

THE SHADE TREE

A BI-MONTHLY BULLETIN DEVOTED TO NEW JERSEY'S SHADE TREES

Volume 91 – Nov - Dec 2018 – Issue 11 & 12

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BULLETIN OF THE NEW JERSEY SHADE TREE FEDERATION

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SEASON’S GREETINGS

The Executive Board and Directors of the New Jersey Shade Tree Federation wish to thank everyone for their support over the past year. Best Wishes are being extended for a Happy Holiday Season. May the New Year be healthy, happy and prosperous to each and every one of you!

EDUCATING THE PUBLIC ABOUT TREES & STORM EVENTS

With recent storms many people are noticing a real lack of understanding by the public on how to prepare trees in communities for a storm event. Many times, residents who had a tree fail in a storm don't understand the reason why, or how they could have mitigated the problem and may not know what to do next. Noticing this void, groups like the Arbor Day Foundation have made "Storm Recover Kits" for communities to educate the public.

There are 6 main topics to educate about trees & storm events to residents:

1. Pre-Storm Prevention – This is educating the public about proper tree care and having their trees checked for defects. Removing defects or a tree that runs a high risk of failing in the storm is important, because trees that fail in storms usually have some type of noticeable defect.
2. Post-Storm – After a storm, residents need to assess their property. It will be important that residents understand the risks of damaged trees for immediate safety. In many cases fallen tree branches may take down power-lines and leave hanging branches that may fall. They also need a plan of who to contact for post-storm work.
3. Tree First Aid – After a storm it may take several days before a proper tree care service may be able to get to a resident. Residents may need to care for a tree or remove a branch still attached to the tree before an arborist can be on the site. Tree first aid will help residents make the right choices to reduce tree damage.
4. Avoiding Scam Artists – After a storm there is a great potential for scam artists to make money. Residents need to know how to protect their property, the trees and themselves from these scam artists. The person that comes to a door post-storm may not have insurance or trained in proper tree care.
5. Reducing Future Storm Damage – Sometime after a storm it is important to remind residents to have the trees checked for damage that may cause a tree to become a hazard in the next storm. This might include removing dead or cracked branches potentially reducing future tree hazards.
6. Importance of Community Forestry – This is also a very good time to show the importance of Community Forestry. Woody debris after a storm can be the largest impediment of cleaning up after a major storm. A long-term properly managed community forest will have far less problems and should be able to recover more quickly after a storm event.

This information is brought to you by the NJ Board of Tree Experts and the Tree Care Industry Association.



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TREES HAVE A “HEARTBEAT,” SCIENTISTS DISCOVER

Return to Now, April 29, 2018



Researchers discover trees have a “heartbeat,” it’s just so slow we’ve never noticed before. Until now, scientists thought water moved through trees by osmosis, in a somewhat continuous manner.

Now they’ve discovered the trunks and branches of trees are actually contracting and expanding to “pump” water from the roots to the leaves, similar to the way our heart pumps blood through our bodies. The only difference between our pulse and a tree’s is a tree’s is much slower, “beating” once every two hours or so, and instead of regulating blood pressure, the heartbeat of a tree, regulates water pressure.

“We’ve discovered that most trees have regular periodic changes in shape, synchronized across the whole plant ... which imply periodic changes in water pressure,” András Zlinszky of Aarhus University in the Netherlands told *New Scientist*. In his 2017 study, Zlinszky and his colleague Anders Barfod used terrestrial laser scanning to monitor 22 tree species to see how the shape of their canopies changed. The measurements were taken in greenhouses at night to rule out sun and wind as factors in the trees’ movements.

In several of the trees, branches moved up and down by about a centimeter or so every couple of hours. After studying the nocturnal tree activity, the researchers came up with a theory about what the movement means. They believe the motion is an indication that trees are pumping water up from their roots. It is, in essence, a type of “heartbeat.” Zlinszky and Barfod explain their theory in their newest study in the journal *Plant Signaling and Behavior*.

“In classical plant physiology, most transport processes are explained as constant flows with negligible fluctuation in time,” Zlinszky told *New Scientist*. “No fluctuations with periods shorter than 24 hours are assumed or explained by current models.” But the researchers still don’t fully understand how the “pumping” motion works. They suggest maybe the trunk gently squeezes the water, pushing it upwards through the xylem, a system of tissue in the trunk whose main job is to transport water and nutrients from roots to shoots and leaves.

In 2016, Zlinszky and his team released another study demonstrating that birch trees “go to sleep” at night. The researchers believe the drooping of birch branches before dawn is caused by a decrease in the tree’s internal water pressure. With no photosynthesis at night to drive the conversion of sunlight into simple sugars, trees likely conserve energy by relaxing branches that would otherwise be angled towards the sun. These birch movements are circadian, following the day-night cycle. Their new discovery is something entirely different, they say, because the movements happen at much shorter intervals.

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VEGETATION MANAGEMENT RESPONSE ACT

For the sake of the dissemination of public knowledge, the following information is being presented to our readers.

There are two identical bills S2505 (was due for a Senate vote) and A2558 (came out of Telecommunications & Utilities Committee) and was referred to the Assembly Appropriations Committee. It would be prudent to become familiar with these bills as there are changes to the way shade tree commissions and the Community Forestry Council operate. In short, the bills allow any public utility to remove trees they deem as dangerous to any electric facility without requiring permission from any commission or agency. The utilities will also be exempt from any penalty or fine.

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TRouBLING URbAN TREE DECLINES

National Wildlife, October – November 2018

To assess changes in tree cover in the nation’s cities and towns (including New York City, right), U.S. Forest Service (USFS) researchers recently examined aerial imagery taken between 2009 and 2014. What they found was disturbing. Each year during that period, the country’s metropolitan areas lost an average of 36 million trees – losses that have serious implications for people and wildlife. “Urban forests are a vital part of the nation’s landscape,” the researchers report in *Urban Forestry and Urban Greening*.

Beyond increasing property values, trees help improve air quality, reduce summer energy costs, mitigate polluted run-off and flooding, and enhance human health. According to the USFS, such woodlands produce more than \$18 billion annually in benefits to society in this country. “City foresters, planners and decision makers need to understand trends in urban forests so they can develop and maintain sufficient levels of tree cover for current and future generations of citizens,” says Dave Nowak, one of the study’s authors. The project found that only three states – Mississippi, Montana and New Mexico – have had slight increases in urban tree cover.



REPORTING ON THE EAB ROUNDTABLE DISCUSSION

By Pam Zipse, Outreach Coordinator, Rutgers Urban Forestry Program

As you may or may not have realized, the Shade Tree conference had a new addition this year – a roundtable discussion on Emerald Ash Borer (EAB) held on Thursday night from 5:30 – 6:30 in the General Session room. This was an informal group discussion facilitated by Dr. Grabosky of the Rutgers Urban Forestry Program (and NJ Shade Tree Federation Board President) encompassing anything that anyone wanted to talk about regarding EAB. We had a respectable turnout for a new initiative, with about 20 people participating and we heard stories of struggle and success from municipal representatives in many stages of EAB preparedness and response.

This roundtable discussion was added to the program to emphasize the fact that the EAB problem is not over. Although we have been talking about it at this conference for many years, it is a staggering problem to address and many municipalities are still not prepared. The reality is, in many places throughout the State, the worst is yet to come.

At the roundtable, we discussed the challenges involved in inventory and decision-making regarding which trees to treat and which to remove, the difficulty in funding management initiatives and in sustaining budgets for these actions and perhaps most difficult of all – the challenge of raising awareness and translating that awareness to action among municipal residents. If your municipality is struggling with these problems know that you are not alone. Unfortunately, there is no one answer, strategy or solution that will work statewide. Each municipality must make the decisions that will work locally.

To add some specifics, we discussed the difficulties encountered in attempting to establish a municipal contract for treatment or removal that will allow for residents to buy into the municipal contract to take advantage of a bulk rate. At least one municipality that tried this found the contractors unwilling to agree to a price for municipal residents without first knowing how many residents wanted to participate. A suggestion was made to have the residents commit to buying in or at least to express interest, before the rate is set.

We also discussed the difficulties of enforcing tree removal decisions made by the municipality when the municipality has planted the trees, but ownership and responsibility has been transferred to the property owner by ordinance. In addition, we discussed the efficacy of treatment (still very good) and the frustration of needing to re-convince the governing body each time treatment needs to be repeated. A concern was raised about utility companies that may be proactively removing ash trees within their rights-of-way. While this is a smart and responsible practice as ash trees become much more difficult, dangerous and expensive to remove once they are dead, if your municipality has decided to invest in treatment of any ash trees within the utility right-of-way, this is something that your local utility should be made aware of as soon as possible.

It seems to me that two themes emerged from this group discussion. One, that having an inventory of at least your ash trees is critical to moving forward with any management action. The other that most, if not all, of the struggles we discussed centered on public outreach and education. This is clearly not an easy task, but one that must be done for the safety of your municipal residents. We want to remind everyone that there are resources to help with this on the State's EAB website (www.emeraldashborer.nj.gov), including a pesticide treatment options guide, an EAB action kit with sample management plan and press release, customizable poster, PowerPoint presentation, and many other helpful tools, and downloadable pest alerts and risk alerts that can be printed and distributed or linked on your own municipal website. Please make use of these resources, and contact anyone listed on the EAB Task Force page with any additional questions you may have.

Thank you to all who participated in the roundtable discussion and good luck to everyone in managing emerald ash borer in your community!

NJ FEDERATION OFFICERS AND DIRECTORS FOR 2018-2019

The New Jersey Shade Tree Federation held its 93rd Annual Business Meeting on November 8, 2018. It was held at the Rutgers University, in Blake Hall on the Cook Campus in New Brunswick, New Jersey. At that meeting, the annual election of officers was held. The new officers and directors are listed below.

Officers:

Jason Grabosky, PhD – President; Rutgers University
Liz Stewart – Vice-President, River Edge Shade Tree Commission
Donna Massa, Executive Director

Directors:

2019: Michael Zichelli – Borough of Glen Ridge
Frank Gallagher, PhD – Rutgers University
William Comery – Borough of Paramus
Paul Cowie – Paul Cowie & Associates

2020: Wayne Dubin – Bartlett Tree Experts
Brian Hartel – PSE&G
Barbara Ronca – Raritan Township
Richard Wolowicz – RichView Consulting

2021: *Pam Zipse, Rutgers University
*Joshua Faas, Plant Detectives
*John Linson, The Shade Tree Department
*Brittany Carino – Atlantic City Electric

* Elected at the 93rd Annual Business Meeting.

WILLIAM J. PORTER AWARD OF APPRECIATION

Each year the NJ Shade Tree Federation presents the William J. Porter Award of Appreciation to an individual who has given much of his/her time, talents, and energy to the Federation as well as to the arboricultural industry itself. This year's recipient is Robert Laskoski.

Bob was active with the Milltown Shade Tree Commission and became involved with the NJ Shade Tree Federation as his wife, Clare, worked for the organization. Clare retired but they both continued to volunteer their time. During the hectic time before and after the Annual Meetings, Bob was always there lending an extra hand whenever needed.

Bob Laskoski works hard for the industry and usually stays in the background with little accolades. He has spent countless hours carrying and transporting gear to and from the Annual Meeting locations. He has also run the lights and coordinated the AV needs during the sessions.

The Board of Directors of the New Jersey Shade Tree Federation recognizes Bob's endless efforts with this year's presentation of the William J. Porter Award of Appreciation.



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