



Massachusetts Urban & Community Forestry Program

The Citizen Forester

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2016 Annual Community Tree Conference at UMass

By Rick Harper On Tuesday, March 8, the University of Massachusetts hosted the annual Community Tree Conference in Bowker Auditorium. In attendance were approximately 240 arborists, Tree Wardens, community volunteer committee members, and arboriculture/urban forestry students. In addition to networking opportunities, attendees had the occasion to hear from informative and enlightening speakers from across Massachusetts and the Northeast. Ken Gooch, Forest Health Program Director for the Massachusetts Department of Conservation and Recreation, started the day's roster of speakers with an update about the state's recent insect and disease issues of importance to tree health. Dr. Dave Bloniarz, US Forest Service (USFS) Urban Forest Researcher and Director of the Urban Natural Resources Institute (UNRI), introduced attendees to i-Tree Landscape – the new addition to the suite of i-Tree programs that USFS researchers have worked tirelessly to develop.

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i-Tree enables us to better understand the ecosystem services and economic value associated with our urban forests and how this understanding can be translated to stakeholders and the general public. Dr. Bloniarz was also joined by Gabriel Markarian and Hadley Stein, who both also discussed technology-related topics in relation to the urban forest. Gabe, a senior Computer Sciences student in the College of Information and Computer Sciences at UMass Amherst, detailed his original research about calculating and quantifying the future benefits of trees, which will soon be printed in an upcoming manuscript in the *Arboricultural Jour-*



Scholarship winners. Photo by David Bloniarz.

nal, titled *Using Flexible Open-Source Programmes to Estimate Future Projections of Urban Tree Benefits: A Case Study in Amherst, MA*. Hadley, a product specialist with Avazea, highlighted the OpenTreeMap application and discussed its potential usage related to urban forest tree inventory and analysis.

Dr. Anne Averill, Professor and Entomologist in the Department of Environmental Conservation at UMass Amherst, detailed her research related to the impact of pathogens, habitat enhancements, and, specifically, neonicotinoid pesticides, on native and domesticated bee populations. She highlighted that insecticides – especially neonicotinoids – should only be used as a last resort and that the least-toxic products should be applied relative to effects on bee populations. Larry Dapsis, entomologist and Deer Tick Project Coordinator from Cape Cod Cooperative Extension in Barnstable County, closed out the morning with a lecture about measures that should be taken to avoid tick bites and to prevent infections from various tick-borne diseases, like lyme disease, babesiosis, and borrelia. One bite can change your life!

Following the morning lectures, presidents of the Massachusetts Tree Warden's and Forester's Association, the

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2016 Annual Community Tree Conference at UMass

Massachusetts Arborist's Association, and the Southeast Tree Warden's Association, handed out scholarship awards to deserving UMass Amherst students.

Afternoon speakers included Dale Varney, Safety Compliance Officer from OSHA (the Occupational Safety and Health Administration). He discussed many of the common safety-related mistakes that occur before an accident actually takes place. Melissa LeVangie, Director of Marketing and Sales for Shelter Tree Inc., discussed tools and techniques that can be used to prevent bodily injury related to climbing. Dr. Nick Brazee, Director of the UMass Plant Diagnostic Lab, closed the day by discussing his current research related to pathogen-plant interactions and by outlining potential pests to look for in the upcoming 2016 growing season, including spruce gall midge, gypsy moth, winter moth, and *Armillaria* spp. root rot. **Summing up the day's events, Dr. Dave Bloniarz offered this analysis of the 2016 Community Tree Conference: "The conference was a great opportunity to tie in a variety of topics that directly impact the professional workplace, as well as help to open new areas of interest to other community foresters. The wide range of subject areas presented provides to the success of the annual conference, and this year was no different. Bringing outstanding experts from industry, research, education, and the non-profit world was key to making the conference informative, lively, and a great learning forum for the attendees."**

Congratulations to everyone involved in producing this renowned annual event, with special thanks to UMass Extension and the Bowker Auditorium in Stockbridge Hall. Go UMass!

MDAR Arbor Day Ash Tagging

With Arbor Day only a month away, it's time to think about planning how we can celebrate trees and their ability to provide our neighborhoods with clean air, shaded streets, and aesthetic value. This year, why not consider joining our Arbor Day ash tree-tagging project?! Spearheaded by the Massachusetts Department of Agricultural Resources (MDAR), the goal of this project is to get as many organizations and communities as possible to tag at least one ash tree in order to spread the word about the Emerald Ash Borer (EAB).



If you have ash trees in your town and want to help raise awareness about the impact of Emerald Ash Borer this Arbor Day, Friday, April 29, MDAR is offering free Tree-Tagging Kits to interested groups. The kits come with tags printed on high-visibility, green plastic board, flagging tape to tie them onto trees, and a tip sheet to get the most out of your tagging efforts. By raising awareness of the impact of Emerald Ash Borer, we hope to foster early detection of **this pest, something that will provide communities with the time needed to prepare for the EAB's arrival and to make important decisions about how to manage their ash trees.** To submit a request for a free kit, visit <http://bit.ly/outreachreq>.

Growing Greener—in Belchertown

The town of Belchertown was recently awarded an Urban and Community Forestry Challenge Grant that will enable the town to establish a formal tree risk assessment program, beginning with the assessment of 400 trees and the creation of a database to manage the trees.

Interested in applying for a DCR Urban and Community Forestry Challenge Grant? Check out information on our [website](#) or contact Julie Coop, julie.coop@state.ma.us or 617-626-1468 or Mollie Freilicher mollie.freilicher@state.ma.us or 413-577-2966.

The next application deadline is November 1, 2016.



Belchertown Common. Source: Wikipedia. <https://en.wikipedia.org/w/index.php?curid=11107741>.

Species Spotlight—More Invasives: Buckthorns

By Mollie Freilicher,
DCR Community
Action Forester

Two species of buckthorn, introduced in the late 1700s, are commonly found in dense under-story thickets in Massachusetts woodlands, forest edges, wetlands, fields, and other disturbed areas, where they out-compete native vegetation. The two species look similar, though glossy buckthorn is alternate, while common buckthorn is subopposite. Common buckthorn is taller than glossy buckthorn, which often is a shrub 10-12 feet tall. Inner bark of buckthorns is bright yellow. Both common and glossy buckthorn are on the Prohibited Plant List. Our native buckthorn, alder-leaved buckthorn *Rhamnus alnifolia*, is a small shrub (three to four feet tall) that is found in wetlands.

Common or European buckthorn
Rhamnus cathartica
Native to Europe and western and northern Asia

Glossy buckthorn
(also *Frangula alnus*)
Native to Europe, western Asia, and North Africa

Rhamnus frangula



Form: Common buckthorn is a large shrub or small tree, typically reaching heights of 25 feet.
Leaves: simple, subopposite or opposite, broadly oval, and finely serrate. The upper surface is shiny and dark green, and the underneath surface is lighter in color.
Twig: slender and reddish-brown, with a gray layer that exfoliates. The terminal bud is a sharp thorn, typically as long as the buds.
Flowers: borne in umbels at the base of shoots, small and yellow-green.
Fruit: black drupe, one-quarter-inch wide, containing three to four seeds, and persisting on the plant into the winter. Birds eat the fruit and spread the seeds, contributing to the escape of the plant into woodlands.
(Images: [Virginia Tech](#))



Form: Glossy buckthorn is a shrub or small tree, reaching heights of 10 to 12 feet.
Leaves: alternate, simple and broadly oval, with entire margins. Leaf color is dark, glossy green above, and paler below. Unlike common buckthorn, there is a terminal bud, which is naked, brown in color, and larger than lateral buds.
Twig: slender, reddish-brown, with gray pubescence.
Flowers: small, yellow-green, and not showy, emerging from leaf axils.
Fruit: a small drupe containing two seeds. Drupe is one-quarter inch wide that turns from red to black as it matures. (Images: [Virginia Tech](#))

Podcasts on Climate Adaptation

Climate change is calling. The adaptors are responding. Stories brought to you twice a month. For more information: <http://www.theadaptors.org/>.

Trees in Their Spring Colors

Check out this post from David Sibley on identifying trees by their colors and forms. Go to sibley-guides.com for the full entry.



The Creation of the Walpole Town Forest, 1916

The Creation of the Walpole Town Forest, 1916

This article first appeared in the [Walpole Times](#).

By Gary Riggott

The Walpole Town Forest will be celebrating the 100th Anniversary of its creation on May 1, 2016. This article is the fourth in a series describing subjects pertaining to the Town Forest, from the first recorded deed in 1659 to modern times. [Editor's note: Earlier articles can be found at walpole.wickedlocal.com]

This article describes the events leading up to the creation of the Town Forest and its dedication in 1916. I have chosen to split this topic into two components: The Land and The Idea.

The Land:

In the previous article I discussed the Blackburn property, some 69 ½ acres along the east bank of the Neponset River near White Bridge. Several buildings were **constructed on this parcel to house the family's textile equipment manufacturing business.** The business went bankrupt in 1890. J. H. Blackburn passed away in 1900 leaving his granddaughter, Eva Caldwell, as executor. She sold 50 acres to Horace Briggs, who later sells the land to George A. Plimpton.

Plimpton was a wealthy businessman who split his time between Walpole and New York City. (His family established Plimpton Press, a textbook publisher whose plant in Norwood employed over 1,200 people at one point). He owned several hundred acres around what is now the High School, Town Forest and Water Department. In fact, in 1907 Plimpton donated the land to the Town on which the high school resides.

The remaining 19½ acres, including the Blake Estate **which stood near White Bridge until the 1970's, was kept as rental property.**

The Idea:

Charles Sumner Bird, Jr. was born into the wealthy Bird family of East Walpole in 1883. He attended Harvard and **traveled through Europe extensively at his father's request.**

He was also a member of the Walpole Town Planning Committee. In fact, so strong was his interest in the nascent field of Town Planning that he and his committee

actually published a book on the subject: Bird, C.S. Jr. (1917).

"Town Planning for Small Communities", New York, NY: Appleton & Co.

The chapter in that book entitled

"Town Forests" describes Bird's observations on community forests

throughout Europe. Here, the land is owned by the town, the expenses are paid by residents, but income also goes back to residents. It is clear that he wants to see that model established in the US, but especially in Massachusetts. He provides arguments for- and the benefits of establishing municipal forests.

Around the turn of the 20th century, all of New England was recovering from the clear cutting that was practiced **in the later decades of the 1800's. The environmental consequences of clear cutting, such as massive soil erosion and the flooding of riverside saw and grist mills, led to some of the earliest environmental laws enacted in the US. For more information, search for the "Weeks Act", which created the US Forest Service. Also, the eastern US was realizing that in the time after the clear cuts, before the next generation of forest products came in, that for the first time pulp wood and lumber would need to be imported from Canada.**

Bird traveled through Europe in the early 1900's at the request of his father to research equipment and techniques for papermaking. The Bird Company was forced to reinvent itself from being a manufacturer of fine writing papers to building materials after a massive factory fire. Paper manufacturing uses wood as its raw material, so as Bird visited the companies that built paper-making equipment, he also visited the forests that supplied the wood.

Here he heard of the almost complete deforestation of **the Black Forest in the 1800's. What was once a 2,200 square mile mixed forest of deciduous trees and fir was replanted with spruce, which had commercial value and grew quickly.** The first forest management practices were developed in the Black Forest, for example where select



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The Creation of the Walpole Town Forest, 1916

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small areas are forested and then replanted, as opposed to being clear cut and left to nature to reforest.

Another feature of these communal forests was their economics. Bird learned of some 1500 towns in Germany where forest products brought in sufficient income where there were no income taxes levied. Also in some 500 of those towns, residents actually received income of a few hundred dollars per year.

Though much of the forests in Europe were managed to produce forest products and income, another benefit which observed Bird was the use of the forests for watershed protection and for recreational uses.

Many communal forests also had an active role in the local economies, providing jobs for lumberjacks, transporters, saw mills, raw materials for artisans and goods to be marketed by shops. The forests also provided jobs for people in difficult economic times or in the winter, when some seasonal jobs disappear.

What Bird envisioned for the state as a whole was a vast network of communal forests. He cited the loss of **potential income to towns due to “waste land”, which was** basically land that was once clear cut then left to reforest naturally with scrub vegetation of no commercial value. Bird reasoned that for a minimal investment in saplings, **in one generation’s time hundreds of thousands of acres** in the state could be reaping sustainable income. He **didn’t want to rely on private ownership, because the long term commitment of time could not be assured.**

Such was the value that he saw in the communal forests of Europe, the Old World, and this is what he wanted to bring to the New World, to the state and to his home town of Walpole, in particular.

In 1913, the state passed a law allowing towns to create their own communal forests. The role of the Bird family in helping to influence the law is not documented, but C.S Bird Sr. had twice run for governor and was very well connected. The first place to act was the city of Fitchburg, home of the first municipal forest in the state. Walpole is home to the first Town Forest in the state.

Bird was also a member of the Walpole Park Board. In 1914 the Board developed a plan for the creation of a Town Forest in Walpole. The plan was created by John **Nolen, a recent graduate of Harvard’s new School of Landscape Architecture** (Nolen would later go on to de-

sign Memorial Park across from Town Hall and Bird Park in East Walpole).

While crafting the Plan for the Town Forest, Bird no **doubt met with his father’s pal George Plimpton** about the idea of a town-owned forest that could provide wood and income to the Town. Plimpton agreed to donate the first 51.1 acres for the new Town Forest. The Town Forest was created with an appropriation of \$500 at the April 1916 Town Meeting. The Town Forest was originally planned to be dedicated in 1915, but World War I made it impossible to get saplings to plant.

Bird was said to have wanted a 600-1,000 acre town forest on both sides of the Neponset. In addition to wood and income, it would provide employment; provide watershed protection and recreational opportunities.

The Town Forest was dedicated in a grand ceremony on May 5, 1916. In addition to Bird and Plimpton, Lt. Gov. Calvin Coolidge was on hand for the event. Some 900 young children were on hand to plant the first acre of **white pine saplings. Using the children were Bird’s idea** because of the long range view that forest managers held in Europe. These children would be the beneficiaries of the wood, the beautiful park, the jobs and the income that the new forest would provide. Having them plant the trees would forge a connection to the forest. Really, it was a brilliant idea.

And so it was that Charles S. Bird created the Walpole Town Forest, the first Town Forest in the state, based in large part to the practices he observed in Europe.*

The Town Forest Committee is still looking for your memories (stories, photos) of the Town Forest. We have created a website for your photos taken in the Town Forest and stories of your Town Forest memories. Please go to walpolematownforest@gmail.com. If you need help scanning your photos, contact Gary Riggett through the Town Forest website.

Editor’s Note: *The Walpole Town Forest is the first town forest in a town in Massachusetts. On May 1st, 2016, from 11:00 a.m.-4:00 p.m. Walpole will hold a celebration of the town forest. The location for the event will be behind Turco Memorial Football field @ Walpole High School, 275 Common St. For more information: <http://www.walpole-ma.gov/town-forest-committee/slides/100th-anniversary-of-the-town-forest-may-1-2016>.

Growing on Trees—Webinars

Urban Forestry Today

They're Coming...Planning Ahead for the Urban Landscape Pests of 2016

Commercial arborists, urban foresters, and interested volunteers can join Rutgers University Diagnostic Lab Director Richard Buckley as he outlines what insects and diseases were "hot" and what were "not" in 2015, in an effort to predict what we might expect to encounter in the upcoming growing season.

To attend, visit www.joinwebinar.com and enter the ID code **130-441-275**.

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

The Urban Forestry Today 2015 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.

Soak Up the Rain New England Webinar Series



Join us as we highlight innovative approaches to addressing stormwater in New England.

Hear about stormwater public outreach resources and programs. See who's soaking up the rain with green infrastructure. Learn about the latest tools and resources from EPA and others. Share successes, barriers, and lessons learned while implementing green infrastructure in our New England communities.

First webinar: Soak Up the Rain New England
April 5, 2016, 12:00 – 1:30 p.m. ET

For more information, download this [PDF](#).
Register here: <https://attendee.gotowebinar.com/register/3611093426241645826>

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, which provides urban forestry analysis and benefits assessment tools.

All instructional sessions begin at 1:00 PM (Eastern)

April 20, 2016 i-Tree STREETS
May 18, 2016 - i-Tree Roundtable: Answering Your Questions About Using i-Tree
June 15, 2016 - Using i-Tree VUE and STORM
July 20, 2016 - Introducing i-Tree Landscape
August 16, 2016 - **What's New in i-Tree ECO**
September 20, 2016 - Looking at i-Tree HYDRO
October 19, 2016 - DESIGN and CANOPY
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 1-hour.

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

Urban Forest Connections

The 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

May 11, 2016 | 1:00-2:15 p.m. ET

June 8, 2016 | 1:00-2:15 p.m. ET

Northeast Climate Science Center

"Patterns, Causes, and Consequences of Spring Onset

Timing Variations and Trends in the U.S."

Wednesday, April 6, 2016 - 3:30 p.m. ET

Speaker: Julio Betancourt, National Research Program, Water Mission Area, Reston, VA

USGS

<https://necsc.umass.edu/webinars>

Growing on Trees

Harvard Forest Seminars

Attend in person or join online

<http://harvardforest.fas.harvard.edu/seminars>



Seminars are Fridays at 11:00 a.m. Eastern Time, unless otherwise noted. They are held in the Harvard Forest Seminar Room and also can be joined online via web-streaming. Seminars are free and open to the public; no pre-registration is required.

Friday, April 1 - [Join seminar online](#)

Jesse Bellemare – Smith College

Climate change and forest plant migration: Insights from biogeography and horticulture in the eastern US

Friday, April 8 - [Join seminar online](#)

Jerry Melillo, The Ecosystems Center, Marine Biological Lab

Aspirations and tensions: lessons from the Third US National Climate Assessment

Friday, April 15 - [Join seminar online](#)

Garrett Meigs, University of Vermont

Forest disturbance interactions: Do insect outbreaks tax or subsidize the activity of subsequent wildfires?

Friday, April 22 - [Join seminar online](#)

Amanda Young, Penn State University

Site properties, regeneration niche, and climate-growth responses of the high elevation forests of the Northern Japanese Alps

Friday, April 29 - [Join seminar online](#)

Ezra Markowitz – University of Massachusetts
Title TBD

Friday, May 6 - [Join seminar online](#)

David Kittredge, University of Massachusetts and Harvard Bullard Fellow
Title TBD

Upcoming Conference: Massachusetts Sustainable Campuses and Communities Conference

April 15, 2016, Hampshire College, Amherst, MA
April 16, 2016, Northampton, MA

[75 Speakers](#) [28 Sessions](#) [20 Exhibits](#) [8 Tours](#)

\$20 - \$45 before March 11, 2016

Discount promotional codes

at <http://masccc.eventbrite.com>

[Register here](#)

Massachusetts Tree Wardens and Foresters Association Celebrate Arbor Day with tree seedlings!

The Massachusetts Tree Wardens and Foresters Association sponsors an annual packaged seedling program as a popular way to help municipalities, garden clubs, businesses, arborists, and other interested individuals and organizations promote Arbor Day and to raise money for the Mass. Tree Warden Scholarship Fund. Available are a variety of shade trees, ornamentals, and conifers. All seedlings and transplant prices include bags, ties, shipping, and handling. The minimum order is 100 seedlings, and the ordering deadline is April 15, 2016. For more information, go to <http://masstreewardens.org/arbor-day-seedling-program/>.

Celebrate Arbor Day!

Friday, April 29, 2016

How can you celebrate Arbor Day this year? For ideas, go to: <https://www.arborday.org/celebrate/celebration-ideas.cfm>

Workshops in Connecticut this June

[Great Mountain Forest](#) in Connecticut will be sponsoring two weekend workshops this June, led by special guests Robin Kimmerer and Tom Wessels. "Plants as Teachers: How Can We Be Better Students?" will be led by Dr. Kimmerer the weekend of June 3-5. "Reading the Forested Landscape" with Tom Wessels will be held June 24-26. The workshops will take place at the Yale Forestry Camp, a rustic lodge in the center of Great Mountain Forest's 6,300 acres. All meals from Friday dinner through Sunday lunch are included, as well as overnight accommodations. \$475 per person. For more information and to make reservations, contact [via email](#) or call (860) 824-8188. Seen in the North-

Growing on Trees

DCR Grants

DCR Urban and Community Forestry Challenge Grants

The most recent recipients for the Urban and Community Forestry Challenge Grant have been announced. Go to: <http://www.mass.gov/eea/agencies/dcr/pr-2016/urban-and-community-forestry-challenge-grants.html>.

Next 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.**

For more information on the Challenge Grants, including our Eversource Go Green grants and National Grid Partnership 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.

Changes to the DCR Urban and Community Forestry Challenge Grant

In 2016, our Urban and Community Forestry Challenge Grant will move to one grant round per year. The annual deadline will be November 1. This move will enable the program to better review and compare grant proposals. Look for some additional changes to the 2016 program in upcoming issues.

For Students

UMass Summer College

Pre-College Program for High School Students

July 24 – July 30, 2016—UMass-Amherst

Students in the Urban Forestry program will learn the importance of and how to care for trees. Students will take a proactive approach to climate as they learn what they can do now and in the future to make their communities greener. Arboriculture and urban forestry are core aspects of environmental conservation.

This program covers a number of earth science-related topics, including: botany, physiology, soil composition, run-off, and pollution. Students will also receive hands-on experiential training in: identifying trees, identifying disease in trees, climbing trees (knot tying, ascension, limb-walking, tree worker safety), pruning, plant health care, and pest management.

Arborists are in great demand in many towns and cities because it is important to properly plant and maintain trees. There are currently multiple career opportunities for graduates with either a two- or a four-year degree in Arboriculture at UMass Amherst. For more information, go to: <http://www.umass.edu/summer/precollege.html>.



Past summer college participant. (Courtesy of Brian)

Massachusetts Arborists Association Scholarship

\$2,500 Gordon & Frances King Scholarship for UMass and Stockbridge School students, due June 1. For more details, go to: <http://www.massarbor.org/sections/scholarship.php>

Growing on Trees

Workshops from Baystate Roads

For more information, go to <http://baystateroads.eot.state.ma.us/workshops/>

Leadership at All Levels

Baystate Roads is pleased to announce a new program, “Leadership At All Levels,” for municipal public works departments and MassDOT personnel. The program consists of four sessions: “Personal Leadership,” “Interpersonal Leadership,” “Group Leadership,” and “Organizational Leadership.” Each session builds on the previous one in a progressive approach to skills-building. The dates for the first session are as follows:

April 6, 2016 • Holiday Inn Taunton, 700 Myles Standish Blvd., Taunton

April 8, 2016 • DoubleTree by Hilton Boston-Bedford Glen, 44 Middlesex Turnpike, Bedford

April 13, 2016 • Hotel Northampton, 36 King St., Northampton

April 15, 2016 • Marlborough Embassy Suites, 123 Boston Post Rd. W, Marlborough

March 23, 2016 • West Springfield Municipal Building, 26 Central Street, West Springfield

May 6, 2016 • Hilton Garden Inn, 1032 South Street, Pittsfield

Creating a Revenue Stream for Stormwater Management

This workshop is specifically designed to assist municipalities meet the challenge of developing dedicated funds for stormwater management. Topics covered include ideas on building a customized funding program, why stormwater management matters, guidance on how to design a stormwater utility, and case studies from municipalities who have successfully funded their program (or a piece of it). We will also include tools for community outreach.

April 26, 2016 • Hawthorne Hotel, 18 Washington Square, Salem

April 28, 2016 • Cape Codder Resort & Spa, 1225 Iyannough Rd., Hyannis

Building Strong Teams

The use of process-improvement teams is becoming increasingly common today, as more businesses adopt a collaborative, cross-functional approach to problem solving. This seminar shows participants how to communicate openly, sensitively, and effectively, so they can develop and contribute to high-performance teams. This class is equally beneficial to managers and the engineering staff they lead.

May 4, 2016 • UMASS Center, Tower Square, Springfield, MA

For more information, go to <http://baystateroads.eot.state.ma.us/workshops/>

The Landscape Message is Back!

UMass Extension's Landscape Message is a regular update to inform and help guide Green Industry professionals in the management of our collective landscape.

Each Landscape Message includes valuable information from sites throughout Massachusetts: growing degree day accumulation, soil temperature, precipitation amounts, and plant phenology. Detailed reports on cultural practices and the status of insects, diseases, and weeds of interest to landscapers, arborists, and turf managers are also regular features. New messages are available weekly during the heart of the growing season, bi-weekly in mid to late summer, and monthly during the fall.

Subscribe to the e-mail list to receive notification in your inbox when each new message is posted: extension.umass.edu/landscape/services/email-list

Growing on Trees

Courses from the New England Wildflower Society

For more information, go to:

<http://www.newenglandwild.org/learn/our-programs>

Willows

This class will introduce you to the fascinating willow family and help you recognize and identify local and alien species in spring.

Saturday, April 23, 10 a.m.-3 p.m. | Location: Garden in the Woods, Framingham, MA and nearby field site | Instructors: [Alexei Zinoviev](#) and [Irina Kadis](#) | Fee: \$60/\$75 (Member/Nonmember) | Limit: 12 | CEU: 4 CFE 1-CF; MCLP; 4 AOLCP; .5 MCH

Measuring Soil Health and Managing Site Challenges in an Urban Landscape

This hands-on, indoor/outdoor workshop introduces the concept of the soil health assessment and the implementation of soil health indicators for evaluating the biological, chemical, and physical attributes of soil as they pertain to the constraints of a site.

Sunday, April 24, 9 a.m. - 3:30 p.m. Location: Garden in the Woods, Framingham, MA | Instructor: [Chuck Sherzi, Jr.](#) | Fee: \$86/\$104 (Member/ Nonmember) | Limit: 15 | CEU: MCLP; 4 AOLCP; 1 MCH | Cosponsor: Ecological Landscape Alliance

Arbor Day Celebration and Tree Giveaway

Saturday, April 30, 10 a.m.-4 p.m.
Location: Garden in the Woods, Framingham, MA |
Fee: Free with Garden admission

Placemakers Lecture

This year we are showcasing the [Friends of the Rail Park](#), a nonprofit organization working to repurpose a three-mile former rail line as public open space running through the heart of the Philadelphia.

Friday, May 6, 6:30-8 p.m. Location: Garden in the Woods, Framingham, MA | Instructor: [Liz Maillie](#) | Fee: \$15/\$20 (Member/ Nonmember)

Wild Edibles

Join Russ Cohen, foraging expert and author of *Wild Plants I Have Known...and Eaten*, for a walk at Old Town Hill. **You'll learn how to identify, find, and prepare edible plants safely and responsibly.**

Habitat: current and former agricultural land, coastal plain, and salt marsh. Known For: sumac, wild lettuce, stinging nettle, black raspberry, salt-tolerant plant species
Difficulty: [Easy/Moderate](#) Sunday, May 8, 1-4 p.m.
Location: Newbury, MA | Instructor: [Russ Cohen](#) |
Fee: \$25/\$30 (Member/Nonmember) | Limit: 20 |
CEU: MCLP, 3 AOLCP | Cosponsor: The Trustees of Reservations

Native New England Shrubs

This course will introduce you to almost fifty species of native New England shrubs, emphasizing plant identification, family characteristics, and historical plant uses. Bring a hand lens. Weekend sessions are held in off-site locations; directions will be provided during the first class. There is a second [Native New England Shrubs class which begins on 9/08/16](#).

Wednesdays, June 1, 8, 15, 6:30-8:45 p.m.; Saturdays, June 4, June 11, 9 a.m.-1:30 p.m.

Location: Garden in the Woods, Framingham, MA, and field sites | Instructor: [Roland "Boot" Boutwell](#) |
Fee: \$200/\$250 (Member/Nonmember) | Limit: 16 |
CEU: 4 AOLCP; MCLP; 1 MCH

New England Plant Communities

Learn how soil, topography, moisture, geological conditions, glaciation, and historical use affect the vegetation of plant communities. We will study dominant canopy, structure, range, and characteristic species of each community, and then apply this knowledge in the field.

Fridays, June 10, 17, 24, 6-8:30 p.m.; Saturdays, June 11, 18, 10 a.m.-2 p.m. Location: Garden in the Woods, Framingham, MA; Susan B. Minns Wildlife Sanctuary, Princeton, MA; and Sly Ponds, Plymouth, MA | Instructor: [Ted Elliman](#) | Fee: \$238/\$280 (Member/ Nonmember) | Limit: 16 | CEU: 4.5 CFE 1-CF; 4 AOLCP; MCLP; 1 MCH

Basic Wetland ID and Delineation

This two-day course introduces the principal elements of wetland identification: wetland hydrology; hydric soils; and hydrophytic plants. We will identify plants in the field, place a delineation line, and utilize web resources. Some pre-class reading is required.

Friday, June 24, Saturday, June 25, 9 a.m.-4 p.m.
Location: Garden in the Woods, Framingham, MA |
Instructor: [Alan Anacheka-Nasemann](#) |
Fee: \$160/\$200 (Member/Nonmember) | Limit: 12 |
CEU: 12 CFE 1-CF; MCLP; 4 AOLCP; .5 MCH | Co-sponsor: Massachusetts Association of Conservation Commissions

Growing on Trees

Courses from the Arnold Arboretum

For more information on these and other courses, go to: <http://my.arboretum.harvard.edu/Info.aspx?EventID=1>

Growing Plants from Seeds

[Jack Alexander](#), Plant Propagator, Arnold Arboretum
Saturday, April 2, 9:00 a.m. – 1:00 p.m., [Dana Greenhouse Classroom](#)

This workshop is for beginners and those who have been frustrated in past attempts to transform seed to seedling. Students will leave class with a selection of seeds raring to grow. Aftercare will be necessary. Fee \$50 member, \$65 nonmember

Parks: Cornerstones of Civic Revitalization
Tuesday, April 5, 6:00 p.m. Reception; 7:00 p.m. Lecture
| Location: [Wheelock College, Brookline Campus, 43 Dawes Street, Brookline, MA](#)

[Rolph Diamant](#), Adjunct Associate Professor, Rubenstein School of Environment and Natural Resources, University of Vermont

This talk will trace the symbolism and significance of public parks, from Frederick Law Olmsted's seminal 1865 Yosemite Report to the present day, as a recurring expression of national and community renewal. Free, but reservations required.

Botany Blast: Buds, Leaves, and Flowers--Springtime Phenology

[Elizabeth Wolkovich](#), PhD, Assistant Professor, Organismic and Evolutionary Biology, Harvard University and [Jehane Samaha](#), Lab Technician, Wolkovich Lab, Arnold Arboretum
Monday, April 11, 5:30 - 7:00 p.m., [Hunnewell Building](#)

Lizzie Wolkovich and Jehane Samaha will highlight the phenology and anatomy of bursting buds, emerging leaves, and opening flowers. This presentation will roam the Arboretum to discuss several [Tree Spotter](#) species; gather at the Hunnewell Building and wear appropriate walking shoes. Binoculars recommended. Fee Free, but registration requested Register at my.arboretum.harvard.edu or call 617-384-5277.

Magnolias for New England

[Andrew Bunting](#), Assistant Dir. of the Garden and Director of Plant Collections, Chicago Botanic Garden
Tuesday, April 12, 7:00 - 8:30 p.m., [Hunnewell Building](#)

Andrew Bunting, magnolia expert and Assistant Director of the Garden and Director of Plant Collections at the Chicago Botanic Garden, presents an in-depth look at the best ornamental magnolias for the New England area. Fee \$5 member, \$10 nonmember. Register at my.arboretum.harvard.edu or call 617-384-5277.

Botany Blast: Pests and Diseases of Woody Plants

[Andrew Gapinski](#), Manager of Horticulture, Arnold Arboretum
Thursday, April 28, 6:00 - 7:00 p.m., [Hunnewell Building](#)

How do trees fend off predators or cope with the diseases that afflict them. What makes one species more vulnerable than another? How does a tree survive a multi-year assault? Andrew Gapinski will speak about the factors that invite pests and diseases, including the role of environmental stress, and some of the indicators of the **presence of a pest or disease. He'll also speak about the Arboretum's decision-making approach to treating trees.** Free, but registration requested. Register at my.arboretum.harvard.edu or call 617-384-5277.

Identifying the 25 Most Common Trees in Boston

[Kyle Port](#), Manager of Plant Records, Arnold Arboretum
Sunday, May 22, 9:00 a.m. - 1:00 p.m., [Hunnewell Building](#)

In just a few hours, you can learn to identify 90 percent of the trees growing in Boston, both native and nonnative. Beginning in the classroom, you will briefly review the characteristics of the 25 most common trees and learn the botanical terminology necessary to describe them. You will then walk the grounds of the Arboretum to look at mature specimens of these trees. Fee \$45 member, \$60 nonmember

Pruning Project: Taming the Early Season Bloomers

[Jen Kettell](#), Arborist and Horticultural Educator
Monday, June 6, 6:30 - 8:30 p.m., [Hunnewell Building](#)
Now is the time to prune those early-blooming shrubs--**once they've flowered**--so their growth through the summer can fuel the development of next year's buds. ISA-certified arborist Jen Kettell will focus your attention on the kinds of shrubs that should be pruned now, various pruning cuts, and the type of thinning that will encourage health and vibrant blooms for years to come. Fee \$25 member, \$35 nonmember.

Gleanings

Online Database Keeps Tabs on Health, History of Thousands of Campus Trees at UMass-Amherst

March 4, 2016



Todd Beals poses with a sawtooth oak, also known as a Carruthers oak, outside Bartlett Hall. The tree was a gift of the Stockbridge School of Agriculture Class of 1938.

It's getting a lot easier to follow the health and value of the thousands of trees that make up the Frank A. Waugh Arboretum in and around the core of campus.

For decades, various trees have had small plaques, visible to passers-by, that identify them by common and botanical name, but now a searchable website catalogs about 8,000 "actively managed" trees that make up the Waugh Arboretum, mostly in the campus core, but also at sites like the Chancellor's House property. A query tool can locate trees by name, health history, canopy size, champion points (a way of rating trees within species by size), historic value, and more. The information is displayed graphically and appears in a spreadsheet, as well.

The person driving this ordering of data is Todd Beals, a recent Stockbridge School of Agriculture graduate who now works for the Physical Plant. Beals developed the ArcGIS Online (AGOL) Web application <http://www.tiny.cc/waugharboretum>, while still a graduate student. He calls it "a great outdoor textbook that anybody can access." Well, almost anybody. Built using the robust ArcGIS software, the site is rich in information, but it may not give up that information without what Beals understatedly calls, "a good bit of noodling." But it is a powerful tool for students, teachers, and the Physical Plant staff that cares for the trees. Read the full story at UMass.edu.



A display of campus trees from the Web application created by Todd Beals.

Green Cities, Good Health

This web site provides an overview of the scientific evidence of human health and well-being benefits provided by urban forestry and urban greening. Check out research on themes such as livable cities, local economics, safe streets, healing and therapy, and others. Go to: <http://depts.washington.edu/hhwbf/>.

From the National Association of State Foresters

My Tree—Our Forest

Urban and community forests provide essential benefits we cannot live without, including clean air and improved community health, reduced storm water runoff, and closer social connections.

To help support efforts to protect these important public benefits, NASF recently launched the *My Tree—Our Forest*® campaign. Check out the newest outreach materials available in our online store, including our popular [tree tags](#) and [reusable shopping totes](#)! If you like what you see, please help spread the word on social media using the hashtag [#mytreeourforest](#).

This Is How Much an Urban Forest Is Worth

March 15, 2016—Trees within the city limits of Austin, Texas contribute nearly \$34 million in ecosystem services to the community annually, according to a new report by the U.S. Forest Service (USFS).

From May to October 2014, researchers from the Texas A&M Forest Service collected data on characteristics like the size, species, and health of trees found on 206 one-sixth-acre plots scattered throughout Austin. They followed the protocols of the USFS Forest Inventory and Analysis program, which has collected information about **the nation's forests since 1930, but has rarely been applied to urban areas.** They and USFS researchers analyzed the data using i-Tree Eco modeling software, developed by the agency to [quantify the economic and environmental benefits](#) of city trees. This is the first comprehensive inventory of a U.S. urban forest; similar studies are planned for cities around the country. Read the full story in [Conservation](#). Read the original [report](#).

News

Going Up To Get at the Root of the Problem: Researchers Gather Samples to Grow Disease-Resistant Elms

By Fran Ryan

March 3, 2016—Northampton — While genetics research may call to mind petri dishes and lab coats, reaching for a solution sometimes requires leaving the laboratory. Once in a while, it requires defying gravity. On Thursday morning, researcher Christian Marks, arborist James McSweeney of Hilltown Tree and Garden in Chesterfield, and Kim Lutz, director of the Connecticut River program for The Nature Conservancy, gathered off Damon Road to collect samples from a mature healthy elm that stood roughly 50 to 60 feet high. For the past six years, Marks, a research associate with The Nature Conservancy, has been scouring the floodplains of New England searching for healthy mature American elm trees in the hopes of propagating the traits that have protected them from the devastating Dutch elm disease. American elms are most abundant in floodplain regions. Read the full story at the [Daily Hampshire Gazette](#).

Tiny, Artificial Trees Could Form the Next Generation of Windmills

By David Nield

March 4, 2016—Researchers in the US have proposed a new form of wind power: small, artificial, mechanical trees capable of producing energy from their vibrations. Working with the natural breeze, or small movements caused by other factors, the scientists hope that new forms of renewable energy can be developed in the future. [The idea](#) is to create a device that can convert random forces – whether that's from the footfall of pedestrians on a bridge, or a passing gust of wind – into electricity that can be used to power devices. And the researchers have found that tree-like structures made from electromechanical materials are perfect for the task. Read the full story at [sciencealert.com](#).

American hazelnut, *Corylus americana*

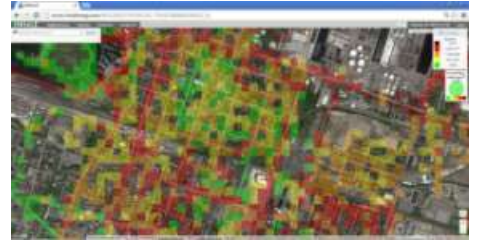


Citizen Scientists to Map Pollution and Where More Trees Are Needed

By Kelly Noseworthy

March 5, 2016—

Trees Please Hamilton is looking for citizen scientists' to help with a new tree-planting project that targets lower city neighbourhoods with higher air pollution.



The unique project will look to create air quality improvements at a very local level. It will use neighbourhood volunteers to measure air pollution and assess the health and number of trees in their own local areas and combine that data to decide on priority locations for tree planting. The Hamilton Naturalists' Club and Environment Hamilton have teamed-up for the next three years – their goal - to improve air quality in six lower city neighbourhoods. They'll spend \$345,000 to get the job done. Read the full story at the [CBC](#).

Signs of Spring in Amherst

Slippery elm, *Ulmus rubra*



Cornelian cherry dogwood, *Cornus mas*



Photos by Mollie Freilicher

On the Horizon

- Apr 1 Deadline: DCR Arbor Day Poster Contest, [2016 Arbor Day Poster Contest Instructions](#)
- Apr 1 MCA Exam, Elm Bank, Wellesley, www.massarbor.org
- Apr 2 Mass Land Conservation Conference, Worcester, MA, <http://massland.org/conference>
- Apr 5 EPA Soak Up the Rain webinar
- Apr 6 Northeast Climate Science Center Webinar, "Patterns, Causes, and Consequences of Spring Onset Timing Variations and Trends in the U.S.," <https://necsc.umass.edu/webinars>
- April 7 Urban Forestry Today Webcast, They're Coming...Planning Ahead for the Urban Landscape Pests of 2016, www.joinwebinar.com, code: 130-441-275.
- April 12 EPA Green Infrastructure Webcast Series, www.epa.gov
- Apr 13 Urban Forest Connections Webinar, <http://www.fs.fed.us/research/urban-webinars/>
- Apr 16 ISA Exam, UMass Amherst, www.newenglandisa.org
- Apr 20 i-Tree Webcast: STREETS, <http://www.unri.org/itreeworkshops/>
- Apr 22-24 Northeast Natural History Conference, Springfield, MA
- Apr 26 MAA Safety Saves and Dinner Meeting, www.massarbor.org
- Apr 29 Arbor Day in Massachusetts!
- May 5 Urban Forestry Today Webcast, Tree Diversity and Exotic Threats: The 5% Solution, www.joinwebinar.com, code: 141-234-395.
- May 11 Urban Forest Connections webinar, <http://www.fs.fed.us/research/urban-webinars/>
- May 14 Tree Climbing Championship, New England Chapter – International Society of Arboriculture, Portland, ME, http://newenglandisa.org/tree_climbing_championship
- May 18 i-Tree webinar series, i-Tree Roundtable, <http://www.unri.org/itreeworkshops/>
- June 8 Urban Forest Connections Webinar, <http://www.fs.fed.us/research/urban-webinars/>
- June 15 SAVE THE DATE- Tree City/Line/Campus USA Awards Ceremony
- June 15 i-Tree webinar series, Using i-Tree VUE and STORM, <http://www.unri.org/itreeworkshops/>
- Oct 14-15 **SAVE THE DATE!** 2016 Tree Steward Training, Petersham, MA

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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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