



# THE CITIZEN FORESTER

Urban & Community Forestry Program

AUGUST 2019 | No. 228

## Global i-Tree Science and Users Symposium

By Mollie Freilicher

In June 2019, the first Global i-Tree Science and Users Symposium was held at the State University of New York,

College of Environmental Science and Forestry in Syracuse, NY. The symposium was sponsored by SUNY-ESF, the USDA Forest Service, and the Davey Tree Expert Company (which is the major private partner for i-Tree development). Dr. David Nowak, Senior Scientist and i-Tree team leader for USDA Forest Service, and Chuck Kroll, professor at SUNY-ESF, were our hosts for the symposium. About 80 attendees from 18 states and 13 countries converged on the campus for the three-day event, which included a day of intensive training on Eco or all i-Tree tools, oral and poster presentations, plenary sessions, facilitated discussion, and lots of opportunity to network with other i-Tree users.



Some of the countries represented at the symposium included Canada, Mexico, the United Kingdom, Ireland, the Netherlands, China, South Korea, and Japan. From the United States, attendees hailed from all corners of the country, though I only encountered one other New Englander. Presentations ranged from novel applications of i-Tree, i-Tree implementation internationally, i-Tree in education, and using i-Tree to manage urban forests. At least one presenter described using i-Tree as part of a USDA Forest Service Landscape Scale Restoration grant – a project highlighted in the July/August issue of *City Trees*, the magazine of the [Society of Municipal Arborists](#).

I was there to present a poster on how the DCR Urban and Community Forestry Program worked with volunteers in Northampton to conduct a sample tree inventory using i-Tree Streets to help advocate for a professional tree manager in the city.

Summary of the project from the [poster](#):

In spring 2014, community organizer Lilly Lombard, from Northampton, MA (pop. 28,600), contacted the Massachusetts Department of Conservation and Recreation (DCR) Urban and Community Forestry Program about how she and a small group of volunteers could help revitalize the city’s urban forestry program. Without a dedicated tree manager, a well-functioning municipal tree committee or official non-profit advocacy group, the city operated mostly on a reactionary basis.

With guidance from the DCR, the group decided to conduct a sample volunteer tree inventory using i-Tree Streets and the mobile data collection tool to make the case to officials that the city needed to invest in management of public shade trees. Additional goals included generating public support for trees in Northampton and getting a snapshot of the structure, function, and value of the city’s street trees.

The DCR provided technical expertise related to i-Tree, GIS, and volunteer tree inventories. Lombard organized volunteers, trainings, press releases, and other logistics. The inventory would be citizen-led and conducted by volunteers, with Lombard at the lead. This effort helped launch an urban and community forestry

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# Global i-Tree Science and Users Symposium

## Using a Sample i-Tree Inventory to Galvanize a Municipal Urban Forestry Program

Mollie Freilicher, Community Action Forester,  
Massachusetts Department of Conservation and Recreation



### Introduction

In spring 2014, community organizer, Lily Lombard, from Northampton, MA (pop. 28,600), contacted the Massachusetts Department of Conservation and Recreation (DCR) Urban and Community Forestry Program about how she and a small group of volunteers could help revitalize the city's urban forestry management program. The city was without a dedicated tree manager, without a well-functioning municipal tree committee or official non-profit advocacy group, and operated on a mostly reactionary basis.

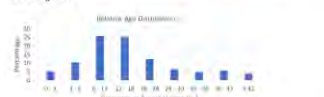
With guidance from the DCR, the group decided to conduct a sample volunteer tree inventory using i-Tree Streets and the mobile data collection tool to help make the case to officials that the city needed to invest in management of public shade trees. Other goals of the inventory included generating public support for trees in Northampton and getting a snapshot of the structure, function, and value of the city's street trees. The DCR provided technical expertise related to i-Tree, GIS, and volunteer tree inventories. The inventory would be citizen-led and conducted by volunteers, with Lombard at the lead.

### Inventory Details

- September 2014
- 50 volunteers
- 4 Team captains & single-day volunteers
- Northampton residents, UMass faculty and students, city DPW
- 8 miles of road inventoried (5% sample)
- Fields collected: Zone, Land Use, DBH, Species, Sidewalk, Conflict, Condition, Location (Lat/Long & Address)
- Inventory time: approx. 4-5 hours
- Estimate 6,648 - 8,848 trees



Slides from a presentation Lily Lombard made to the City Council after the inventory. Left: before and after images of streets. Right: recommendations for the city.



Estimated size distribution for public shade trees in Northampton from the sample tree inventory, showing a need to increase tree planting.

### Since the Inventory

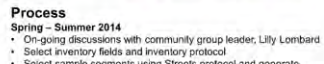
- City appointed professional tree warden (New England term for city tree manager) and re-established official seven-member Tree Commission.
- City applied for and received DCR grant for professional tree inventory (using estimates from the sample inventory to guide the Request for Proposals)
- Official non-profit, Tree Northampton, established with a focus on planting trees
- City applied for and received DCR grant for strategic tree planting
- A large group of dedicated tree volunteers has solidified. They plant, maintain, and advocate for trees in the city.
- Tree Warden named 2019 Tree Warden of the Year by the Massachusetts Tree Wardens' and Foresters' Association
- City has implemented more pro-active management system



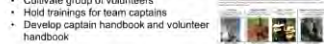
Random sample street segments, stratified by city ward, for the tree inventory.



Sample street segments in Ward 3 of the city. Maps like this were distributed to inventory teams for use in the field.



L-R: Team captains at an i-Tree training led by the DCR. Volunteers assembled the morning of the inventory. Volunteers measuring a tree on inventory day.



Page from inventory guide created for volunteers

- ### Process
- #### Spring - Summer 2014
- On-going discussions with community group leader, Lily Lombard
  - Select inventory fields and inventory protocol
  - Select sample segments using Streets protocol and generate maps. Samples stratified by city ward.
  - Cultivate group of volunteers
  - Hold trainings for team captains
  - Develop captain handbook and volunteer handbook

- #### Fall 2014
- Press release about the inventory
  - Hold volunteer tree inventory
  - Present inventory results to city
  - Generate report of results

- #### Summer 2015
- Based on success of sample inventory, team captains conducted a complete inventory of the central business district

Click on poster to see a high-resolution PDF on slideshare.net.

(Continued from page 1)

program in Northampton that has become a model for other communities. This poster was the only one to showcase the use of i-Tree as a tool for citizen advocacy and was of interest to other attendees. Many presenters, both oral and poster presenters, highlighted the process they undertook to implement i-Tree Eco projects in their countries and communities and how they are using information generated by Eco. One exciting project, presented by Christopher Nytech, of Fundación Amigos de El Yunque, used i-Tree Eco methodology to engage citizen scientists in monitoring forest plots in El Yunque National Forest in Puerto Rico. Another project, presented

by Héctor M. Benavides Meza, of [INIFAP](#), showed an interactive map developed as part of an i-Tree Eco project in Chapultepec Forest (Bosque de Chapultepec) in Mexico City. Josh Behounek, of Davey Tree Expert Company, shared how i-Tree can be integrated into Urban Forest Master Plans and how different tools can be implemented in communities at different points along the continuum of urban forest management.

On the last day, David Nowak presented on the future of i-Tree, including some exciting developments on the way. Dr. Nowak started by looking at the past, going back to the late 80s and early 90s, to early assessments in Oakland, Chicago, Washington, D.C., and Boston. The Urban Forest Effects Model, a precursor to Eco, was first developed in 1996, with a street tree assessment tool, STRATUM, coming along in the early 2000s, culminating in the release of what we now know as i-Tree in 2006. Some of the updates in process for Eco include change analysis, updated carbon equation, updated values and input data, integration with the Forest Inventory and Analysis program, and new national capabilities for U.S. users. For Landscape, the i-Tree Development Team is working on the ability to select smaller areas for analysis. Some new layers are also on the way:

### For structure:

- Links to local FIA or i-Tree data
- Wildlife ranges

### For ecosystem services

- Tree effects on air temperature
- Health effects related to temperature
- Tree effects on water quality

### For risks to forests and people

- Forest fragmentation
- Potential hurricane threat
- Threatened and endangered species
- Threats to water quality

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# Global i-Tree Science and Users Symposium

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- Sea level rise
- Future hardiness zones

For i-Tree Canopy, the team is working on a new user interface and upgrading the reports so that the application has the same look and feel as Landscape. The team is also working on incorporating the ability to make the use of boundaries that are currently available in Landscape, such as census blocks and counties. Dr. Nowak also mentioned some new tools that are being released as part of a suite of tools for advanced users and [researchers](#):

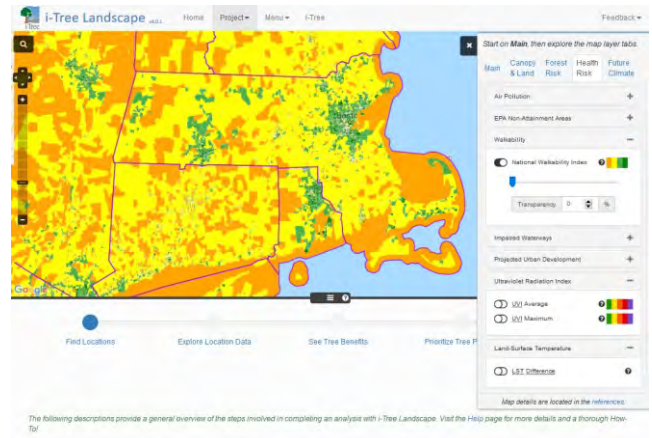
Three in partnership with SUNY-ESF

- i-Tree Cool River
- i-Tree Cool Air
- i-Tree Energy (new building energy calculations)

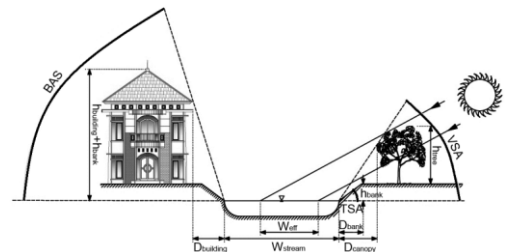
i-Tree Species will also get some upgrades, including integrating lifespan into calculations, while i-Tree Planting will get some back-end improvements. i-Tree MyTree will see some additional pest information added, as well as the ability to look at multi-year benefits. Nowak also highlighted the online wood marketplace that should be opening sometime this year.

Following this session, we all broke into smaller groups around topics such as “Stakeholder needs and ideas related to specific tools” or “Stakeholder needs and ideas for improving urban forest management,” which was the group I joined. Each group worked with a facilitator from Davey to come up with ideas to help the i-Tree development team. My group had a wide-ranging discussion about how i-Tree can better serve urban foresters and about some of the current barriers to urban foresters integrating i-Tree into management.

After three days steeped in i-Tree, it was time to head back to Massachusetts and fully absorb everything I learned. Are you interested in finding out more about i-Tree? Go to [www.itreetools.org](http://www.itreetools.org).



Screenshot from i-Tree Landscape showing walkability data layer.



A figure from the research behind i-Tree Cool River.

## Partners in Community Forestry Conference

November 20-21, 2019 | Cleveland

The Partners in Community Forestry conference is the largest international gathering of urban forestry practitioners, advocates, researchers, and government leaders. Everyone comes together to share their best practices and find new ideas to bring home. What is Partners all about? Check out this video: <https://youtu.be/J6w06gqm01l>.

Find out more at the [Arbor Day Foundation](http://Arbor Day Foundation).



## Species Spotlight—Chinquapin oak, *Quercus muehlenbergii*

By Mollie Freilicher While thumbing through our new copy of Dirr and Warren's *The Tree Book*, I was surprised to see an entry for chinquapin oak (*Quercus muehlenbergii*), along with some beautiful photos. (More on this brand new book in a future issue, but for now, we are loving [this new resource](#).) This is not a tree I have thought of as a landscape tree, perhaps because it is not readily available in the nursery, or because I have not been paying attention.



[Northern Forest Atlas](#)

Chinquapin oak, (also chinkapin), commonly known as yellow oak, is in the white oak group. It is native to Massachusetts and occurs in southern Berkshire County in areas of [Yellow Oak Dry Calcareous Forest](#) in an area known as the Marble Valley. This area has a calcium-rich bedrock with a pH of 6.5 or greater, creating a unique forest community. With limited distribution and limited populations, chinquapin oak is protected in Massachusetts and is listed as [threatened](#). It is also not commonly in the nursery trade, but Dirr and Warren write that it is worth the effort to find.

In terms of wider native distribution, chinquapin oak is found from southern Ontario, east to western Vermont and Massachusetts, south to northwest Florida, and west to Texas and Mexico. In landscape settings, chinquapin oak reaches heights of 40 to 50 feet, with a similar spread, eventually forming a rounded crown. It is



[CalPoly Urban Forest Ecosystems Institute](#)

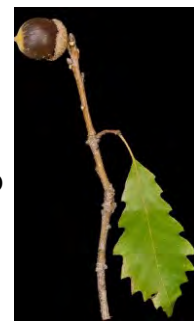
hardy in zones (4)5–7(8) and has a medium growth rate.

Leaves of chinquapin oak are shiny green and turn yellow to orange-brown in the fall. They have eight to thirteen parallel veins that end in a tooth or shallow lobe.

The bark is an ashy gray and is rough and flaky. The fruit is an acorn,  $\frac{3}{4}$  to one-inch long, with a thin cap enclosing about half the nut. The acorns occur singly or in pairs, and, like other oaks in the white oak group, mature in one season. They are edible and sweet and were an important food source for Native Americans.

They are also an important food source for wildlife, including small and large mammals, from rodents to black bears, as well as several birds, including red-bellied woodpeckers, northern bobwhite, and blue jays.

Curious as to what G.B. Emerson wrote about this tree in his 1846 *Report on the Trees and Shrubs Growing Naturally in the Forests Massachusetts*, I was surprised that I couldn't find it. Emerson writes of a few oaks, including one that seems close (chestnut oak, *Q. castanea*), but nothing that matches exactly what we now know as chinquapin oak (*Q. muehlenbergii*). Changed Latin and common names add to the confusion. Under the *Q. castanea* entry, Emerson describes a tree with wood that "is a very yellow color," harkening to the current common name 'yellow oak.' He describes some differing opinions on *Q. castanea* from the Mssrs. Michaux, the father and son French botanists of the 18<sup>th</sup> and early-to-mid-19<sup>th</sup> century. They disagreed with each other as to whether *Q. castanea* was simply a subspecies of *Q. prinus* or whether it was its own species. Emerson does not have an entry for *Q. prinus* (what is now chestnut oak, *Q.*



[Northern Forest Atlas](#)



[Virginia Tech Dendrology](#)

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## Species Spotlight—Chinquapin oak, *Quercus muehlenbergii*



[CalPoly Urban Forest Ecosystems Institute](#)

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*montana*), nor for the other Latin synonym associated with chinquapin oak, *Q. acuminata*. Emerson describes some other oaks, though nothing that sounds exactly right. Its identity in Massachusetts in the mid-1840s seems to be unclear.

In the 1908 volume, *North American Trees*, by Nathaniel Lord Britton and John Adolph Shafer, the tree, *Q. muehlenbergii* is described as ‘yellow oak’ and is, indeed, our tree of interest. Along with an extensive description of the tree, Britton and Shafer write that “This tree should be seen more frequently in parks and on lawns, to which its handsome form and foliage would add additional beauty.” It has also caught the attention of modern arborists, and in 2009 the Society of Municipal Arborists named it the Urban Tree of the Year.

Chinquapin is thought to be a corruption of a word from an Algonquin language. It first shows up in print in 1612 in William Strachey’s *The historie of travell into Virginia Britania*, where he mentions “Acrons, Wallnuts, Chesnutts, Chechinquamyns and Fish.” Is this describing the same tree? Maybe? Who knows? The specific epithet, *muehlenbergii*, is named after Gotthilf Heinrich Ernst Muhlenberg, a

Pennsylvania minister who became a dedicated botanist in retirement.

In the landscape, chinquapin oak is particularly suited to high pH soils, which are common in urban areas. Dirr and Warren write that it has “potential” as a street tree, but they recommend its use as a specimen or for large areas, describing it as “meritorious.” Sources have also described it as tolerant of drought, with moderate tolerance for airborne salt, though poor tolerance for salt in the soil and poor tolerance of wet soils.



[CalPoly Urban Forest Ecosystems Institute](#)

### References

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- Dirr, Michael A. 1998. *Manual of Woody Landscape Plants*. 5<sup>th</sup> Ed. Champaign, IL: Stipes.
- Dirr, Michael A. and Keith S. Warren. 2019. *The Tree Book: Superior Selections for Landscapes, Streetscapes, and Gardens*. Portland, OR: Timber Press.
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- Division of Fisheries & Wildlife, Natural Heritage & Endangered Species Program. 2015. Yellow Oak, *Quercus muehlenbergii*. <https://www.mass.gov/files/documents/2016/08/wi/quercus-muehlenbergii.pdf>.
- Oxford English Dictionary Online. Chincapin.
- USDA Forest Service. [Fire Effects Information System. \*Quercus muehlenbergii\*](#).

# Growing on Trees—Grants

Grant Info Session  
August 21 | Worcester  
See below for details.

## Urban and Community Forestry Challenge Grants

**Deadline for Intent to Apply: October 1 | Full Application Deadline: November 1**

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.

Project areas include:

- Building and Strengthening Citizen Advocacy and Action Organizations
- Securing or Training Professional Staff
- Completing strategic community tree plantings and "heritage" tree care projects
- Developing and Implementing Systematic Urban Forestry Management through tree inventory and analysis, resource assessment, and development of plans
- Establishing a wood bank – NEW!
- Other projects

Read the complete guidelines and download the application at:

<https://www.mass.gov/guides/urban-and-community-forestry-challenge-grants>

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@mass.gov](mailto:julie.coop@mass.gov) or Mollie Freilicher at 413-577-2966 or [mollie.freilicher@mass.gov](mailto:mollie.freilicher@mass.gov). Come to our grant info session, Wednesday, August 21, 10:00a.m.-12:00p.m. Quinsigamond State Park, 10 N. Lake Ave, Worcester.

## FY 2019 Brownfields Training, Research, and Technical Assistance Grant

This grant solicits proposals from eligible entities to conduct research and provide technical assistance to new, existing, and/or prospective EPA Environmental Workforce Development and Job Training (EWDJT) grantees. In addition to providing ongoing technical assistance throughout the project period, the successful applicant will be responsible for developing an annual meeting to facilitate peer-to-peer networking and provide training to the EWDJT grantees. For more information:

<https://www.epa.gov/brownfields/brownfields-technical-assistance-training-and-research>

## Growing Greener—in Worcester

By **Derek Lirange** The Worcester Tree Initiative recently began its ninth watering season with our Young Adult Forestry (YAF) Program. We will water at least 400 trees each week – in city planting strips, in parks, and other public planting locations. Additionally, we will care for the Franklin Street Traffic Island, the WWI Memorial Grove Trees in Green Hill Park, the cherry trees on the West Boylston Street Planting Strip, and trees in Dodge Park. Each year we partner with the City of Worcester Forestry Department, The Worcester Youth Center, the Massport Foundation, and our summer volunteers to water and care for as many city of Worcester public trees as possible.



Read the full story at [towerhillbg.org](http://towerhillbg.org).

# Growing on Trees—Webcasts and Events

## USDA Forest Service Urban Forest Connections

August 14, 2019 | 1:00 – 2:15 p.m. (Eastern)

Quantifying Rainfall Interception in the Urban Canopy—Jon Hathaway, University of Tennessee

To view the webinar and watch past archived webinars, go to <https://www.fs.fed.us/research/urban-webinars/>.

## TREE Fund Webinar

August 29, 2019 | 1:00 p.m. (Eastern)

Can We Vaccinate Trees to Protect Against Diseases? - Dr. Glynn Perceval, Bartlett Tree Experts Research Laboratory, UK

September 10, 2019 | 2:00 – 3:00 p.m. (Eastern)

The Landscape Architect in the Nursey: Selecting Trees and Enforcing Specifications

James Urban, Urban Trees + Soils, and Paul Josey, Wolf Josey Landscape Architects

Go to: <https://treefund.org/webinars>

## New England ISA Annual Conference & Trade Show

October 6-8, 2019 | Springfield, MA

Come hear the latest on a variety of arboriculture and urban forestry topics. Gary Johnson will be this year's keynote speaker.

Pre-conference workshops feature i-Tree, a tree tour, and climbing with Mark Chisholm. Network, earn CEUs, and pesticide credits. Find out more at [newenglandisa.org](http://newenglandisa.org).

## Reconnecting with Trees: A Path to Improved Health and Well Being

September 23, 2019 | 8:30 a.m. - 3:30 p.m.

Coastal Maine Botanical Gardens Boothbay, ME  
[Read more and register](#)

From the [Ecological Landscape Alliance](#)

## New Online Class: Utility Arboriculture

September 3, 2019—December 11, 2019

UMass-Amherst lecturer in Arboriculture and Urban Forestry Kristina Bezanson has created a new online class on Utility Arboriculture. The class follows the book *Utility Arboriculture: The Utility Specialist Certification Study Guide*, recently published by the International Society of Arboriculture. The utility industry is short on arborists, and this course will help prepare participants for work in the field. The course covers principles and practices of utility arboriculture, including Utility Pruning, Integrated Vegetation Management, Safety, Project Management, Regulations, Communications, Electrical Knowledge, and Storm and Disaster Management. Find out more at [UMass-Amherst](http://UMass-Amherst).

## EPA Green Infrastructure Webinar Series

August 7, 2019 | 1:00 - 2:30 p.m. (Eastern)

Going Wild: The Conservation Co-benefits of Green Infrastructure

Register at <https://attendee.gotowebinar.com/register/8092356502322505217>

Find out more [here](#).

## Upcoming Courses & Programs

Check out upcoming arboricultural and botanical offerings from local organizations:

Native Plant Trust

[www.nativeplanttrust.org/education/classes](http://www.nativeplanttrust.org/education/classes)

Arnold Arboretum

[www.arboretum.harvard.edu/education/adult-education](http://www.arboretum.harvard.edu/education/adult-education)

Polly Hill Arboretum

[www.pollyhillarboretum.org/education/calendar](http://www.pollyhillarboretum.org/education/calendar)

Tower Hill Botanic Garden

[www.towerhillbg.org/garden-nature/](http://www.towerhillbg.org/garden-nature/)

THE CITIZEN FORESTER

# Growing on Trees

## From Massachusetts Tree Wardens' and Foresters' Association Mass Qualified Tree Warden Course

September – November 2019

Register now to become a qualified tree warden.

[Registration is now open](#) for the second Massachusetts Qualified Tree Warden training course, to begin in September 2019 and wrap up in November. The six-module course, held every other year, is designed to educate tree wardens about what they need to know to fulfill their duties. Those who successfully complete the course receive the *Massachusetts Qualified Tree Warden (MQTW)* designation and certificate of achievement. Here is a [list of frequently asked questions](#). Please [email us](#) for further information. Click here for a [session-by-session course outline](#).

If you prefer to register by paper: brochures will be mailed soon, or you can download and print the registration brochure below. Download the [program brochure](#) or go to the [www.masstreewardens.org](http://www.masstreewardens.org) for more information.



### DCR Tree Steward Training

October 25, 2019, 9:00 a.m. – 4:30 p.m. and October 26, 2019, 8:00 a.m. – 3:00 p.m.

Harvard Forest, Petersham

This annual training is designed for community tree board members, tree wardens and other municipal staff, tree activists, planners, interested citizens, and green professionals interested in the topics and issues of urban and community trees and forests. Local and state experts will provide foundation training with the aim of developing better tree stewardship in communities of all sizes in Massachusetts. ISA and MCA credits will be available.

Additional details and registration will be coming soon.

### In Celebration of Trees with Dr. Michael Dirr—a Campus Walkabout and Book Signing

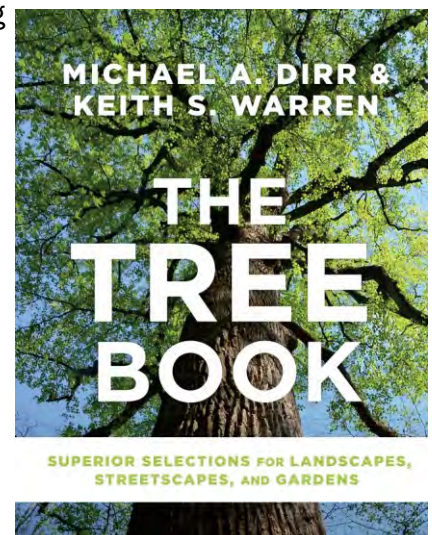
September 7, 2019, 9:00 a.m.—4:00 p.m. | UMass Amherst

2 ½-hour walkabout guided by Professor Dirr, followed by a book signing of his new *The Tree Book*.

For most people who work with trees, Dr. Michael A. Dirr needs no introduction. He is the author of numerous books on woody plants that have become staples on our desks. He also has some New England roots, as he earned his PhD from UMass. The green industry has tremendously benefited from his keen interest in evaluating trees and his enthusiasm about sharing it with us.

*The Tree Book* (2019), authored by two of the biggest names in horticulture—Michael A. Dirr and Keith S. Warren, is the go-to reference to more than 2,400 species and cultivars. Featured trees include those widely available in the nursery trade, some new and promising choices, and a selection of overlooked options that deserve renewed interest.

Find out more and register: <http://ag.umass.edu/landscape/events/in-celebration-of-trees-with-dr-michael-dirr>





# Growing on Trees

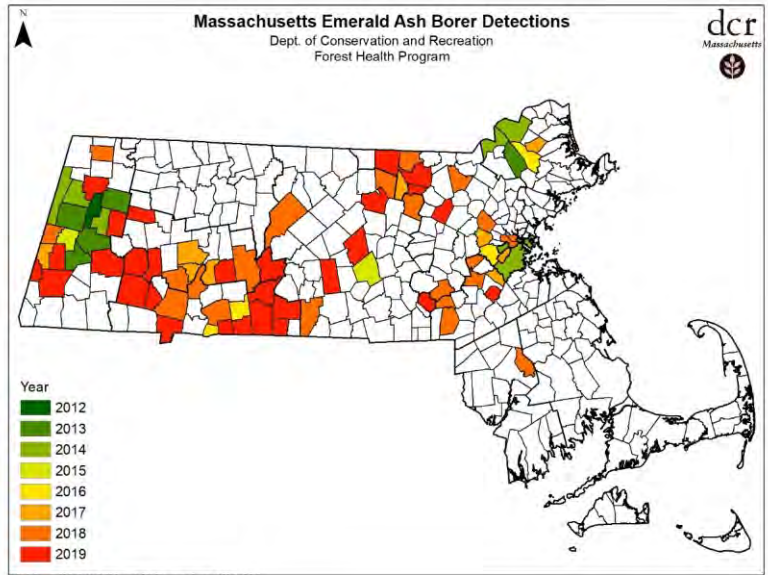
## Emerald Ash Borer Update

As of July 31, emerald ash borer (EAB) has been detected in 82 communities in Massachusetts, most recently in Reading, Lynnfield, Belmont, and Lowell.

Emerald ash borer attacks ash trees (*Fraxinus* spp.) as well as fringetree (*Chionanthus virginicus*). It does not attack mountain ash (*Sorbus* spp.), which is in a different family.

Learn how to identify signs and symptoms of EAB [here](#). Think you've seen EAB? Report it at [massnrc.org](http://massnrc.org).

Interested in the latest from MassNRC? Follow MassNRC on Twitter [@MassPests](https://twitter.com/MassPests)



EAB detection map as of June 13, 2019. (This map does not include the most recent detections Reading, Lynnfield, Belmont, and Lowell. We'll have an updated map next month.)

## USDA Declares August Tree Check Month Take Time to Look for the Invasive Asian Longhorned Beetle

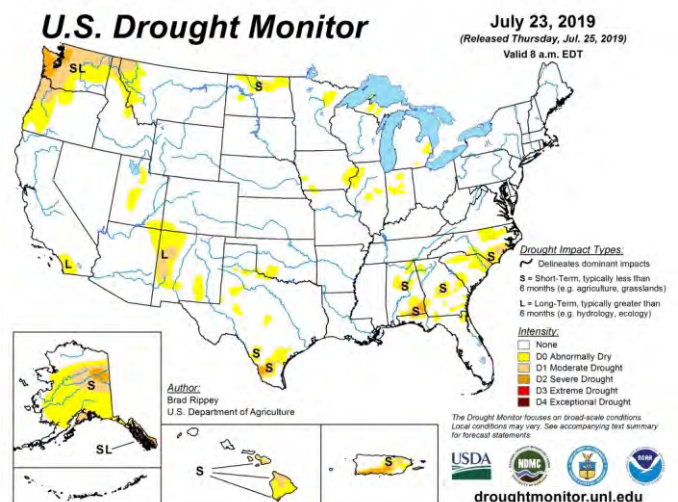
August is the height of summer, and it is also the best time to spot the Asian longhorned beetle (ALB) as it starts to emerge from trees. The U.S. Department of Agriculture (USDA) is asking the public to take five minutes to step outside and report any signs of this invasive pest. Checking trees for the beetle will help residents protect their own trees and better direct USDA's efforts to eradicate this beetle from the United States. Read the full press release [here](#).



## Drought Monitor

As of July 30, 2019, no parts of Massachusetts or the Northeast were classified in a drought status or as abnormally dry, though the state did dip into abnormally dry territory during July until the heavy rains the week of July 15. Across the U.S., abnormally dry and drought conditions have remained similar to last month.

For complete details, go to the U.S. Drought Monitor: <https://droughtmonitor.unl.edu/>



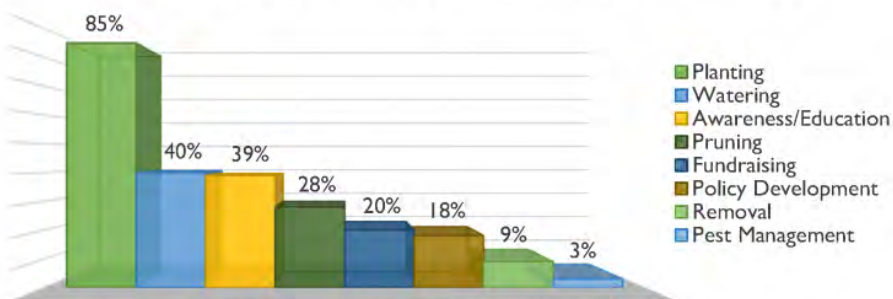
# Gleanings

## From The TREE Fund—Crowning Achievements: Tree Care Volunteers

By Teresa Recchia

What does your community ask you to do for the trees you live with? How does this information affect decision-making by municipalities when it comes to sustainable urban forestry programs? Dr. Richard Hauer, University of Wisconsin – Stevens Point, answers these questions in his latest TREE Fund supported research on volunteers and their involvement in municipal tree care activities as part of his Hyland R. Johns grant, “Sustainable Urban Forestry Planning Models and Decision-Making Dashboard.”

Tree Care Activities Conducted by Volunteers



Overall, volunteers completed nearly 5% of tree care activities in the municipalities surveyed for this study. While this is by no means a replacement for municipal staff or contracted services, volunteer assistance cannot be discounted when challenging fiscal decisions are being made. Many strong municipal forestry programs across the United States involve volunteers, and developing community outreach and training programs are a proven way to increase the involvement of community members in tree care. While tree planting is the most common activity, it is important to point out that volunteers also have impact on tree awareness and education, fundraising and policy development – as well as on helping trees reach maturity through watering and pruning. Volunteers are a resource whose value can be maximized if they are properly integrated into project planning.

As more functionalities are added, its value as a tool for municipalities will continue to grow. Access more vital learnings from Dr. Hauer’s research on volunteers, among many other topics, by clicking [here](#) or read the original [post](#).

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## The Tree That is Live-Tweeting Climate Change

By Jessica Leigh Hester

If you’ve been sweaty and miserable, resenting summer and aching for a cool breeze, you’re not alone. A northern red oak in the Harvard Forest in Petersham, MA, has been hot, too. The tree hasn’t been complaining about it the way humans do; *Quercus rubra* doesn’t whine or get wrung out and cranky. But oaks—and the beech, birch, hemlock, white pine, and maple trees growing nearby—are going through “the same environmental things that we experience,” says Clarisse Hart, the director of outreach and education at the Harvard Forest, a 4,000-acre outdoor research laboratory owned and managed by the university. Read the full story at [AtlasObscura](#) (And check out [Witness Tree](#) too.)

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## News

### Some Green Ash Trees Show Some Resistance to Emerald Ash Borers

by Jeff Mulhollem

Genes in green ash trees that may confer some resistance to attacks by the emerald ash borer express themselves only once the tree detects the invasive beetle’s feeding, according to Penn State researchers. Read the full story at [phys.org](#).

# News

## Concord Receives \$250K Grant for Climate Change Planning (including tree planting)

By Rob Fucci

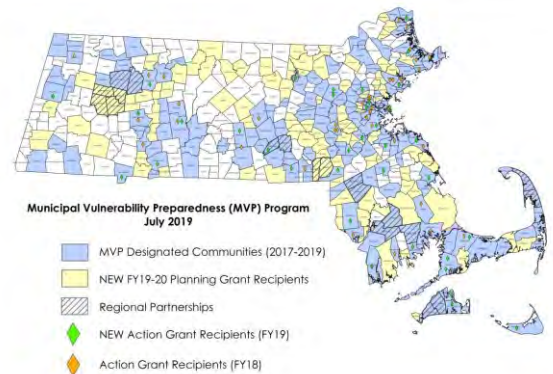
The Town of Concord, among 34 other communities in the commonwealth, recently received part of \$10.3 million in grants to implement projects combating climate change.

Concord was awarded \$250,095 from the Commonwealth of Massachusetts through the Municipal Vulnerability Preparedness (MVP) Program.

According to a press release, the Executive Office of Energy and Environmental Affairs' MVP grant and designation program provides communities with technical support, climate change data and planning tools to identify hazards and develop strategies to improve resilience. [...]

\$150,000 was awarded for a Reforestation and Tree Resilience project, which will include planting 100 trees and evaluating the feasibility of establishing a tree nursery at Concord's Wastewater Treatment Plant. [This amount is in addition to \$100,095 awarded to develop a plan.]

"Concord's tree canopy and urban forest is an important aspect of the town's culture and a valuable asset in protecting Concord from the urban heat island effect," Richard Reine, Concord director of Public Works and Engineering, said in the release. "We are grateful to the Commonwealth for the opportunity to accelerate and expand our tree planting program. Increasing temperatures and rainfall patterns, as well as changing pest infestations, can put our trees at risk. The MVP grant will provide valuable resources for Concord to plan for improving the resilience of our urban forest." Read the full story at [WickedLocal](#). Find out more about the [MVP program](#).




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## News Headlines in Brief

[Trees of New Bedford – The Copper Beech Tree of Amelia Hickling Jones](#)

[One Thing You Can Do: Know Your Tree Facts](#)

[We Can't Just Plant Billions of Trees to Stop Climate Change](#)

[California's Drought Killed Almost 150 Million Trees](#)

[New Species of Tree Discovered in Tanzania Mountains](#)

[People Are Stapling Bread to Trees and Sharing the Photos on Reddit](#) (don't try this at home)

[Nonnative Pear Trees Are Showing Up in US Forests](#)

[Turning Trees into Money in The Pioneer Valley](#) (MA)

[A Reminder Why You Shouldn't Stand Under a Tree in a Thunderstorm](#) (along with a detailed lesson about lightning)

[These Maine-Made Bats Are Being Used at the MLB All-Star Game](#)

[How Cities Could Use Social Media to Help Create Mood-Boosting Public Spaces](#)

[Study Finds Small Mammals Aid Expansion of Warm-Climate Trees](#)

[Book Traces the History of Urbanism Through an Archaeological Lens](#)

[Trees Surviving in Cities](#)

[Asian Longhorned Beetle Confirmed in Alberta, Canada](#)

[Keep An Eye Out for Asian Longhorned Beetle](#)



# On the Horizon

- Aug 10-14** ISA Annual International Conference, Knoxville, TN, [www.isa-arbor.com](http://www.isa-arbor.com)
- Aug 21** DCR UCF Grant Info Session, 10:00 a.m.-noon., Conference room at Quinsigamond State Park, 10 N. Lake Ave., Worcester, RSVP to Mollie Freilicher [mollie.freilicher@mass.gov](mailto:mollie.freilicher@mass.gov), 413-577-2966.
- Aug 27-28** [CTSP workshop](#), TCIA, Littleton
- Aug 29** TREE Fund Webinar, 1:00 p.m. (Eastern), [www.treefund.org](http://www.treefund.org)
- Sept 3** Online Class: [Utility Arboriculture](#), UMass-Amherst
- Sept 5** [Invasive - Ailanthus altissima - Targeting the Tree of Heaven](#), Concord, NH
- Sept 7** Celebration of Trees with Michael Dirr, UMass-Extension, Amherst [www.umassgreeninfo.org](http://www.umassgreeninfo.org)
- Sept 11** Mass. Qualified Tree Warden Course, Sturbridge, [www.masstreewardens.org](http://www.masstreewardens.org)
- Sept 13** Spotted Lanternfly Workshop, New England ISA, Wellesley, [www.newenglandisa.org](http://www.newenglandisa.org)
- Sept 14** Town Forest Conference, Sherborn, DCR Service Forestry, [www.masswoodlands.org/events/](http://www.masswoodlands.org/events/)
- Sept 14** Landscape and Forest Tree and Shrub Disease Workshop, UMass-Extension, Amherst, [www.umassgreeninfo.org](http://www.umassgreeninfo.org)
- Sept 18** Saluting Branches, Sites around New England, [www.salutingbranches.org](http://www.salutingbranches.org)
- Oct 2** Massachusetts Certified Arborist Exam, Wellesley, [www.massarbor.org](http://www.massarbor.org)
- Oct 6** ISA Certification Exam, Springfield, [www.newenglandisa.org](http://www.newenglandisa.org)
- Oct 6-8** [New England Chapter-ISA Annual Conference](#), Springfield, MA,
- Oct 17** [Invasive Insect Certification Program](#)—Pt. 1, UMass-Extension, Sturbridge,
- Oct 25-26** DCR Tree Steward Training, Harvard Forest, Petersham, registration coming soon.
- Oct 31** [Invasive Insect Certification Program](#)—Pt. 2 UMass-Extension, Sturbridge,
- Nov 14** [Invasive Insect Certification Program](#)—Pt. 3 UMass-Extension, Sturbridge,
- Nov 18-19** Society of Municipal Arborists Annual Conference, Cleveland, OH, [www.urban-forestry.com](http://www.urban-forestry.com)
- Nov 20-21** Partners in Community Forestry Conference, Cleveland, OH, [www.arborday.org/pcf](http://www.arborday.org/pcf)
- Dec 8-11** [American Society of Consulting Arborists](#) Annual Conference, New Orleans
- Dec 12** ISA Certification Exam, Wellesley, [www.newenglandisa.org](http://www.newenglandisa.org)

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## Bureau of Forestry

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**Kathleen A. Theoharides**, Secretary, Executive Office of Energy and Environmental Affairs

**Leo Roy**, Commissioner, Department of Conservation and Recreation

**Peter Church**, Director of Forest Stewardship, Department of Conservation and Recreation

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.), contact [Mollie Freilicher](mailto:mollie.freilicher@mass.gov) or click [here](#).

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