Citizens for Lexington Conservation
PO BOX 292, LEXINGTON, MA 02420-0003
http://www.clclex.org

ADDRESS SERVICE REQUESTED

September, 2012
Kate Fricker, Editor **Eileen Entin & Keith Ohmart, Co-Presidents**

IN THIS ISSUE:

Photo Quiz: In which Lexington conservation area is this building?

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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 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 send $15.00 to CLC, P.O. Box 292, Lexington, MA 02420-0003.

There is an electronic version of the CLC newsletter, sent by email with a link to the newsletter. 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 are currently receiving your newsletter by snail mail, we urge you to convert to e-mail by contacting 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.

For maps of conservation lands: http://www.lexingtonma.gov/conservation/conland.cfm

CITIZENS FOR LEXINGTON CONSERVATION
2012/13 FALL/WINTER WALKS

All walks are free and open to the public

Thursday, September 20, 2 - 3 PM Pond Exploration at Parker Meadow
Geared for children in grades K – 5 accompanied by an adult.
Join Emily Schadler for a prowl around Parker Meadow to look for signs of beavers, bugs, tadpoles, and frogs. 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. Meet at the Revere St. entrance to Parker Meadow. Limited parking is there; additional parking is available on neighborhood streets across Revere St.
Walk Leader: Emily Schadler, Conservation Stewardship Coordinator (eschadler@lexingtonma.gov; 781-862-0500X240).

Saturday, September 29, 7:30 - 9:30 AM Bird Walk in Dunback Meadow
Since this is a time when migrants are returning to their more southern winter homes from northern areas, we have the possibility of viewing warblers, vireos, hawks, flycatchers and sparrows that are not usually at Dunback Meadow during the summer months. Our usual residents, such as Downy Woodpecker, Carolina Wren, Black-capped Chickadee, American Goldfinch and Tufted Titmouse will also be around for our viewing and hearing. Beginners at birdwatching and children are welcome. If it rains the walk will be cancelled. Meet at the entrance on Allen St. where parking is available.
Walk Leader: Bobbie Hodson (robertahodson@comcast.net; 781-861-9421).

Saturday, October 13, 11AM – 12:30 PM Cotton Farm – Dunback Meadow – Upper Vine Brook

We will walk in the recently acquired Cotton Farm conservation land, with its apple orchard, open fields and lovely pond. We will then walk the Upper Vine Brook Trail, which connects to Highland Ave. If time permits, we can then explore Dunback Meadow conservation area on the other side of Marrett Rd. Rain date is October 14 at the same time. Meet at the parking area at Cotton Farm (entrance on Marrett Rd.). Additional parking is available on Marrett Rd.
Walk Leaders: Gerry Paul (gerryp@bu.edu; 781-861-6279); Bonnie Newman (bjnewman@rcn.com; 781-861-8191); Bob Hausslein (rhausslein@rcn.com; 781-862-9102).

Thursday, October 18, 2:30 – 4 PM Lexington's Autumn Leaves
Geared for children in grades 2 – 5 accompanied by an adult.

Join Karen Longeteig for a walk around the Buckman Tavern 'arboretum' to gather and identify autumn leaves and hear tree stories. Wear boots or be prepared to have muddy shoes. No rain date. The walk will take place in light drizzle, but will be cancelled if it pours. Call walk leader if in doubt. Meet at the Visitors Center on the Buckman Tavern grounds. Street and municipal lot parking are available.
Walk Leader: Karen Longeteig, Lexington Tree Committee member
(karen.longeteig@gmail.com; 781- 862- 4094).

Sunday, October 28, 9:30 AM to 12 noon Walk *ACROSS Lexington*

A new route system, *ACROSS Lexington* (Accessing Conservation land, Recreation areas, Open space, Schools and Streets in Lexington), is under development by the Greenways Corridor Committee. This walk is a chance to get a guided tour of the pilot route. The walk will start and end in Lexington Center. We will walk along the bike path, streets and conservation parcels throughout the northeastern part of town. We'll learn a little natural history, a little social history, and enjoy the outdoors. Good walking shoes are a must, but the terrain is not difficult (sneakers are fine). Severe inclement weather will cancel the walk. Meet under the rear overhang of the Depot in Lexington Center. Walk Leader: Alex Dohan (amdohan@gmail.com; 781-863-5882).

Saturday, January 26, 2013, 8:00 - 10:00 AM Winter Walk in Dunback Meadow

While this is a time of quiet within Dunback Meadow, there remain possibilities of viewing unusual birds such as perching owls (Northern Saw-whet Owl, Barred Owl, and Great Horned Owl), Common Redpolls and Rough-legged Hawks. Our residents, the Black-capped Chickadee, Tufted Titmouse, Downy Woodpecker and Blue Jay, will be there also. If there is deep snow wear boots, as the walking can be rough. Beginners at birdwatching and children are welcome. If there is rain or a snowstorm, the walk will be cancelled. Meet at the entrance on Allen St. where parking is available.
Walk Leader: Bobbie Hodson (robertahodson@comcast.net; 781-861-9421).

Thank you Walk Leaders

CLC is grateful for the people who volunteer to lead our spring and fall walks. Our thanks to Bobbie Hodson, Nell Walker, Tom Whelan, Karen Longeteig, Harry West, Emily Schadler, and Fran Ludwig for leading the walks last spring.

Winged Burning Bush and Alternative Native Shrubs

By Jane Warren

The Plant Materials Guide for Lexington (available at http://www.clclex.org/publications/flora-fauna/) lists exotic invasive plants as well as plants native to Lexington. Knowledge about invasive species like winged burning bush (*Euonymus alatus*) is important in protecting the natural environment. Burning bush is included in a list of plants that Massachusetts has prohibited for sale, trade, purchase, or distribution. The US Department of Agriculture reports that burning bush is invasive in 15 states, including 4 New England states (CT, MA, NH, and RI). Invasive plants that crowd out native plants are very harmful to ecosystems.

Burning Bush in October

Winged Burning Bush is a favored landscaping shrub because of its beautiful bright red foliage in the fall. Many hedges of burning bush are seen in yards around Lexington. These shrubs have spread into conservation lands and open spaces in Lexington and into national forests and conservation lands in many states. Burning Bush has even been planted along interstate highways. Birds disperse seeds of burning bush broadly. The seeds germinate readily.

Unfortunately, Burning Bush is a highly invasive plant that came into the US from Northeastern Asia around 1860. As with most other alien plants, it took a long time for people to realize how pernicious these shrubs are. They grow in any level of light, from full sun to dense shade and in many soil types with a range of acidity. Thus they can intrude into varied habitats, including forests, fields, and floodplains. They crowd out native herbaceous plants and shrubs. Older burning bushes have huge roots that are difficult to dig out, and new shoots may arise yearly for decades from those roots.

Burning Bush is a fast-growing shrub that may reach 10 – 20 feet in height and width. The leaves are opposite, oval, and 1 – 3 inches long. The tiny yellowish - green flowers occur in May and June. Small paired red fruits, about half an inch long, appear in the leaf axils. The capsules split open in September and October, revealing up to 4 red seeds that some birds eat.

Highbush Blueberry in Fall

Fortunately, several native species of deciduous shrubs that provide red foliage in the fall are good alternatives to the Burning Bush. Attractive shrubs that do not have red foliage in the fall are also good alternatives. The native plants described below vary in growth conditions so you can choose shrubs that look attractive and also suit the conditions of your yard. All of these native species have more conspicuous flowers than burning bush. Many also provide food for birds and other wildlife. Some are larval hosts for butterfly or moth caterpillars.

Highbush blueberry (*Vaccinium corymbosum*) grows 6 – 12 ft. high. Small white or pink, bell-shaped flowers form pretty, drooping clusters in spring that de-

velop into edible blue fruits in the summer. Leaves are reddish green in spring, blue-green in summer, and bright red, orange, and purple in the fall. About 30 species of songbirds and game birds eat the berries. Highbush blueberry is a larval host to two butterflies and two moths. Growth conditions are broad: highbush blueberries can grow in sun, in partial shade, in shade and in wet or dry acid soil.

Red-osier dogwood (*Cornus sericea*) and other dogwood shrubs: Red-osier dogwood grows about 8 feet tall. Flat-topped clusters of small white blossoms appear from May to July. The leaves are dark red in fall, and the red twigs stand out in the snow in winter. Red-osier dogwood prefers moist, well-drained soil and a pH about neutral, but is adaptable to a range of soils. It likes partial shade. Gray dogwood (*C. racemosa*) can grow 15 feet tall, but generally is shorter. The small, white flat-topped flowers in clusters of about 2 inches across emerge in May to July. Leaves of gray dogwood turn dull red in fall. It tolerates a wide range of climatic conditions and soil types. Silky dogwood (*C. amomum*) grows to about 10 feet. Creamy white flowers in flat-topped clusters 1½ - 2½ inches across emerge in June to July. The leaves turn purple to red in fall. This shrub grows in moist areas, often along streams, ponds, and swamps, but can grow in drier soil. Its light requirement is partial or full shade.

These species of dogwoods all have similar fruits. They are small, round drupes, each containing one seed with a fleshy cover. Red-osier and gray dogwoods have white fruits; silky dogwoods have blue fruits. Forty or more species of birds eat the fruits of these shrubs with some differences in preferences. All of these shrubs provide nectar for butterflies and are larval hosts for the spring azure butterfly.

Red chokeberry (*Photinia pyrifolia*) grows to about 8 feet tall. In spring it has clusters of striking white, 5-petaled flowers about half an inch in diameter. Subsequently dark green glossy leaves emerge. In fall the leaves turn an orange-red color and bright red pear-shaped fruits, about 1/4 inch in diameter, appear and remain until January. About 10 to 12 birds eat the fruits. It prefers rich moist soil in sunny locations.

Southern arrowwood viburnum (*Viburnum dentatum*) and other *viburnum* species: Arrowwood viburnum generally grows 6 – 10 feet high. Small, white flowers in flat-topped clusters 2 – 4 inches across appear in June to August. The oval toothed leaves turn to yellow and then wine red in fall. The fruits, blue-black oval drupes 1/3 inch long, are also in clusters. Witherod viburnum or wild raisin (*Viburnum nudum* var. cassinoides) is a dense shrub that can grow 6 to 20 feet high. The small white flowers in flat clusters appear from May to July. The oval leaves, 2 to 5 inches long, are thick and leathery, turning bright red in fall. The fruits, oval drupes 1/2 inch across, ripen to blue-black in fall and look like raisins. The American cranberrybush (*Viburnum opulus*) grows 6 to 15 feet tall. The attractive flowers that bloom in May to July are in clusters of 2 to 4 inches with large sterile flowers on the outside and small fertile flowers on the inside. The dark green leaves, 2 to 4 inches long with 3 pointed lobes, turn reddish in autumn. The fruits are oval, red-orange drupes about half an inch long. It prefers rich, moist, sunny locations and somewhat acid soil. Viburnums are host plants to the spring azure butterfly and hummingbird clearwing moth. Ten to 20 bird species eat viburnum fruits, with some differences in preference. American cranberrybush fruits are preferred less than other viburnums, so they persist through winter and serve as emergency food for birds in late winter when most of the other fruits have been eaten.

Common winterberry (*Ilex verticillata*) grows 6 to 15 feet high. The small white flowers are arrayed interestingly along the small twigs. The bright red berries look stunning against the dark green leaves in fall and against the snow on the branches in winter. These shrubs are dioecious so at least one male is needed to pollinate several female shrubs. The leaves are hosts for caterpillars of elf and striped hairstreak butterflies. About 40 species of birds eat the berries. As with the American cranberrybush, birds only eat the berries when tastier food is no longer around, usually in late January. Winterberries prefer moist soil, but can grow in drier soil. They do well in sun, partial shade, or shade.

Common elderberry (*Sambucus canadensis*) grows about 12 feet tall. The ¼ inch white flowers that appear in June and July form clusters up to 10 inches wide. The compound pinnate leaves can have 5 to 11 leaflets. In late summer, clusters of small, juicy, purple-black berrylike drupes emerge and are devoured quickly by many bird species and some mammals. The flowers are a nectar source for butterflies. Elderberries prefer rich, moist, slightly acid soil, but tolerate dry soil. They like partial shade.

Summersweet in Fall

Summersweet (*Clethra alnifolia*) has dense foliage and grows about 10 – 12 feet high. The small white flowers emerge in mid-summer in dense clusters on 3- to 6-inch spikes. The leaves are shiny dark green, turning brilliant yellow and orange in fall. The flowers provide nectar to bees, hummingbirds, and butterflies. Fruits are brown dry capsules that persist through the winter. Many songbirds and small mammals eat the seeds of summersweet. These shrubs thrive in rich moist to wet acidic soil, but can grow in almost any soil, including sandy soil and clay. They favor light shade, but can grow in full sun to full shade.

Spicebush (*Lindera benzoin*) is sometimes called “forsythia of the wild.” It grows to 15 feet or more in height. The small yellow flowers that emerge in early spring before the leaves come out are numerous and showy. Leaves are 3 to 5 inches long, green in spring and summer, and bright golden-yellow in the fall. These shrubs are dioecious. The ripe fruits, 3/8 inch bright red drupes, emerge in July to October. The high-fat fruits are eaten by about 20 species of birds. Spicebush is a larval host for spicebush and eastern tiger swallowtails and promethean silk moth. This bush likes light shade and moist soil.

Dunback Meadow

By Bobbie Hodson

With over 170 acres of wetlands, pine and mixed woods, and open meadows, Dunback Meadow is a gem of diversity and beauty. Located between Clarke Middle School and Bowman Elementary School it serves not only as a walkway for students but also as a haven for lovers of nature-- birders in particular.

For birders this truly is a land for all seasons. In winter the Black-capped Chickadee and Tufted Titmouse call, as the Downy and Hairy Woodpeckers drum on their favorite trees. Spring

brings the Red-winged Blackbirds and Common Grackles in the early months and later a variety of vireos and warblers, many of whom stop briefly on their journey to more northern woods. The late spring and early summer months are marked by breeding birds singing as they busily feed their young. In the midst of summer one can find many Ruby-throated Hummingbirds hovering over flowers. As fall approaches we find the migrants returning from the north--sparrows and other songbirds on their way south. Every month is one of rich discovery as birders search for over 150 different species that have been found here.

Dunback Meadow is known throughout the birding community as a mecca for unusual birds. Within the last ten years a variety of owls, including the elusive Long-eared Owl, have wintered here. Most years one can find four other owls: Great Horned, Eastern Screech, Northern Saw-whet, and Barred. Several other rare bird species, such as Connecticut Warbler, Fox Sparrow, Northern Shrike, Common Redpoll, and American Woodcock are frequently found in season here. Understandably, due to the diversity of habitats and presence of rare bird species, there are several dozen bird walks and a multitude of individual birders each year within this beautiful conservation land.

A Toast

By Charlie Radoslovich

Last winter I was part of an amazing group that folded, filled, and lit more than 300 luminaries spelling out “SAVE THIS FARM” at Busa Farm. What inspired me to take part in such a daunting task at dusk? My inspiration is simple: love for the land, love for history, and a love for vegetables.

I’m Charlie Radoslovich and I farm backyards in Lexington and Arlington. I install and maintain farms on underused properties throughout these same towns that have contributed to this rich history of the United States. I am supported by those who want to honor our agrarian past, so that it will not disappear from our landscapes. I also serve on LexFarm’s Board of Directors.

I farm for family. I want my children to know food is sacred. It connects us to our ancestors, literally with every bite. I farm to be connected to nature and all its teachings. Lastly, I farm so others can.

On Friday, August 31, 2012 the Town of Lexington posted a draft Request for Proposals, delineating criteria for proposals for a community farm on the very piece of land that peppers, cucumbers, lettuce, leeks, and tomatoes have called home for over 90 years. It has been a long journey to this point. In fact, the land was cultivated as early as 1642. But, much more work is required before we can truly enjoy the fruits of our labor, a community farm supported by its friends.

Nevertheless, as Lexington prepares to kick off its 300th anniversary celebration on September 22, 2012 promoting its rich history in agriculture, I would like to celebrate all those luminaries in the community who had the courage and foresight to help preserve what truly makes Lexington unique, and worth celebrating. So friends, to you I raise my fork in the field and on my plate. Salud!

Vegetable Love

by Barbara Crooker

Feel a tomato, heft its weight in your palm,
think of buttocks, breasts, this plump pulp.
And carrots, mud clinging to the root,
gold mined from the earth's tight purse.
And asparagus, that push their heads up,
rise to meet the returning sun,
and zucchini, green torpedoes
lurking in the Sargasso depths
of their raspy stalks and scratchy leaves.
And peppers, thick walls of cool jade, a green hush.
Secret caves. Sanctuary.
And beets, the dark blood of the earth.
And all the lettuces: bibb, flame, oak leaf, butter-
crunch, black-seeded Simpson, chicory, cos.
Elizabethan ruffs, crisp verbiage.
And spinach, the dark green
of northern forests, savoyed, ruffled,
hidden folds and clefts.
And basil, sweet basil, nuzzled
by fumbling bees drunk on the sun.
And cucumbers, crisp, cool white ice
in the heart of August, month of fire.
And peas in their delicate slippers,
little green boats, a string of beads,
repeating, repeating.
And sunflowers, nodding at night,
then rising to shout hallelujah! at noon.

All over the garden, the whisper of leaves
passing secrets and gossip, making assignations.
All of the vegetables bask in the sun,
languorous as lizards.
Quick, before the frost puts out
its green light, praise these vegetables,
earth's voluptuaries,
praise what comes from the dirt.

Editor's note: The photos in the following article are beautiful when seen in color. Look for them in the online version of this newsletter at http://clclex.org. Click on "Current Newsletter".

Goldenrod & Company, A Photographic Tour

By Ned Eisner

Goldenrod has inspired poets with its beauty[1] and Thomas Edison and the U.S. Government with its latex content[2], but for me it is its bountiful food that inspires. Goldenrod pollen & nectar draw insects and spiders in countless multitudes. Starting in mid summer and running into the fall, at least one of the roughly 25 species in the genus *Solidago* is in bloom in New England.[3]

Goldenrods are classified in the family Asteraceae, along with asters and daisies. All but one of the New England species of goldenrod have yellow flowers, with the oddball having white flowers. Most are a few feet tall, with the tallest being greater than 6 feet. The most common species in our area are perennials that spread both by seed and by creeping rhizomes. Goldenrod pollen is large and heavy and requires pollinators to spread it – it does not cause seasonal allergies (ragweed is typically the culprit for allergies at this time).

At a time when many other plants have finished blooming, goldenrod provides a needed food source for many types of insects. The plentiful herbivorous or omnivorous insects attract predators of all sorts, from insects to spiders to birds. Our tour starts with 3 beetles that are very commonly found on goldenrod: the locust borer beetle, *Megacyllene robiniae*, the black blister beetle, *Epicauta pennsylvanica*, and the goldenrod soldier beetle, *Chauliognathus pensylvanicus*.

Locust borer beetle
Megacyliene robinea

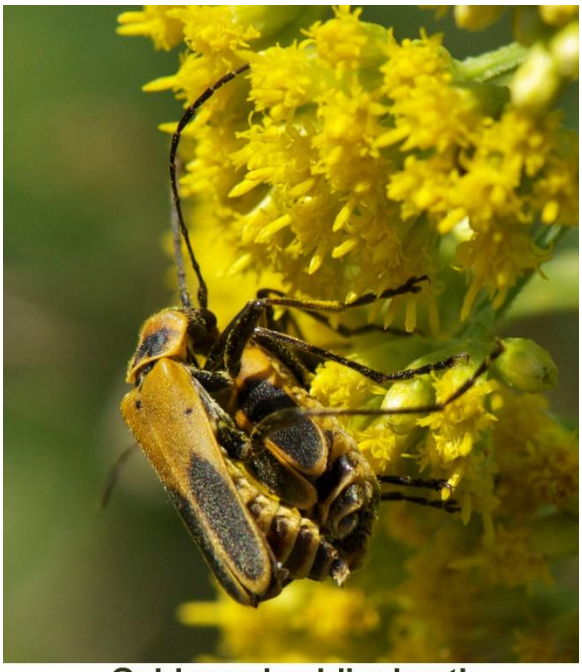
The locust borer beetle adult is possibly a wasp mimic with black and yellow stripes similar to those of a yellowjacket. They eat the pollen and nectar from flowers. Eggs are laid in wounds on black locust trees, *Robinia pseudoacacia*, where the larvae then tunnel in and consume the wood.

Black blister beetle
Epicauta pennsylvanica

Blister beetles in the family Meloidae, such as *Epicauta pennsylvanica*, are so named because their hemolymph (the insect combination of both blood and lymphatic fluid) contains a chemical called cantharidin that is a powerful blistering agent. It is also a potent poison via ingestion, so these beetles should not be handled or eaten. Many of the beetles in this family, including *Epicauta* species, "reflex bleed". That is, they bleed from their joints when threatened. This behavior has evolved to help deter arthropod predators, many of which are repelled by cantharidin. The fact that it causes blisters on people is, for

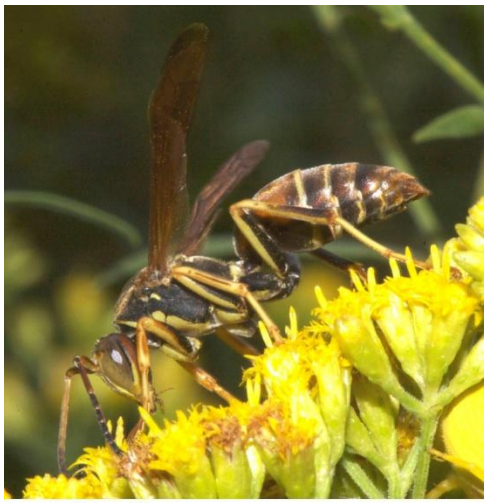
us, an unhappy side effect. Interestingly, some insects are actually attracted to cantharidin and actively seek it out. These insects are immune to the effects and pass the chemical on to their eggs, which then become less attractive to predators.[4]

The goldenrod soldier beetle is the most common soldier beetle in our area. The adults feed on pollen and nectar, especially from goldenrod, and the larvae eat small insects and grasshopper eggs.



Goldenrod soldier beetle
Chauliognathus pennsylvanicus

The next stop on our tour is the Hymenoptera – bees, wasps, & sawflies. Not surprisingly, goldenrods attract a plethora of bees and wasps. Although they are extremely common visitors to goldenrod, everyone is so familiar with the honey bee, *Apis mellifera*, that I will not show it here. Northern paper wasps, *Polistes fuscatus*, are extremely common visitors, as are various bumblebees, *Bombus* spp. A Bee wolf, *Philanthus gibbosus*, and a less common, but beautiful cuckoo wasp in the family Chrysididae, complete the Hymenoptera part of the tour.



Northern paper wasp
Polistes fuscatus

Northern paper wasps build open-faced paper nests hung from a single stalk similar to those of the European paper wasp (which looks like a yellowjacket). Adults typically feed on nectar, but larvae are supplied with small masticated insects. Like most wasps, they will not sting if left alone, but can be aggressive if aggravated.

Common bumblebee
Bombus impatiens

Bumblebees are ubiquitous visitors to many types of flowers, including goldenrod. Most are cavity dwellers, sometimes reusing abandoned mouse nests. Close observation will reveal that there are a number of different bumblebee species, all quite similar in appearance. The photograph is of Bombus impatiens, our most common bumblebee. A number of researchers believe that at least 2 of our bumblebee species have massively declined in population for unknown reasons.[5]

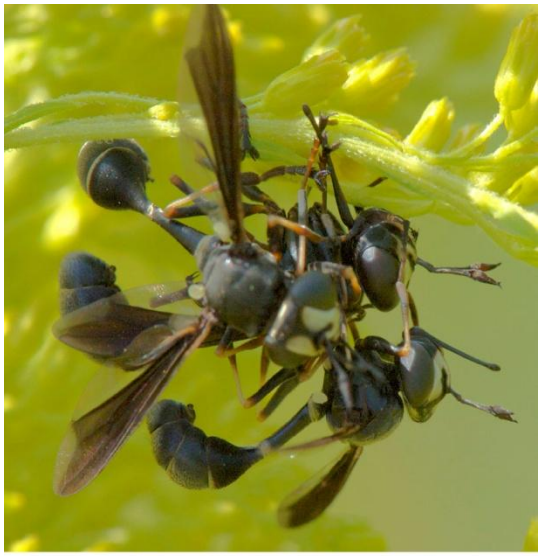
Bee wolf
Philanthus gibbosus

Bee wolves, such as the Philanthus gibbosus pictured, hunt other wasps and bees to supply to their larvae. Their nests are underground in small burrows. Like the paper wasps, the adults eat nectar or pollen.

Cuckoo wasps search for solitary bee or wasp nests and then lay their eggs in the brood cells. Their larvae develop as parasites, either consuming the bee larva, or the food for the bee larva.

Cuckoo wasp
family *Chrysidae*

There are a number of interesting flies that frequent goldenrod. Gall flies are tiny and difficult to photograph flies whose larvae cause the plant to form a ball of tissue, a gall, around the larva. The larvae then eat the plant tissue and pupate. The adult emerges in the fall or the next spring. Our tour features two gall-making insects: a flower fly, *Spilomyia longicornis*, and a thick-headed fly, *Physocephala tibialis*. Their galls, called rosette galls, are made at the top of the stem. Most of the other galls on goldenrod develop in the middle of the stem. Various midges, fruit flies, and wasps can create similar galls. The best way to find what made a gall is to bag it and see what emerges.



Thick-headed fly
Physocephala tibialis

Flower flies are a large family of bee and wasp mimics. *Spilomyia longicornis* is widespread. The mimicry includes both coloration and behavior: the flower flies use their forelegs to mime the motion of wasp antennae. Adults eat pollen and/or nectar, and larvae develop in water-filled holes in trees. Like many of the species described here, the adults and larvae of Physocephala have very different feeding

Flower fly, *Spilomyia longicornis*

habits. The adults eat pollen and nectar, but the larvae are parasitoids of bumblebees. The eggs are laid on the host while in flight. The larvae then burrow into the bumblebee and eventually consume it.

Compared to the Coleoptera, Hymenoptera, and Diptera, Lepidoptera are not particularly common on goldenrod. Our tour features 3 photos, the American copper butterfly, *Lycaena phlaeas*, a Yellow-collared scape moth, *Cisseps fulvicollis*, and a Geometrid moth caterpillar, the Camouflaged looper, *Synchlora aerata*.

American copper
Lycaena phlaeas

American copper butterflies are very common in Lexington and fly from late spring to early October in several overlapping broods. The larvae feed on alien buckwheats such as Sheep-sorrel and Curled dock.

Yellow-collared scape moth
Cisseps fulvicollis

The Yellow-collared scape moth is a day-flying moth, easily confused with the Virginia ctenucha moth. They especially like to nectar from goldenrod and asters. The caterpillars feed on grasses and sedges at night, usually low to the ground, and are thus difficult to find. They appear to be migratory, moving north each year like several butterfly species.

Camouflaged looper
Synchlora aerata

Our last Lepidoptera species is an inchworm, the Camouflaged looper. It is the only widespread caterpillar that adorns its body with plant fragments to help camouflage it while it eats. It usually uses bits of flower petals from the flower it is eating. The adult moth is usually called the Wavy-lined emerald and is a beautiful green color with two thin, white bands on both fore and hind wings.

Ambush bugs
Phymata pennsylvanica

Our final stops on the tour are two common predators: ambush bugs, *Phymata pennsylvanica*, and a female goldenrod spider, *Misumena vatia*.

Ambush bugs hunt in just the way their name describes. They rely on their excellent camouflage to hide motionless among the flowers and pounce

upon unsuspecting prey. Typical prey are bees and wasps; the photo shows a female with a captured yellowjacket or paper wasp and 2 males hoping to mate.

Misumena vatia is named after goldenrod, so you would think it would be easy to find on goldenrod. In fact, I have had more luck finding these spiders on milkweed and Queen Anne's lace than on goldenrod, although there is some chance that they are just harder to see on goldenrod and so I've missed them. A goldenrod spider can change color over the course of several days from bright yellow to white, or visa-versa, depending on what color flower it is on. Like ambush bugs, goldenrod spiders use their cryptic coloration to hide among the flowers, waiting for prey to come to them.

Goldenrod spider
Misumena vatia

On any given day, you may not see any of the insects or spiders shown here, but you will certainly see others. Patience and repeated observations over the course of the summer and fall will reveal dozens of other visitors, as well as repeated viewings of more common ones.

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1) Many poems have goldenrod mentioned in them, particularly end-of-summer or fall-themed poems. Helen Hunt Jackson's poem "September" starts

The golden-rod is yellow;
The corn is turning brown;
The trees in apple orchards
with fruit are bending down.

Anne Higginson Spicer uses goldenrod as a symbol of America in "The Goldenrod", the first two stanzas of which are:

From now on there are "corners in foreign fields that are forever" America.
Should not the golden-rod bloom there?

Some day the fields of Flanders shall bloom is peace again,
Field lilies and the clover spread, where once was crimson stain;
And a new cheerful golden spray shine through the sun and rain.
The clover's for the English who sleep beneath that sod,
The lily's for the noble French whose spirits rest with God,
But where our sacred dead shall sleep must bloom the golden-rod.

2) Thomas Edison, among his many other better known inventions and companies, was interested in finding a domestic source for rubber. He, Henry Ford, and Henry Firestone founded the Edison Botanic Research Corporation in 1927 to do just that. Over the next 9 years the company tested over 17,000 plants for their rubber content and production worthiness. The best candidate, discovered early on, turned out to be a goldenrod, *Solidago leavenworthii.* Selective breeding eventually produced a plant capable of producing 12% rubber. Edison had Firestone make a set of goldenrod tires for his Ford Model T, but large-scale production of quality rubber was problematic. During World War II, the U.S.

government Emergency Rubber Project continued Edison's work, but was closed down as the production of quality synthetic rubbers became cheaper.

3) The New England Wildflower Society,.Go Botany, http://www.gobotany.newenglandwild.org,

4) Eisner, Thomas, For Love of Insects, Harvard University Press, 2003.

5) Xerces Society website, www.xerces.org/bumblebees/.

The Stewardship Round-Up

By Emily Schadler, Lexington's Conservation Stewardship Coordinator

Rather than printing a separate newsletter, Lexington Conservation Stewards has now teamed up with Citizens for Lexington Conservation to include a stewardship update in every CLC newsletter. This joint effort will help to combine resources, save paper, and strengthen the ties between two great conservation organizations here in Lexington. Stewards who previously received an LCS newsletter will now receive the CLC newsletter, and CLC members will get a chance to read up on stewardship projects, so it's a win-win partnership!

Lexington Conservation Stewards is a citizen volunteer group that works closely with the Conservation Commission and Lexington Conservation Division Staff to care for the town's 1,400 acres of conservation land. Through efforts such as maintaining trails, building boardwalks, controlling invasive species, and cleaning up streams, the Stewards improve the quality of our natural areas. For more information or to sign up as a Steward, visit www.lexingtonma.gov/conservation/stewards.cfm.

Read on to learn more about the great work that Stewards have been up to this summer on our conservation land.

Paint Mine Trail Improvements

The Stewards are making steady progress on the trail improvements to the Paint Mine conservation area that are funded by a MA Department of Conservation and Recreation's Recreational Trails Program grant. Over 1300 feet of boardwalk and bridges will be constructed under the grant, and the project is currently around 50% complete. In the early spring, the Lexington High School track and cross country teams graciously contributed their brawn to moving lumber from Mountain Road to boardwalk sites in the woods. Stewards completed construction of the longest boardwalk – 775 feet stretching along the wetlands above the muskrat ponds – during the spring and early summer. Several Eagle Scout projects have tackled some of the shorter boardwalks scattered throughout the property, helping to push the project forward. The remaining boardwalks will be built on workdays this fall and next spring or summer. And, thanks to the coordination of Steward Director Stew Kennedy, a new trail entering Paint Mine from the new Estabrook School site will be completed this fall, just in time for the Big Backyard program to put it to use. Thanks to everyone who has helped out with the much-needed improvements at Paint Mine! Future workday dates will be posted on www.lexingtonma.gov/conservation/events.cfm.

Water Quality Sampling Through the Watershed Stewardship Program
The Watershed Stewardship Program has kicked off a new water quality sampling project to aid the Engineering Division in monitoring the town's stormwater run-off. Watershed Stewards Linda Arnow, Tom Whelan, and Fran Ludwig worked with Dave Pavlik of the Engineering Division to train a crew of samplers to monitor 10 outfalls each. Samplers conduct an assessment of each outfall and then test the ammonia and chlorine levels 5 times in both wet and dry weather conditions. If the sampler notices a high level of ammonia or chlorine, or if something strange is present – such as an unmapped pipe, an unpleasant odor, or a malfunctioning culvert – he or she reports back to Engineering. Once the source of the pollutant has been identified, Engineering takes steps to eliminate the problem. The program has initially focused on the Vine Brook, but over time, it will expand to all of Lexington's streams, helping to improve water quality throughout the community. Questions about the program can be directed to Dave Pavlik in the town's Engineering Division at dpavlik@lexingtonma.gov.

Lexington's Community Gardens
Lexington is currently home to 2 community gardens, located at Idylwilde and Dunback Meadows conservation areas (a map of the garden sites is available at: http://www.lexingtonma.gov/conservation/Community%20Garden%20Master.pdf). Community gardens provide a way for people without other garden space to "rent" a plot for a reasonable fee. Gardeners then plant what they would like, weed and tend their plot, and harvest their bounty. They also contribute to the upkeep of the community garden area by weeding paths, cleaning up debris, or sharing gardening tips with fellow gardeners. Registration for the 2013 gardening season will open in late March or April 2013. If you would like to be notified when registration opens, contact the Conservation Division at landstewards@lexingtonma.gov to have your name added to the email list. Please include your name, address, email address, and telephone number. Thanks to our volunteer garden coordinators, Don Kozak and Alix Bartch, for all of the work they have put into keeping the gardens running!

Whipple Hill Grant Awarded
The Stewards have just been 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. With these funds, volunteers will build 18 boardwalks totaling around 620 feet over soggy trails sections throughout the property. Grant work will begin this fall or spring 2013 - look for workdays and other grant-related announcements at www.lexingtonma.gov/conservation/events.cfm.

Thanks to the Summer Conservation Interns
Over the summer months, the Conservation Division hires 2 interns to maintain trails and perform other field work on Lexington's conservation areas. This year, interns Brian Sewell and Tom Henneberry tackled a wide variety of projects, from clearing trails to cleaning up party spots to helping out with the new Paint Mine trail at Estabrook School. Thanks to Tom and Brian for all of the hard work they put in over the hot summer months to keep our conservation areas in good shape!

Have you Visited Cotton Farm Yet? In 2010 the 4 acre Cotton Farm property was purchased with Community Preservation Act funds and added to the Upper Vine Brook conservation area. The uplands on the new Cotton Farm parcel allow for a great trail connection from Highland Avenue to Marrett Road, providing a pleasant pedestrian route from the Town Center area to

Dunback Meadow. If you haven't visited Cotton Farm yet, be sure to put it on your list! Bob Hausslein, the lead Steward at Cotton Farm – Upper Vine Brook, has been working hard to make the area inviting to visitors. New trail signage on the Highland Avenue end (crafted by Steward Bob Mandle) invites people into the trail, and a new bridge installed by Eagle Scout Dan Palmer makes crossing a wet area easy. There is a picnic table near the pond and a 2-car parking area along the driveway from the Marrett Road entrance. For a map of Cotton Farm – Upper Vine Brook, visit www.lexingtonma.gov/conservation/conland.cfm#ConAreas. CLC is sponsoring a walk to be held on the property on Oct. 13. (See Fall Walks, page 2-3)

Photo Credits:

p. 1, 16 Kate Fricker
p. 4-6 Jane Warren
p. 9-13 Ned Eisner

Answer to Photo Quiz:

Cotton Farm