THE SHADE TREE

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

Volume 94 — September - October 2021 – Issue 9 & 10

This Issue Presents…

DIRECTOR'S DISCOURSE

By Donna Massa

The New Jersey Shade Tree Federation's 96th Annual Conference is just around the corner. It will be held October 21-22, 2021, at the **Crowne Plaza, 2349 W. Marlton Pike, Cherry Hill, NJ**. Here are some important deadlines to take note of:

• Our office continues to be located on Rutgers campus and our mail is sorted with Rutgers mail. Delivery to our office is delayed. Use our mailing address **PO Box 6540, Hillsborough, NJ 08844** to avoid having delivery of your registration delayed.

Payment Options:

• Enclose check or **authorized** voucher/PO with your registration form and mail to: NJ Shade Tree Federation, **PO Box 6540, Hillsborough, NJ 08844**

• Register online and pay by credit card thru Pay-Pal. Complete your registration form and be sure to select the "submit form" button. An invoice will be sent direct from Pay-Pal where you may pay via credit card. The invoice is NOT sent to you immediately but WILL BE SENT in a timely fashion so that you may complete your registration. I**MPORTANT NOTE: Registration is NOT accepted until a completed registration form is received AND payment thru Pay-Pal is made.**

• FOR HOTEL RESERVATIONS, PURCHASE ORDERS MUST BE SUBMITTED TO THE CROWNE PLAZA BY OCTOBER 1ST. THE CROWNE PLAZA WILL NOT ACCEPT PO's AT THE CONFERENCE! Call 1- 888-233-9527 and be sure to mention the NJ Shade Tree Federation 2021 Conference in order to obtain the reduced rate of $ 119/night.

Lots of changes on the horizon and we ask that you bear with us as we explore more efficient ways to make your attendance at the conference safe,

Continued on Page 66

BULLETIN OF THE NEW JERSEY SHADE TREE FEDERATION
Editor: Richard S. Wolowicz • Executive Director: Donna Massa,
Blake Hall, 93 Lipman Drive, New Brunswick, NJ 08903
Telephone: (732) 246-3210 Fax: (732) 640-5289 **www.njstf.org**
e-mail: trees@njstf.org ISSN # 0037-3133

DIRECTOR'S DISCOURSE

Continued from page 65

enjoyable, comfortable, as well as informative.

Regarding COVID protocols, we will be following a code of behavior that will be dictated to us by the venue. Those protocols are dictated to the venue by the governor of the State of NJ and the governor's protocols are dictated to him by the CDC.

There will be masks and sanitizing lotion in the give-away bags for your use. The seating will be classroom style (attendees facing forward) seated 3 ft apart. We will do our best to keep our members, speakers, and staff safe. If you have ANY reservation about attending this year's conference, we understand and would suggest that perhaps this is not the year to join us. We are, however, looking forward to welcoming those who will join us freely as we gather as a community once again.

This year, our 96th Annual Conference Dinner will be held on Thursday evening of the conference and is included with the purchase of a "Complete Registration". This event is a networking/community event where shade tree commissions and professionals in the tree care industry can exchange thoughts and experiences regarding the activities of shade tree commissions within municipalities as well as the tree industry itself all with the same goal of preserving the tree canopy throughout the state of New Jersey.

Our ability to work with the hotel and keep the overnight stay cost reasonable depends on you. Consider purchasing a "Complete Registration" and staying and enjoying both days of our conference including our 96th Annual Conference Dinner on Thursday night during the conference. The accommodations and the dining are exquisite. Plan ahead and reserve early.

We recognize that the beauty of our conference is that it brings together municipal shade tree commissioners with professionals in the tree industry. We also recognize that each group has different areas of focus. With this in mind, we will offer a morning General Session and a split session in the afternoon where we have established a "Municipal Track" and a "LTE/LTCO" track.

CORE will not be offered at this year's conference. Instead, join the folks from the NJ Urban and Community Forestry Program at the "Branch Office" located in the Terrace Room. Interact directly with the NJUCF staff, ask questions you've always wanted to ask, network with other local shade tree program volunteers, and brainstorm about projects, ideas, challenges, and successes.

Continued on Page 67

DIRECTOR'S DISCOURSE

Continued from page 66

We welcome all of our exhibitors – those who return each year to support the Federation and meet and greet you as well as newcomers to our Exhibit Hall. Be prepared to visit our Exhibitors not only within the Exhibit Hall but also in the promenade and outside as they display their equipment.

Continuing Education Units anybody??? The NJ Community Forestry, the Pesticide Control Programs for New Jersey, New York and Pennsylvania, the LTE/LTCO Programs in New Jersey and Maryland, the International Society of Arboriculture, the Association of Public Works, and the Society of American Forests each has approved our conference for continuing education credits! Come to the Federation conference and obtain whatever credits you need. Be sure to complete details of what credits you would like to receive when you complete your registration form.

We challenge you to take advantage of all that the 96th Annual Conference has to offer you. We look forward to welcoming you to the conference this October!

DECAY CAN CAUSE HAZARDOUS DEFECTS IN TREES

Tree Care Industry Association

Tree failure is a major cause of residential property damage, as well as the leading cause of power outages nationwide. An ice storm can overload all the branches on a tree, a hurricane or high wind can blow down a tree if its roots are compromised, or a cracked tree can fail under its own weight.

"Homeowners who are worried about trees falling and damaging property should call a professional arborist for an on-site inspection," advises Tchukki Andersen, staff arborist with the Tree Care Industry Association.

Andersen notes that trees are designed to withstand most storms, but all trees can fail – and defective trail fail sooner than healthy trees. A sound tree becomes potentially dangerous when the tree's woody structure is weakened by one or more defects. During storms, pre-existing defects predispose trees to failure.

"To a professional arborist," notes Andersen, "defects are visible signs that a tree has the potential to fail."

Broadly defined, there are seven categories of defects: decayed wood, cracks, root problems, weak branch unions, cankers, poor tree architecture, and dead trees, tops or branches.

Continued on Page 69

Asplundh is hiring.

The leader in safe and efficient vegetation management services is presently seeking qualified candidates for a wide range of employment opportunities across the country. From no experience to a full resume, Asplundh offers a family-like culture, team-oriented approach, and extensive training for those in search of a rewarding career.

To apply go to Asplundh.com **Follow us**

ASPLUNDH
A BETTER WAY

 Continued from page 67

Stress

Healthy, well-maintained trees growing on suitable sites will be able to minimize the extent of decay and other defects. Trees that are stressed have reduced energy reserves, and therefore have less ability to deal with wounds and decay.

Most urban trees survive on construction-altered soils that may be compacted, poorly drained, high in clay, sand or gravel, very alkaline or littered with construction debris. Additionally, many urban trees are subjected to chemicals such as deicing salts, herbicides and fertilizers commonly used in landscape maintenance. Poor tree maintenance is another contributor to stress. These cumulative stresses all take a toll on tree vitality and structural integrity, increasing the risk of failure.

Defects and Decay

Professional arborists have an understanding of the factors that create or accelerate the development of defects in trees. They also understand that some species have growth characteristics that make them prone to certain defects.

All defective trees cannot be detected, corrected or eliminated. Although a professional arborist can readily recognize most defects, there are root problems and some internal defects that are hidden. These trees may require in0depth assessments and specialized diagnostic tools. Homeowners should also keep in mind that defects change with time. A tree that looked fine three years ago may have severe problems today. By doing regular inspections, arborist can successfully manage the risk of tree failure.

Advanced decay and cavities result in less structural strength and reduced stability. Wood decay is an internal process with just a few external indications, such as mushrooms, conks, rotten or punky wood, cavities, hollows, holes, in-rolled cracks, and bulges in the wood.

The healthy layer surrounding the decay column is called the shell. If the shell thickness is thin relative to the size of the tree, the shell is likely to fracture, causing the tree to fail. A tree can have internal decay and an opening and still be structurally sound provided that the shell is thick enough and the opening is not too wide.

If a tree is repeatedly wounded by the presence of in-rolled cracks, included bark, canker-rot fungi, or equipment (mowers, plows and weed whips), decay occurs in every annual ring of wood. These trees should be carefully inspected by a professional arborist because they do not form a sound shell of wood. The tree is likely to fail at the or near the location of the crack or would because a large and ever-expanding column of decay is present there. Again, a professional arborist can evaluate shell thickness and opening width to help determine the trees potential for failure.

TREE PLANTING HAS MIND-BLOWING POTENTIAL TO TACKLE CLIMATE CRISIS

Climate Academy by Grounded • Damian Carrington, Environmental Editor

Research shows a trillion trees could be planted to capture huge amount of carbon dioxide

Planting billions of trees across the world is one of the biggest and cheapest ways of taking CO2 out of the atmosphere to tackle the climate crisis, according to scientists, who have made the first calculation of how many more trees could be planted without encroaching on crop land or urban areas.

As trees grow, they absorb and store the carbon dioxide emissions that are driving global heating. New research estimates that a worldwide planting programme could remove just under one-third of all the emissions from human activities that remain in the atmosphere today, a figure the scientists describe as “mind-blowing”.

The analysis found there are 1.7bn hectares of treeless land on which 1.2tn native tree saplings would naturally grow. That area is about 11% of all land and equivalent to the size of the US and China combined. Tropical areas could have 100% tree cover, while others would be more sparsely covered, meaning that on average about half the area would be under tree canopy.

The scientists specifically excluded all fields used to grow crops and urban areas from their analysis. But they did include grazing land, on which the researchers say a few trees can also benefit sheep and cattle.

“This new quantitative evaluation shows [forest] restoration isn’t just one of our climate change solutions, it is overwhelmingly the top one,” said Prof Tom Crowther at the Swiss university ETH Zürich, who led the research. “What blows my mind is the scale. I thought restoration would be in the top 10, but it is overwhelmingly more powerful than all of the other climate change solutions proposed.”

Crowther emphasised that it remains vital to reverse the current trends of rising greenhouse gas emissions from fossil fuel burning and forest destruction, and bring them down to zero. He said this is needed to stop the climate crisis becoming even worse and because the forest restoration envisaged would take 50-100 years to have its full effect of removing 200bn tonnes of carbon.

But tree planting is “a climate change solution that doesn’t require President Trump to immediately start believing in climate change, or scientists to come up with technological solutions to draw carbon dioxide out of the

Continued on Page 72

DOGGETT . . . Liquid asset for trees and tree care companies.

The fastest growing segment of the tree care industry is liquid tree fertilization and Doggett is leading the way. The spectacular growth in this field has come from the fact that the fertilizing method that helps trees the most also helps tree care companies the most.

Liquid fertilizing is right for trees because the fertilizer is injected into the soil. This fractures and aerates the soil so that water, oxygen and fertilizers are made available to the feeder roots. Doggett's forty years of experience have resulted in XL Injecto Feed—a solid in a liquid—suspended particles of concentrated nutrition which you mix with water. Its slow release formula provides nourishment for up to two years and is available in five formulations for varying fertilizing situations.

Liquid tree fertilizing is a liquid asset for tree care companies because it lets you do a thorough and professional job in very little time with hardly any investment in equipment. It requires about one fourth the labor of the dry granular application.

It's no surprise that the leading tree care professionals in the country come to Doggett for tree fertilizer. From Central Park in New York, where XL Injecto Feed is the fertilizer of choice for dependable results, to the highly respected Shade Tree Laboratories at the University of Massachusetts, XL Injecto Feed is demonstrating its value and proving that it really is a liquid asset for trees and tree care companies.

Doggett Corporation, Lebanon, NJ 08833 Tel: 908-236-6335

TREE PLANTING HAS POTENTIAL *Continued from page 70*

atmosphere", Crowther said. "It is available now; it is the cheapest one possible and every one of us can get involved." Individuals could make a tangible impact by growing trees themselves, donating to forest restoration organisations and avoiding irresponsible companies, he added.

Other scientists agree that carbon will need to be removed from the atmosphere to avoid catastrophic climate impacts and have warned that technological solutions will not work on the vast scale needed.

Jean-François Bastin, also at ETH Zürich, said action was urgently required: "Governments must now factor [tree restoration] into their national strategies."

Christiana Figueres, former UN climate chief and founder of the Global Optimism group, said: "Finally we have an authoritative assessment of how much land we can and should cover with trees without impinging on food production or living areas. This is hugely important blueprint for governments and private sector."

René Castro, assistant-director general at the UN Food and Agriculture Organisation, said: "We now have definitive evidence of the potential land area for re-growing forests, where they could exist and how much carbon they could store."

The study, published in the journal Science, determines the potential for tree planting but does not address how a global tree planting programme would be paid for and delivered.

Crowther said: "The most effective projects are doing restoration for 30 US cents a tree. That means we could restore the 1tn trees for $300bn [£240bn], though obviously that means immense efficiency and effectiveness. But it is by far the cheapest solution that has ever been proposed." He said financial incentives to landowners for tree planting are the only way he sees it happening, but he thinks $300bn would be within reach of a coalition of billionaire philanthropists and the public.

Effective tree-planting could take place across the world, Crowther said: "The potential is literally everywhere – the entire globe. In terms of carbon capture, you get by far your biggest bang for your buck in the tropics [where canopy cover is 100%] but every one of us can get involved." The world's six biggest nations, Russia, Canada, China, the US, Brazil and Australia, contain half the potential restoration sites.

Tree planting initiatives already exist, including the Bonn Challenge, backed by 48 nations, aimed at restoring 350m hectares of forest by 2030. But the study shows that many of these countries have committed to restore less than

 Continued on Page 73

half the area that could support new forests. “This is a new opportunity for those countries to get it right,” said Crowther. “Personally, Brazil would be my dream hotspot to get it right – that would be spectacular.”

The research is based on the measurement of the tree cover by hundreds of people in 80,000 high-resolution satellite images from Google Earth. Artificial intelligence computing then combined this data with 10 key soil, topography and climate factors to create a global map of where trees could grow.

This showed that about two-thirds of all land – 8.7bn ha – could support forest, and that 5.5bn ha already has trees. Of the 3.2bn ha of treeless land, 1.5bn ha is used for growing food, leaving 1.7bn of potential forest land in areas that were previously degraded or sparsely vegetated.

“This research is excellent,” said Joseph Poore, an environmental researcher at the Queen’s College, University of Oxford. “It presents an ambitious but essential vision for climate and biodiversity.” But he said many of the reforestation areas identified are currently grazed by livestock including, for example, large parts of Ireland.

“Without freeing up the billions of hectares we use to produce meat and milk, this ambition is not realisable,” he said. Crowther said his work predicted just two to three trees per field for most pasture: “Restoring trees at [low] density is not mutually exclusive with grazing. In fact, many studies suggest sheep and cattle do better if there are a few trees in the field.”

Crowther also said the potential to grow trees alongside crops such as coffee, cocoa and berries – called agro-forestry – had not been included in the calculation of tree restoration potential, and neither had hedgerows: “Our estimate of 0.9bn hectares [of canopy cover] is reasonably conservative.”

However, some scientists said the estimated amount of carbon that mass tree planting could suck from the air was too high. Prof Simon Lewis, at University College London, said the carbon already in the land before tree planting was not accounted for and that it takes hundreds of years to achieve maximum storage. He pointed to a scenario from the Intergovernmental Panel on Climate Change 1.5C report of 57bn tonnes of carbon sequestered by new forests this century.

Other scientists said avoiding monoculture plantation forests and respecting local and indigenous people were crucial to ensuring reforestation succeeds in cutting carbon and boosting wildlife.

Earlier research by Crowther’s team calculated that there are currently about 3tn trees in the world, which is about half the number that existed before

Continued on Page 74

the rise of human civilisation. “We still have a net loss of about 10bn trees a year,” Crowther said.

Visit the Crowther Lab website for a tool that enables users to look at particular places and identify the areas for restoration and which tree species are native there.

This article was amended on 18 October 2019 to reflect a revision made to the original research paper, and a clarification in a letter by the authors of the study in the journal Science, that responds to criticism of their work. They clarify that one comparison made did not take into account that 55% of the CO2 produced by human activity is absorbed by land and oceans. The text of the first and second paragraph of this article have been edited to reflect this and the paper revision. The article was further amended on 31 August 2021 when text stating that “research estimates that a worldwide planting programme could remove two-thirds of all the emissions from human activities that remain in the atmosphere” was changed to refer to “just under one-third”, to reflect a subsequent erratum published by the report’s authors.

GET TO KNOW THE NJSTF BOARD MEMBERS

The most recent interview with the NJSTF Board members is now available.

Listen in as we chat with Robin Potter, George Sweetin and George Megllio. All are first year NJSTF Board Members who volunteer in their communities.

In an effort to bring our members together throughout the year, the NJSTF has been posting periodic video chats with our members so that we can get to know each other better.

PREVIOUS EPISODES:

Jason Grabosky and Frank Gallagher both NJSTF Board Members and Rutgers Professors.

John Linson & Mike Zichelli who both work on the municipal level of tree care.

Neil Hendrickson and Steve Chisolm Jr., both NJSTF Board Members who have worked in the tree industry.

 Continued on Page 77

TIMMERMAN EQUIPMENT COMPANY

3554 Route 22 West

PO BOX 71

Whitehouse, NJ 08888

www.timmermanequipment.com

Proud Member and Sponsor of the
New Jersey Shade Tree Federation

Altec ENVIRONMENTAL PRODUCTS

WOOD CHIPPERS

Altec

FORESTRY TRUCKS

DURATECH®

Tub & Horizontal GRINDERS

SALES PARTS SERVICE

(908) 534-4126 (908) 534-2320 FAX

HTS
Tree Care Professionals

PENNINGTON, NJ

609-737-1682

HTSTREECARE.COM
FULLY INSURED - FREE ESTIMATES
Info@HTSTreeCare.com
Residential – Commercial – Municipal
"Tree Care to Improve Your Environment and Enhance Your Property"

SERVICES:
* Evaluations
* Tree Removals
* Cabling
* Stump Grinding
* Pruning

NEW JERSEY SOCIETY of CERTIFIED TREE EXPERTS

CERTIFIED ARBORIST ISA

BBB





ISA Certified Arborists # NJ-0838AU & NJ-1004AM
NJ Certified Tree Experts Brian Hartel, CTE #562 & 563
NJ Contr. Lic. #13VH02977500 & PA Contr. Lic. #PA050951

MasterCard VISA

Brittany Peterson and Barbara Ronca, NJSTF Board Member/past member and both community trees. involved in our community trees.

Paul Cowie and Josh Faas, both NJSTF Board Members. Paul is a professional arborist and Josh is a wholesale plant representative.

CONFERENCE UPDATE

The NJSTF Board has been receiving concerns from some of our Membership about attending a live conference this year. Registration for the in-person conference has been coming in and we are committed to an in-person conference at the hotel this year.

It is important to us that we include all of our Membership in the yearly conference. The NJSTF Board Members have been working to offer a modified ON-LINE Option for those who cannot attend the conference this year.

The virtual viewing of the speaker presentations would be offered after the in-person conference and will be found on our website www.njstf.org once they are available. We will be working with credentialing boards to see what CEU's can be offered in this way.

Please be patient for updates we send via e-mail and on our website. We will continue to update you on what will be available and how to register for the online option, so stay tuned!

RichView CONSULTING

Arboricultural & Forestry Services

www.RichViewConsulting.com

Serving Municipal, Utility and Private Clients

Richard S. Wolowicz, LTE # 281, AF

ISA Certified Arborist and Utility Specialist

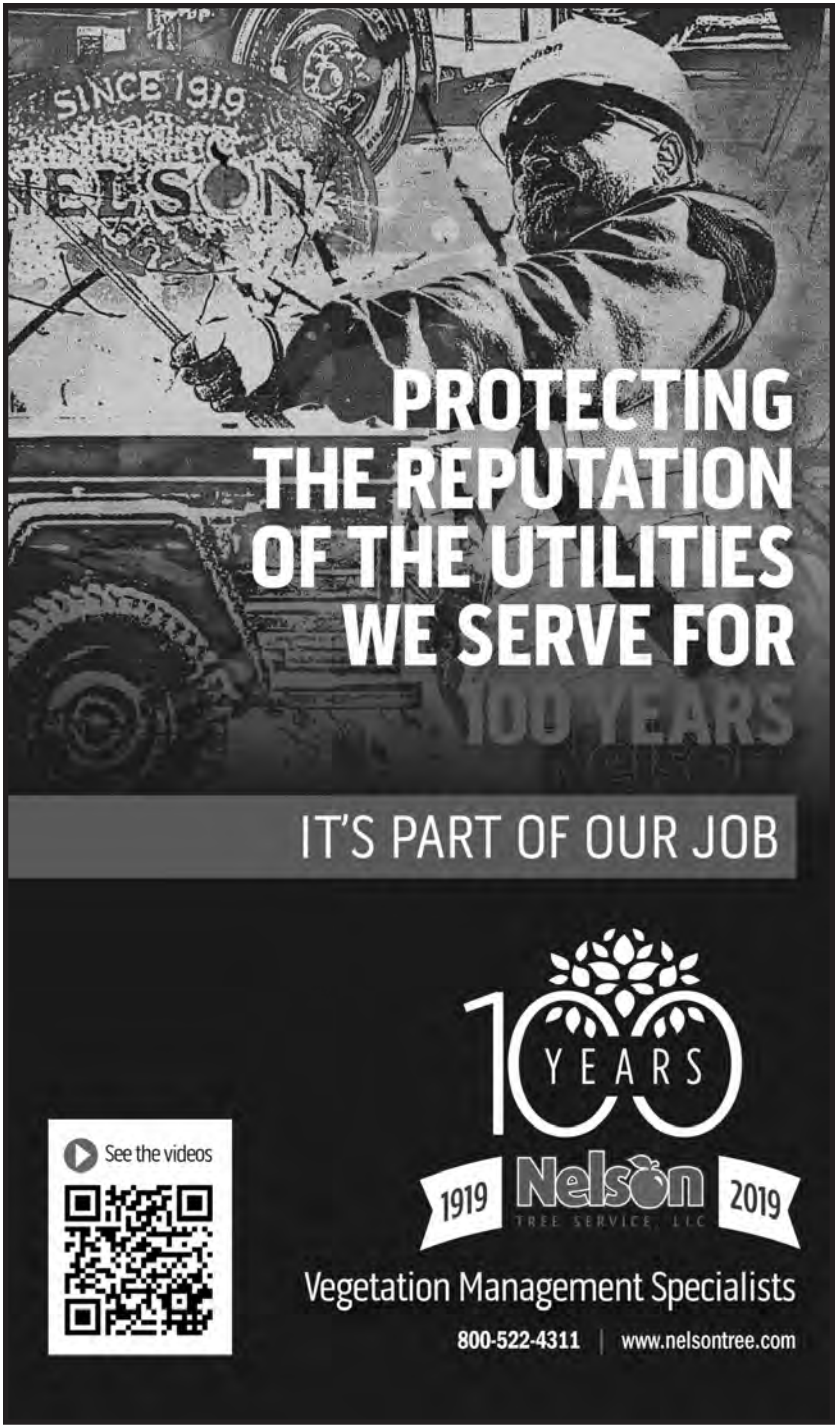
973-220-6797

Rich@RichViewConsulting.com

973-837-1390 phone
973-837-1391 fax

Northeastern
ARBORIST SUPPLIES

50 NOTCH ROAD
WEST PATERSON, NJ 07424


SINCE 1919
NELSON
PROTECTING
THE REPUTATION
OF THE UTILITIES
WE SERVE FOR
100 YEARS
IT'S PART OF OUR JOB
See the videos
100 YEARS
1919
Nelson
TREE SERVICE, LLC
2019
Vegetation Management Specialists
800-522-4311 | www.nelsontree.com

The New Jersey
Shade Tree Federation
Blake Hall
93 Lipman Drive
New Brunswick, N.J. 08903

Non Profit Organization
U.S. POSTAGE
PAID
New Brunswick, NJ 08901
Permit 50520

ASPEN
TREE EXPERT CO., INC.
"Specialists in Arboriculture"

Fully Insured and Serving
Monmouth, Ocean, Middlesex,
Mercer, and Burlington Counties

(732) 928-5747

481 Wright-Debow Rd.
Jackson, NJ
Aspen-Tree.com
Email: Info@Aspen-tree.com

Our Professional Staff

- 9 NJ Board Certified Tree Experts
- 5 ISA Certified Arborists
- 4 Tree Care Industry Association (TCIA) - Certified Tree Care Safety Professionals
- 3x World Champion Tree Climber Mark Chisholm

Thoroughly Trained Crews

- Chainsaw Safety
- Chipper Safety
- Line Clearance Qualified
- First Aid and CPR
- Flagger Certification

Services Offered

- Line Clearance
- Tree Pruning
- Tree Removals
- Hazard Tree Assessments
- Consultations
- Stump Grinding
- Insect & Disease Control
- Tree Fertilization