

## Income, Equity, and the Urban Forest: Strengthening Student Understanding in Springfield, MA

By **Rick Harper and David Bloniarz**

Since 2012, the University of Massachusetts (UMass) has been working with the USDA

Forest Service (USFS), the City of Springfield, and ReGreen Springfield (a local non-governmental organization) to promote awareness and access to urban forests and community green spaces in Springfield, MA. Part of this collaboration has resulted in support for two successful summer scholar-intern candidates – one in 2015 and another in 2016 – as part of the ‘Connecting Students with Stakeholders’ program, administered by the UMass Urban Forestry Extension Program.

These individuals were highly motivated and passionate about working with and leading other volunteers and interns to improve the City of Springfield through

environmental stewardship.

They played a vital role in extending and augmenting urban forestry efforts through citizen-science initiatives, partnering with volunteers from environmental justice (EJ) communities to perform urban tree data collection, and restoring parks and green spaces in their own neighborhoods. This included working with the Abbey Brook Watershed Monitoring Program. They also performed outreach to abutting neighbors, including working directly with school-aged students to develop

a field-based classroom lesson plan relative to the exploration of urban forests, their affiliated benefits (e.g., runoff, CO<sub>2</sub> sequestration), and the importance of urban green spaces.

This experience led these two interns to consider the broader picture and look at what the research says about the dynamics of urban tree canopy cover and urban centers in other parts of the nation.

### Urban centers and environmental equity

Cities are generally dynamic, vigorous landscapes and though often vibrant, their patchy, uneven character can sometimes lead to the inequitable distribution of environmental benefits and burdens. Findings from numerous research initiatives suggest that while there are a number of variables that are related to, and contribute to, the distribution of Urban Tree Canopy (UTC) cover, there is a strong, consistently positive correlation between UTC cover and median household income (Grove et al. 2014, Schwarz et al. 2015, Locke and Grove 2016). This may be unsettling

to a number of stakeholders, including the EJ community, that has long been concerned with patterns of low-income, and minority communities disproportionately burdened by environmental hazards. In recent times, the scope of environmental equity has broadened from more of a singular focus on burdens to include the distribution of environmental amenities, like vegetation cover and access to parks and open spaces. It is generally reported and accepted that there is an uneven distribution of these environmental goods, disproportionate to



Student-led, urban forest data collection initiatives involve Springfield community residents.

### Up Ahead:

Students in Springfield	1-3
Species Spotlight	4
MQTW	5-6
Town Forest Event	7
Tree Steward Training	8-9
Webcasts	10
Growing on Trees	11-12
News	13
On the Horizon	14

(Continued on page 2)

# Income, Equity, and the Urban Forest

(Continued from page 1)

members of racial and ethnic minority communities and low-income neighborhoods (Bullard 2000, Adamson et al. 2002). The National Center for Ecological Analysis and Synthesis funded a study examining the potential inequities associated with the distribution of UTC cover in relationship to race/ethnicity and income, in seven cities across the U.S. – Baltimore, MD, Los Angeles, CA, New York, NY, Philadelphia, PA, Raleigh, NC, Sacramento, CA, and Washington, D.C. Both climate and tree canopy cover varied considerably from 55% in Raleigh to 13% in Philadelphia (Schwarz et al. 2015).

## Urban tree canopy cover and income

Though the initial expectation may be that all of the seven cities would clearly demonstrate that neighborhoods with lower-income, less education, and high percentages of people of color would have low UTC cover, this was not found to be consistent across cities that vary in climate and size, in addition to racial and ethnic composition. Consistent across all cities,



Stakeholders and residents visit Springfield urban orchards.

however, was a positive relationship between UTC cover and median household income. In fact, it was determined that an increase of median household income by an estimated \$1,000 could encourage a range of 0.05–0.20 point (%) increase in UTC cover.

A distinguishing characteristic of the cities located in California was determined to be their arid climate. Trees planted in more arid climates receive substantially less natural rainfall and often require supplemental irrigation in order to survive. In temperate regions of the United States, trees can grow without additional watering on unmanaged, fallow, or abandoned lands. Given the high water resource requirements in arid cities, the dominant role of income and resources in driving UTC cover may create a greater potential for environmental injustice in cities receiving little precipitation. Natural growth and

regeneration of trees in cities with greater precipitation could obscure the effects of different levels of resources allocated

towards growing and maintaining UTC cover. In these areas, an increase in UTC cover may be as a result of “disinvestment” – a condition where an area is permitted to return to its natural (potentially forested) state, as much as a result of intentional UTC cover increase through planned urban tree planting programs. Hence, treeless areas in arid climates may represent less investment in UTC cover and urban forest management, while in temperate areas, treeless areas may simply not be a reliable or accurate indicator of low investment.

The relationship between UTC cover and income may be the result of a type of cycle where high amounts of UTC cover increase property values and further attract households with high incomes. This positive feedback loop may support the continued maintenance of UTC cover in neighborhoods with high-income households and high levels of homeownership. Similarly, areas with low UTC cover have low property values, and residents may have less access to resources or incentives to increase property values because they are renters or are on fixed incomes. For instance, it is possible that residents in low-income neighborhoods might reasonably resist increases in UTC cover to avoid gentrification and rising rents. The cost of tree maintenance, such as leaf clean-up, watering, and pruning, is another disincentive that can be particularly acute in low-income neighborhoods.

## Urban tree planting and environmental justice

Increasing UTC cover has become a widespread goal, often incorporated into municipal sustainability plans. It has been proposed as a way to mitigate impacts from human-dominated systems on the immediate (e.g. shade and cooling) and global (e.g. carbon capture) environment. If the equity dimensions of sustainability are put into practice, UTC goals *can* help to rectify environmental injustices. However, it is important to



Summer interns oversee outreach and educational opportunities.

# Income, Equity, and the Urban Forest

(Continued from page 2)

note that tree planting initiatives are not a panacea for environmental justice, as trees can generate disservices, and in some cases costs may exceed local benefits or local desire and capacity to care for trees and other green infrastructure. Benefits from tree canopy cover might therefore be better assessed in using spatially-based strategies, since in some circumstances tree cover will provide strong positive services, while in others tree cover may provide negligible benefits or disservices associated with plant maintenance or clean-up.

The association between income and tree canopy cover has important implications for urban sustainability plans, many of which include increased UTC cover as a goal. If UTC cover and income are positively reinforced through property values, investments, or other mechanisms, any public or private interventions to increase tree canopies might first consider the needs of low income communities, provided that the economic and ecological benefits do not outweigh the costs and that there is local buy-in to the initiatives from local residents.



Summer scholar-intern Dom Savoie (2016) performs urban tree data collection.

## Moving forward in Springfield

Here in Massachusetts, the City of Springfield has been classified as a “Gateway City” by the state legislature. In 2009, the Massachusetts Legislature defined Gateway Cities as municipalities “with a population greater than 35,000 and less than 250,000 with a median household income below the commonwealth’s average and a rate of educational attainment of a bachelor’s degree or above that is below the commonwealth’s average” (M.G.L. 23A § 3A). Springfield has a population of around 153,000 and is considered to be zone 6a by the USDA Plant Hardiness Zone Map. As a result of the cooperative efforts of the aforementioned organizations, 3,000 new street trees have been installed over the past five years. Providing student scholars with the opportunity to work in this diverse environment with other like-minded professionals and community stakeholders has been a unique experience that offers the potential to not only enrich an

individual’s summer employment experience, but to also shape and impact lifelong career decisions in urban forestry and urban natural resources awareness and conservation.

*The authors would like to thank Domenic Savoie, Lauren Bullard, and all of the summer interns and volunteers who tirelessly advocate for street trees and green spaces in the City of Springfield, MA.*



Summer scholar-intern Lauren Bullard (2015) examines cherries in urban orchard.

## Sources:

- J. Adamson, M.M. Evans, and R. Stein. 2002. *The Environmental Justice Reader: Politics, Poetics, and Pedagogy*. University of Arizona Press. Tucson, AZ.
- Bullard, R.D. 2000. *Dumping in Dixie: Race, Class, and Environmental Quality*. Westview Press. Boulder, CO.
- Grove, J. M., D.H. Locke, and J.P.M. O’Neil-Dunne. 2014. An ecology of prestige in New York City: Examining the relationships among population density, socio-economic status, group identity, and residential canopy cover. *Environmental Management*. 54(3): 402-419.
- Locke, D.H., and J.M. Grove. 2016. Doing the hard work where it’s easiest? Examining the relationships between urban greening programs and social and ecological characteristics. *Applied Spatial Analysis*. 9: 77-96. DOI 10.1007/s12061-014-9131-1
- Schwarz, K., M. Fragkias, C.G. Boone, W. Zhou, M. McHale, J.M. Grove, et al. 2015. Trees Grow on Money: Urban Tree Canopy Cover and Environmental Justice. *PLoS ONE* 10(4): e0122051. doi:10.1371/journal.pone.0122051
- USDA Plant Hardiness Zone Map (<http://planthardiness.ars.usda.gov>).
- Wikipedia – Springfield, MA. [https://en.wikipedia.org/wiki/Springfield,\\_Massachusetts](https://en.wikipedia.org/wiki/Springfield,_Massachusetts).

**Rick Harper**, University of Massachusetts-Amherst

**David Bloniarz**, USDA Forest Service



# Species Spotlight Common witchhazel, *Hamamelis virginiana*

By Mollie Freilicher



With fall here, the time for flowering trees in our area is coming to a close, with one notable exception: common witchhazel (*Hamamelis virginiana*), which takes this time to really shine. In the same family as our last species spotlight, Persian parrotia, common witchhazel is one of two species of *Hamamelis* that is native to North America. Common witchhazel is native to eastern North America, from southern Ontario, east to Nova Scotia, south to

north/central Florida, and west to Arkansas and east Texas. It is a large shrub or small tree that can reach heights of 20 to 30 feet with a spread of 15-25 feet and has a rounded or vase-shaped multi-trunked form. It is hardy in USDA zones 3 to 8. It is a common component of the understory of hardwood forests in Massachusetts and from October to December, common witchhazel comes into flower with delicate, small strappy yellow, fragrant flowers that appear as the tree is at peak fall color and shedding its leaves. It almost feels like you've stumbled onto something magical

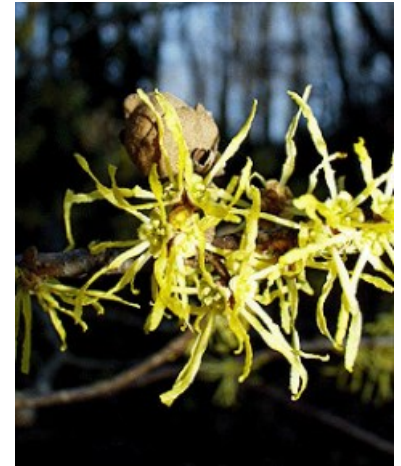


when you come upon a common witchhazel in flower in the woods.

Leaves of common witchhazel are alternate, simple and obovate, with five to seven straight veins. The edges of leaves can be coarsely toothed or wavy, which gives the leaf a somewhat unique appearance. They are medium green during summer, and turn yellow in the fall. The bark of witchhazel is smooth

and gray-brown, with inner bark that is reddish-purple.

The flowers are perfect and yellow, with four strap-like petals that bloom for two to four weeks. The fruit is a capsule with four curved points that matures in a year, releasing one or two black seeds the following autumn. According to the *Audubon Society Field Guide to North American Trees, Eastern Region*, the capsules can eject their seeds 30 feet.



Witch hazel, the mildly astringent extract, can be derived from the leaves, twigs, roots, and bark. Ruffed grouse, northern bobwhite, ring-necked pheasant, and white-tailed deer eat the fruit. In western Massachusetts, it has been documented that black bears will also eat the fruit.

As an understory tree, common witchhazel tolerates



shade, but can also be planted in full sun. It does best in moist soils and can tolerate some drought. In the planted landscape, common witchhazel is a good choice for naturalized areas, borders, and shady areas. The multiple trunks and somewhat irregular habit give witchhazel an interesting form on the landscape.

Photos (clockwise from top-left) Leaf, Flower, Fruit, Bud, Bark: Virginia Tech

## Sources

Dirr, M. A. 1998. *Manual of Woody Landscape Plants*. 5th Ed. Champaign, IL: Stipes.

Farrar, J.L. 1995. *Trees of the Northern United States and Canada*. Ames: Blackwell.

Little, E.L. 1995. *National Audubon Society Field Guide to North American Trees: Eastern Region*. New York: Alfred A. Knopf.

# Mass. Qualified Tree Warden Program Kicks Off

By **Mollie Freilicher** On Tuesday, October 10, after a long holiday weekend for many, 49 tree wardens and associate members arrived at Eversource in Westwood for the inaugural class in the first-ever Massachusetts Qualified Tree Warden training program. The training is presented by the Massachusetts Tree Wardens' and Foresters' Association (MTWFA), in partnership with the Massachusetts Department of Conservation and Recreation, the University of Massachusetts Amherst, and several communities and entities, with support from the USDA Forest Service. The training is the brainchild of Dr. H. Dennis Ryan, (UMass-retired) who outlined the modules and flow for the course. MTWFA's Education Committee worked with Dr. Ryan and other program instructors to develop the content of each session.

The program is a six-session course that will take place about once a month over the next eight months and cover a wide variety of topics important for tree wardens. Upon successful completion of the course, tree wardens will receive the designation *Massachusetts Qualified Tree Warden*, valid for one year. Thereafter, Qualified Tree Wardens must earn five approved continuing education credits to renew the qualification. Qualified Tree Wardens will be able to earn these credits all at once by attending the MTWFA Annual Conference, or they may earn them by attending other professional workshops sponsored by MTWFA or other arboricultural organizations. Qualified Tree Wardens will be required to submit an annual recertification sheet detailing where and when they have earned these credits.

Massachusetts General Law, Chapter 41, Section 106, states that tree wardens in communities with over 10,000 inhabitants shall (i.e., must) "be qualified by training and experience in the field of arboriculture [...]." The current law does not state exactly what that might mean, and interpretations can vary widely. And, of course, what about the communities with fewer than 10,000 inhabitants? Shouldn't they have a qualified tree warden too?

We anticipate that the law will eventually define qualifications for tree wardens in communities both above and below the 10,000-population threshold, and that there will be related regulations associated with Chapter 87. There is currently a bill before the Massachusetts Legislature that would amend Chapter 87 and allow the Department of Conservation and

Recreation to promulgate regulations. Among other changes in Bill S.1122 is this new wording regarding qualification and population:

A qualified tree warden shall be defined as a person who has completed a degree in a forestry or natural resource management field, has attained certification from the International Society of Arboriculture or through the Massachusetts Certified Arborist Program of the Massachusetts Arborists Association or other equivalent professional certification or, for communities with less than 10,000 residents, completed a series of Professional Development courses offered by the Massachusetts Tree Wardens and Foresters Association or equivalent training.

The Qualified Tree Warden program is intended to train those in smaller communities, which may not at this



moment have a qualified tree warden, and in larger ones, which more often do. Current attendees include tree wardens from many corners of the Commonwealth and from communities of all sizes. Some have a lot of experience in arboriculture and urban forestry, while others are brand new to the field. The format provides an atmosphere where tree wardens

can learn not only from the cadre of instructors, but also from their peers. Networking and building community is another important aspect of the Qualified Tree Warden course. After all, we're all in this together!

Over the next eight months, attendees will learn not only about trees, but also about people and the various "non-tree" aspects of being a tree warden, including working with the media, communicating with other municipal departments, and writing a specification. Tree wardens need a wide range of skills and knowledge, and the course will attempt to cover many of these.

(Continued on page 6)

## Mass. Qualified Tree Warden Program Kicks Off



Topics will include:

- What a tree warden needs to know, including work priorities, public relations, and cultivating community support
- Plant ecology, botany, and soils
- Tree identification
- Arboricultural standards and safety
- Massachusetts tree laws
- Working with utility arborists
- Budgeting, outside contracting, ANSI A300 Tree Care Practices
- Tree wardens and the community: working with other departments, tree boards, volunteers, and the media.
- Storm preparation: planning with other departments and the utility company, using i-Tree
- Managing and funding tree programs: municipal budgets, DCR & other grants, writing grant applications, Tree City USA and other programs
- Municipal Plant Health Care
- Construction zone management
- Tree risk evaluation, inventory policy, and liability
- Decay and structural support of trees
- A300 tree risk management
- Tree risk field evaluation
- Municipal inventories and i-Tree
- Streetscape design
- Tree planting best practices

Interest in the first Qualified Tree Warden program has been high and we regret that limited space caused a number of tree wardens to be deferred until the next course in 2019. The current plan is to hold the Qualified Tree Warden program every other year, in alternate years as UMass Extension's Green School. The Massachusetts Tree Wardens' and Foresters' Association and its partners are looking forward to a great training opportunity and to increasing the capacity of tree wardens and their programs in communities of all sizes across Massachusetts.

## Northampton Featured at Western Mass Tree Wardens Dinner Meeting

Attendees at the last meeting of the Western Mass. Chapter of the Massachusetts Tree Wardens' and Foresters' Association dinner meeting, held September 26,



heard how in just three short years, the City of Northampton revived and enhanced its urban forestry program. Lilly Lombard, Chair of the Tree Commission, and Rich Parasaliti, Tree Warden, shared how the city transformed its program. A few of the accomplishments in Northampton include: appointing a qualified Tree Warden, re-forming the Tree Commission, applying for a DCR Challenge Grant to conduct a tree inventory (and getting the grant and completing the inventory), and the formalizing of an advocacy group, Tree Northampton, among other achievements. Lilly and Rich shared their inspiring story, and we hope they can share their story with a wider audience in the future.

**Save the date for the next meeting:  
March 13, 2018.**

## From the Mass. Tree Wardens' and Foresters' Association Nominate Your Favorite Tree Warden!

Nominations are now being accepted for the Tree Warden of the Year award, to be announced at the Annual Conference on January 9, 2018. Although the nomination brochure is only mailed to "government leaders," the MTWFA welcomes nominations from any Massachusetts resident. You can now complete and submit the [nomination form online](#) OR [download the nomination form](#) and complete and submit it via email or snail mail. Not sure what the award is all about? [Click here for more information.](#)





# Town Forest Event—Sheffield

## DCR holds Annual Town Forest Event in Sheffield

The annual town forest event was started by Michael Downey, DCR Service Forester and Stewardship Program Supervisor five years ago. This event's broad vision is to create a way to connect folks to their community forests. Many town forest properties across the state are underutilized and underappreciated. The event is designed to celebrate good forest management and hopefully inspire other communities to proactively manage their town forest resources to better serve their communities.

Tom Ryan, a Service Forester for DCR, organized this year's event, which was held in Sheffield on September 23. This was the 5<sup>th</sup> annual town forest event and was well attended by over 150 people. Some participants hailed from eastern Massachusetts, as well as from the neighboring states of Connecticut and New York, and included private forest landowners, municipal officials, land trust representatives, woodworkers, and licensed professionals. Twenty-five foresters and timber harvesters received continuing education credits for participation.

The day began with a meet and greet with vendors (and cider donuts!) and a brief welcome from the Town of Sheffield Select Board, Sheffield Land Trust, and Conservation Commission. The morning session consisted of a choice of tours between a viewing of a floodplain reforestation project at the Trustees of Reservations property Bartholomew's Cobble, or a site visit to Berkshire Products, Inc. and the local school. Lunch was sourced from local farms and prepared by the Sheffield Congregational Church and Southern Berkshire Regional School District culinary arts program. During lunch, attendees heard an address from James W. Kelly, Consulting Forester, working on Sheffield's Town Forest and Jim Law, president of the Berkshires Woodworkers Guild.

After lunch, attendees had a choice of sessions between tours of Sheffield Town Forest land or participation in wood products demonstrations, including log scaling (R) Beham Forest Products LLC), saw milling (Sky View Farm), timber framing (Uncarved Block Inc), and timber sports (Whistle Punks). The day ended with a brief closing address from Tom Ryan and a beer tasting sponsored by Sheffield's own (and appropriately-named) Big Elm Brewery.

Stay tuned for information on next year's Town Forest Event – perhaps coming to a town near you!



DCR Service Foresters Pete Grima and Kate Marquis



DCR Service Foresters Alison Wright-Hunter and Doug Hutcheson



DCR Service Forester Tom Ryan, the organizer of the event



Attendees listening to the program



Demonstration from Berkshire Products



Timber frame demonstration by Uncarved Block, Inc. with DCR's timber frame

# Tree Steward Training

By **Mollie Freilicher** On October 13-14, 19 Tree Stewards gathered at Harvard Forest in Petersham for the annual Tree Steward Program of the Department of Conservation and Recreation (DCR). Attendees came from all over Massachusetts, including from Martha's Vineyard! The training, held every fall, covers topics of interest to Tree Stewards, from Tree ID, to pruning, to applying for grants. It is put on, in part, with support from the USDA Forest Service.

Julie Coop, DCR Urban and Community Forester, emceed the day and led a round of introductions. Peter Church, DCR Director of Forest Stewardship, then kicked off the morning with an introduction to the DCR, its forestry programs, and the diverse forests of Massachusetts. [Jen Kettell](#), arborist and horticultural consultant, of Jen Kettell LLC, followed with an introduction to pruning small trees. After a portion indoors, where attendees learned about the steps to successful pruning, everyone headed outside for a demonstration of pruning small trees. After the demonstration, everyone returned to the indoors for a session with the City Arborist and Tree Warden for [Cambridge](#), David Lefcourt. Dave shared some of the secrets to the success of his tree program and suggestions on how to work effectively with others to achieve urban forestry goals.

After a break for lunch, everyone headed back outside for tree identification with [DCR Service Forester](#) Joe Perry. Attendees learned not only about dichotomous keys and some common native, forest tree species, but also about how Joe teaches tree ID to kids, sharing not just information about trees, but also his love of trees. The next session also took place outdoors: tree planting with [Rick Harper](#), Extension Assistant Professor from the UMass Department of Environmental Conservation. After a brief introduction indoors, the group headed out and toward the Fisher House to plant a sugar maple.

The day's program wrapped up with Calvin Layton, Senior Arborist with Eversource, talking with the group about utility arboriculture and how communities can work with their local utility arborist. Calvin also shared information about the new Eversource utility arboretum. Calvin also announced that he was retiring from Eversource and that this was his last program as a utility arborist! Congratulations, Calvin!

We will miss having you at Tree Stewards! With that, the formal programming for the day ended. Those spending the night, dropped off their things at Raup House and set out to enjoy the rest of the afternoon by exploring some trails around Harvard Forest. Some attendees explored an art installation in the woods called [Hemlock Hospice](#). (On view until November 2018.)

Saturday began with a session on the DCR Urban and Community Forestry program, including information on resources that are available and on how to apply for a Challenge Grant. Next up was a session on diagnosing insect and disease problems with Nicole Keleher of the DCR Forest Health program. Nicole shared information on several insects and diseases that are present in Massachusetts forests, including an update on the emerald ash borer (EAB) and Asian longhorned beetle. Before attendees headed outside for a demonstration, Mollie Freilicher, DCR Community Action Forester, shared some brief information about how communities can prepare for, and respond to, forest pests by having a plan. Everyone then headed outside to see Nicole demonstrate how to hang an EAB trap in a tree (using a sizeable slingshot!), how to girdle a tree, and how to inject a tree, using emamectin benzoate.

After this outdoor portion, everyone went back indoors to hear Chuck Sherzi, arborist and horticulturalist, of [Sherzi & Company](#), present two case studies of soil restoration in two parks in Boston where he used the [Cornell Comprehensive Assessment of Soil Health](#). Attendees learned some new techniques, including the intriguing technique that some organic farmers use of planting [daikon radishes](#) to help restore soil texture.

After lunch, attendees gathered for the last formal session of the training, i-Tree with Dr. Dave Bloniarz of the USDA Forest Service and UMass Amherst Department of Environmental Conservation. Dave demonstrated [Canopy](#) and [Design](#) and gave a tour of the resources available on the [i-Tree website](#). The day concluded with a moderated discussion, giving attendees an opportunity to share success and challenges in their community and to discuss any issues that arose during the session. Much of the discussion covered engaging elementary-aged students and Arbor Day celebrations. After a good discussion, the day wrapped up and attendees headed home with some tools and ideas for their communities.



# Tree Steward Training



Julie Coop, coordinator of the DCR Urban and Community Forestry Program



Learning Tree ID with DCR Service Forester, Joe Perry



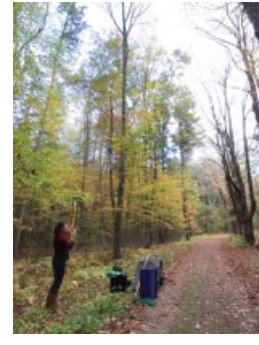
Learning about Massachusetts forests with DCR Director of Forest Stewardship, Peter Church



Pruning with Jen Kettell of Jen Kettell, Inc.



Tree Planting with Rick Harper, UMass Extension Assistant Professor



Hanging a trap for emerald ash borer with Nicole Keleher of the DCR Forest Health Program



Learning about monitoring for emerald ash borer with Nicole Keleher



Demonstration of tree injection with Nicole Keleher



Attendees and a few of the speakers

## Webcasts and Events

### Urban Forestry Today Webcast

#### Performing an Urban Site Assessment of Street Tree Planting Sites

November 9, 2017 | 12:00 p.m. (Eastern)

Bryant Scharenbroch, Ph.D

[www.joinwebinar.com](http://www.joinwebinar.com), access code 311-319-675

Urban tree health-related challenges often arise from underlying site-related conditions that typically include problems related to soil. Join **Dr. Bryant Scharenbroch**, University of Wisconsin – Stevens Point, as he discusses the critical attributes of street tree planting site assessment and of how practitioners can implement the new ‘rapid urban site index’ to identify potential problems.

*The Urban Forestry Today 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.*

### From Berkshire Botanic Garden

#### Making More Plants; Propagating Your Own Woody Plants

Thursday, November 16, 3:00 - 5:30 p.m.

Learn how to collect, prepare and propagate evergreens and other woody plants by cuttings

#### Bark and Buds: Winter ID of Trees and Shrubs

Saturday, December 9, 10:00 a.m. – 2:00 p.m.

Develop your ability to identify winter trees, buds, and bark

For more information, go to: <https://berkshirebotanical.org/>.

### Conference: The Evolving Role of Urban Landscapes

November 14, 2017 8:00 a.m. - 4:30 pm

Winterthur, DE

Find out more: <http://www.ecolandscaping.org/event/conference-evolving-role-urban-landscapes/>

### TREE Fund Webinar

#### Drought Tolerance in Trees – Improving Tree Selection for Challenging Urban Sites

November 30, 2017 2:00—3:00 p.m. (Eastern)

Andrew Hirons, PhD, Myerscough College, U.K.

<http://www.treefund.org/webinars>

### 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](#).

No November webinar.

#### Next webinar:

December 13, 2017 | 1:00 - 2:15 p.m. (Eastern)

#### Future webinars:

January 10, 2018 | 1:00 - 2:15 p.m. (Eastern)

February 14, 2018 | 1:00 - 2:15 p.m. (Eastern)

To access the webinar, go to <https://www.fs.fed.us/research/urban-webinars/>.

### Online Course: Urban Forest Adaptation Planning and Practices

The Northern Institute of Applied Climate Science (NIACS) and USDA Northern Forests Climate Hub are offering the Forest Adaptation Planning and Practices training as an online course for urban foresters and natural resource managers. Sessions will be bi-weekly from November 7, 2017 to January 30, 2018.

**GEOGRAPHIC FOCUS:** Information will focus on urban areas in the Midwest and Northeast, but applicants from other regions are welcome to apply.

**REGISTER ONLINE:** [www.forestadaptation.org/UrbanFAPP-online](http://www.forestadaptation.org/UrbanFAPP-online)



# Growing on Trees

## Harvard Forest Seminars

Seminars are **Thursdays** 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 webstreaming.



Seminars are free and open to the public; no pre-registration is required.

The full schedule is available here: <http://harvardforest.fas.harvard.edu/seminars>

Some upcoming sessions that might be of interest:

**Thursday, November 2** - [Join seminar online](#)

Ross Alexander - Harvard Forest

*Hide and go seek with climate signals of Eastern US tree species*

**Thursday, November 30** - [Join seminar online](#)

Isabelle Chuine - Centre d'Ecologie Fonctionnelle & Evolutive, and Harvard Bullard Fellow

*Let the niche be functional: a process-based approach of the niche to forecast the fate of species in future climate*

**Thursday, December 7** - [Join seminar online](#)

Nicole St. Clair Knobloch – Harvard Bullard Fellow

*Encouraging conservation at the point of development*

## From the New England Wildflower Society

A selection of the upcoming courses offered by the New England Wildflower Society. Course locations vary. Go to <http://newfs.org/learn/our-programs> for details

November 4: [Bare Trees and Naked Shrubs](#)

November 8: [Live Webinar: Choosing Native Trees for Your Landscape](#)

November 13 – April 8: [Designing with Native Plants](#)

November 16: [Takin' it to the Streets: How to Convey the Fascination of Plants to a General Audience](#)

November 19: [New England Plant Diversity: Session 2](#)

November 29: [Wetland Shrubs in Winter](#)

December 6: [Live Webinar: Choosing Native Shrubs for Your Landscape](#)

January 7: [Conservation Biology](#)

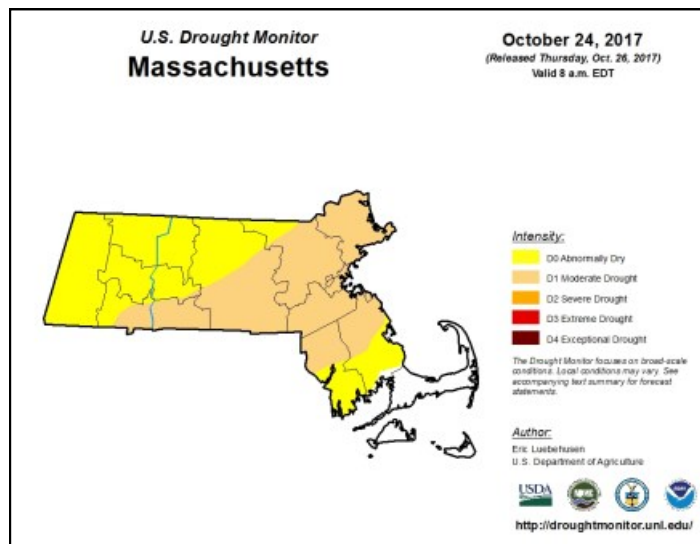
January 13: [Winter Botany](#)

January 20: [Urban Gardening Series: Native Lawn Alternatives](#)

January 28: [Shrubs in Winter](#)

## Drought Monitor

Conditions as of October 24, 2017. As of last week, much of the state was abnormally dry, though that will likely change this week, given all the rain in the last week. Tune in for the latest, released every Thursday at: <http://droughtmonitor.unl.edu/>



## From the Arnold Arboretum

For additional information on these and other offerings, go to: <https://www.arboretum.harvard.edu/education/adult-education>

Select Saturdays: Arboretum for Educators

November 17: [The Boatman: Thoreau on the Water](#) (Robert Thorson)

December 2: [Growing Woody Plants from Hardwood Cuttings](#) (Tiffany Enzenbacher)

January 11, 18, 25, February 1: [Landscape for Life](#) (Mark Richardson)

February 10: [Bark: A Multi-Sensory Experience of Trees](#) (Michael Wojtech)

February 24: [Grafting Woody Plants](#) (Sean Halloran)



## Growing Greener — in the Boston Area

Speaks for the Trees (SFTT) is a new organization in the greater Boston area committed to supporting the health and vitality of the urban tree canopy through engagement, outreach, education, and advocacy work. SFTT connects community partners and city officials with local residents. Through this we hope to share best practices, increase community ownership of neighborhood spaces, improve policies for trees, and raise awareness for tree stewardship and care. Our organization's initial focus will be to increase knowledge of greater Boston's current tree canopy inventory to facilitate effective planting of public street trees. To learn more, visit our website at [speaksforthetrees.org](http://speaksforthetrees.org), connect with us on [Twitter](#) or [Facebook](#) @SFTTBos, or email us at [trees@speaksforthetrees.com](mailto:trees@speaksforthetrees.com).




---

## Gleanings

### After the Storm, Who Takes Care of the Trees?

By **Patty Matteson**

Thousands of federal, state, and private agencies have been deployed to areas that were impacted by hurricanes Harvey, Irma, Maria, and Nate. These first responders are there to help the people in the storm's path. However, there is another group of responders that go into storm-ravaged towns to aid the trees: the Urban Forest Strike Teams (UFST).



This 10-year-old program is a nationwide collaborative effort among state forestry agencies funded and trained through the U.S. Forest Service's Urban and Community Forestry Program. Since 2007, the Southern UFST has been activated 12 times and mobilized across the South in response to hurricanes, tornadoes, and ice storms.

The catalyst for the creation of UFST was Hurricane Katrina. Widespread tree damage prompted the international Society of Arboriculture, Davey Resource Group, and USFS to deploy certified arborists into at least nine communities along the Mississippi/Louisiana Gulf Coast. State forestry agency urban foresters were frustrated that damaged but viable trees were being cut down and trees that posed a high risk to the public remained standing. The lack of an assessment strategy or trained staff hindered their ability to offer needed assistance to impacted communities. Read the full story at [usda.gov](http://usda.gov).

---

## Global Kids Study: More Trees, Less Disease

October 9, 2017—A study of 300,000 children in 35 nations says children whose watersheds have greater tree cover are less likely to experience diarrheal disease, the second leading cause of death for kids under the age of five. The study is the first to quantify the connection between watershed quality and individual health outcomes of children at the global scale. The study results from a major new database that enables 'big data' approaches. Read the full story at [ScienceDaily](http://ScienceDaily).

## News

### Youngsters Helped Out in Chicopee Tree Planting

By **Sy Becker**

October 5, 2017—Chicopee (WWLP) – The city of Chicopee is getting just a little bit greener, thanks to a group of four and five year-olds, and some state officials.

The children, who are in early education programs run by the Valley Opportunity Council, helped workers from the Department of Conservation and Recreation plant trees Thursday morning, outside the VOC's offices on Mount Carmel Avenue in Willimansett. Read the full story at [www.wwlp.com](http://www.wwlp.com).

### How Should We Pay for Street Trees?

By **Teresa Mathew**

October 3, 2017—Trees have proved to aid mental health, decrease obesity and other health risks, and just generally make people happier. But they are often thought of as a luxury rather than a vital component of healthcare or urban infrastructure. In a new report, The Nature Conservancy, a conservation-focused nonprofit, argues that trees are an important public health asset and should be funded as such.

"Just like the public health sector has gotten used to thinking about walkable cities as something they need to care about, we're advocating that they need to think about nature and parks as part of that quest," says Robert McDonald, a lead scientist at The Nature Conservancy and co-author of the report.

McDonald hopes that cities will start to integrate urban forestry into their other health, wellness, and environmental initiatives. Despite the benefits, there are multiple reasons why tree planting falls by the wayside. For one, it's a process that often requires the coordination of multiple agencies—not just forestry, but other departments like transportation and water. "We've set up our cities so there's one agency to manage trees and parks, and they don't have a health mandate. Other agencies do care about health, but don't have a mandate to plant trees," McDonald explains. Cities often do not see the link between residents' health and the presence of trees.

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

### Greening the Gateway Cities: 500 trees Planted So Far in Brockton

By **Marc Larocque**

October 30, 2017—A local nonprofit is on a campaign to spruce Brockton up.

The Plymouth-based Wildlands Trust is promoting and coordinating a tree planting campaign as part of Brockton's Greening the Gateway Cities program. The effort began in April, with the goal of planting 2,400 trees in Brockton, within a span of three years.

Thus far, nearly 500 trees have been planted in Brockton as part of the Department of Conservation and Recreation-funded program. The trees are planted by DCR forestry crews, after consultations that are organized by the Wildlands Trust.

"I think a lot of residents are excited to participate," said Kate Silva, outreach coordinator from the Wildlands Trust. "So far, the program is going very well. We have been getting a lot of positive responses both from the residents and local businesses, as well as the city." Read the full story at [The Enterprise](http://TheEnterprise).

## News Headlines in Brief

**This App Doesn't Fall Far From the Tree**

**Missoula Urban Forest Getting Noticed**

**Oak Wilt in Brooklyn**

**City Bench Reclaims New Haven Urban Forest and Turns It Into Objects Of Beauty**

**Cut Your Phone Dependence with an App That Plants Trees as a Reward**

**Tree Species Are Leap-Frogging up Mountains In Reaction to Climate Change**

**Ancient Trees "Ripped Their Skeletons Apart" to Grow**

**Minneapolis Business Wood from The Hood Helps Misfit Trees Find New Life**

**The Book 'Wise Trees' Showcases Ancient Trees from Around the World**

**One of the World's Most Popular Trees Arose near the Arctic Circle**

# On the Horizon

**Nov 1** **Deadline for [DCR Urban and Community Forestry Challenge Grant](#)**

**Nov 2-4** TCIA Expo, Columbus, OH, [www.tcia.org](http://www.tcia.org)

**Nov 7** [Connecticut Urban Forest Council Conference](#), Plantsville, CT (Registration deadline Nov. 3)

**Nov 7 – Jan 30** [Online Course: Urban Forest Adaptation Planning and Practices](#)

**Nov 8** EPA [Green Infrastructure Webcast](#), 1:00 p.m. (Eastern)

**Nov 9** Urban Forestry Today Webcast: Performing an Urban Site Assessment of Street Tree Planting Sites, 12:00 p.m. [www.joinwebinar.com](http://www.joinwebinar.com), access code 311-319-675

**Nov 13-14** Society of Municipal Arborists Annual Conference, Tulsa, OK, [www.urban-forestry.com](http://www.urban-forestry.com)

**Nov 15-16** Partners in Community Forestry Conference, Tulsa, OK, [www.arborday.org/programs/pcf/](http://www.arborday.org/programs/pcf/)

**Nov 29-** New England Grow, Boston,  
**Dec 3** [www.newenglandgrows.org](http://www.newenglandgrows.org)

**Nov 30** TREE Fund Webinar: Drought Tolerance and Trees, 2:00 p.m., [www.treefund.org](http://www.treefund.org)

**Dec 1** Deadline to nominate [Tree Warden of the Year](#)

**Dec 12** Tree Risk Assessment Qualification Course, North Attleboro, [www.newenglandisa.org](http://www.newenglandisa.org) (Registration deadline: November 12)

**Dec 13** [Urban Forest Connections Webcast](#), 1:00 p.m. (Eastern)

**Dec 14** Urban Forestry Today Webcast, Pruning Practices to Manage Risk & Enhance Urban Wildlife, 12:00 p.m. [www.joinwebinar.com](http://www.joinwebinar.com), Access code: 491-732-747

**Dec 31** **Deadline for Tree City, Tree Campus, and Tree Line USA Applications**, contact [Mollie Freilicher](#) with questions

**Jan 9-10** Mass. Tree Wardens' and Foresters' Association Annual Conference, [www.masstreewardens.org](http://www.masstreewardens.org)



**The Citizen Forester is made possible through a grant from the USDA Forest Service Urban and Community Forestry Program and the Massachusetts Department of Conservation and Recreation, Bureau of Forestry.**

**Bureau of Forestry**  
**Department of Conservation and Recreation**  
251 Causeway Street, Suite 600  
Boston, MA 02114

Julie Coop, Urban and Community Forester  
[julie.coop@state.ma.us](mailto:julie.coop@state.ma.us), 617-626-1468

Mollie Freilicher, Community Action Forester  
[mollie.freilicher@state.ma.us](mailto:mollie.freilicher@state.ma.us), (413) 577-2966

[www.mass.gov/dcr/urban-and-community-forestry](http://www.mass.gov/dcr/urban-and-community-forestry)

**Charles D. Baker**, Governor  
**Karyn E. Polito**, Lieutenant Governor  
**Matthew A. Beaton**, 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](#) or click [here](#).

**Subscribe? Unsubscribe?** You are receiving this because you have requested to receive *The Citizen Forester*. If this is an error or you do not wish to receive this newsletter, please email [mollie.freilicher@state.ma.us](mailto:mollie.freilicher@state.ma.us). To sign up, click [here](#).



The Department of Conservation and Recreation prohibits discrimination in employment on the basis of race, color, creed, religion, national origin, ethnicity, gender, gender identity or expression, age, sexual orientation, Vietnam Era Veteran status, or disability.