decades it has become a widespread problem invasive.

Japanese Knotweed prefers sunny locations near, but not in, water. It can also grow in shaded areas, but does so less vigorously. It is often found along stream banks and adjacent to wetland areas, but can also establish itself in drier upland areas. Like all herbaceous perennials the above-ground stalks die back every fall. The heart of the plant is its underground rhizomes, which store energy at the end of each summer to fuel vigorous growth of new stalks in the spring. There is an extensive interconnected net of these rhizomes, which can extend fifty feet or more, so a large Japanese Knotweed thicket may in fact be one single plant. Thus to control Japanese Knotweed one has to get to the roots, and an entire area must be treated, not just a limited portion of it.

Japanese Knotweed management approaches can be grouped into three categories: (1) *Starvation*, (2) *Removal*, and (3) *Poisoning*.

Starvation is based on depleting the energy in the root masses. Regular mowing or cutting, at least twice a month over a period of several years, will deplete the rhizomes and prevent replenishment. Another approach is to cut the stalks to the ground and to cover everything with heavy black plastic. Stalks may pop up through gaps in the covering and need to be dealt with, but this method requires less frequent effort than mowing.

Removal is only helpful when combined with the starvation approach. Although it is possible, and probably helpful, to dig out the large crowns near the surface, the rhizomes extend very deep into the ground and spread very far. It is impossible to remove them all, and even a small root fragment will start a new shoot.

Poisoning is the least labor-intensive approach, but also requires the most expertise. One technique is to cut the stalks near the ground and then apply a glyphosate weedkiller such as Rodeo or Roundup inside the hollow stem. Sometimes a single treatment will give nearly 100% control, although one should probably check back the next year or two to verify. This approach creates the least disturbance, but requires a licensed applicator. If the area to be treated is near

a wetland or stream, poisoning will also require a permit from the local Conservation Commission.

Since Japanese Knotweed can easily sprout from root and stem fragments, plant materials should be carefully composted on-site or incinerated. They should never be included with normal yard waste!

Restoration: Once the Japanese Knotweed is gone something else will take its place. Quite often this will be another invasive plant. Those methods that most disturb the soil are likely to lead to the greatest problems. Seeding the disturbed area with a native grass/wildflower mix is the quickest and simplest restoration approach. This also facilitates ongoing mowing or cutting of any emergent Japanese Knotweed shoots. After several years, shrubs and trees can be planted.



Experience to date:

Personally I have been involved in several Japanese Knotweed control projects. The first one I started about three years ago along the Minuteman Bikeway near my home. This is a very sunny, level area of about 120 x 8 feet that had grown into a solid Japanese Knotweed thicket. My first step was to cut all the stalks, the second was to dig and pull out the crowns that were near the surface. The third step was to cut and mow on a regular basis for several years. The area is now open and grassy, but requires regular watching since there are still some nearby plants

behind a fence and across the bikeway and some sprouts do come up.

A second project was near some wetlands in Arlington. Here I cut and pulled up stalks several times a year. Because this area was fairly shaded, the Japanese Knotweed has not spread but it is still present.

The most recent project is with the Friends of Arlington's Great Meadows (FoAGM) along the Bikeway in Lexington. This started in the spring of 2005 and many people have been involved, including high school students. Here we are trying two physical approaches but no herbicides. One section we cut, dug up, and covered with black plastic. In the other section we just cut and removed the previous year's stalks, then throughout the season cut and removed the emerging stalks on a fairly regular basis. Both methods are quite labor-intensive, but it is too soon to tell their relative effectiveness. Unfortunately we now can see the invasive Purple Loosestrife in the background and a new crop of garlic mustard.



In my view, the key to effective Japanese Knotweed control is dogged persistence. Because the essence of the plant is its extensive underground rhizomes, Japanese Knotweed can easily

reappear.

Those who want to find out more about this project, or to help with it, can visit our website: www.FoAGM.org

Other web links for further information:

New England Wildflower Society: www.newfs.org/conserves/invasive.htm

The Nature Conservancy: tncweeds.ucdavis.edu/esadocs/polycusp.html



Middlesex Conservation District Spring Plant Sale

The Middlesex Conservation District will be holding its Spring Plant Sale Friday April 28 (3-6 pm) and Saturday April 29 (8am-12noon) at the 4H Fairgrounds, South Chelmsford Road, Westford, MA. All items may be ordered in advance and picked up on the two sale days; in addition excess first quality stock and specialty items will be available those days.

The sale includes tree and shrub seedlings, perennials, fruits, herbs, groundcovers, and hard goods (compost bins, fertilizers, nesting boxes, garden gloves, deer repellent, etc). Please call 978-692-9395 to obtain a brochure and order form; or visit MCD's website at www.middlesexconservation.org. All proceeds benefit the District's conservation programs.

Book Reviews

***Swampwalker's Journal*, by David Carroll**

Reviewed by Kate Fricker

In this book David Carroll brings us a long celebration of life in swamps, bogs, marshes and other shallow water wetlands. Reading it is a very visual experience, creating a clear picture of the forms of life in each location, with none of the inconvenience and misery of mosquitoes, uncertain footing, leeches and mud. Mr. Carroll is an artist as well as a writer. His drawings are so accurate and alive that one wants to reach out and touch them. In them each animal is engaged in an activity typical of the species.

Swampwalker's Journal is like a whole course in the field biology of wetlands, yet it is much more alive than a textbook. It has a delightful vocabulary, with references to a wide variety of literature. The author writes about each species as though he were describing the interesting habits of his friends, and he aches for them as he sees the destruction of their wetland habitats as a result of unchecked human population growth.

Read this book, grab your boots, and head for the nearest swamp to check it out.

***Reflections in Bullough's Pond* by Diana Muir**

Reviewed by Keith Ohmart

Using the device of reflecting on the history of the pond within sight of her home in Newton, Massachusetts, Diana Muir has woven a wonderfully constructed description of the impacts of human activity on the New England landscape and the landscape's influences on human endeavors from the first Native Americans to our present day.

Ms. Muir's superb tale describes this interwoven relationship beautifully. Suffice it to say that months after having read this book, I am regularly haunted by it as I scan the daily headlines and news stories of our own age.