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Exploring Volunteer Urban Tree Committees in Massachusetts, Part II

By **Richard W. Harper**, **Emily S. Huff**, **David V. Bloniarz**, **Stephen DeStefano** and **Craig R. Nicolson**

In part I (Sept. 2020) we introduced the exploration of volunteer urban tree committees in Massachusetts, discussing their operational characteristics. Here we will continue with the final segment – a discussion about the community and organizational relationships closely associated with these committees.

3. Community Relationships

Tree committee representatives reported that they often interacted with a variety of important and successful collaborators including the municipal Department of Public Works (DPW; n=6), and 'town committees, commissions' (n=6), and a variety of non-governmental organizations ('NGO'; n=8; e.g., 'garden clubs' and 'environmental groups'). Overall, the interview data revealed that nearly all of the urban tree committees identified 'unsuccessful collaborators' (n=12), however, clear specifics were less emergent.

Evaluation of urban tree committee programs generated some interesting responses from interviewees, and while a clear theme emerged relative to the fact that 'no' (n=6) members often did not perform a formal program evaluation, 'informal' (n=9) discussion-based evaluation of committee-based initiatives did occur:

> "...there's no formal means of evaluating. I mean, because we meet every month, within the committee we evaluate projects as they're going and certainly feedback from the tree warden and the director of the DPW. I would say there's certainly not a lack of resident feedback when we...do something...not formal but a monthly check-in, certainly." (Arlington Tree Committee)

Tree committee members, municipal officials and staff, and other volunteers gather at the annual DCR Tree City USA Forum and Award Ceremony for learning, recognition, and networking.

The manners in which urban tree committees carried out public interaction included 'in-person interaction' (n=7; e.g., at a table or booth), or through 'print media' (n=6) or 'electronic, social media' (n=11). They also indicated that they felt there was an ongoing 'need for volunteers' (n=4) and that they attempted to 'foster camaraderie & interest' (n=5) to maintain the volunteers they have.

In describing the relationship with the community tree warden, urban tree committees reported that they

Up Ahead:

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Planting volunteers after an tree planting. Photo: David Bloniarz

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generally had a 'positive relationship' (n=7) and that there was 'regular communication' (n=6) between the two parties.

> "…if any of us have a question, we either email or call him [the tree warden] and he's incredibly responsive and always able to give us an update…" (Brookline Tree Planting Committee)
>
> "We love him. He's awesome. Engineer from – spent ten years in Cambridge…good guidance there. He has a great attitude…so the relationship has been super positive from day one." (Newburyport Tree Committee)
>
> "I recruited a fellow – another landscaper to become tree warden whom I worked with previously, so he's now in that position. So, we have a good relationship and we discuss all aspects and all work." (Marion Tree Committee)

Three other committees indicated they had 'limited interaction' with their local tree warden and that they were "uncertain" as to the state of their relationship. Interviewees typically described the relationship between themselves and community decision makers as being 'positive' (n=10). A prominent number (n=8) of urban forest tree committees reported 'yes' they were actively involved in policy development relating to 'local tree by-laws' and 'local tree ordinances.'

Observations

That there were a variety of important and successful collaborators identified by interviewees was not a surprise; what was interesting though, was that responses were less specific regarding unsuccessful collaborators. According to the Lanesborough Tree and Forest Committee, the fact that a volunteer urban forest tree committee plays a very specific role in the community may simply decrease the chances of an unsuccessful collaboration:

> "You know, I guess our span of interest is narrow enough that I don't know that I would say there were any unsuccessful collaborations. I'm not trying to say we do everything right. I guess I'm trying to say we haven't pushed the envelope too far."

It is also possible that interviewees consider the divulgence of an unsuccessful collaboration somewhat sensitive, and individuals generally may not be as forthcoming with this sort of information in a research environment (Cartwright, 1988).

The fact that so many (n=11) urban forest tree committees indicated they employed some form of 'electronic, social media' to interact with the public was of interest. Upon further exploration of this theme, however, a prominent number of interviewees indicated this method is through 'Facebook', and nearly all sources indicated this form of interaction is through a website typically housed by the municipality. In fact, some individuals highlighted the need to engage their community by increasing their urban forest tree committee's capacity in the realm of social media:

> "…we're working – starting to work with social media. We have a Facebook page and a website. And we have a new woman who

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> just joined the committee who is younger and much more cognizant of social media than I am and she's going to take that sort of thing on…" (Amherst Public Shade Tree Committee)
>
> "We don't do a website because we don't have anyone young enough right now to be that savvy. And I am not a web person. That'd be a good reminder that the world does not travel on paper anymore. It travels on websites and Facebook 'likes' and we have to figure out how to do that (Lanesborough Tree and Forest Committee)

The fact that the ongoing 'need for volunteers' (n=4) was an emergent theme may be concerning for individuals who find themselves on the front lines of volunteering in any sector, including on urban forest tree committees. Across the U.S. and in other developed nations, membership in civic organizations and volunteerism in specific sectors, as well as generally, appears to be on a downward trajectory (Putnam, 1996; Green and Haines, 2016). Just as volunteerism itself has positive ramifications that extend beyond the individual and impact the economy and viability of organizations, a shrinking volunteer base may impact – and be indicative of – a range of segments of society from graduation rates, to participation in the democratic process (Green and Haines, 2016).

Most committees enthusiastically indicated that they had a positive relationship (n=7) with their local tree warden, yet not all committees (n=3) felt this way. Though details about the workings of this relationship are largely absent from the research literature, according to Harper et al. (2017), the nature of the position of a successful tree warden requires effective communication and interaction with a wide number of groups, including urban forest tree committees. Though Fazio (2015) does not mention tree wardens by name, he does posit that tree boards must work closely with city foresters. For an effective urban forest tree committee, it is critical that this same sentiment of cooperation and partnership can be readily extended to other audiences and important stakeholders including local officials, agencies, and organizations.

Northampton Tree Warden, Richard Parasiliti, Jr., speaks to attendees at DCR's Tree Steward Training about what tree wardens do and how they work with tree committees and community members.

Conclusions

Volunteer involvement in urban forestry, including service on an urban forest tree committee, may help to provide essential experience, new ideas and perspectives, and offer critical skills towards the furtherance of urban tree management at the local level (Westphal and Childs, 1994). Volunteers may also enable access to new audiences and advocates through networks and contacts (Nichnadowicz, 2000). Urban foresters routinely identify a lack of available resources (e.g., funding) as a key limiting factor (Stobbart and Johnston, 2012) in their urban forest management program, hence the potentially reduced costs associated with garnering volunteer-based support to aid or carry out initiatives, may also be another welcomed benefit in relation to volunteer involvement in urban forestry (Bloniarz and Ryan, 1996; M.

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Welch, pers. comm.). Though typically not paid, volunteers and volunteer-based initiatives do require investment, however, including in equipment, training, and care (e.g., food and water, first aid and safety equipment) (Fazio, 2015). Volunteer-related expenditures might also include small-scale celebrations, like an appreciation dinner, after a significant task is carried out (e.g., a larger-scale urban tree planting or urban tree inventory). This may bolster morale, and if volunteers know they are valued and feel their efforts are acknowledged, they can connect more fully with the organization and each other, resulting in an increased sense of belonging and involvement (Moran and Mallia, 2015). This can act as a positive "loop" since increased involvement can motivate volunteers to continue their relationship and deepen their service commitment with the association (Lammers, 1991; Moran & Mallia, 2015). Another means of strengthening the effectiveness of urban forest tree committees could be to provide members with formal program evaluation materials and training so that program delivery may continually be improved and strengthened.

Urban tree planting can be an important venue for student volunteers who wish to green their community. Photo: David Bloniarz

Urban forest tree committee volunteers in Massachusetts are typically passionate, committed individuals who love trees and wish to see this important urban resource managed with care and stewardship in mind. Lipkis and Lipkis (1990) summarize these sentiments in stating,

> "Tree planting…fosters community spirit and pride, bringing people together for a meaningful purpose that can build the bridges and promote the understanding that brings the neighborhood together. The initial efforts of the tree planters compound themselves as others find in the trees a deeper appreciation of the community as well as natural beauty." (p. viii)

To ensure viability in this sector of volunteerism, committee members could be equipped with resources related to the use of social media as well as strategies to engage and broaden the base of individuals potentially willing to serve on their urban forest tree committee. Successful volunteers serving on an urban forest tree committee would benefit from having the ability to work constructively and cooperatively with a wide number of stakeholders, decision makers, and audience members, with special attention being given to the community tree warden. Since this individual is pivotal to the urban forest operations in a given municipality (Harper et al., 2017), urban forest tree committee members in Massachusetts – and other states with this position – can make a concerted, sustained effort to foster a cooperative, productive relationship with their tree warden. Also, since many urban forest tree committees are actively involved in local policy formation (e.g., tree ordinances and by-laws), research could further explore the need and efficacy of legal training for committee volunteers. These, and other important topics, are worthy of continued examination as we strive to better understand the nature of volunteer-led urban forest tree committees.

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Other Resources:

A listing of tree committees in Massachusetts, as of 2019, is available here and check out the DCR Urban & Community Forestry factsheet.

Species Spotlight

More "Pine" Trees

By **Mollie Freilicher**

The January 2021 Species Spotlight described several trees many think of as "pine trees," but which are not in the *Pinus* genus, though they are in the pine family, Pinaceae. The spotlight featured spruce, fir, larch, Douglas fir, hemlock, and pine and covered some of the distinguishing characteristics. We left out the true cedars (Genus C*edrus*), which are also in the pine family and will cover them below. This month will feature a few more trees, though from the cypress family, Cupressaceae. For a review of the January spotlight, go to the DCR Citizen Forester website.

A correction: In the January spotlight, I wrote that trees in the Pinus genus have *needles in bundles of two, three, or five. As can be expected in life and in botany, there are exceptions. DCR Service Forester Peter Grima wrote to let me know the exception to this bundling of needles.* Pinus monophylla*, also called singleleaf piñon, one-leaved, Gray, Frémont, or Nevada nut pine has just one needle per fascicle. (Rarely, it may have two.) This exceptional tree can be found in Nevada, California, Utah, Arizona, Idaho, and in Mexico (Baja California). It is the state tree of Nevada. Peter also reminded me of a great website for the conifer curious: www.conifers.org.*

* Indicates a tree is native to Massachusetts

Cedars ("True cedars")

Genus *Cedrus.* Family Pinaceae. There are two to four species of cedar (depending on taxonomic opinion) none of which are native to North America. Leaves of cedars are three-sided and come in two forms. Toward the tips of branches, needles are attached to the stem singly or are attached spirally around the stem. Otherwise, they are in tufts. Cones of cedars are upright and oblong, two to five inches long. (Some describe them as barrel-shaped.) Immature cones may be blueish-green, maturing to a brown color. As mature trees, cedars have a wide-spreading habit. Cedars are not commonly planted in Massachusetts, but you may find them in arboreta, parks, or institutional grounds.

Juniper

Genus *Juniperus*. Family Cupressaceae. Junipers are "evergreen," but in winter, sometimes, the foliage will turn brownish. One feature of juniper is typically having two different types of leaves. One type is described as "awl-like." These needles are awl-shaped (that is, they have a narrow taper, ending in a sharp point) and spread out from the stem. The other kind of leaves are "scale-like." These leaves are whorled or in overlapping, opposite pairs and are pressed against the stem – all you can see are the leaves. This gives them a scaley appearance. The seed cones of juniper look like a berry, but are a fleshy cone. They are blue, with a powdery coating, and have a resinous smell. These cones remain on the tree over the winter and can help aid identification. Bark of junipers is fibrous, often in vertical strips. Some tree-form junipers planted in urban areas in Massachusetts: Eastern redcedar (*Juniperus virginiana*)*.

Two different types of juniper foliage, Photo: Wikimedia

"Cedars"/Arborvitae/Thuja

Genus *Thuja*. Family Cupressaceae. Two species in this genus are native to North America. *Thuja* are evergreen and have scale-like leaves in alternating pairs that are pressed against the stem. The leaves are short, about a

Foliage of *Thuja*

Species Spotlight—More "Pine" Trees

tenth of an inch long, though may be longer and lance-shaped on fast-growing shoots. The branchlets are flattened and somewhat fan shaped. At the tips of some branches, immature cones may be visible, even in the winter. Seed cones are solitary, at the tips of branches, and mature in one season. They have four to eight pairs of scales. In fall, the cones open and seeds are released in winter. They have a conical form and are typically densely branched, making them popular in the landscape in hedges. While sometimes called "cedars," these are not true cedars – a designation reserved for trees in the genus *Cedrus.* Some thuja planted in urban areas in Massachusetts: eastern arborvitae (*Thuja occidentalis*)*. With just a few native populations in Berkshire county, eastern arborvitae is on the Massachusetts Endangered Species list.

Falsecypress/"Cedars"

Genus *Chamaecyparis.* Family Cupressaceae. Three species in this genus are native to North America and others are often planted as ornamentals. *Chamaecyparis* have scale-like leaves, some of which may appear flattened. Young trees may have more needle-like leaves. When crushed, leaves may be aromatic – pleasantly or unpleasantly. On the undersides of some species, white 'X's or a white pattern may be visible. Seed cones are round and may appear berry-like until maturity. Bark is typically gray-brown, and on many species, somewhat "shreddy," exfoliating in ragged strips. Some *Chamaecyparis* planted in urban areas in Massachusetts: Hinoki falsecypress (*Chamaecyparis obtusa*) and Sawara falsecypress (*Chamaecyparis pisifera*). Atlantic white cedar (*Chamaecyparis thyoides*) is not planted in urban areas, but is native to Massachusetts.

Dawn Redwood

Genus *Metasequoia*. Family Cupressaceae. Dawn redwood is monotypic – that is it is the only species in its genus. Its leaves are opposite, deciduous, linear, flattened, and about a half-inch long, with rounded tips. In addition to deciduous leaves, dawn redwood has both persistent and deciduous stems. Deciduous stems contain only needles (no buds) and drop off in the fall with the leaves. Additionally, bark of dawn redwood is reddish and as a tree matures, it becomes "shreddy," exfoliating into strips. The fruit is a small, pendulous, round cone that starts out greenish and matures to a brown color. The scales on mature cones resemble lips. The trunk often develops a significant buttress. Dawn redwood (*Metasequoia glyptostroboides*) is commonly planted in urban areas in Massachusetts, though not in large numbers.

Baldcypress

Genus *Taxodium*. Family Cupressaceae. Baldcypress is another deciduous conifer and resembles dawn redwood. Its leaves are alternate, deciduous, linear, flattened and up to three-quarters inch long. Like dawn redwood, it has persistent stems and deciduous stems. Deciduous stems contain two-ranked leaves, while leaves are spirally arranged on persistent stems. The bark is reddish-brown and fibrous, and the trunk can become buttressed at the base. When planted in very wet areas or around water, baldcypress will develop "knees," protrusions above ground that form around the tree. The fruit is a round cone on a short stalk. It is greenish and resinous when young and matures to a brown color. Baldcypress is often confused with dawn redwood, but baldcypress leaves are alternate,

Fall color of baldcypress on the campus of UMass-Amherst.

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while dawn redwood is opposite. Species planted in urban areas in Massachusetts: common baldcypress (*Taxodium distichum*).

Others

There are a few more conifers to cover. To find out more about these species, check out these links:

Cupressaceae Japanese cedar, Cryptomeria (*Cryptomeria japonica*)
Giant sequoia (*Sequoiadendron giganteum*)

Sciadopityaceae Umbrella pine (*Sciadopitys verticillata*)

Taxaceae Yew, *Taxus* genus

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Japanese umbrella pine (*Sciadopitys verticillata*). Photo: Oregon State University

2021 DCR Arbor Day Poster Contest

The Trees Out Our Window

Fifth grade classes from schools across the Commonwealth are encouraged to participate in the annual Arbor Day Poster Contest by having fifth-grade students create posters highlighting this year's theme, **The Trees Out Our Window**, and then hosting a school poster contest. The winning poster from each school can be submitted to DCR. Home-schooled or non-participating school students may submit their posters and enter the contest individually.

The Arbor Day Poster Contest is sponsored by the Department of Conservation and Recreation, the U.S. Forest Service, and the Massachusetts Tree Wardens' and Foresters' Association.

For complete rules and guidelines, go to the Arbor Day Poster Contest page on the DCR website.

From the Woods

By **Jennifer Fish**

February has always been one of my favorite months. It's the deep quiet, like when the power goes off after a storm and the background hum of our daily lives stops, that I am so drawn to. When the snow is deep and the temperature well below freezing, a forester throws on a few layers of wool before heading out, snowshoes in hand. Deep in the woods the pale sun sparkles off the snow. All sound is muffled except for the occasional crack of a tree as its sugar-filled sap is overwhelmed by the cold, and a curious chickadee or two. This is the deep breath before the landscape comes alive again in a flurry of growth and reproduction, like a giant factory power switches after a long weekend.

As New England sleeps, many of our feathered friends have escaped the rigors of the cold for more tropical scenery. Those that have made the long journey are enjoying a well-deserved break before the exhausting journey north followed by the rigors of nesting and raising young.

For us, this winter slow down can be a good time to plan summer projects. Since many birds have site fidelity, we can plan for what they will find when they return to their summer home and we can make their summer jobs easier, which means more baby birds.

The biodiversity of our area (diversity of life and habitats) means that lots of bird species congregate across our landscape for the brief, frenzied summer months to breed and raise a clutch or two of young, before packing on a few grams of fat reserves and heading south again. Time is of the essence. This is a time when most of us can help; small back yards to large landholdings can provide habitat for bird species. Some birds are generalists, meaning they can live and breed in a wide variety of habitats and may be a good fit for a small property. Others require very specific habitat, like wetlands, swaths of trees that are seedlings or saplings, or maybe large areas (100+ acres) with a diversity of tree sizes and layers to undergrowth.

Back yards < 1 acre

Native species are so important for birds. Baby birds need lots of protein, which means insects. Did you know that "Yards dominated by introduced plants produced 75 percent less caterpillar biomass than primarily native landscapes and were 60 percent less likely to have breeding chickadees at all. Nests that chickadees did build in yards with many non-native plants contained 1.5 fewer eggs than nests on properties dominated by natives."? (Narango, PNAS, 2018).

I'm sure you are getting plant catalogues in the mail. This year plan some native plantings into your landscaping.

Some resources to get you started:
www.grownativemass.org
www.nativeplanttrust.org

Leave the leaves – ignore those urges to clean up as soon as we get the first warm spell. Native bees, moths, and other insects will still be hibernating. It is important to wait until the ground has warmed to 50 degrees and the nights are above freezing. Birds rely heavily on insects for protein when nesting.

Water – all living things require a source of water. This year I made a bird bath using a large plastic flowerpot that had cracked and a metal trash can lid. I flipped the pot over, broke the interior base open so that it would hold the curve of the trash can lid and handle. I collected a few handfuls of small stones and purchased a solar powered floating fountain (sprinkler removed so more water stays in the bird bath).

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Chestnut-sided warbler at the edge of a landowner's woods.

The stone provide perches for birds as well as butterflies and bees. The fountain attracts the birds who like running water. It should provide a good source of water for birds and insects for many years to come with very little time or money invested while keeping a few items out of the landfill.

Watch the cats – cats are a big predator of birds. Consider an outdoor, enclosed "catio" to give your cats a sense of the outdoors while keeping birds and small mammals safe.

Small woodlands 1 to 10 acres

In addition to the back-yard projects, woodland properties of this size can encompass home ranges for some breeding birds such as ovenbirds, downy woodpeckers, and pine warblers.

Leave a bit of a mess – humans love the neatness of a park, but birds and other wildlife find what they need in an untidy, native woods. Invasive-free yard waste, last year's Christmas tree, leaves and garden debris provide cover, foraging, and nesting habitat. When safety isn't an issue, leaving dead trees to rot and fall over creates the perfect habitat for arthropods, another favorite on the bird menu. Foresters refer to these logs and dead branches as coarse woody debris—a habitat element that is missing from our forests.

Get rid of the invasives – Salty street sides often mean planting specially adapted trees and shrubs. In the woods however, sticking to native plants is always best. Some non-native species can invade the forest, choking out native plants. Did you know that among native tree species, oak ranks highest in its capacity to support species of butterfly and moth caterpillars (over 500!), followed by willow, cherry and birch. (Douglas Tallamy, *Bringing Nature* Home, 2007)

Smaller properties or low-level infestations can often be dealt with through constant cutting and pulling. Larger properties or heavily infested properties might need an herbicide treatment to knock them back enough to enable maintenance by pulling seedlings.

Native plantings of shrubs can be a nice addition to small woodlands creating a screen to neighboring properties (or the bird-friendly brush piles you create) and adding interest along favorite paths.

For more information:

Why Native Plants Matter (Audubon)

YouTube: A Presentation by Doug Tallamy – Nature's Best Hope

Native Plant Finder (National Wildlife Federation

Large woodlands 10+ acres

Larger properties, especially when imbedded in a predominantly wooded landscape provide the most benefit to the largest number of forest bird species. Forested landscapes have the potential to provide habitat to both the generalist and the habitat specialized bird species. That is why five years ago, DCR teamed up with Mass Audubon and the MA Woodlands Institute to train foresters how to evaluate bird habitat and work with woodland owners to improve bird habitat for a suite of birds where habitat issues are contributing to their decline.

For woodland owners with forested property over 10 acres there is cost-share available for a habitat evaluation and management recommendations. Management recommendations focus on habitat features that are missing on a given property and can be tailored to a landowner's long-term goals.

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From the Woods

Some examples are creating small quarter-acre openings to foster what is called horizontal complexity, creating snags (standing dead trees), thinning the canopy to encourage growth of native shrubs and smaller trees, or clear cuts to provide larger areas of seedling and sapling growth favored by some birds.

For more information:

- Foresters for the Birds: Assessing Your Woods for Bird Habitat
- Mass Audubon—Managing Forests for Birds

For next steps - contact your service forester or call a local private consulting forester

- DCR Service Forester District Map (PDF)
- Massachusetts Private Licensed Foresters (PDF)

As the days get longer and the sun a little brighter check the catalogue of a nursery with native plants, pull out the sketch book, or talk to a forester. The possibilities are almost endless. What will you plan for your summer project?

Forest management can create habitat for other creatures too, as this black bear exploring a newly-expanded lowbush blueberry patch shows. After a cut to create an opening a few years prior, lowbush blueberry flourished. Note, the coarse woody debris and snag left after the cut. Turkeys, yellow-bellied sapsuckers, a variety of warblers, and deer and moose have also been spotted using this area.

Jennifer Fish is the Director of the DCR Service Forestry program.

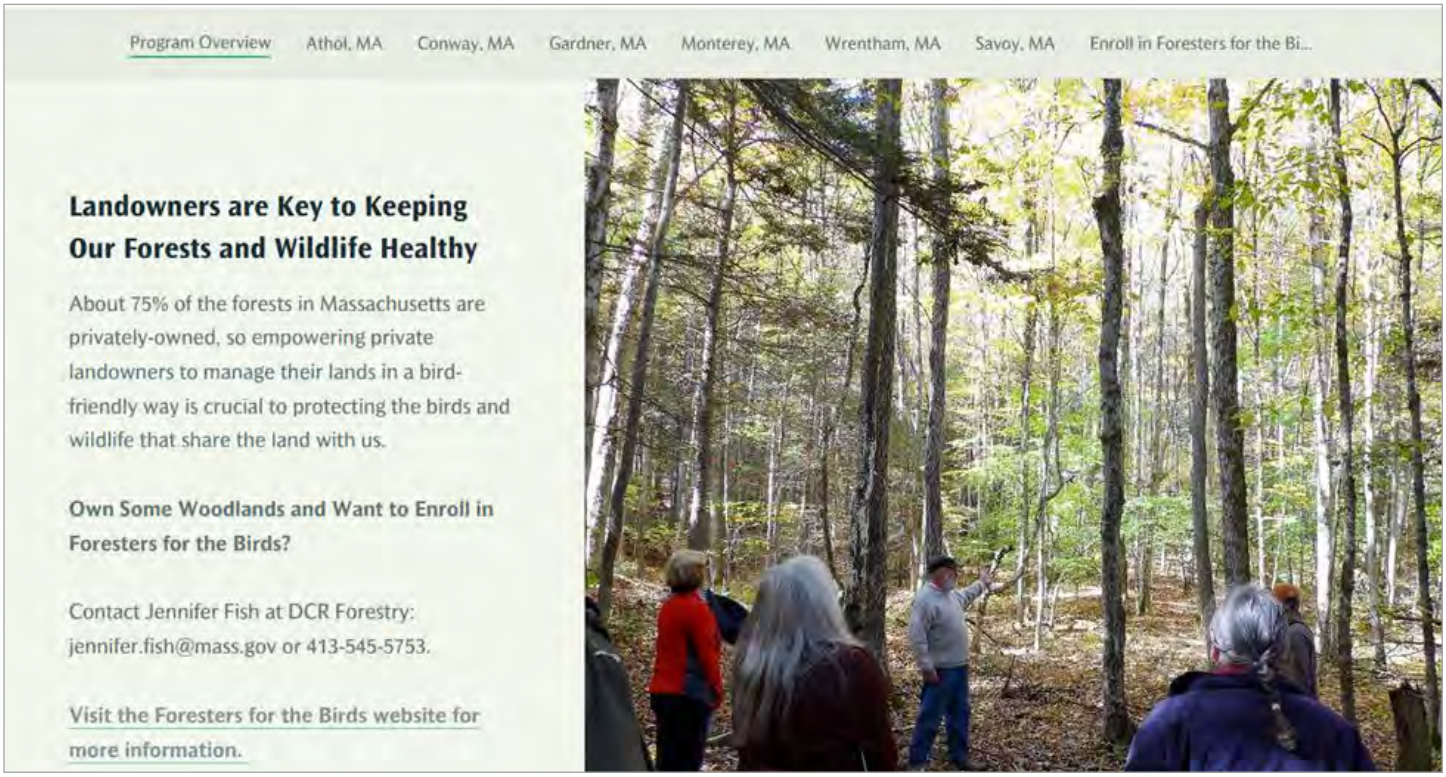


Image of the StoryMap about Foresters for the Birds in Massachusetts.

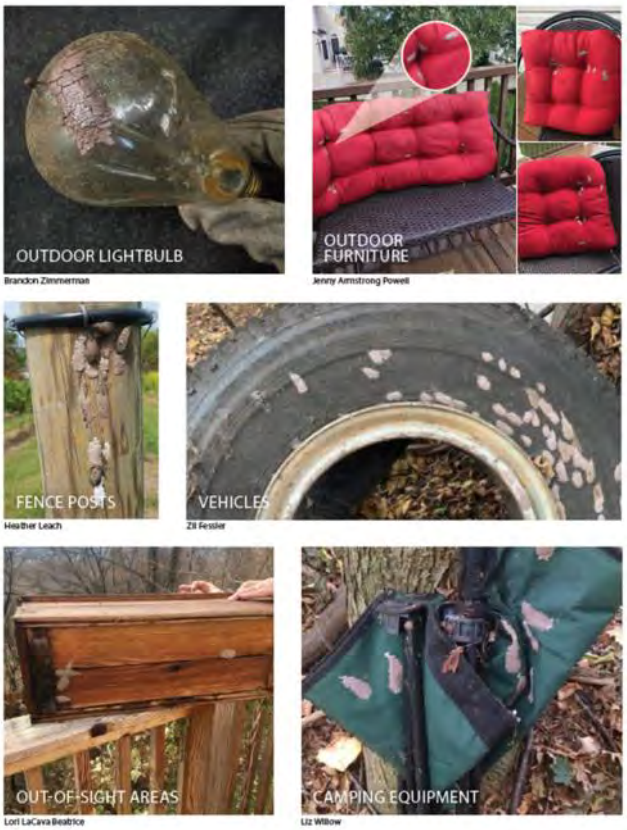
Identifying Egg Masses of the Invasive Spotted Lanternfly

By **Joshua Bruckner**

Spotted lanternfly (*Lycorma delicatula*, "SLF") is an emerging invasive insect of concern in New England. With over 70 host plants, including tree of heaven, maple, black walnut, grapes, and hops, this invasive species can cause serious economic and environmental damage. Industries including agriculture, forestry, timber, and food products all stand to be affected.

Although no established breeding populations of spotted lanternfly have been found so far in Massachusetts, living and dead adult SLF have been found in six different municipalities: Billerica, Boston, Concord, Milford, Norwood, and Sharon. With the first hard frost of the year behind us, any spotted lanternflies around may have died off, but any eggs they laid will remain, surviving over the winter until they hatch in May.

Spotted lanternfly egg masses, uncovered (top), and covered (bottom). Photo: Emilie Swackhamer, Penn. State University, Bugwood.org.



SLF egg masses have been found on some unusual items, not just trees, as these photos from Pennsylvania show.

Now is an important time to check for signs of SLF egg masses, since the eggs will be easiest to see on bare trees. Female spotted lanternflies lay eggs on nearly any flat surface, which makes them a challenge to survey for, and means there is a big risk of them being accidentally introduced into our region from vehicles or goods that come here from infested states. Indeed, spotted lanternfly has been established as close by as Connecticut and New York. That makes it critical for as many people as possible to learn to identify these egg masses and distinguish them from any lookalikes. Those who work outdoors in DCR and the forestry and arbor industry can provide a first line of defense against the establishment of spotted lanternfly. Make sure you learn what the SLF egg masses look like so you can report anything you find!

(Continued on page 13)

Identifying Egg Masses of the Invasive Spotted Lanternfly

(Continued from page 12)

Female spotted lanternflies lay one or two egg masses, with 30 to 50 eggs in each mass. The masses are usually covered in a protective coating that looks like a waxy putty, starting out white when fresh and later drying to resemble a gray, cracked, patch of mud. This rough gray surface works well as a camouflage on many surfaces, including tree bark, rocks, and weathered wood. Exposed or uncovered eggs resemble strings of connected seeds.

The easiest things to confuse with SLF egg masses would be the egg masses of the gypsy moth (*Lymantria dispar*). Gypsy moth egg masses can be found from late August until May on almost any vertical surface. They can be distinguished from SLF egg masses by their buff or yellowish fuzzy coating, and they often have tiny pinprick holes on the surface, evidence of a parasitic wasp that preys on gypsy moth eggs. The eggs themselves, which can be seen by scraping away the fuzzy covering, are small and spherical, compared to the larger and more oval eggs of lanternflies.

SLF egg mass on the left, next to a gypsy moth egg mass on the right. Photo: Emelie Swackhamer, Penn State Extension

You may also come across mud wasp or mud dauber nests on the sides of structures or under roof overhangs. Mud daubers are solitary wasps and are a native insect that create cylinders of mud to house their eggs. The shape and large size set them apart from SLF egg masses.

Mud dauber nest. Photo: Bugwood Wiki

We also sometimes get reports from people who confuse SLF egg masses with lichens. Lichens are a hybrid of algae and fungus and are found in many habitats. They have a wide variety of appearances, but commonly have a scaly-looking appearance and some of the most common ones are flat and have a bluish-green tinge. These are harmless, naturally occurring growths and can be left alone. However, SLF egg masses could be camouflaged amongst a lichen-covered surface, so you should always check to make sure!

A lichen on a tree. Photo: Bill Uhrich

If you think you have found a spotted lanternfly egg mass, please photograph what you see and report it here. If you are not able to take a photograph, you can use one of our plastic ID cards (order some for free here) or a credit card to scrape the eggs off, place them in a bag or other sealable container, and add rubbing alcohol as soon as you can - this will kill the eggs.

Joshua Bruckner is Forest Pest Outreach Coordinator for the Massachusetts Department of Agricultural Resources.

Growing on Trees—Webcasts and Online Events

Urban Forestry Today

February 4, 2021 | 12:00 - 1:00 p.m. (ET)

Arboreta, Botanical Gardens & Urban Forestry: A Natural Relationship

John Berryhill, Smith College

Register here or visit: www.joinwebinar.com and enter the code: 836-545-899 at noon on February 4.

For more information and to view archived webcasts, go urbanforestrytoday.org.

Urban Forest Connections

February 10, 2021 | 1:00 - 2:15 p.m. (ET)

Extreme Events in the Urban Forest: Assessment, Response, and Recovery

Dr. Steve Norman, USDA Forest Service; Will Liner Florida Forest Service; Alex Sherman, city forester, Springfield, MA

Free. Find out more at the U.S. Forest Service Urban Forest Connections website.

On-Demand Webinar

Helping Municipalities Develop Urban Wood Management Programs

The Virginia Department of Forestry is leading the way in developing statewide guidance for municipal urban wood best practices and incorporating them into the full circle management of the urban forest. Learn about Virginia's commitment to support an urban wood program on every level – from local arborists and makers to the municipalities that provide them wood.

Watch the webinar on the Urban Wood Network.

Street Tree Essentials

April 1, 5, 8, 2021 | 9:00 - 11:00 a.m. (ET)
Online class from BayState Roads

This course will cover how to plan, select, care for, and protect street trees. Registration fee: $25 for public sector staff. Find out more at BayState Roads.

Landowner Virtual Town Hall

February 2, 2021 | 12:00 - 1:00 p.m. (ET)

Landowner Virtual Town Hall: Oak Resiliency in Southern New England - Forest Stewards Guild

Oak trees are iconic in southern New England, dominating seventy percent of the region's forests. Most of those forests are owned and stewarded by family forest owners. These forests face many threats to their long-term health and ability to grow. How can landowners address challenges such as climate change, deer herbivory, and gypsy moth, and other forest pests?

Join us to discuss with wildlife and forestry professionals what actions landowners can take to promote oak in their woods. Register for Virtual Town Hall

Also, join us for a follow-up questions and answers session on Saturday, February 6 at 9:00 a.m. Participants will have access to the virtual town hall recording to watch before joining the Q&A. Register for the Q&A follow up.

University without Walls – UMass Amherst (online)

Two classes this semester!

Feb 1, 2021 - May 4, 2021

Sensible Pruning for Beginners and Experts
Instructor: Dr. Brian Kane.

Find out more at umass.edu.

Community Forestry
Instructors: Dr. David Bloniarz, Dr. Richard Harper, and Kristina Bezanson.

Find out more at umass.edu.

Urban Tree Symposium

February 26, 2021 | 8:00 a.m. - 5:30 p.m. (ET)
Tower Hill Botanic Garden & The Ecological Landscape Alliance. More information at towerhillbg.org.

Growing on Trees

News from the Arbor Day Foundation (ADF)

Tree City USA Conference February 10, 17, 24, 2021 | 12:00 – 1:30 p.m. (ET)
The Arbor Day Foundation is organizing a **Tree City USA Virtual Conference** which will be held February 10, 17 & 24. The conference is committed to helping Tree Cities enhance the critical role that urban and community forestry plays to address climate change, environmental justice, and sustainable urban development. The conference will have educational content to help grow your program, discover innovative ways to manage trees, and connect with community members. Registration is $30 and is free for all Tree City USA communities. Register at arborday.org.

2021 Tree City USA, Tree Campus Higher Ed, and Tree Line USA Requirements

Tree City USA

Standard 4- Proclamation and Arbor Day Observance

- **A signed Arbor Day proclamation on all 2021 applications will be required.**
- **Arbor Day observances/celebrations will not be required**, but cities will be highly encouraged to publicize their community's recognition as a Tree City or celebration of Arbor Day.
  - Examples of things communities could do while socially distancing: Facebook live tree planting, social media post encouraging citizens to celebrate Arbor Day, newspaper article, radio ad, etc.
  - ADF will be developing a communications toolkit with graphics, social media posts, and more that communities can use to celebrate.

Tree Campus Higher Education

Standard 4- Arbor Day Celebration

- **ADF will require that campuses celebrate/observe Arbor Day on 2021 applications.**
  - This doesn't have to be a large tree planting event. It can be a social media live video of department members planting a tree, a simple social media post promoting being a Tree Campus and celebrating Arbor Day, a blog post, etc.
  - ADF will provide a toolkit for campuses to use for their 2021 events.

Standard 5- Service Learning Project

- **This will be required and students will need to be involved in some capacity for the 2021 applications.**
  - ADF understands that this may look different from previous years with being virtual but below are some examples that campuses used to meet this standard in 2020:
    - Student coursework on trees in classes being held virtually (college arboriculture classes)
    - Record or livestream a local tree expert giving tree planting or care tips to the student community
    - Student interns on the campus facility team that work on trees
    - Student-led education on the importance of trees to the campus and community that is shared via a social media campaign or via a digital campus publication
    - Students give a virtual presentation on trees to a local K-12 classroom
    - The creation of a virtual tree walk video

Tree Line USA

Requirement 5- Arbor Day Celebration

- **ADF will require that utilities celebrate/observe Arbor Day on 2021 applications.**
  - This doesn't have to be a large tree planting event. This can be an employee planting a tree, social media posts or live events, bill inserts with Arbor Day information or more.

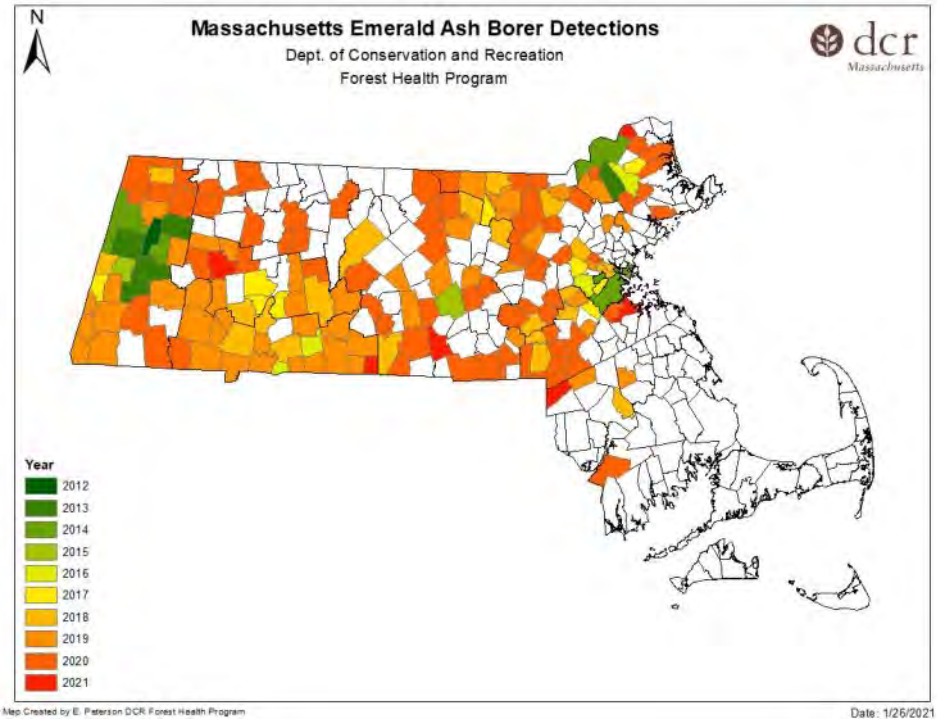
Contact Mollie Freilicher, mollie.freilicher@mass.gov, 508-726-9255 with questions.

Growing on Trees

EAB Update

In 2020, the DCR Forest Health Program confirmed the presence of emerald ash borer (EAB) in 70 communities. So far, this year, DCR staff have confirmed EAB in six additional communities: Quincy, Merrimac, Oxford, North Attleborough, Chesterfield, and Holland.

Barnstable remains the only county on the Massachusetts mainland without a known detection of EAB. EAB also has not been detected on the islands. For information on what to look for go to www.emeraldashborer.info/.



Weather and Climate

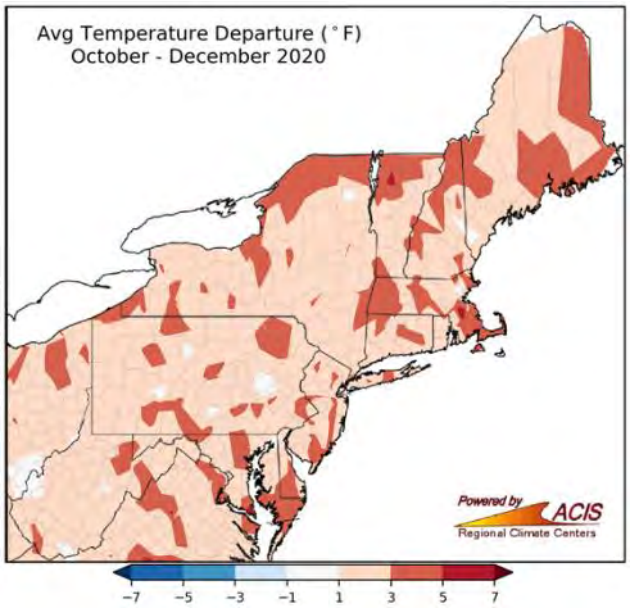
Massachusetts is out of drought status. Looking back over the last six months, the state is still behind on normal precipitation. Except for the last days of January, temperatures so far this winter have been warmer than average for almost all of Massachusetts and the northeast. Keep an eye on temperature and precipitation trends with the resources below.

Find out More

The Northeast Regional Climate Center

The U.S. Drought Portal

National Climate Report



Growing on Trees

Grants

National Park Service Rivers, Trails and Conservation Assistance Program — Requests considered on a rolling basis through March 2021 – National Parks Service is accepting applications for community assistance in conservation and outdoor recreation. Project applicants may be state and local agencies, tribes, nonprofit organizations or citizen groups. National Parks and other federal agencies may apply in partnership with other local organizations. Visit the funding opportunity description at nps.gov.

New England ISA Arbor Day Grant—Application Deadline March 31, 2021
This grant awards up to $1,000.00 to a municipality, non-profit organization, or institution that demonstrates the need to promote and support their Arbor Day celebration. Find out more at newenglanisa.org.

Scholarships

There are several scholarship for full-time students who are currently (or who will be) enrolled in an arboriculture, urban and community forestry, or related program at an accredited two or four year university in fall 2021.

Organization	Deadline
Massachusetts Tree Wardens' and Foresters' Association	February 15
Garden Club Federation of Massachusetts	March 1
TREE Fund	March 15
New England ISA	April 1
Cape Cod Landscape Association	April 25
Massachusetts Arborists Association	May 31

Greening the Gateway Cities

Photos from the fall 2020 planting season.

Find out more about the Greening the Gateway Cities Program at maurbancanopy.org.

From left to right: Planting trees in Chicopee; Watering trees in Holyoke. Photos by Rachel DeMatte, DCR.

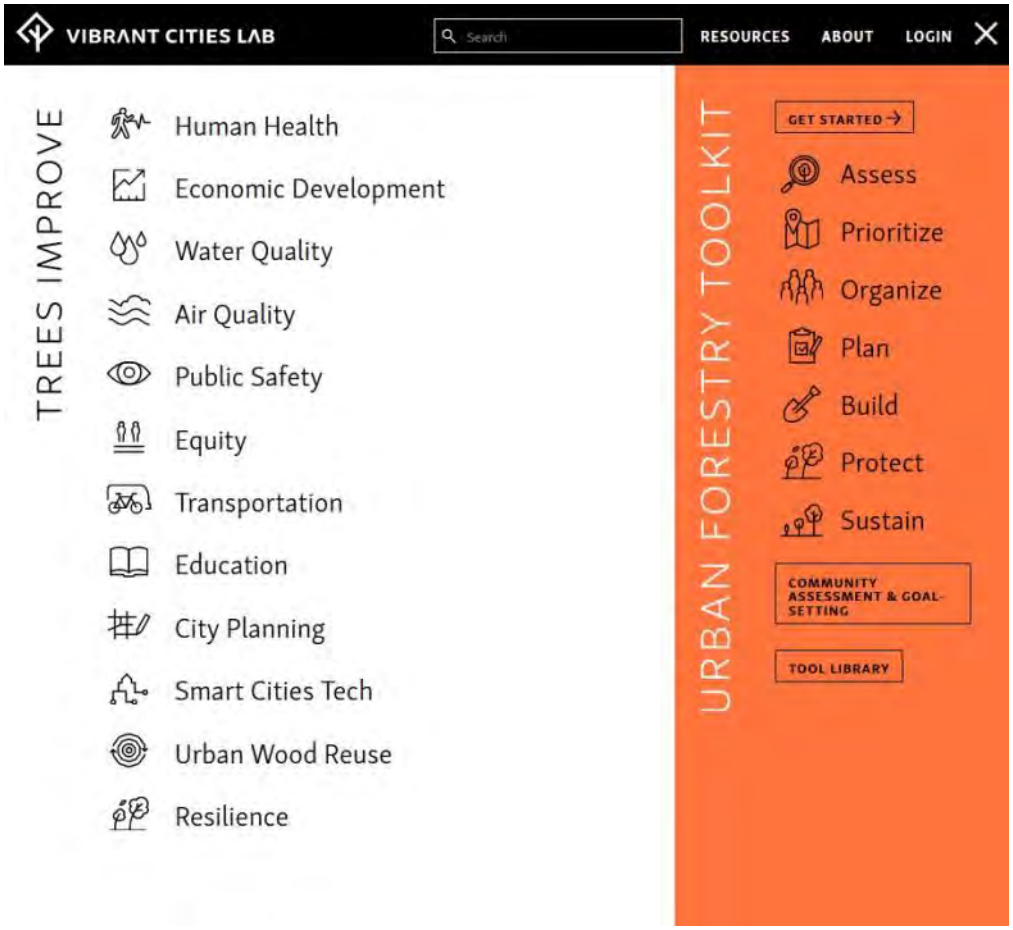
Gleanings

Vibrant Cities Lab

Vibrant Cities Lab is an online hub for urban forestry research, case studies, and guides, as well as home to a toolkit that allows managers and advocates to assess their urban forest. The US Forest Service, American Forests and the National Association of Regional Councils created Vibrant Cities Lab to help city managers, policymakers and advocates build thriving urban forest programs.

Content is organized by topics, including human health, economic development, urban wood reuse, and public safety, among others, or users can search for documents and resources.

Check out this great resource at vibrantcitieslab.com.



Tree Board University

This unique online training will help you learn more about trees, about people, and about serving in a citizen advisory role in your city or town. This eight-session course for tree committee members (as well as other urban forest tree advocates) is free and can be taken at your own pace. Tree Board University, funded by the USDA Forest Service and hosted by the Arbor Day Foundation, is comprised of eight modules, from Tree Board 101, to Engaging in the Political Process, to Getting Things Done, and Moving Forward, and more. If you are a current tree committee member or are thinking of joining (or starting!) a tree committee, this course is for you. Find out more and sign up at treeboardu.org.

News

Return of Periodical Cicadas in 2021: Biology, Plant Injury and Management

Much of Massachusetts is not known to have periodical cicadas. The brood of periodical cicadas, Brood XIV, on the Cape and in Southeastern Mass. is expected to emerge next in 2025. The brood expected to emerge in 2021 is Brood X. Check out this map of broods and their expected emergence in the eastern and central United States.

By **Michael J. Raupp**

Photo 1: This will be a common scene in 2021, when hundreds of thousands of cicadas will emerge beneath trees in more than a dozen eastern states. Photo by Michael J. Raupp.

Natural events often occur in predictable cycles. In temperate North America, we are accustomed to the annual production of the leaves, flowers and seeds of our deciduous oaks and maples. *Agave americana*, the giant agave native to Mexico and Texas, is commonly known as the century plant due to its enormous periodic bloom of a decade or two. Even celestial events occur with clockwork predictability, like the visit of Halley's comet every 75 years. If you live in the eastern United States, get ready.

In the spring of 2021, trillions of periodical cicadas are expected to emerge in parts of the following states: Delaware, Georgia, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia. They will be a source of wonder and consternation as they emerge from the earth and lay eggs in treetops. (Photo 1). Read the full story in *TCI Magazine*.

Headlines in Brief

Mass Headlines

Boston Drops Plans for Melnea Cass Boulevard Redesign After Backlash Over Tree Removal

Key W.D. Cowls Forestland Protected in $3.25M Deal

With Williamstown, Conway Explores Feasibility of Carbon Market Program (MA)

Worcester County Conservation District Doing Some Soil-Searching

Massachusetts Lawmakers Send Climate Bill That Would Reduce State's Carbon Footprint to Gov. Charlie Baker's Desk

Earth Matters: The Wisdom of Trees in Winter

Other Headlines

How Wood Shaped Human History, From Spears to Boats to Books (Book Review)

$1 Million Available for Projects That Diversify Markets for Wood from Northern Forest Region

Do D.C.'s Poorest Neighborhoods Still Have Fewer Trees? (48-min listen)

Dismay Greets End of U.S. Effort to Curb Spread of Tree-Killing Beetle

Pittsburgh Is One of Four Cities Chosen as a Reforestation Hub to Help Our Urban Trees

Trees of Gratitude: Community Art Project Brings Together Face Masks, Heartfelt Messages

Towering Sequoias Are Even Bigger Than Thought, Laser Scans Suggest

Maine Wants to Pay Landowners to Fight Climate Change with Their Trees

Narragansett Students Set Goal of Planting 100 Trees This Spring (RI)

New Proposed Tree Ordinance For Atlanta Tries To Balance Between Builders And Advocates

A Time to Plant, A Time for Trees—Tu B'Shevat, the New Year of Trees

On the Horizon

Feb 2	Landowner Virtual Town Hall: Oak Resiliency in Southern New England, 12:00 p.m.
Feb 2	Webinar: UMass Extension's Invasive Insect Webinar Series - ALB & Trapping
Feb 3	Webinar: The American Oaks ($), 12:30pm, Ecological Landscape Alliance
Feb 4	Webinar: Arboreta, Botanical Gardens, and Urban Forestry, 12pm, Urban Forestry Today
Feb 9	Webinar: UMass Extension's Invasive Insect Webinar Series - SWD, BMSB & SLF
Feb 10-24	Tree City USA Conference (Virtual), Arbor Day Foundation
Feb 10	Webinar: Extreme Events in the Urban Forest, 1pm, U.S. Forest Service
Feb 24	Webinar: Woods to Home, 2pm
Feb 26	Urban Tree Symposium, (Virtual)
Mar 9	Webinar: Invasive Woody Plant Management (part 2), 2pm, US EPA
Mar 15	Deadline for DCR Arbor Day Poster Contest
Mar 17	Webinar: Forest to Cities, 2pm
Apr 13	Webinar: IPM for Spotted Lanternfly, 2pm
Apr 30	Arbor Day in Massachusetts

The Tree City USA, Tree Campus Higher Ed, and Tree Line USA application deadline was **December 31**. Contact Mollie Freilicher with any questions on your application.

The New England Chapter-ISA maintains a calendar with many online opportunities. Check it out here: https://newenglandisa.org/events

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.

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www.mass.gov/dcr/urban-and-community-forestry

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.