

The Citizen Forester

NOVEMBER 2016
NO. 196

Tree Steward Training

By Mollie Freilicher, DCR
Community Action Forester

About 20 tree wardens,
tree committee members,

municipal arborists, volunteers, interested citizens, and others gathered at Harvard Forest October 14-15 for **DCR's Tree Steward Training**. The weather was fantastic, and fall colors were nearly at their peak.

Held annually, the Tree Steward Training provides a venue for learning about trees, management, and advocacy, as well as for networking with others. Attendees learned about Massachusetts forest history and the work of the DCR Bureau of Forest Fire Control and Forestry from the Director of Forest Stewardship, Peter Church. DCR Service Forester Joe Perry provided an extended session on tree identification, including techniques by sight, smell, feel, and, of course,



Tree planting with Rick Harper.

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the pneumonic MAD-Cap-Horse. Extension Assistant Professor from UMass-Amherst Rick Harper discussed tree establishment and mortality and brought everyone outside to demonstrate how to plant a tree. The group planted a containerized sugar maple near the Fisher House and learned the importance of finding the root flare and planting at the correct depth, as well as the sometimes long process of eliminating circling roots.

After lunch, catered by the Miller's River Cafe in Orange, attendees heard

from Dr. Dave Bloniarz, USDA Forest Service, on i-Tree (www.itreetools.org).

Dr. Dave provided background on i-Tree and demonstrated two of the web-based tools, Design and Canopy.



Peter Church, DCR Director of Forest Stewardship.

DCR Director of Forest Health, updated the group on pests and disease conditions of 2016, including the extensive defoliation of many hardwoods this year and what to expect next year from gypsy moth. Attendees also heard about other issues facing trees in Massachusetts, including crypt gall wasp on the Cape and Islands, winter moth, southern pine beetle, Asian longhorned beetle, caliciopsis canker, red pine scale, and more. Calvin Layton, Senior Arborist for Eversource, ended the day sharing the work of utility arborists and the line they walk between keeping the electricity flowing and keeping trees standing safely.

Saturday dawned cool and bright, and after breakfast, attendees learned about the resources available from the DCR Urban and Community Forestry Program, including technical advice, training, and our annual Challenge Grant Program. After spending the first session indoors, the group was ready to head outside with Tom Ingersoll of Ingersoll Land Care for an extended pruning session. The group learned about the three important pruning cuts, heading (or topping), reduction, and thinning, and about when it is appropriate (or not!) to use each. In addition, attendees learned about important tools to have in your pruning toolkit.

After two hours outdoors, everyone headed inside to hear from Clarisse Hart of the Town of Petersham and Harvard Forest talk about the Petersham Tree Commit-

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Tree Steward Training



Tree planting.

tee. Clarisse was joined by Tom Ingersoll, and together they discussed how their tree groups get things done. The Petersham Tree Committee is an official committee of the town, and the Sheffield Tree Project, Tom's group, is an organization completely separate from the town. Clarisse shared some of the projects the Tree Committee has been working on, including a

[tree tour](#) funded by a grant from the Petersham Cultural Council (a local organization supported by the Massachusetts Cultural Council), for which they solicited nominations, a DCR Challenge Grant, work in the local school, and more. Tom shared information about how the [Sheffield Tree Project](#) came about, the planting projects they have undertaken, and maintaining Tree City USA status in the town.

After a break for lunch, attendees came together for the final two sessions of the training. Dr. Dennis Ryan, retired-UMass-Amherst, presented information on New England storms and the kinds of hazards they leave behind. Dennis drove home the point of the importance of being cognizant of electrical hazards that may result from storm damage. The day wrapped up with a roundtable discussion during which attendees brought up many topics, including how do tree committees find interested members, how do



Making sure the tree is straight during the planting.

you get good quality nursery stock at a reasonable price, how tree committees and groups tell their stories, scenic roads, successful projects, and more.



Clarisse Hart of the Town of Petersham and Harvard Forest on tree committees.

Thank you to all the speakers for sharing your knowledge and expertise, thank you to Harvard Forest for hosting us, and thank you to all the attendees.

Some attendees were sponsored by their town, business, or employer to attend.

This year's sponsors include: J. Dymon Landscape, Town of Peru, Town of Springfield, Trees for Watertown, Town of Wrentham, and the Mass. Dept. of Agricultural Resources. Thanks also go to our program sponsors: USDA Forest Service **and the Massachusetts Tree Wardens' and Foresters' Association.**



Tom Ingersoll of Ingersoll Landcare on pruning.

If you are interested in attending next year, watch the *Citizen Forester* for announcements about next year's session.

Species Spotlight—Basswood, *Tilia americana*

By Mollie Freilicher, DCR
Community Action Forester

After a few months of looking at unusual exotic trees, we are back to a New England native: basswood (*Tilia americana*). In the world of urban and community forestry, we are probably more used to hearing about the littleleaf linden (*T. cordata*), the European cousin of American basswood, but this native has its place in the urban forest.



Basswood is a large tree, reaching heights of 60 to 80 feet, with a spread of 30 to 50 feet, though it can grow taller and wider. It is hardy in zones

3b to 8(9) and is native from Maine to Florida and west to the Dakotas and Texas. It is a tree of the central and eastern hardwoods, growing on mesic sites, often with sugar maple (*Acer saccharum*), red oak (*Quercus rubra*), white ash (*Fraxinus americana*), and others. The name **basswood is thought to come from “bast wood,”** as the inner bark can be soaked and used to make fiber and rope.



Leaves are alternate, simple, and ovate to cordate, four to six inches long, with serrated margins and an acuminate tip and an uneven base. They are a shiny green above and are paler below. Basswood has a false terminal bud and lateral buds can be red-brown or greenish, are one-quarter to one-third-inch long, and two-scaled. Additionally, one side of the bud may bulge. The

buds are roughly teardrop shaped.

Twigs are smooth, brownish-green to red in color, and usually zig-zag. Young bark is gray and smooth, but with age, it turns gray-brown and develops long ridges and furrows.

Borne in hanging cymes, basswood flowers are perfect, fragrant, and creamy yellow. They bloom in late June or early July, attracting lots of bees. The flower stalks are attached to a long, flat bract, three to four inches long,

which persists on the tree and can help aid in winter identification. In some areas, honey from basswood is collected.

The fruit is small, round, and nut-like, ripening in the fall and occurring in clusters. The seed provides food for birds and other wildlife. The strong, but soft, white, close-grained wood is a favorite of wood

carvers. It is also used for lumber, the bodies of electric guitars, veneer, plywood, pulp, and other products.

Basswood is easy to transplant and can tolerate difficult soils and moderate drought conditions, though it is not very tolerant of air pollution or harsh urban conditions. While it is without serious pest or disease problems, basswood is susceptible to Japanese beetles, aphids, linden borers and other insects, as well as verticillium wilt and powdery mildew.

There are a few cultivars of American linden available, including ‘Redmond’ and ‘American Sentry,’ which are both

smaller than the species. As a large tree, basswood requires a large site and could go in a park or other large area, or in a naturalized setting.

Some of the smaller cultivars of basswood may be more suited to streetscapes, in areas where the tree could be planted out of the range of road salt, though this is a tree probably more suited to parks and other large open spaces.



Photos, clockwise from left: Flowers, twig, bark, fruit, and leaf:

John Seiler, Virginia Tech

Species Spotlight—Edibility Notes from Russ Cohen

The main portions of the plant I have experience in eating are the young leaves and the flowers. The young leaves may be eaten raw and have a pleasant (albeit a bit bland) flavor. You may discover upon chewing on the leaves that they are somewhat mucilaginous. This is not surprising, once you know that (until recently, when it was split out into its own family, the Tiliaceae), the genus *Tilia* was placed in the Malvaceae (aka the Mallow family), a member of which is Okra. I have heard that in England, where they call *Tilia* trees lime trees, they make lime sandwiches (which are like watercress sandwiches, on white bread with the crusts cut off, but with young *Tilia* leaves as the filling instead). Although I have yet to try them, I am sure that young Basswood leaves can also be used in cooked recipes. (As they are already mild and tender, the leaves would not need to be boiled first.)

Tilia blossoms (flower clusters) come out in June and have a pleasant, lemon-honey aroma. The flower clusters (either fresh or dried) make a delightfully-flavored tea, which, besides tasting good, have two medicinal values: the tea is soothing to your digestive system, as well as

your mental state. (It is a gentle sedative.) By the way, there is no need to remove the propeller-like bract attached to the stem with the flowers on it – it can go into your tea strainer along with the flowers.

Other species of *Tilia* (like the Little-leaf Linden, *Tilia cordata*, a common street tree) can be used in a similar fashion to *Tilia americana*.

I have also heard, but can't verify, that *Tilia* trees can be tapped for sap; the inner bark is edible (with a flavor like cucumber); the small nutlets are edible; and a very acceptable (albeit quickly-decomposing) chocolate substitute can be made from a paste of the ground-up flowers and immature fruit of *Tilia americana* or *Tilia cordata*.

Russ Cohen, author and expert forager, is the retired Rivers Advocate, for the Division of Ecological Restoration/Riverways Program of the Mass. Dept. of Fish and Game. He is the author of *Wild Plants I Have Known...and Eaten*, available from the [Essex County Greenbelt Association](#).

Scholarship

The Massachusetts Tree Wardens' and Foresters' Association provides scholarships to University of Massachusetts students and Massachusetts residents actively studying arboriculture, community forest management, or urban forestry at an out-of-state college or university. Find out more about the application process at www.masstreewardens.org/scholarships.

Tree City USA—2016 Applications Now Being Accepted

Also accepting Tree Line USA and Tree Campus USA Applications

Apply online or use the paper application. Go to www.mass.gov/dcr/urban-and-community-forestry and click on "Branching Out" at right. Applications are due December 31.

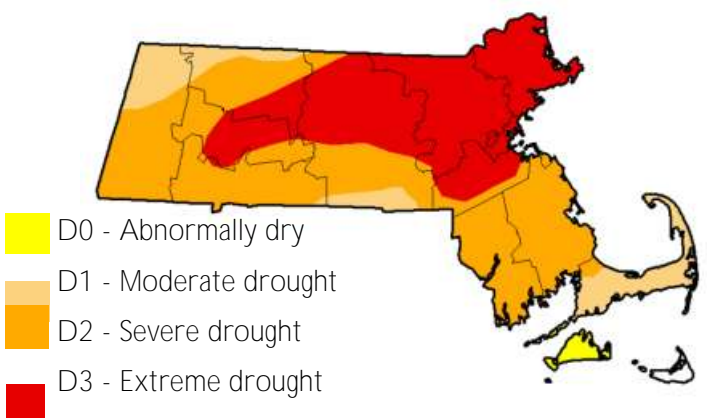
Drought in Northern Forests?

The timing and type of precipitation are key ingredients for drought stress in Northern Forests. [Short duration hot droughts](#) may become more frequent in the region as it receives more torrential downpours at inopportune times. Read the full blog post at blogs.usda.gov.

Drought Monitor

Conditions as of October 25, 2016. Check out drought conditions in Massachusetts, New England, and the U.S. All of Massachusetts is in drought, with **much of the state categorized as "severe drought" or "extreme drought."**

U.S. Drought Monitor: http://droughtmonitor.unl.edu/Massachusetts_drought_management_information



Growing on Trees

Grants

DCR Urban and Community Forestry Challenge Grants

Deadline: November 1 (Full Application)

Challenge grants are 50-50 matching grants (75-25 for environmental justice projects) to municipalities and nonprofit groups in Massachusetts communities of all sizes for the purpose of building local capacity for excellent urban and community forestry at the local and regional level.

The USDA Forest Service provides funding for the grant program, and DCR administers the grants with guidance from **the Massachusetts Tree Wardens' and Foresters' Association. The DCR Urban and Community Forestry Program** assists communities and nonprofit groups in their efforts to protect and manage community trees and forest ecosystems, **with the ultimate aim of improving the environment and enhancing the livability of all of Massachusetts's communities.**

NOTE: The 2016 application contains [new guidelines](#) for strategic planting grants.

Project areas include:

- Building and Strengthening Citizen Advocacy and Action Organizations
- Securing or Training Professional Staff
- Developing and Implementing Systematic Urban Forestry Management through tree inventory and analysis, resource assessment, and development of plans
- Attaining a Tree City USA Award, Growth Award, Tree Campus USA Award, or Tree Line USA Award
- Completing strategic community tree plantings and “heritage” tree care projects
- Other projects

Start planning for next year's round! Read the complete guidelines and download the news application at: <http://www.mass.gov/eea/agencies/dcr/conservation/forestry-and-fire-control/urban-and-community-forestry-challenge-grants.html>.

For more information on the Challenge Grants, including our National Grid Partnership Grants and Eversource Go Green grants, contact Julie Coop at 617-626-1468 or julie.coop@state.ma.us or Mollie Freilicher at 413-577-2966 or mollie.freilicher@state.ma.us.

USDA Forest Service Community Forest and Open Space Conservation Program

This is a competitive grant program whereby local governments, qualified nonprofit organizations, and Indian tribes are eligible to apply for grants to establish community forests through fee simple acquisition of private forest land from a willing seller. The purpose of the program is to establish community forests by protecting forest land from conversion to non-forest uses and provide community benefits such as sustainable forest management, environmental benefits including clean air, water, and wildlife habitat; benefits from forest-based educational programs; benefits from serving as models of effective forest stewardship; and recreational benefits secured with public access. Applications are due January 13, 2017. For more information, see the announcement on the [Federal Register](#).

TD Green Streets Grant

The 2017 grant round launched October 10. If your community was a Tree City USA in 2015 and is in the TD Bank service area, your community may be eligible. Check the TD GreenStreets webpage for more details: www.arboday.org/programs/tdgreenstreets/.

Tree City USA—2016 Applications Now Being Accepted

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Growing on Trees—Webinars

Urban Forestry Today Webcast Series

Emerald Ash Borer Research Update
November 3, 2016 | 12:00 p.m. - 1:00 p.m. (Eastern Time)
Dan Herms, Ph.D., The Ohio State University

Join Dr. Dan Herms of The Ohio State University as he provides an update about Emerald Ash Borer, discusses the ecology of an EAB invasion, and outlines future research directions regarding this invasive pest of importance.

To attend, visit: www.joinwebinar.com and enter the code 553-335-555.

These broadcasts are free and will offer the opportunity for arborists to earn 1.0 ISA CEU and 0.5 MCA credit for each webcast. For those who are unavailable to attend the live broadcast, archived sessions will be available in the 'videos' section at www.urbanforestrytoday.org

For more information, contact:
Rick Harper, Department of Environmental Conservation, University of Massachusetts, Amherst
rharp@eco.umass.edu

The Urban Forestry Today 2016 Webcast Series is sponsored by the University of Massachusetts Department of Environmental Conservation, in cooperation with the USDA Forest Service, Massachusetts Department of Conservation and Recreation, University of Massachusetts Extension, and Massachusetts Tree Wardens' & Foresters' Association.

Urban Forest Connections

The USDA Forest Service's Urban Forest Connections webinar series brings experts together to discuss the latest science, practice, and policy on urban forestry and the environment. These webinars are open to all. Past webinar presentations and recordings are available [here](#).

Future Webinars
December 14, 2016 | 1:00 p.m.-2:15 p.m. (Eastern Time)

TREE Fund Webinar: Soil Compaction and Urban Trees: Strategies for Gaining Ground

Dr. Bryant Scharenbroch—University of Wisconsin – Stevens Point
Learn how you can protect urban soils from compaction and gain useful management strategies to improve the quality of compacted soils in your local landscape. CEUs will be available
November 30, 2016 at 2:00 pm ET Pre-registration is not required; log in at treefund.org on November 30.

i-Tree 2016 Webinars

Join us for a comprehensive, web-based instructional series that will introduce the latest tools in the i-Tree software suite, as well as bring you up-to-date on the improvements that have been made to the i-Tree collection of inventory, analysis, and reporting tools for urban and community forests. i-Tree is a state-of-the-art, peer-reviewed software suite from the USDA Forest Service and its partners that provides urban forestry analysis and benefits assessment tools.

All instructional sessions begin at 1:00 p.m. ET

November 16, 2016 i-Tree STREETS
December 21, 2016 - i-Tree Roundtable: Answering Your Questions About Using i-Tree

CEU Credits

Society of American Foresters CFE units and International Society of Arboriculture (ISA) CEUs are expected to be awarded for attending these online sessions. Each session is planned to last one hour.

For more information, go to: <http://www.unri.org/itreeworkshops/>

Ecological Landscape Alliance Webinar

Urban Tree Selection in a Changing Climate

November 1, 2016 1:00 - 2:00 p.m. (Eastern)

Based on current climate projections urban trees will experience dramatically warmer temperatures during their lifespans than the climates under which they evolved. Identifying appropriate tree genotypes for future climates is fraught with uncertainty and the potential for unintended consequences. In this program, Dr. Bert Cregg, Associate Professor of Horticulture and Forestry at Michigan State University, will discuss on-going research and the challenge of identifying landscape trees for a warmer world. Free for ELA members, \$10 for non-members.

For more information, go to:

<http://www.ecolandscaping.org/event/webinar-urban-tree-selection-in-a-changing-climate/>.

Growing on Trees

Harvard Forest Fall Seminar Series

Seminars are Fridays at 11:00 a.m. Eastern Time, unless otherwise noted. They are held in the Harvard Forest Seminar Room at Harvard Forest in Petersham, MA, and also can be joined online via webstreaming. Seminars are free and open to the public; no pre-registration is required. See the full schedule at <http://harvardforest.fas.harvard.edu/seminars>.

Friday, November 4, - [Join seminar online](#)
David Basler – University of Basel (Switzerland) and Harvard Bullard Fellow

Timing is the key: on the importance of phenology for tree growth and survival

Friday, December 2, - [Join seminar online](#)
Michael Reed – Tufts Univ. and Harvard Bullard Fellow

What to Expect When You're Expecting...Extinction

Friday, December 9, - [Join seminar online](#)
Kate Ballantine – Mount Holyoke College
Long-term development and ecosystem functions of restored wetlands

Quabbin Watershed Forest Management Tour

Red Pine Scale & Plantation Conversion: from monoculture to diverse native forest
10:00 a.m. – 1:00 p.m.
Saturday, November 5, 2016
(Rain date: November 6)

Tour starts at the
Quabbin Visitor's Center
485 Ware Road (Route 9), Belchertown, MA
Wear sturdy shoes and long pants, and bring tick repellent.
Please RSVP to Helen.Johnson@state.ma.us
Questions? email Helen or call the Visitor's Center at (413) 323-7221.



THE CITIZEN FORESTER

From the Arnold Arboretum

Find out more at:
<http://my.arboretum.harvard.edu/Info.aspx?EventID=1> .
To register for any of these programs click [here](#) or contact 617-384-5277.

City of Trees—Screening and Discussion
Wednesday, November 2, 7:30–8:45 p.m.

Location: [Hunnewell Building](#)
Since 1990, the nonprofit organization Washington Parks & People has tried to reduce poverty and violence in Washington, D.C. neighborhoods by improving parks. At the height of the recession, the organization received a stimulus grant to create a "green" job-training program in communities hardest hit. They had two years to help unemployed people find jobs and care for parks in their neighborhoods. The film *City of Trees* thrusts viewers into the inspiring but messy world of job training and the paradoxes change-makers face in urban communities every day. Discussion will follow. Fee \$10

Thirty-Eight: The Hurricane that Transformed New England

[Stephen Long](#), Journalist and Natural Historian
Thursday, November 17 7:00–8:30 p.m.

Location: [Hunnewell Building](#)
The 1938 hurricane was so devastating partly because nobody had any inkling that it was bearing down on them. Stephen Long will show why that happened and place this storm within a historical context of New England hurricanes before and since. **Long's talk will focus on** these forests and the people of Massachusetts, New Hampshire, and Vermont who were faced with acre after acre of blown down trees. Long's [book](#) will be available for purchase and signing. Fee \$5 member, \$10 nonmember

Urban Forests: A Natural History of Trees and People in the American Cityscape

[Jill Jonnes](#), PhD, Historian and Journalist
Thursday, December 8, 7:00–8:30 p.m.

Location: [Hunnewell Building](#)
Jill Jonnes will speak about the history of the tree in American cities over the course of the past two centuries, delving into presidents, plant explorers, visionaries, citizen activists, scientists, and nurserymen whose arbo-real passions have shaped and ornamented the nation's cities. Fee: Free for members and students, \$10 nonmembers

Gleanings

Balancing Nature and Commerce in Rural Communities and Landscapes

January 31-February 2, 2017 in Shepherdstown, WV

During this 3-day course, community-based teams will focus on the economics, community character, natural resources, and partnership-building skills necessary for creating sustainable communities. Teams will identify opportunities to differentiate their communities based upon their unique assets, have the opportunity to hear the latest trends in bringing alternative energy or transportation or sustainable agriculture practices to their rural communities, and develop specific action plans for implementation when they return home! Applications due December 12, 2016. For more information, go to [The Conservation Fund](#).

Check out Issue 1 of the Northern Research Station Current Urban Field Station Topics

http://www.nrs.fs.fed.us/ufs/local-resources/downloads/CurrentTopics201610_Issue1.pdf



New EPA Study Supports the Long-Term Benefits of Green Infrastructure

The EPA conducted a study to estimate the groundwater recharge benefits from application of small storm retention practices on new development and redevelopment nationwide. The study focuses on areas in the U.S. where groundwater is a significant contributor to urban and agricultural uses and where water shortages may occur in the future under different climate change scenarios. The results show that, over time, the use of green infrastructure can save hundreds of millions of dollars in groundwater resources, while just applying the practices to new development and redevelopment only. If retrofitting or increased retention were to occur, the groundwater benefits would be even more significant. Learn more at epa.gov.

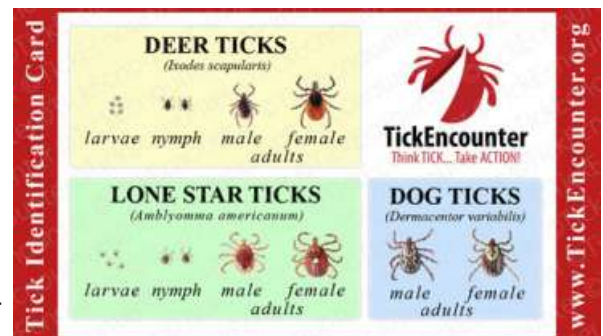
EPA Releases New Report on Green Infrastructure and Climate Change

As different parts of the country become drier, wetter, or hotter, community leaders and citizens are looking to green infrastructure to improve their community's resiliency to the effects of climate change. In 2015, the EPA convened charrettes, or intensive planning sessions, in four cities to demonstrate how this type of planning could be applied to communities dealing with a range of challenges. Each city's charrette focused on different issues based on the most pressing climate change impacts they were facing and their current level of green infrastructure implementation. This new publication summarizes those issues, and the recommendations developed by each charrette. Read the full report at epa.gov.

Watch out for Ticks!

While ticks are active all year long, fall is often a time we see numbers of ticks surge, so be on the lookout. Ticks are arachnids that feed on the blood of mammals, birds, and reptiles. Black-legged ticks (also known as deer ticks) and dog ticks are found throughout Massachusetts and may spread different disease-causing germs when they bite you. Lyme disease, babesiosis, and anaplasmosis are common tick-borne diseases in Massachusetts. You can take precautions to avoid tick-borne illness, including, checking yourself, children, and pets once a day for ticks when you come inside, using insect repellent, wearing light-colored clothing, and avoiding brushy areas. Find out more about ticks and tick-borne diseases here: <http://www.mass.gov/eohhs/gov/departments/dph/programs/id/epidemiology/ticks/>.

If you are bitten by a tick, you can submit the tick to the UMass Laboratory for Medical Zoology for testing. For information on tick testing, go to: <https://ag.umass.edu/services/tick-borne-disease-diagnostics>.



Mass ReLeaf Ministry Receives Abernathy Award for Service



The artful display in the sanctuary of Wellesley Congregational (Village) Church told the story in a worshipful way: the wheelbarrow and rake, the well-known photo of Earth taken from the

moon, flowers and greens and recycling bags...and a young tree, awaiting its permanent home.

Such was the setting last spring when the Mass ReLeaf ministry of the Massachusetts Conference, and its Director Neal Seaborn, received the church's Abernathy Award, honoring exemplary spirit and practice of service to others.

Over the past several years, the involvement of the United Church of Christ (UCC) and other religious organizations in the earth's environmental stewardship movement has gathered momentum. In towns and cities across America, people of many faiths are rolling up their sleeves in practical and far-reaching ways in response to a faith-filled call to re-examine what it means to be human and how we must live on this planet for survival.

In 2005, the Massachusetts Conference and the Massachusetts Department of Conservation and Recreation (DCR) Urban and Community Forestry Program established a state-wide environmental social action facilitation ministry - the MassReLeaf Ministry - as a part of this national religious-environmental movement.

The MassReLeaf Ministry recently completed 11 years of service- facilitating 42 tree-care projects led by 45 local religious organizations of multiple faiths and other local organizations - on public and access-qualified lands across Massachusetts. Together, they have planted 744 mature trees. In addition, Mass ReLeaf has provided 290 seedling trees to Conference churches to emphasize the importance of planting trees in municipalities and offered planting help, as well. Their ministry has benefited dozens of communities and hundreds of people living in urban areas.

Why plant trees? First, the benefits provided by urban and community forests to municipalities must be understood, not to mention the impact of planning and executing tree care projects on the people taking part in these projects.

Our urban and community forests provide:

- As much as 50% noise reduction to municipalities as compared to barren municipalities
- Cooling shade replete with winter/summer cyclical effects for personal use by the people in the community
- Visual screening which satisfies a basic human need for privacy
- Enhanced property values by as much as 25 to 30%
- Business economic growth due to municipal attractiveness
- A sense of community pride of the people (due to appearance of the community and involvement of the people in community activities)
- Reduction of crime in the municipalities by as much as 28 to 30% less)
- and even a more rapid recovery from illnesses (2 ½ times faster)

Urban and community forests reduce levels of pollutants that seriously impact human physical, mental, and emotional health. An average urban tree absorbs about 15 times the pollution absorbed by a tree located in a pristine forest, an average of about .46 tons (900 pounds) of toxic gases per year. And at the same time, each tree absorbs an average of about five pounds of minute solid particles that cause severe asthma, emphysema, and lung cancer in humans.



And finally, urban and community forests:

- Reduce heating and cooling needs for residential buildings, thereby reducing costs.
- **Reduce the "urban heat island effect"** - localized heating due to the preponderance of black-topped surfaces - to provide a more human-friendly living environment.
- Reduce rainfall runoff and erosion, thereby improving water quality and quicker re-charge of local aquifers.
- Function as habitat for wildlife enriching human enjoyment of these creatures.
- Contribute to the reduction of global climate change for the long-term security of the Earth.

To learn more about this exciting ministry, visit macucc.org/massreleafministry or contact Neal Seaborn at eseaborn@comcast.net or 781-237-2152.

Photos: Top, Mass ReLeaf Director Neal Seaborn, Wellesley Congregational Church pastoral residents Joshua Fitterling and Megan Snell, and Eric Seaborn, after the awards ceremony; Below, Neal Seaborn and Wellesley Congregational Senior Pastor Sarah Sarchet Butter plant a tree while Eric Seaborn supervises. Photos by Heather MacFarlane.

Gleanings

EPA Awarding \$1.3 Million to Revitalize America's Urban Waters and Surrounding Communities

Washington, D.C. — The U.S. Environmental Protection Agency (EPA) is awarding \$1.3 million to 22 organizations in 18 states to help protect and restore urban waters and to support community revitalization and other local priorities.

This year's Urban Waters grantees will inform and engage residents in stormwater management and pursue community-based plans to address pollution in waterways. To accomplish these goals, many projects will address trash in waterways; test rivers, streams, and lakes for pollutants; and prepare the next generation of environmental stewards for careers in the green economy. Local organizations receiving EPA grant funding include:

Mystic River Watershed Association, Massachusetts (\$60,000) will partner with towns and cities near Boston to create a multimedia education program to increase awareness of stormwater pollution for a regional coalition of municipalities.

Pioneer Valley Planning Commission, Massachusetts (\$60,000) will develop a green infrastructure plan for Day Brook in Holyoke to reduce stormwater flow into the brook and resulting combined sewer overflow discharges into the Connecticut River. Read the full release at epa.gov.

Why Do We Keep Planting Stinky Ginkgos?

By Maureen McMurray and Taylor Quimby

*This story was adapted from episode 5 of **New Hampshire Public Radio's podcast *Outside/In***.* Each autumn, foliage-starved urbanites are treated to a spectacle of color as the fan-shaped leaves of the ginkgo trees lining their streets turn a brilliant shade of gold. But the treat comes at a cost: When the female ginkgo trees shed their leaves and berries, they rot and emit a stench often likened to dirty gym socks, vomit, or poop. The ginkgo tree has owned this bad smell for millennia. Like the horseshoe crab, elephant shark, and cockroach, the ginkgo is a living fossil, meaning it has existed virtually unchanged for over 200 million years. Botanists theorize that the rancid smell of the ginkgo berries came to be because it actually attracted [dinosaurs](#) to consume (and later discharge) the berries, helping to spread the seeds. Today, that famous ginkgo stink is an annual reminder that fall has officially arrived. Read the full story at Slate.com.

On *The Hidden Life of Trees*, by Peter Wohlleben

By Andrea Wulf

October 7, 2016—A walk through a forest might never be the same again after reading this elucidating book, which **makes a case for trees as social beings that communicate, feel, and help each other.** “The Hidden Life of Trees” explains that trees use scent to talk, “agree” to bloom together, and take communal action against pests. Bizarre as this might sound, the author Peter Wohlleben is not a New Age disciple who conjured up some crazy esoteric visions but a forester in Germany who underpins (most) of his ideas with hard scientific data. He refers, for example, to studies in which scientists have discovered what one called the “wood wide web” — in which trees “exchange news about insects, drought, and other dangers.” Read the full story at Washingtonpost.com. Andrea Wulf is the author of “*The Invention of Nature: Alexander von Humboldt's New World*.”

New Web Portal to Help Communities Prepare for Climate Change

The EPA has launched a new online portal that provides local leaders with information and tools to increase resilience to climate change. Using a self-guided format, the Adaptation Resource Center (ARC-X) provides information tailored specifically to community needs. The ARC-X leads users through all steps of an adaptation process, including understanding the implications of climate change for their particular region or issues of concern; adaptation strategies that can be implemented to address climate-related risks; case studies that illustrate how other communities with similar concerns have already successfully adapted, along with instructions on how to replicate their efforts and potential EPA tools to help implement the adaptation strategies; and, sources of funding and technical assistance from EPA and other federal agencies. Read the [press release](#). Access the new resource: <https://www.epa.gov/arc-x>.

News

Northampton to Have First Professional Shade Tree Inventory

October 17, 2016—Northampton, MA — The city is moving forward with its first-ever professional inventory of public shade trees, which will be the foundation for a comprehensive urban forestry plan to improve the **future of Northampton's tree canopy. The \$74,650 project** will be funded using a \$30,000 grant from the state Department of Conservation and Recreation and \$44,650 in matching funds that the Northampton City Council unanimously approved in the spring. Mayor David J. Narkewicz said the inventory is necessary to get an in-depth look at what actions the city should take toward **restoring its forestry. "We need to make informed budgetary decisions about what we need to do to invest properly in our public shade tree canopy, and this inventory will give us that information," Narkewicz said. The city hired Davey Resource Group of Kent, Ohio, to have five of its arborists conduct the inventory. The mayor says it will begin in the next few weeks, and is scheduled to conclude in November. Read the full story at the [Daily Hampshire Gazette](#).**

As Cities Get Warmer, Their Trees Lose Some of Their Ability to Take Carbon Out of the Atmosphere

By Deborah Netburn

All hail the urban tree.

These woody wonders standing sentinel along sidewalks and in city parks do more to improve our lives than most of us realize. Trees filter our air and water and increase biodiversity in our neighborhoods by providing habitats for animals. Just being near them has been shown to improve our health: One [study](#) found that people who live on tree-dense blocks are less likely to suffer from hypertension, obesity, and diabetes than those who **don't. We've all taken refuge in the shade of a leafy canopy on a hot day, but trees keep us cool in another way, as well. When they photosynthesize, they open tiny pores on their leaves called stomata that allow for gas exchange with the atmosphere. An open stoma also enables water inside the leaf to evaporate, which in turn causes the air around the leaf to cool. En masse, this process acts like a natural air conditioner. Read the full story at [latimes.com](#).**

75 New Trees Being Planted At Tornado-Damaged Springfield Park

Springfield, MA – The City of Springfield is still healing from the June 1, 2011 tornado.

"The fabric of the City ripped apart by the destruction of our urban tree canopy," said David Bloniarz of ReGreen Springfield. Five years have passed and still devastation from the June 1st tornado is all too visible in Springfield.

"You remember how these neighborhoods were and then when you drive through now and still see a lot of the devastation of what was brought from the tornado, it's why we're volunteering today," said David Barkman, General Manager of the Verizon Wireless in West Springfield.

In Springfield's Old Hill neighborhood, new homes have replaced piles of rubble, but yards are bare.

No trees. That's why volunteers through ReGreen Springfield planted more than a dozen large and small trees in Harriet Tubman Park overlooking the Mill River. Read the full story or watch the video at [wwwlp.com](#).

A 600-Year-Old Oak Tree Finally Succumbs

By James Barron

October 16, 2016—Basking Ridge, NJ—The locals say that George Washington and the Marquis de Lafayette — the Frenchman who bankrolled the American patriots with cold, hard cash — picnicked in the shade it provided. Rank-and-file soldiers are said to have rested under it, gathering strength before going on to beat the redcoats.

It is a huge oak tree, now estimated to be 600 years old. Arborists such as Rob Gillies consider it one of the oldest in North America. It is a local landmark, right there in the cemetery of the [Basking Ridge Presbyterian Church](#). Read the full story at the [New York Times](#).

News Headlines in Brief

- [This Tree Trunk Has Been Floating Upright For 120 Years - And No One Knows Why](#)
- [The Mystery of the 'Ghost' Redwoods May Be Solved](#)
- ["Extinct" Variety of Tree Rediscovered at Queen's Palace in Scotland](#)
- [Secret supports placed to help Missoula street trees thrive](#)
- [Canine Conservationists—By sniffing out invasive insects, highly skilled dogs are on the frontlines of forest conservation.](#)
- [Who Will Speak for Haiti's Trees?—Opinion](#)

On the Horizon

- Nov 1 [Deadline to apply for DCR Urban and Community Forestry Challenge Grant](#)
- Nov 3 Urban Forestry Today Webinar, www.joinwebinar.com and enter the code 553-335-555.
- Nov 5 Quabbin Watershed Forest Management Tour, Quabbin Visitor Center, Belchertown, RSVP to Helen.Johnson@state.ma.us
- Nov 6-8 New England Chapter-ISA 50th Annual Conference, Burlington, VT, www.newenglandisa.org
- Nov 10-12 TCI Expo Tradeshow and Conference, Baltimore, MD, www.tcia.org
- Nov 15 EPA Webinar: Building the Case for Green Infrastructure: Outreach and Education, <http://www.epa.gov/green-infrastructure/green-infrastructure-webcast-series>
- Nov 15 Society of Municipal Arborists Annual Conference, Indianapolis, IN, www.urban-forestry.com
- Nov 16 i-Tree webinar: i-Tree Streets, www.unri.org/webcasts/itreeconferences/
- Nov 16-17 Partners in Community Forestry Conference, Indianapolis, IN <https://www.arboday.org/programs/pcf/>
- Nov 30 TREE Fund webinar, Soil Compaction and Urban Trees, treefund.org
- Nov 30 – Dec 2 New England Grows, Boston, www.newenglandgrows.org
- Nov 30 – Dec 2 American Society of Consulting Arborists Annual Conference, Boston, <http://www.asca-consultants.org/>
- Dec 21 i-Tree webinar: i-Tree Roundtable: Answering Your Questions About Using i-Tree, www.unri.org/webcasts/itreeconferences/
- Dec 31 **Deadline for Tree City, Tree Line, and Tree Campus USA Applications**, contact Mollie Freilicher, 413-577-2966 or mollie.freilicher@state.ma.us
- Jan 10-11 **Mass. Tree Wardens' and Foresters' Association** 104th Annual Conference, Sturbridge, www.masstreewardens.org



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If you have a topic you'd like to see covered or want to submit an item to *The Citizen Forester* (article, photo, event listing, etc.), please contact [Mollie Freilicher](mailto:Mollie.Freilicher@state.ma.us) or click [here](#).

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