



Citizens for Lexington Conservation

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<http://www.clclex.org>

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Kate Fricker, Editor April, 2013 Eileen Entin & Keith Ohmart, Co-Chairs

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**Photo Quiz: Where in Lexington
was this picture taken?**

Citizens for Lexington Conservation is a non-profit 501(c)3 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 2013," you are up to date. If it says "Dues paid 2012" (or earlier), then it is time to renew your membership for 2013. 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 in time 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. Dues may also be paid by credit card through PayPal from a link on our web site, <http://www.clclex.org>.

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. In addition you don't have to slit open the nasty seals the post office now requires on our snail mail copies. 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 Annual Meeting

Monday, April 29, 2013 at 7:00pm
Cary Memorial Library, Meeting Room

Active and Engaged: Rare Species Conservation Inside Route 495

Speaker: Bryan Windmiller, Grassroots Wildlife Conservation, Inc.

In Massachusetts, the parts of the state "inside 495" are often regarded by conservationists as simply too urbanized and criss-crossed by roads to be of much conservation value. However, some of the most significant populations of rare wildlife in our state are still be found within 30 miles of Boston. Ensuring a long-term future for rare species in eastern Massachusetts will rarely be a passive affair of simply protecting habitat; it will often require long-term, sustained, and active management and will almost always involve the cooperation of private landowners and a variety of public agencies. We will learn about some ongoing conservation projects "inside 495", involving species as diverse as Blanding's turtles, little brown bats, bridle shiner fish, and Britton's violets.

Bryan Windmiller holds a PhD in biology and a Master's degree in Environmental Policy, both from Tufts University. He was the founder of an ecological consultancy, Hyla Ecological Services, and has worked as an ecological consultant since 1987, specializing in understanding the impacts of human infrastructure and development projects on populations of wild animal species, particularly amphibians and reptiles. Bryan teaches undergraduate and graduate courses in wetlands ecology, conservation biology, and herpetology and was a visiting scholar at James Cook University in Australia. Currently, Bryan is President of a newly-formed non-profit corporation, Grassroots Wildlife Conservation, which integrates hands-on educational programs into the conservation of rare animal and plant species.

CITIZENS FOR LEXINGTON CONSERVATION 2013 SPRING WALKS

Saturday, April 13, 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 beginners 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. Rain date is Sunday, April 14, 8 – 10 AM. Walk Leader: Bobbie Hodson (robertahodson@comcast.net; 781-861-9421)

Saturday, April 20, 1 - 3 PM

Garlic Mustard Pull at Lincoln Park

Meet at the bike path entrance on Worthen Road. 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. We will also pull out new invasive 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. Heavy rain or lightning will cancel the event for that day. Rain date is Sunday, April 21, 1 – 3 PM. Walk Leader: Nell Walker (nelwalk@verizon.net; 781-862-6943)

Sunday, April 21, 10 – 11 AM Butterfly Walk at Arlington's Great Meadow

Meet in the parking lot at Golden Living Center – Lexington, at 840 Emerson Gardens Rd. (off Maple Street) in East Lexington. The parking lot is on the right side of the facility, and drivers should park at the far end. This walk will be co-sponsored by Citizens for Lexington Conservation and the Massachusetts Butterfly Club. Butterfly enthusiast Tom Whelan will lead a walk to see two species of spring butterflies, Brown and Henry's Elfin. These small, easily overlooked butterflies are found in many parts of the United States 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. People of all ages are welcome; children must be accompanied by an adult. 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 if the weather requires cancelling the event.

Saturday, May 4, 8 – 10 AM

Warbler Walk in Lower Vine Brook

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. Children with adults are welcome. Bring warm clothes, boots if it's 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 (hwest2020@gmail.com; 617-461-9500 mobile)

Sunday, May 5, 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 fringed polygala, wild columbine, Jack-in-the-pulpit, and other spring blooms. Walkers should wear boots or other terrain footwear. Steady rain or lightning will cancel the walk.

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

Thursday, May 16, 2 - 3 PM**Pond Exploration at Parker Meadow**

This walk is 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 bugs, tadpoles, frogs 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. Walk Leader: Emily Schadler, Town of Lexington Conservation Stewardship Coordinator (eschadler@lexingtonma.gov; 781-862-0500 x 240)

Saturday, May 25, 10 - 11:30 AM**Slow and Easy Nature Walk**

Meet at the trail entrance next to the Employee Parking Lot on the right side of Brookhaven (1010 Waltham St.). Are you worried about going on those walks in the woods that you used to enjoy so much? Here's your chance to take it slow and easy on the Brookhaven Nature Trail, following a winding path through the woods behind Brookhaven. There are six benches where walkers can sit and admire the birds, the flowers and the view over the pond, or the two vernal pools along the way. The surface of the path has been packed with a smooth layer of stone dust to make traveling with a cane or even a walker possible. Bring binoculars if you are a bird watcher. Steady rain or lightning will cancel the walk. Walk Leaders: Kate Fricker and Marie Roberts (kfricker@alum.swarthmore.edu; 781-640-1276)

All walks are free and open to the public

Maps of conservation lands can be found at
<http://www.lexingtonma.gov/conservation/conland.cfm>

Thank You, Fall Walk Leaders

Many thanks to the leaders of our Fall Walks: Bobbie Hodson, Emily Schadler, Gerry Paul, Bonnie Newman, Bob Haussein, Karen Longeteig, and Alex Dohan.

Photo Credits

p. 1, Keith Ohmart
p. 6, Alex Dohan
p. 7, Wikipedia
p. 9, Peggy Enders
p.13, Kate Fricker

Bird Migration in Lexington

By Bobbie Hodson

Although we become quite excited when the beautiful warblers are singing and flying their way through Lexington on their northern journey during mid-May, the spring migration of many birds starts much earlier. In fact, the total migration extends for over three months in the spring, and even longer during the late summer and fall when the birds are more leisurely returning to their wintering grounds. And let's not forget those birds, such as Juncos, who migrate south to us for their winter here.

Before the snow is off the ground in late February the Red-winged Blackbirds are croaking in swamps. By March the Killdeer and American Woodcock return. These three early migrants can be seen and heard around Dunback Meadow. A treat in mid to late March is to go into the fields near Clarke Middle School at dusk and listen to the woodcocks "peeting" as they perform their courtship dance in the sky.

In March and April the ducks return with most heading further north to their breeding grounds. Places to watch them in their breeding colors include the Arlington Res, Great Meadows in Concord, and Tophet Swamp. By looking carefully one can often find a dozen different species of geese, swans and ducks. During this time Great Blue Herons also return to start breeding in their treetop nests. April is also the time when many species of sparrows migrate through, leaving Song Sparrows and Savannah Sparrows here to breed in many of our conservation areas. One place to find the sparrows is the Waltham Street Fields conservation area.

During late April and into May come the beautiful warblers and vireos, which can be found at Lower Vinebrook, Dunback Meadow, Arlington Res, and Whipple Hill. On an early May morning it's not unusual to hear and see nearly a dozen of these gorgeous birds as they flitter about in search of insects. Although most warblers breed north of here, several, including the Common Yellowthroat, Yellow, Black and White, and Yellow-rumped Warblers, add song and color to our trees and fields throughout the summer. This is also the time when Baltimore Orioles and Rose-breasted Grosbeaks return to sing their beautiful arias as they find mates, build nests and start to feed their young.

If you want to see and hear this springtime migration, please join us on one or more of the several bird walks offered by CLC during this period. We look forward to introducing you to our local birds.



Answer to Photo Quiz: The picture was taken at the trail entrance to Lower Vine Brook at Brookside Road, part of the ACROSS Lexington system.

Would you like to be able to call yourself a Member of the Board? CLC would like a larger board. If this interests you, contact Eileen Entin, at eileenhome@gmail.com, or Keith Ohmart, at kohmart@verizon.net.



A Sentinel Falls

By Alex Dohan

When we bought our Lexington house in 1997, part of what drew us to the property was the wooded lot. There were Beech trees, Red Maple, Ash, Hickory, Cedar, Chokecherry, Dogwood, White Pine, and more. And that's not counting all the shrubs and invasives. Red Maple and White Pine dominate. It's no surprise that those fast-growing, hardy trees took over when the land reverted from farmland in the early 20th century. Luckily, when this neighborhood was built in the late 1950s and early 1960s the developers were forward-thinking enough to retain many of the trees on the building lots.

In a quest for more space for our growing family, we sadly took down a few of the 90+ year old trees to build an addition to our home, but there is still no shortage of trees. It's a challenge to grow vegetables, but I've learned a lot about "native gardening" over the years and we get visits from all sorts of wildlife, including bear and beaver (we have a stream also), though those are rare. We have lots of leaves to rake, a few dings in the cars from falling branches, and expensive arboreal maintenance, but it is worth it to live among the carbon dioxide sinks. It's cool and shady in the summer and peaceful in the winter. Fall provides the proverbial riot of color and spring brings something new to see each day.

I've heard some of the great white pines in the neighborhood referred to as Sentinel Pines. They are Sentinels indeed, taller than most of the other trees around, topping out at 100 feet or more. We had a couple of those wonderful trees. Notice the use of the past tense. On October 28, 2012, "Superstorm" Sandy roared through with huge wind gusts. As I watched in amazement from the kitchen window, the largest of our trees, the sentinel in front of the house, let out a mighty crack and came crashing to the ground, broken off about 6 feet above the roots. My first thought was thankfulness that it had not fallen ON the house, but in completely the opposite direction. My second thought was sadness that such an iconic tree was finished.

Amazingly, there was little damage of importance. Our electrical wires were pulled from the house, but not broken. The great tree fell away from the house and out of range of the cars and the shed, damaging some other trees and bushes as it fell. As soon as it seemed safe, we went out to look at the carnage. Most of the heartwood of the tree was dust; there had been nothing left to hold it up save bark and sapwood. And we'd had no idea. We had had a severe pruning done of other trees about 4 months prior, to prevent storm damage, but the pine had looked healthy to us. How wrong we were.

I've watched woodpeckers, squirrels, creepers, jays, fishers, wood ducks and all sorts of other creatures climbing or flying in that tree. Never again will they ascend toward the sky on that rough bark, or hide in the knotholes where branches once extended. On the other hand, it now makes an interesting "natural bridge" over our stream, and I look forward to years of watching the decay process. I broke off and saved the top of the tree, which now sits on my kitchen windowsill, reminding me of the great Sentinel that once stood outside.

Save the Eastern Hemlocks!!

By Jane Warren

Eastern hemlocks (*Tsuga canadensis*), sometimes called the redwoods of the east, are majestic trees that may grow to a height of 150 feet or more with a trunk up to 6 feet in diameter. They grow slowly, but may live as long as 900 years. They start producing cones at about 15 years of age and some may produce them when they are as old as 450 years. The leaves are flat evergreen needles and the cones, a half to 1 inch long, are shaped like footballs dangling from the tips of branches. In the northern hardwood forests, hemlocks are found on low rolling hills and glacial ridges, often with white pine, northern red oak, sugar maple, American beech, yellow birch and white ash. Around Lexington you can see these glorious trees, often in clusters or long rows, in conservation lands, along roads and in many yards. Eastern hemlocks are important to the environment as well as beautiful. They provide habitats for birds, fish, invertebrates, amphibians, reptiles, and mammals. About 90 bird species and more than 40 mammals use hemlocks for cover or food (seeds or needles) in the northeastern US. Hemlocks provide the deep shade along creeks that supports trout and other cold-water wildlife.



Hemlocks are one of the most shade-tolerant trees, but they do not do well in soil that is wet or has poor nutrition, nor do they tolerate prolonged heat, windy exposed sites, or air pollution. Drought is harmful to hemlocks, especially younger trees, but now their worst enemy is the hemlock woolly adelgid (*Adelges tsugae*) (HWA), a tiny insect from East Asia that is almost invisible (about 1/32 inch long). In the US this insect was first found in the Pacific Northwest in the 1920s and in the Washington DC and Richmond VA areas in the 1950s. By 2005, it was established in 16 states from Georgia to Maine. The HWAs, which lack natural enemies in North America, have spread by wind, birds, mammals and infected hemlocks from nurseries.

HWAs are parthenogenetic—all are female and reproduce asexually. Their life cycle has two generations each year. The overwintering generation starts to lay eggs in spring; each adult lays 100 to 300 eggs. The brownish-orange eggs are covered with the fluffy white material secreted by the adult insects to protect the eggs. When the eggs mature, the nymphs begin to feed and increase in size and become mature adults by mid-summer. Adults in the spring generation lay up to 75 eggs per insect. The resulting nymphs survive over the winter and mature to adults in spring. Thus the population can grow quickly.

The HWAs suck fluid from the base of the hemlock needles and may inject toxins while feeding, depleting the tree. Other insects, such as hemlock scale, hemlock borer and spittlebugs, and also fungi and drought can all exacerbate the impact of the HWAs. Some trees die within 4 years, but others may linger several years in a weakened state.

If you have hemlocks in your yard, keep an eye on their health. The first sign of infestation by HWAs is the appearance of fluffy white globs on the twigs. Signs that a tree is deteriorating are

previously shiny green needles turning grayish or dropping off and branches falling. If you notice signs of infestation, it would be prudent to contact a tree expert right away to assess the health of the tree and provide appropriate treatment. If HWA infestation is noticed early, the tree is more likely to be saved. Sprays such as horticultural oils or insecticidal soaps are effective if the tree is saturated with them. Systemic treatments have had some dramatic results that may be effective up to 5 years. Looking ahead, several beetle species introduced from Asia that appear to feed only on HWAs may prove to be a longer-term solution. Researchers are also attempting to identify strains of eastern hemlocks that seem to be tolerant to the feeding of the HWAs.

Because the eastern hemlocks provide such a uniquely beneficial habitat for wildlife, some experts believe that the HWA infestation could be a worse ecological disaster than that caused by the chestnut blight that was first seen in the US in the early 1900s. If we are not able to successfully thwart the HWAs in time, the widespread losses of eastern hemlocks will be devastating. Hopefully, the various treatments will save many of these glorious trees from the alien invaders. Be vigilant in checking for the white globs on your hemlocks!

Backyard Phenology

By Keith Ohmart

Those of us who keep track of seasonal changes in the bloom time of our local flowers and the comings and goings of our seasonal avian visitors from warmer climes are keenly aware of year to year changes in these cycles. Many of us keep track of these year to year changes in personal journals, but what if there were a way to gather this information into a large data base that would be of benefit to climate scientists and others who tracks such information? This would elevate the personal record keeping that many of us do to the realm of phenology, which is the scientific study of the effect of climate on biological life cycle events.

As you may have guessed, there is now an online program operated by the *USA National Phenology Network (USA-NPN)* where your seasonal observations can be recorded that will help scientists from many disciplines learn more about our natural world and its changing climate. If you have a computer and access to the internet you can join this growing movement of citizen scientists by logging in the observations from your own backyard in a way that is far more meaningful than simply consigning them to a personal journal.

Log on to the *USA-NPN* web site (<https://www.usanpn.org/>) and look for their *Nature's Notebook* program to get started. Observations of plant, bird and insect species are all accepted. The biggest problem for beginners is biting off more than you can handle. I know this from personal experience in my own first year. In my eagerness to get started I committed to observing 8-10 plant species all of which were growing right in my yard, in addition to half a dozen bird and insect species, figuring, "How hard could this be?" As I learned, it is best to start with just a few plant species the first time around until you get the hang of it, and now in my second year I am dialing things back to about half that number of species.

During the early part of the growing season from bud break or the emergence of perennial plant species, recording observations every few days is desirable to best capture the rapid changes that our native plant species undergo every year. As the season progresses, the

pace of observations will slow down over the summer but then pick up again towards fall as fruiting takes place and foliage undergoes the transition to fall conditions.

The *USA-NPN* web site offers very complete instructions on how and what to observe for each plant, bird or insect species that you select, as well as a wealth of available information on each species through convenient drop down menus. The list of available species is extensive.

What I have found most rewarding about my participation in this program beyond the notion of contributing to a larger scientific effort is the discipline that this has brought to my formerly casual interest in observing the changing seasons. Observing the seasonal changes that nature puts in front of us in a more organized fashion has heightened my awareness of the natural world that surrounds us. And isn't that what a lifelong interest in the natural world is all about?

HAPPY BIRTHDAY, MINUTEMAN BIKEWAY!

By Peggy Enders.

Peggy Enders is Chair of the Lexington Bicycle Advisory Committee, a member of the Greenways Corridor Committee and the Friends of Lexington Bikeways, and is also a Conservation Steward director.

May 2013 will mark 20 years since the Minuteman Commuter Bikeway was formally dedicated and opened. For at least a year before that 1993 opening day, folks were exploring the uncompleted Bikeway—hauling their bikes over unfinished bridges—eager to experience what is now one of the region's finest outdoor resources.



The whole story of the Bikeway, however, begins long before 1993. At a recent party honoring Jerry Van Hook's many years of service as a bicycling activist and chair of the first official Lexington bicycle committee, Tom Fortmann and Bob Sawyer reminisced about the early days of bicycle advocacy in Lexington and the work it took to realize the Bikeway.

The prospect of a commuter bikeway was discussed as early as 1974, when a group of residents involved with planning bikeways along the Vine Brook and next to Lincoln Field began talking about the possibility of a rail-trail using the old Boston & Maine railroad line. Groups in Lexington and Arlington were working separately but on similar plans, and it was a solicitation from the Metropolitan Area Planning Council in 1978 that led to a proposal and an EPA-funded feasibility study in 1981.

Next an alliance—including Bedford—was formed, called the "Cycling Transportation Foundation." As Tom Fortmann describes it, in 1982, with the help of some friendly state legislators, "a barely noticeable million-dollar bikeway was tucked into the next billion-dollar transportation bond." The original intent of the funding was to relieve commuter congestion on Route 128 and improve air quality—thus the importance of the name, "commuter bikeway",

even though it is enjoyed by many other users. (Tom reports that one proposed name was the “Minuteman Bicycle Highway.”)

After that, it was up to the towns to decide whether or not to support the construction of a bikeway. There was considerable resistance from residents, particularly abutters, who were worried about “the wrong sort of people” coming out to Lexington on the trail. But through the hard work of Tom Fortmann, Alan McClennen, Cathy Buckley, Selectman Jack Eddison, and many others, the Bikeway was built.

In 2008, the Bikeway was inducted into the “Rail-Trail Hall of Fame” by the national Rails-to-Trails Conservancy. In that same year, the Bikeway became a year-round resource for all users when the Friends of Lexington Bikeways received approval from the town to raise private funds and hire a contractor to plow it in the winter.

The distance between Alewife Station and the Bedford Depot is just over 10 miles, but in addition to being a wonderful ride into the city or out to the countryside, the Bikeway is a great jumping off point for a number of other trails, parks, and conservation lands all along its route. On the Cambridge end, these include

- the Alewife Linear Path that runs to Davis Square and joins the Somerville Community Path;
- the paved trails around and near Fresh Pond;
- the Fitchburg Cut-Off Path that goes to the Belmont border and may soon be extended to Belmont center;
- and the new paths along the Alewife Brook Greenway that extend to the Mystic River Reservation.

At the Bedford terminus, the Reformatory Branch rail-trail is just down the road. It’s an unpaved and rough trail that goes all the way to Concord and the Old North Bridge, passing the Great Meadows Wildlife Refuge along the way; the section to the Bedford line is slated to be a paved extension of the Minuteman Bikeway. The 3-mile unpaved Narrow Gauge Rail-Trail starts just across the street from the Bedford Depot and goes north to Technology Park in Billerica, just short of Route 3.

In Lexington, the Bikeway traverses the entire length of the town, past a number of conservation lands, including Arlington’s Great Meadows in East Lexington, Parker Meadow, and the Meagherville Woods (just a short walk or ride from the Bikeway at Garfield Street). The trail through Meagherville is a good way to get to the Battle Road trail from the Minuteman Bikeway – it involves travelling through some neighborhoods to get to Wood Street, Old Mass Ave, and the start of Battle Road trail.

A new map of the Bikeway will be published this spring that shows how easy it is to use the Bikeway to explore trails and open spaces in the area. The production of the map is being made possible with funds from the Department of Conservation and Recreation. The same grant is funding a review of current conditions on and near the entire Bikeway – from Arlington to Bedford. After surveying users over the winter, Toole Design Group plans to hold a public session this spring; the results of their study and the design recommendations will be submitted to the towns sometime this summer.

Lexington Bike Walk 'n Bus Week!

Promoting healthy, sustainable, and safe transportation options
Sunday, May 5 - Saturday, May 11,

Walking, cycling, and taking mass transit are the healthiest and most sustainable means of transportation. A number of activities are being planned during this week-long event to celebrate the many alternative transportation resources available in town. Bike Walk 'n Bus Week is being organized by the Bicycle Advisory Committee, Greenways Corridor Committee, and Safe Routes to School Committee, in conjunction with Town staff.

See <http://lexbikewalkbusweek.org> for details

Managing Invasives in Our Lands and Parks

A talk by Dr. Eric Olson,
Summarized by Kate Fricker and Bob Hausslein

An alien plant is defined as a plant that arrived in this country after Europeans did. In Massachusetts 33% of our 2712 species are alien. Among the alien plants there is a spectrum from those that are wildly invasive to those that are welcome, such as tomatoes, wheat, apples, carrots, and Queen Anne's Lace.

The problem with most alien plants is that to our native insects and birds they are inedible, like green plastic foliage. For native plants, leaf consumption by insects runs 5 to 15% per year, whereas for most invasives, it is zero. Native vegetarian animal life has evolved to digest the plants that evolved alongside them, and if an alien invasive plant invades a large area, the native birds and insect life will starve and die out.

One might ask why we don't introduce an insect from the original home of the invasive, one that kept the invasive plant in check before it migrated. This has been tried, but some introduced species turn out to be worse pests than the plant they were brought in to control. It takes many years of research to find a good match. In the meantime we have to do what we can to save our environment.

1. **Garlic Mustard**, in addition to shading large areas, is allelopathic, in that it secretes a chemical that damages and kills beneficial root fungi that many plants, especially trees, depend on for growth. The most efficient control method is to pull up only the second year plants, since the plants do not flower and seed in the first year. This should be done from the time the flowers first appear until seeds are produced in mid-June. Plants should be put in a plastic bag, tied, and sent to an incinerator, not a composting facility. If weight is a problem they can be dried out first. It will take a year or two before the chemical in the ground decomposes.
2. **Japanese Knotweed** spreads rapidly through its root system, which can grow aggressively and even destroy foundations. The plant can spread over large areas, and



Garlic Mustard



Japanese Knotweed

may secrete a chemical similar to that of Garlic Mustard. Use pitchforks to dig up the roots after a rain has loosened the soil. Leaves and stems will not sprout, so they can be discretely spread around as compost. Bag the roots and send them to the incinerator. This process will cause so much damage to the soil environment that it shouldn't be repeated year after year. After one or two years of digging, just mow down the tops. Eventually the plants will die by root fatigue, but it may take several years of repeated mowing.

3. **Black Swallowwort** is related to milkweed, as one can see by the pods and flying seeds. Unfortunately, unlike milkweed, it produces a substance that kills any Monarch Butterfly caterpillars hatched from eggs laid on it. Plants are hard to pull up, so count on 5 years of grubbing out root crowns and burning the plants.

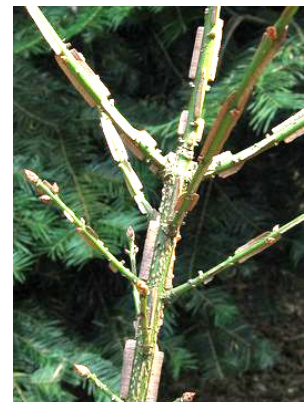
4. **Oriental Bittersweet** if left unchecked will completely cover trees with its foliage, eventually pulling them down or killing them by cutting off transport of nutrients and water. Make a cut close to the ground and one high up before the seeds appear in mid-summer. Don't cut down our native bittersweet, which can be identified by flowers and seeds only at the tips of twigs. Oriental Bittersweet produces fruits all over. Dr. Olson suggested that we should have a state law requiring that landowners keep invasive plants on their property from spreading, so their out-of-control vegetation doesn't become a problem for everybody else.



Oriental Bittersweet

5. **Common Buckthorn** is a bush or small tree that out-competes native trees and shrubs. Shrubs up to 2 inches in diameter can be pulled with a weed wrench, preferably when the soil is moist. Larger trees can be cut down, but they will re-grow unless treated with herbicides. This required a license unless done on your own property. Some people cover the stump with a tin can to prevent re-growth.

6. **Winged Euonymus** is a bush that can escape into the woods, but it is not as serious a pest as the previous alien plants. It can be uprooted with a weed wrench.



Winged Euonymus

7. **Exotic honeysuckles**, such as *Lonicera tatarica*, have solid stems, whereas the native honeysuckles have hollow stems. They also are not as serious pests as the first four, but they do spread rapidly and reduce the diversity of plants in the woods. A weed wrench is the best tool for pulling up this shrub.

The Stewardship Round-Up

By Emily Schadler, Lexington's Conservation Stewardship Coordinator

Lexington Conservation Stewards has teamed up with Citizens for Lexington Conservation to include a stewardship update in every CLC newsletter. Lexington Conservation Stewards is a volunteer group that works closely with the Conservation Commission and Conservation Division Staff to care for the town's 1,400 acres of conservation land. For more information, visit

www.lexingtonma.gov/conservation/stewards.cfm



Lexington Conservation Division is Now Hiring Seasonal Land Management Interns

Do you know of a hard-working, responsible job-seeker who would love to work outdoors this field season? The Lexington Conservation Division is now hiring 2 seasonal land management interns to assist with caring for conservation land from mid-June through October. Duties include maintaining trails, mowing meadows, managing invasive species, building/repairing boardwalks, supporting the Stewards, and conducting outreach and educational efforts related to conservation land. For the full application and more details, visit:

www.lexingtonma.gov/townmanager/employment.cfm .

The interns will be starting in mid-June, but trail maintenance needs won't wait that long! In the spring and early summer, vines, tall grasses, and invasive species are already hard at work growing over our trails. Stewards can lend a big hand in the pre-intern weeks by trimming back trail overgrowth, removing fallen debris on trails, and cleaning up litter that others have left behind.

Cotton Farm Arbor Removal

In October, Stewards worked with Northeast Tree, Inc. to remove the dilapidated arbor that stretched over a section of the pond at Cotton Farm. The arbor was both a safety and environmental hazard, due to the railroad ties and lumber that were sinking into the pond. Stewards worked to free the arbor from the dense-growing clematis that anchored it to the shore, and Northeast Tree skillfully lifted the arbor out of the pond in one piece. Stewards then pulled all of the remaining lumber from the water. The former location of the arbor now makes a great spot to view the pond. Check out photos from this exciting project at:

www.lexingtonma.gov/conservation/arbor%20removal%20at%20Cotton%20Farm.pdf



Spring Peeper

Get Your *Lexington Alive* Field Guide Today

Lexington Alive is Lexington's new field guide, created specifically to help residents explore the nature around us right here in our community. This sleek, beautiful field guide is durable, water resistant, and easy to use in the field. Proceeds benefit the Lexington Nature Trust, which helps to care for Lexington's 1,400 acres of conservation land. *Lexington Alive* is available for purchase for \$6.00 in the Lexington Community Development Office (Town Offices Building - 1625 Massachusetts Avenue, ground floor) weekdays 8:30 am to 4:30 pm.

www.lexingtonma.gov/conservation/stewards.cfm .

Whipple Hill Trail Improvements to Begin this Summer

In the fall, the Stewards were awarded over \$8,000 in a grant from the Division of Conservation and Recreation's Recreational Trails Program to implement trail improvements at Whipple Hill conservation area. Grant work will begin this summer and extend into next year to improve seasonally wet trail areas with boardwalks, bridges, and trail realignments. Over 15 trail issues in Whipple Hill will be tackled in this project. Check for scheduled workdays at www.lexingtonma.gov/conservation/events.cfm.

Thanks for a Successful Fundraiser

In December, the Steward Directors put out a request for end-of-year donations to the Lexington Nature Trust for trail maintenance and upkeep of conservation areas. Thanks to the generosity of over 50 donors, we raised over \$5,000 that will go towards the care of our conservation land here in town. Our sincerest thanks to everyone who donated to this end-of-year fund drive! Your support is truly appreciated, and we will report back on the good work that we accomplish with these funds.

Welcome to Lexington's Newest Conservation Area – Wright Farm

We are excited to welcome the newest of Lexington's conservation area – Wright Farm, an approximately 13 acre area on Grove Street in the northwest corner of Lexington. While it is not yet easy to access, Wright Farm will eventually have a parking area, welcome kiosk, and trail system so that the public can easily access it. Wright Farm has value both as wildlife habitat and as a site for woodland recreation. It adjoins a narrow strip of wooded Lexington conservation land, which itself adjoins the Burlington Landlocked Forest, a large area of mostly wooded open space in Burlington. Together, these open spaces provide an important wildlife corridor. Wright Farm, with its sweeping views of historic farmland, has long provided an attractive gateway to Lexington for travelers coming from Bedford. The Conservation Commission purchased Wright Farm with support from Town Meeting and funds from the Community Preservation Act.

2,200 Hours of Great Work

Our records show that Stewards and other volunteers contributed over 2,200 hours of volunteer time in 2012 caring for our conservation areas here in Lexington! According to Independent Sector, the hourly rate for volunteer labor in Massachusetts is \$26.13/hour, meaning that those 2,200 hours add up to a value of \$57,486. Thanks to everyone who lent a hand in 2012! Please email any hours that you contribute in 2013 to caring for conservation land to landstewards@lexingtonma.gov. No hour count is too small or large!

New Lexington Public Open and Recreation Space Map Available Online

A new map showing Lexington's public open and recreation space is available online as a PDF at www.lexingtonma.gov/conservation.conland.cfm. The map is the first of its kind to represent all Lexington open and recreation space that is open to the public, including municipal, state, and federal land, as well as parking areas and trails. It is a useful resource for scoping out new areas to explore in town as well as connectivity between open spaces. Large format paper copies are available for purchase for \$10 through the Lexington Conservation Division; email landstewards@lexingtonma.gov if interested.