



NEWTON  
CONSERVATORS

WINTER ISSUE

# NEWSLETTER

Newton's land trust working to preserve open space since 1961

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## Cold Spring Park Red Maple Swamp — Can It Endure?

*By Eric Olson, Senior Lecturer in Ecology at Brandeis University*

Eighty years ago this spring, a lucky red maple seed-on-a-wing took its spiraling flight downward from its mother tree and settled into the damp peaty soil of Newton's Cold Spring Park. A mature red maple is a prolific seed producer, and that single seed would have had hundreds, if not thousands, of siblings also winging downward that year. A seed, as a biology professor of mine liked to say, is a baby tree with a packed lunch, and wild nature can be hard on babies of any creature, but especially those of plants. Of the many thousands of seeds produced by a tree during its lifetime, few ever become seedlings, much less mature forest trees.

A few do make it of course, and that is how this past summer fellow naturalist Bruce Wenning and I found ourselves standing before a particular red maple, one of the many in Newton's largest red maple swamp. We were able to trace this tree back to a lucky seed 80 years ago because we counted its rings. No, we didn't cut it down — using a forester's corer we extracted a slim cylinder of wood, thinner than a pencil, which we later sanded, moistened, and examined under a dissecting microscope. Our drill hit close to the center of the tree, allowing us to confidently count back in time to the year

1937, when this tree was starting its long, slow ascent into the canopy.

We were taking part in Newton's Red Maple Swamp Study Project, organized this year by the Newton Conservators in collaboration

with City of Newton Parks and Recreation Dept. officials. Of the hundreds of large and healthy red maples that dominate the swamp forest of Cold Spring Park, Bruce and I had stopped at one, chosen pretty much by chance: "How about this one, Bruce?" "Looks good to me, Eric, let's see what she's got!"

In 1937 Franklin Delano Roosevelt was beginning his second term, Amelia Earhart disappeared over a distant sea, and war was brewing in Europe. Counting a tree's growth lines can connect us to the past, but though our chosen study tree proved to be old in human years, the thick peat soils

at this site suggest that a swamp forest has dominated here for centuries, well before Newton became a named town. An 1895 map of Newton shows a wetland here at least four times its current size before most was ditched and filled, along with hundreds of other wetland acres in town, to make the land suitable for suburbia. Reflecting on this history should increase our appreciation



**Red Maple Foliage:** note three main lobes. Also shown is a close up of a male flower (note pollen-producing stamens), a close up of a female flower (note the pair of long stigmas), and seeds on wings. This fruit type is known as a samara. Red maple is wind-pollinated and wind-dispersed.

*Continued on page 2*



MAP: COURTESY OF CITY OF NEWTON

Blue plant symbols indicate red maple swamp covering much of Cold Spring Park's 65 acres.

for what remains and our gratitude to the citizens and city officials who back in the 1970s decided to conserve forever about 35 acres of Red Maple Swamp right in the center of town.



Eric Olson takes a core sample of a red maple in Cold Spring Park

more moisture than most trees — in fact red maples do just fine planted in a typical suburban yard. Rather, this tree becomes so common in wet sites because oaks, sugar maples, white pines, and most other native trees cannot thrive in waterlogged soils. On better-drained sites, especially those unaffected by logging or heavy deer browse, red maple cannot compete against most other tree species. It dominates wet sites due to tolerance, not competitive ability.

To honor this past, it behooves us to ask today if all is well, and can we count on generations of sturdy red maples to dominate here for centuries to come, sending their seeds spiraling down into the wet peat soil? This question is what motivates the Conservators' Study Project, and here is what we have learned.

It turns out that red maple trees dominate New England's wet soils not because they need



Portion of core taken from a Cold Spring Park maple showing 25 years of growth. Sharpie pen dots indicate annual rings.

And we also have learned that there is a threat to this centuries-long story, and that is the arrival of glossy buckthorn (*Frangula alnus*), a Eurasian shrub that thrives in saturated soils and tolerates understory shade. Newton's red maple swamp is dense with buckthorn shrubs, as many as 24 stems per square meter (average 10 stems per m<sup>2</sup>, N = 7 plots, range 0 to 24), ranging in height from 10 cm up to three meters. Extrapolating from this admittedly small sample suggests that there could be over 1.4 million buckthorn stems in Newton's 35 acres of maple swamp.

Such a dense understory of buckthorn is able to suppress the growth of native tree seedlings. My buddy Bruce and I looked for understory red maple but found very few, even in sites where canopy trees had fallen and opened up the stand to more sunlight. The buckthorn is everywhere, and it is inevitable such an aggressive plant will hamper regeneration of red maple.



Glossy buckthorn shrub in the red maple swamp at Cold Spring Park

When did this invader become so prevalent? Bruce grew up on the edge of Cold Spring Park; he's 63 now and remembers as a youth walking and running

through the park to meet up with friends and sometimes exploring and playing in the forest. He says red maple has always dominated the low-lying areas of the Park, but he remembers that back then it was possible to see much farther into the forest. In just the past few decades, then, this old unique forest has been changed in a way that may mean the gradual loss of overstory maples.

Here's one reason you should care, even if you don't mind the look of all that buckthorn: Professor Doug Tallamy has shown that native maples are fed on by the caterpillars of





PHOTO: KEN MALLORY

*Removal of glossy buckthorn in the red maple swamp in Cold Spring Park*

over 250 species of native butterfly and moth. In contrast, a survey of insect life on buckthorn found just nine caterpillar species, all generalists usually found on other plant species (Yoder et al., 2008). That team also reported what we have seen in Cold Spring Park, that buckthorn leaves rarely show evidence of feeding by any insect. Freedom from herbivory was likely seen as a desirable trait by the nurserymen that brought buckthorn from Europe as an ornamental in the 1800s, but to an ecologist such a plant may as well be made of plastic. Think about it! As we all learn in grade school, the sun powers plants, plants feed caterpillars which in turn feed

baby birds. Or: plant to caterpillar, metamorphosis to moth, then moth to bat. Or: plant to grasshopper, grasshopper to spider or frog or toad or salamander. Plants are the proverbial base of the food chain, and so wherever inedible plants come to dominate, insect-eating creatures like birds will struggle to find sufficient food.

What to do? We have begun to explore this question, pulling out hundreds of buckthorn stems by the roots, in two 10 by 10 meter test plots in Cold Spring's swamp forest. Over the next year we will monitor these plots watching for regrowth of buckthorn but also for new red maple seedlings. It isn't easy, this approach: treating just those two plots took a couple hours of work by several determined volunteers. If we do observe a new generation of red maple trees starting life in our test plots, you may be asked to pitch in, and help steward Newton's unusual Red Maple Swamp into the future. ■

[https://en.wikipedia.org/wiki/Acer\\_rubrum](https://en.wikipedia.org/wiki/Acer_rubrum)  
<http://www.newtonma.gov/gov/parks/city/coldO.asp>  
<http://www.nytimes.com/1999/04/27/science/eastern-forests-change-color-as-red-maples-proliferate.html>  
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**If you haven't renewed your membership already, now is the time.  
 And consider a gift for a conservation-minded friend.**



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 CONSERVATORS**

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|---|---|
| <input type="checkbox"/> \$125 Patron           | <input type="checkbox"/> \$50 Family Member               |
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**You also may make a targeted donation to one of the following specific funds:**

- |  |   |
|--|---|
| <input type="checkbox"/> Woodcock Meadow \$ _____                                  | <input type="checkbox"/> Ordway Endowment Fund \$ _____ |
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Please make checks payable to Newton Conservators, Inc.

Visit our website at [www.newtonconservators.org](http://www.newtonconservators.org) if you wish to renew your membership online.

# President's Message

Dear Conservators,

It's a hard time to be a small creature in today's world.

Researchers at Radboud University in the Netherlands who studied records from German nature preserves discovered a seasonal decline of 76% and mid-summer decline of 82% in flying insect biomass over 27 years. Another study by the German Nature and Biodiversity Conservation Union showed that there are 15% fewer birds than just 12 years ago.



A year-old study by the organization Partners in Flight indicated that North America has 1.5 billion fewer birds now than it did 40 years ago. Observations in more than 25 other countries indicate that this is a global phenomenon.

What are the most likely causes of the loss of these populations and others around the world? Loss of habitat. Climate change. The overuse of pesticides and fertilizers. The increase in agricultural monocultures.

In a *Conservation Biology* article, EO Wilson tells us to, "Pay attention to the little things that run the world." He continues:

The truth is that we need invertebrates but they don't need us. If human beings were to disappear tomorrow, the world would go on with little change... But if invertebrates were to disappear, it is unlikely that the human species could last more than a few months. Most of the fishes, amphibians, birds, and mammals would crash to extinction about the same time. Next would go the bulk of the flowering plants and with them the physical structure of the majority of the forests and other terrestrial habitats of the world.

How can those of us living in Newton help to preserve those little things? By thinking globally and acting locally. We need to work to preserve the bugs and the birds in our local environment by conserving their habitat in Newton — both by protecting critical open spaces and by taking care of those that already are protected, by protecting or increasing the biodiversity within them.

That is the mission of the Newton Conservators. We fulfill that mission in many ways.

Here are a few examples:

- We have been working for two years to protect the land now owned by Boston College in Webster Woods. (Mayor-Elect Ruthanne Fuller has pledged to make that happen.)
- We are removing invasive plants from many of the city's open spaces. Invasive plants outcompete and push out the native plants that provide food for our native insects and birds. (For more information, see <http://bit.ly/2elu069>)
- We are restoring Woodcock Meadow at Nahanton Park by removing invasive plants and planting native plants.
- We have started two experimental plots to try to restore the understory of the red maple wetland in the rear of Cold Spring Park (see the lead article by Eric Olson earlier in this newsletter).
- We are working with the City to put conservation restrictions on city-owned conservation areas and parks — and then to monitor them.

All of those projects are funded by membership dollars. It is our membership renewal time, and we hope that you will renew your membership — or join for the first time. If you're already a member, you have received a renewal notice in the mail. If not, you can join online: <http://bit.ly/2jDeU2P>.

Thanks for your support!

*Beth Wilkinson*

ILLUSTRATIONS: SUZETTE BARBIER

# Winter Ducks in Newton

We all notice fewer birds around us during the winter months, but the exception is ducks. There are many more ducks, and more species of ducks in Newton during the winter, when compared to the spring. Many duck species breed farther north, where the freezing of the water there forces them to spend winters with us, unless, of course, our waters freeze over here as well. In that case they either migrate farther south or move out to the coast, where the salt water does not freeze so easily.

Good places to find these ducks are the Charles River and the various ponds such as Crystal Lake, Bullough's Pond, and Chandler Pond in Brighton, across the town line by the Commonwealth Golf Course. There is also a pond off Fuller Street near where it intersects Commonwealth Avenue and near the entrance to the Braeburn Golf Course.

## Mallards

Mallards can turn up in any of these places, as well as around smaller bodies of water such as the creek in the above golf course, creeks in Cold Spring Park, and Dolan Pond in West Newton. Mallards will hybridize with our American Black Ducks. This might make looking at Mallards more interesting as one can look for individuals like the one pictured below.



*American Black Duck (top) and Mallard hybrid (bottom)*

The lower bird has a partially green head and is a hybrid, whereas the upper bird is an American Black Duck. Both of these species are dabbling ducks that eat vegetation and do not usually dive under the water. They tip up to dabble. Mallards will nest anywhere, even in the grassy strip between the sidewalk and the street if they are hard pressed for privacy. They sometimes can be seen eating acorns during the winter months when aquatic vegetation is more difficult to find.



*Hooded Merganser*

once. The females are grayish-black with a horizontal white mark across their cheek. They nest in holes in trees near inland water sources up in Canada. They are with us for the winter months.

Hooded Mergansers also have white on their heads but have rusty sides, and the white patch is on a crest of feathers that may be raised to show off the white, or folded down in a less ostentatious pose. The females are brown with a rusty head that appears crested. They nest in our area and north of here. Their chosen spots are ponds with standing dead trees where they find woodpecker cavities to nest in. Locally such habitat is a little west of Newton, near route 495 and westward. These colorful ducks turn up on Bullough's Pond and Crystal Lake, as well as in the Charles River.



*Male Bufflehead (top), Female Bufflehead (bottom)*



*Ruddy Duck male with white cheek*

Finally, look for the Ruddy Ducks, perky little ducks that usually have their tails cocked up vertically. The males have large white cheek patches, the females have a double-horizontal white mark across their cheek somewhat like a female

Bufflehead. Their tails give them away. They nest mostly in the western part of the United States, along the sides of marshy ponds and lakes. You might see them on Crystal

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Lake, or on the Chestnut Hill Reservoir, just over the city limits by Boston College.

### Common Mergansers and Ring-necked Ducks



Male Common Merganser

mentioned species and both Common Mergansers and Ring-necked Ducks.



Female Common Merganser

is a sleek bird with a glossy green head that usually appears black. These birds have a serrated edge to their bills, acting like teeth, to grasp fish. The females have a rusty brown head in which the brown on the throat stops in an abrupt line where the plumage changes to white.

The female has a little bit of a wacky crest on the backside of her head. These birds nest west of us in New Hampshire, Vermont, and New York and north of that area in Canada. They prefer to be close to large lakes and will use woodpecker holes or will nest on the ground.

The Charles River is usually the best place for winter ducks in Newton. Ted Kuklinski leads a portion of our Christmas Bird Count party along the banks of the Charles each year. There one can see all of the previously

The Common Mergansers are a colorful species that is easy to get to know. The trick is to go out and spend time looking for them. They are on the Charles every winter. The male Common Merganser



Male Ring-necked Duck (black head at right) with female to the left

white, with a darker brown head. She has a white band on her bill and white on her face at the base of her bill.

They nest north of Newton, in New Hampshire, Vermont, New York, and up into Canada. Their nests are on drier spots in marshy areas near open water. They do have an iridescent purple ring around their necks. This ring is virtually impossible to see unless you are close and the light is just right.

### Other good places to see ducks

If you find yourself ready to face the New England weather in January, February, or March and want some interest in your stroll, try the Blue Heron walk along the Charles River from Watertown Square, upriver to Bridge Street. Other good spots are Auburndale Park, Purgatory Cove, and the trail along Quinobequin Road in Waban.

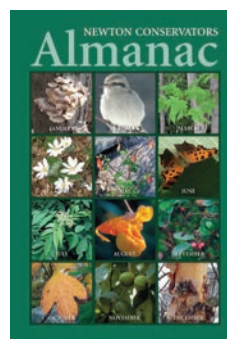
One can also stray to the Stop and Shop on Pleasant Street in Waltham, just east of Farwell Street. There is a footbridge behind this store and a path in Newton across the river. Parking is easy in the Stop and Shop lot. Bring binoculars if you have them. If not, invite a friend who does have them. The ducks can be at a distance on the river. Depending where you walk, you can also run across muskrats, beavers, and river otters along the Charles River. ■

—Pete Gilmore

## It's Winter. Take a Hike!

Shop online at [www.newtonconservators.org/books.htm](http://www.newtonconservators.org/books.htm) to purchase Newton Conservators publications. *Almanac* is \$19.95 + shipping, and the *Trail Guide* is \$8.95 + shipping.

- Members receive a discount from these prices when purchasing online.



# The Two Bridges Trail

By Ted Chapman, Two Bridges Riverside Trails Working Group



PHOTO: KEN MALLORY

Bridge over Route 95 connecting to Riverside MBTA

In October 2017, the Newton Conservators joined Bike Newton and the Lawrence and Lillian Solomon Foundation of Wellesley to administer a grant from the Massachusetts Department of Conservation and Recreation called the Recreation Trails Program. The goal of this grant is to study the Two Bridges Trail.

- The second bridge was built in 1950, is about 119 feet long, and crosses the Connector Road (in some documents referred to as Recreation Road). That gives access from Grove Street, to the Mass Pike (I-90), Recreation Road, Rt. 30/Commonwealth Ave, and I-95/Rt. 128 northbound.



Concept Diagram Topo map of Riverside Trail path courtesy of A Greener Greater Boston

While only 1,700 feet in length, the Two Bridges Trail represents a key opening to a bigger picture of trail development in the Charles River Reservation. It begins in Newton Lower Falls on a spur of Clearwater Street, then transverses a 340-foot gas line right of way on land owned by the City of Newton. After crossing two bridges

This coalition, the Two Bridges Working Group, will engage engineering firms to provide information on the following issues: topography, site analysis, and an easement plan; structural assessment of the two bridges; design of rail systems, path surface, and adaptations to grade changes for access to the MBTA station and links to existing recreation trails in the area.

## History of the path

The working group is carrying forward the vision of The Metropolitan Park Commission's report written in 1892 by the landscape architect Charles Eliot. He envisioned a park system along of the banks of the Charles, Neponset, and Mystic Rivers, the Blue Hills, the Middlesex Fells, and beaches in Lynn, Nahant, Winthrop, Quincy, and Nantasket. The natural river patterns provided a system of interconnected open spaces, accessible to even the most densely populated areas.

During the decade after the publication of the report in 1893, eighty percent of the current metropolitan park system was set aside as permanent public open space. The report gave the following description of the Newton section of the Charles river: "Within ten miles of Boston, there is a stretch of river scenery that cannot be surpassed in the United States."

on a 700-foot-long abandoned railbed, it finally transverses both I-95/128 and the Connector Road to reach the Riverside MBTA station, where there are existing pedestrian trails along the Charles River.

There are two existing bridges on the abandoned Newton Lower Falls Branch of the Boston and Albany Railroad between Lower Falls and Riverside.

- The first bridge was built in 1961, is 151 feet long, and crosses I-95/Rt. 128.

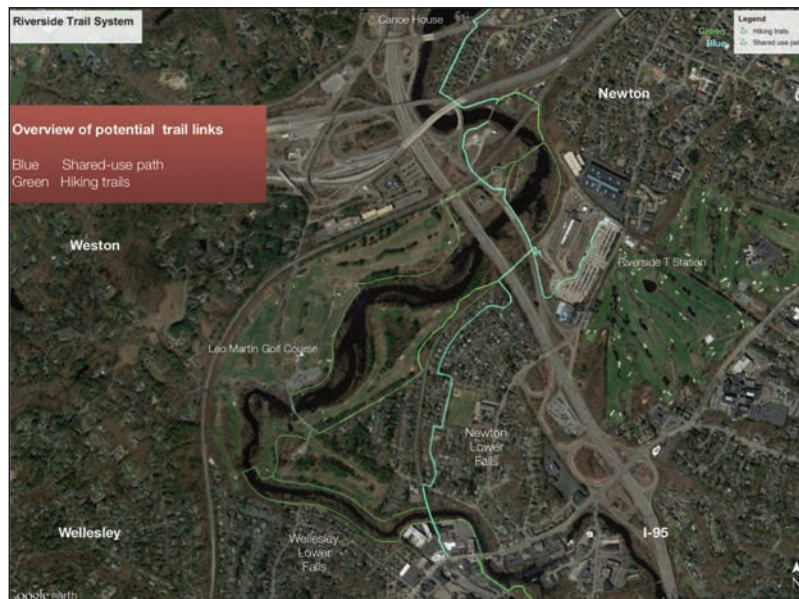
The development of rail lines, including the 1842-1970 Newton Lower Falls Branch of the Boston and Albany

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Concept drawings courtesy of A Greener Greater Boston showing a proposal for the two bridges and MBTA



Concept drawings courtesy of A Greener Greater Boston showing an overview of potential trail links connecting to Riverside MBTA

Railroad, created recreational opportunities along the Charles Lake District in Auburndale. From 1897 to 1963 Norumbega Park provided boat rentals, theater, music, and dining opportunities to thousands. In the 1900s this section of the Charles was the most heavily canoed waterway the world.

The development of highways, regional infrastructure, and housing has since encroached upon this experience, but the river rolls on. Since the 1990s, the DCR created a multiuse recreation Charles River Reservation/Blue Heron trail extending from Boston to the Norumbega Park Conservation Area in Newton. The town of Wellesley

has an extensive trail system. The connecting links through Newton Lower Falls and Auburndale await development.

The concept of a bike/footpath through Newton Lower Falls was part of the 1969 comprehensive Recreation/Open Space Plan by the Newton Planning Department, authorizing the publication in 1975 of the Newton Conservation Commission Charles River Pathway. The following objectives of this pathway were listed:

1. To have a continuous footpath along the Charles River.
2. To conserve the banks of the Charles in as natural a setting as possible.
3. To add to outdoor recreational and educational opportunities available to the City.

In 2009, the Massachusetts Department of Conservation and Recreation's (DCR) Charles River Reservation Footbridge Projects/Trail Corridor Proposal linked construction of the pathway through Lower Falls on the unused rail line to the restoration of three footbridges crossing the Charles River. This proposal hoped to restore important links between the Charles River Bike Path and the Blue Heron Trail in Newton, reopening access to this spectacularly beautiful part of the Charles.

By 2015, using available funds from the state's Accelerated Bridge Program, two of the three bridges — the "Pony Truss" at Riverside Park in Weston and the "Trestle" bridge between Newton Lower Falls and Wellesley Hills — were completed. The third Recreation Road "Stringer" bridge, crossing from the MWRA pump station in Weston to Charles Street at the Lasell College boathouse in Newton, was delayed.

The Mass DCR's renewed interest in the Lower Falls pathway in 2009 met opposition by rail-trail abutters who filed a lawsuit against DCR. The controversy tore at the fabric of the Lower Falls community. In response, the Newton Lower Falls Improvement Association (LFIA) created a working group to look at alternatives to the rail trail. The group defined 24 path segments that could be variably linked to get from the Wellesley Bridge to the Lasell College boathouse.

In 2010 the Development at Riverside proposal began to be aired. The traffic issues associated with this project created a new incentive to look at alternative pathways



as safer pedestrian routes from Lower Falls to Riverside than negotiating the two proposed roundabouts on Grove Street. Through the active lobbying of the larger Newton community and city counselors, the special permit granted to the developer created mitigation funds for projects like trails. In late 2016, a new developer has assumed the lease at Riverside; plans for the site and surrounding roads have yet to be revealed.

In 2016 the Massachusetts Supreme Judicial Courts ruled on the appeal from the Massachusetts Land Court by the plaintiffs who had brought suit against the DCR; the ruling found that the decommissioning of a rail line is a federal issue. This finding could open the door to movement on the rail trail through Lower Falls becoming a reality. There remains some opposition from abutters in the Lower Falls Community to opening the full rail trail corridor. The Two Bridges Trail deliberately avoids 90% of the rail line in favor of using the street grid and pedestrian trails along the river defined by the LFIA study.

**Benefits**

The Two Bridges pathway achieves an important goal without using the bulk of the mile-long rail line through Lower Falls and therefore creating further dissent in the Lower Falls community. The trail creates continuity of routes for pedestrians and bicyclists between Wellesley and Riverside by using existing streets and alternate pedestrian routes. With the support of the Appalachian Mountain Club and the DCR, the working group will map and develop these alternative foot paths along the Charles River adding to a regional path system along one of the most beautiful sections of the Charles River. The project’s advisory committee will involve stakeholders from multiple communities that abut the extended trail system — Wellesley, Newton, and Weston — and regional bike pedestrian advocates. ■

**Photo Feature: Auburndale Park After a Heavy Snowstorm, by Jonathan Elcock**



**MISSION**

**Newton Conservators, Inc.**

The Newton Conservators promotes the protection and preservation of natural areas, including parks, playgrounds, forests and streams, which are open or may be converted to open space for the enjoyment and benefit of the people of Newton. It further aims to disseminate information about these and other environmental matters.

A primary goal is to foster the acquisition of land, buildings and other facilities to be used for the encouragement of scientific, educational, recreational, literary and other public pursuits that will promote good citizenship and the general welfare of the people of our community.

*The Newton Conservators was formed as a not-for-profit organization 56 years ago in June 1961.*

**The Newton Conservators Newsletter®** is published four times each year by the Newton Conservators, Inc., in June, September, December, and March. Deadlines for these issues are the first Friday of each month in which an issue is scheduled to be published.

We welcome material related to our mission from any source. Send proposed articles or letters by email in MS Word or rich text format to [bethwilkinson@mac.com](mailto:bethwilkinson@mac.com). Digitized photographs, maps and diagrams are also welcome.

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Thanks to the following contributors to this edition of the Newsletter: Eric Olson, Beth Wilkinson, Pete Gilmore, Ted Chapman, and Katherine Howard.

# Woodcock Meadow Restoration — Update

The birders — and the birds — seem to agree: Woodcock Meadow hasn't looked this good in a long time! We're about two years into the meadow restoration project, and good progress has been made.

The work is following the general recommendations of the 2011 Nahanton Park Management Plan by Mass Audubon (jointly commissioned by the Newton Parks & Rec Department and the Newton Conservators) and the 2015 meadow-specific restoration plan by Conservators Advisor Jon Regosin (also Chief of Conservation Science for the state's Natural Heritage & Endangered Species Program).

## Woodcock habitat

The American Woodcock is identified as a Species of Greatest Conservation Need by the MA Division of Fisheries & Wildlife. It needs a specific habitat — open, sandy grassland — for mating and nesting. Woodcock Meadow is the only such sandy grassland habitat in Newton.

Using aerial photographs, Jon Regosin showed the degradation and diminishment of the meadow that had occurred: huge white pines had filled up the middle, and the edges were filling in with encroachment from pines, black locust and red cedar. Non-native invasive species such as buckthorn, bittersweet, and others were threatening the native grassland species. Birders had noted the reduced numbers of Woodcocks using the meadow for mating.

The restoration plan to remove threatening plant species and manage them and the meadow long term was approved by the Parks & Rec Commission and then by the Integrated Pest Management (IPM) Committee. The goal is to restore and maintain an open meadow grassland dominated by little bluestem grass interspersed with other native species such as bush clover, aster, and goldenrod, with 15-20% native shrub

and small tree cover such as cedar, scrub oak, blueberry, gray birch, and sumac. Phases 1 and 2 (still in process) call for removal of encroaching trees and nonnative invaders; Phase 3 will be maintenance and monitoring, and new plantings.

## Work-to-date

The work accomplished to date was done by many

people: The city's Forestry Department, which removed trees (contributed from the department's staff/budget); Bartlett Tree Experts using targeted glyphosate (Roundup) application services as approved by IPM and paid by the Conservators Woodcock Meadow fund; volunteers from the Conservators and Friends of Nahanton Park, who participated in seven volunteer sessions in 2016 and three in 2017; and our two interns in the summer of 2017.

We also had several classes of Needham High science students, who removed huge amounts of garlic mustard from the meadow edges in spring 2017 and came back in the fall to learn about, and pull, buckthorn and other invasive plants. (Needham

High has been using Nahanton Park for science study for many years — and when they saw our restoration plan signage in the meadow, they contacted us to ask if they could help.)

## City Forestry Department

The tree work done by the city's Forestry Department began in early March 2016 with the removal of the huge white pines in the center of the meadow, and some from the edges. Birders who arrived that night, in hopes of a woodcock mating ritual show, were amazed to see the woodcocks taking off and alighting from the exact spots of the removed trees. The woodcocks seemed to be enjoying the expanded space!



PHOTOS: KEN MALLORY

*Drone images of Newton Conservators in Woodcock Meadow*





PAINTING: COURTESY OF STIM WILCOX

*This woodcock watercolor was painted in late 1940s, by Dr. Arthur M. Stimson.*



PHOTO: COURTESY OF COLONIAL SEED COMPANY

*Little bluestem grass*

Another City tree work day is planned for December 2017, or as soon thereafter as weather permits.

Unfortunately, the wet spring and additional sunlight from the tree removals also gave the invasive species a growth spurt. Bittersweet, for example, is thriving. Also, in midsummer a grove of garlic mustard was found in the center of the meadow, hopefully removed before distributing its seed, but it will require followup next season.

In September patches of the terrible black swallow-wort vine (*Cynanchum louiseae*) were found for the first time in the meadow, next to the picnic tables and by the Upper Parking Lot. The pods were pulled off before the seeds were released, but the plants will be back in the spring — in addition to those coming in the wind from the growing infestation all over the city. Nonnative “lawn” grasses are also thriving at the JCC corner, threatening to invade the little bluestem areas. Management of these invasive species will be an ongoing challenge, and we intend to get consultation advice from other experts.

## Longer term

For longer-term meadow management, Jon Regosin notes that over time too much thatch/nutrients builds up and needs to be removed. Possible methods include a “controlled burn” (not very practical for our location), York raking (thatch-removing large rake dragged by a tractor), or hand raking. He has suggested a high-school-student science project involving hand raking in marked treatment areas compared to other areas of the meadow left as the control area. This will be discussed with the Newton and Needham high school science teachers this fall.

The meadow was lovely to behold when we visited in September: the little bluestem was waving in the wind and sun (strangely, it is actually quite tall, and purple). Many birds and pollinators were enjoying the open, peaceful meadow. ■

✍ Katherine Howard

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**Eastern Towhee**  
*photo by Haynes Miller*



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