

Spring 2021
 This issue featuring
 the Economic Benefits
 of Trees:

Tree Benefits	1
President's Message	2
Memo Board	2
Consultant's Corner	10
Arbor Day English/Spanish	12
TREE Fund News	16
CoR Annual Meeting	17
News From International	20
Sustainables	21
Spotted Lanternfly	23
2020 FL Chapter Awards	23
Economic Impact	24
New Florida Chapter Members	26
Arborist Certification Committee Report	27
Florida Chapter Education Schedule	27

Trees Provide \$4 Billion in Benefits to Florida Cities¹

Drew C. McLean, Andrew K. Koeser, Deborah R. Hilbert, Shawn Landry, Amr Abd-Elrahman, Katie Britt, Mary Lusk, Michael G. Andreu, and Robert J. Northrop²

*figures/images are included within the article; to access the tables referred to within the article, please click on the links to go to the online tables.

What is an urban forest?

An urban forest is a collection of trees and other woody vegetation found in and around human developments. An urban forest can be thought of as a gradient of trees extending from the street trees of

densely packed urban cores, past the landscaped suburban plots, and all the way out to the remnant forests of exurban (or edges of urban) lands. It includes all the woody vegetation found in urban parks, industrial landscapes, residential properties, wetlands, riparian corridors, coastal ecosystems, greenways, and nature preserves, regardless of ownership. (Figure 1 - below).



Figure 1. Urban forest gradient; from left to right and top to bottom: urban street trees, park trees, residential trees, and trees along a trail in a nature preserve.

Credit: Drew C. McLean, UF/IFAS

Trees continued on page 4



Hello Florida Chapter ISA!

I am thrilled to be serving as your 2021 president! I would like to take this opportunity to introduce myself, share some of my goals for the year, and invite you to participate in one (or several) of our outstanding committees.

I am one of the first female certified arborists in the state and have been working in the industry for over 35 years,

starting as a young girl in my step-dad's nursery and then working alongside my step-brothers on their tree and landscaping crews. As an undergraduate student, I was lucky enough to work for Walt Disney World in Orlando as an EPCOT Center Gardener while participating in the Disney Theme Parks and Resorts Professional Internships Program. I recently graduated with my master's degree in Forest Resources and Conservation with a focus on Natural Resource Policy and Administration from the University of Florida. I am the proud recipient of the 2016 Florida Chapter ISA President's Award of Merit and the 2011 Florida Urban Forest Council Friends of the Urban Forest Outstanding Professional Award.

This year, I will be working closely with our Executive Transition Task Force to establish a well-designed and structured planning strategy for our CEO transition. For those of you that do not know, our long-term CEO Mr. Norm Easey has announced his retirement date as September, 2023, leaving very big shoes to fill in the near future! Norm is an ISA rock-star on a global level, and we are so thankful to have this extended time to identify our Chapter's goals moving forward to ensure the highest level of service continues to be delivered to our Chapter membership during this transition. Be on the lookout this year for surveys to gather your ideas and comments, and to include you in the planning process. Your participation matters!

Joining a committee is an excellent way to become more involved with the Florida Chapter. It allows you to work with other dedicated arborists on topics that matter to our industry. Last year, Past-President Rob Calley created a Tree Care Licensing Task Force, appointing Barry Grubb as Chairperson. Barry and his committee have done tremendous work in championing this effort toward arborist licensure in the state. Likewise, separate committees were merged to form a blended Marketing and Public Relations Committee, with Bonnie Marshall as Chairperson. Bonnie and her committee

MEMO BOARD

Electrical Hazard Awareness Training with Dr. John Ball
 April 23, 2021
 IN-PERSON in Plant City

- ▷ Register
- ▷ Live Streaming Zoom
- ▷ Register for Zoom
- ▷ Flyer

Florida Chapter FCC
 March 2021
CANCELED

TREES FLORIDA 2021 Conference and Trade Show
 EXHIBITOR and SPONSOR opportunities
 Register ONLINE!

- ▷ online EXHIBITOR registrations
- ▷ online SPONSOR donations

TREES FLORIDA Conference and Trade Show
 Palm Coast, FL
 June 7-8-9, 2021
 Registration available in early April

- ▷ watch for updates

have made significant progress to improve our social media presence and we are excited to share these updates with you soon.

Education Committee Chairperson Lori Ballard and her committee continues to produce exceptional learning opportunities, bringing advanced and cutting-edge information to those in our Florida tree care industry.

We are also keeping our fingers crossed for Trees Florida this year, where Trees Florida Committee Chairperson Ron Collins is working with his Palm Coast volunteers to plan and schedule an exciting and in-person event in June at the Hammock Beach Resort.

These are just a few examples of committees and task forces that would benefit from your input but can also act as resources for you to rely on. Self-nomination is encouraged as we continue to seek new volunteers to broaden our outreach to potential members.

We will be also be offering the opportunity for you to virtually observe and participate in our quarterly Board of Direc-
President continued on page 4

CLICK HERE FOR FLORIDA CHAPTER ISA COVID UPDATES

Florida Chapter ISA 2021 Board of Directors

Executive Committee

Kim Pearson, President ('21)
City of Fort Lauderdale
101 NE 3rd Avenue
Fort Lauderdale, FL 33301
Phone: 954-828-5798
kpearson@fortlauderdale.gov

Rob Calley, Past President ('21)
Backridge Tree Service Inc.
717 Edge St.
Ft. Walton Beach, FL 32547
Office Phone: 850 240-2829
Personal Phone: 850 699-2474
backridge17@gmail.com

Jonathan Frank, Vice President ('21)
Bartlett Tree Experts
566 NE 42nd Court
Oakland Park, FL
Phone: 954-459-5178
jfrank@bartlett.com

Alison Summersill, Treasurer ('20-'21)
Advance Tree Pros
7242 Gardner Street
Winter Park, FL 32792
Phone: 407-276-2459
ali@advancetreepros.com

Directors

Gareth Coggan, Commercial ('21-'23)
Florida Tree Care Company
PO Box 1097
Windermere, FL 34786
Phone- 407-494-3582
mail@ftree.com

Lori Ballard, Consulting Arborist Representative ('19-'21)
E Sciences
2329 Sunset Point Rd.
Clearwater, FL 33675
Cell: 727-403-5980
lballard@esciencesinc.com

Michael Marshall, Grower Representative ('21-'23)
Marshall Tree Farm
17350 SE 65th Street
Morrison, FL 32668
Phone: 352-528-3880
Michael@marshalltrees.com

Dr. Andrew Koeser, Educator Representative ('19 - '21)
University of Florida
14625 CR 672
Wimauma, FL 33598
Phone: 813-633-4150
akoeser@ufl.edu

Matt Anderson, Municipal Arborist Representative ('20-'22)
City of Clearwater
507 Vine Street
Clearwater, FL 33755
Matt.Anderson@MyClearwater.com

Barry Grubb, Utility Arborist Representative ('20-'22)
Florida Power & Light
PO Box 1119
Sarasota, FL 34230
barry.lgrubb@fpl.com

Brian Gould, Climbing Representative ('21 - '23)
Tree Care Technologies, LLC
8037 Crushed Pepper Ave.
Orlando, FL 32817
Phone: 407-285-1713
bgould@treecaretechnologies.com

**Justin Freedman
FUFC Representative ('19 - '21)**
E Sciences, Inc.
224 SE 9th Street
Fort Lauderdale, FL 33316
Phone: 954-484-8500
jfreedman@esciencesinc.com

**Jeffery Van Treese II
Attorney Representative ('19-)**
PO Box 971252
Boca Raton, FL 33497
jvt2law@gmail.com

**Quatisha Oguntoyinbo-Rashad,
At Large ('21)**
City of Miami
444 SW 2nd Avenue 3rd Floor
Miami, FL 33130
Phone: 305-763-5159
Qoguntoyinbo-rashad@miamigov.com

Bonnie Marshall, At Large ('21)
Juniper Landscaping
2504 64 Street Court East
Bradenton, FL 34208
Phone: 352-316-0264
Bonnie.marshall@juniperlandscaping.com

Florida Chapter Trustee:
Mr. Rick Joyce
Florida Chapter Standby Interim Director:
Dr. Andrew Koeser

Administration
Norm Easey, Chief Executive Officer
Jan Easey, Admin. Assist.
Patty Morrison, Admin. Assist.

We honor and thank the Florida Chapter ISA Past Presidents

2020 - Rob Calley
2019 - Adam Jackson
2018 - Scott Shultz
2017 - Lori Ballard
2016 - Bonnie Marshall
2015 - Celeste White
2014 - Dr. AD Ali

2013 - Patrick Miller
2012 - Eric Hoyer
2011 - Don Winsett
2010 - David Reilly
2009 - Mike Robinson
2008 - Mary Edwards
2007 - Rick Joyce

2006 - Rick Joyce
2005 - Bruce Smith
2004 - Michael Marshall
2003 - Perry Odom
2002 - Perry Odom
2001 - Loren Westenberger
2000 - Dane Buell

1999 - Dr. Ed Gilman
1998 - Richard Bailey
1997 - Joe Samnik
1996 - Joe Samnik

Florida Arborist newsletter is published quarterly by the Florida Chapter of The International Society of Arboriculture, Inc., 7853 South Leewynn Court, Sarasota, FL 34240, and is intended as an educational benefit to our members. Information may be reprinted if credit is given to the author(s) and this newsletter. Please submit all requests and articles to: Norm Easey, 7853 South Leewynn Court, Sarasota, FL 34240, Fax (941)342-0463 Email: Jan@floridaisa.org. Articles submitted will not be returned and are preferred in electronic format via disk or e-mail. The Florida Chapter reserves the right to refuse or edit submitted articles or advertising as seen fit. All pictures, articles, advertisements and other data are in no way to be construed as an endorsement of the author, products, services, or techniques. Likewise, the statements and opinions expressed herein are those of the individual authors and do not represent the view of the FL-ISA, its executive director, board of directors, its chairman, this newsletter or its editor.

[President continued from page 2](#)

tor meetings, to further commit ourselves to fair and transparent governance, to provide a window into how much fun we actually have together, and perhaps to help decide where you may fit in. I'll save you a seat! Contact Patty at the Chapter office for the link and code patty@floridaisa.org.

The ISA is a professional organization dedicated to continuing education for arborists, to tree care research, and to serving tree care consumers around the world. The Florida Chapter shares this same dedication, with a further commitment to serving the needs particular to Florida's professional arborists and tree care consumers. Our Chapter is only as strong as its membership, so I encourage you to renew your membership and promote new membership among your colleagues, allowing us to be the strongest possible local advocate for our Florida arboriculture industry.

I look forward to a productive year serving as your president.

Sincerely,

Kimberly Pearson

2021 Florida TCC Cancellation

We regret to inform our climbing community that we have made the tough decision to cancel the March, 2021 Florida Chapter TCC. We truly look forward to seeing everyone compete at the Florida TCC in Spring, 2022.

We have been diligently monitoring the situation with COVID and the vaccines. In the end we felt that the physical nature of the event with sometimes very close contact potentially puts our participants and volunteers in harm's way.

In addition to these COVID concerns in Florida, it was recently announced that International ISA has cancelled the International TCC (ITCC) for 2021. [Their next ITCC will be held in September of 2022 in Copenhagen, Denmark.](#)

[Trees continued from page 1](#)

Tree Canopy Coverage

Urban forest managers use a range of measurements to describe and value the urban forest and its benefits. One measurement that can be made over large areas of land with relative ease is the quantification of tree canopy coverage. Tree canopy cover is the percent of a given land area (e.g., city, national forest, etc.) covered by leaves and branches when viewed from above. Canopy coverage assessments are important tools that allow a community to estimate current canopy coverage, understand the extent of the urban forest, and track potential changes over time. Canopy coverage can be measured in the field with specialized equipment or by analysis of aerial and satellite imagery.

Florida has 29 metropolitan and micropolitan census-designated areas, representing 51 of the 67 counties and over 98% of the state's population (US Census Bureau 2019). These census-designated areas represent geographical regions with at least one densely populated urban area and related economic ties. Metropolitan areas must have one city or town with at least 50,000 people, while micropolitan areas must have a city or town with a population between 10,000 and 50,000 people (US Census Bureau 2019).

To assess the urban forest throughout the state, we analyzed canopy coverage and its associated benefits in each of these census-designated areas. Tree canopy coverage was estimated using a point-based sampling approach. This method generates random points within a designated boundary on high-resolution aerial imagery. The random points are then assessed by a photo interpreter and classified as "Tree/Shrub" or "No-Tree." The classified points are tallied and divided by the total number of points to reach an overall canopy coverage percentage.

Tree canopy coverage ranged from 18.6% in the Okeechobee micropolitan area to 74.4% in the Crestview-Fort Walton-Destin metropolitan area (click here to view Table 1) . In general, canopy coverage tended to decrease from north to south and west to east across the state (Figure 2 - below).

[Trees continued on page 5](#)

Trees continued from page 4

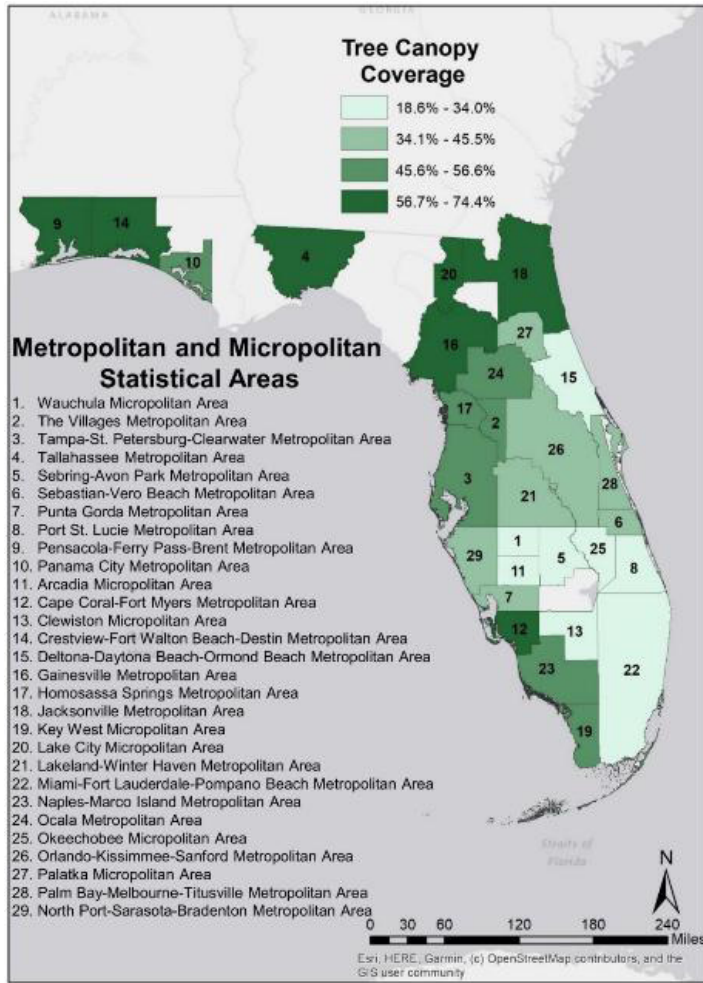


Figure 2. Locations of the 29 metropolitan and micropolitan areas in Florida. The different colors represent the percent of canopy coverage. Numbers correspond to the metropolitan and micropolitan area names in the legend on left side of the figure.

Urban Forest Benefits

Urban forest ecosystems provide a variety of economic and environmental benefits (Livesley et al. 2016), including shading homes to create energy savings, intercepting rain to reduce stormwater, improving air quality by filtering pollutants, and sequestering carbon to offset emissions associated with climate change. Many urban forest benefits are influenced by the combined surface area of all the leaves in a tree’s canopy (Peper and McPherson 2003). Researchers use leaf area measurements to estimate the benefits provided by individual trees in an urban forest (Figure 3 - below).

Researchers have developed ecosystem services models that use urban forest data to calculate the total economic value of all trees in a designated area, typically at the city or county level. Prior urban forest ecosystem service assessments for Gainesville and Tampa, Florida

PROTECTING THE REPUTATION OF THE UTILITIES WE SERVE...

IT'S PART OF OUR JOB

Nelson
TREE SERVICE, LLC

See the videos

Vegetation Management Specialists

800-522-4311 | www.nelsontree.com

can be found at <https://edis.ifas.ufl.edu/fr265> (Tampa) and <https://edis.ifas.ufl.edu/fr414> (Gainesville). Evaluation of these benefits allows city managers and citizens to gauge the importance of the urban forest compared to other key infrastructure elements and to budget for the appropriate management of this natural resource.

Currently these models are able to estimate only some of the more tangible benefits of the urban forest, like the ones mentioned above. There are many other important benefits, such as wildlife habitat, recreational value, and human psychological effects. Researchers are working to apply economic values to these less tangible but important services. While all of these models are based on the best available science at the time, the data they produce are still just estimations.

For this study, the total acreage of each metropolitan and micropolitan area was calculated in a geographic information system (ArcGIS v10.5, ESRI). Acreage of tree canopy was estimated by multiplying the total

Trees continued on page 6

Trees continued from page 5



Figure 3. Sign displaying some of the estimated benefits produced from a tree in Pinellas County, FL.
Credit: Drew C. McLean, UF/IFAS

area of each census-designated boundary by the canopy coverage percentage obtained during the aerial imagery interpretation process. We used the estimation of “canopy area” (click here to view Table 1) in each metropolitan and micropolitan area to calculate the value of benefits received from their corresponding urban forest. Benefit production rates (e.g., tons of air pollution removed per acre) and the monetary values for air pollution, avoided runoff, carbon sequestration, and carbon storage were based on data obtained from the i-Tree Canopy software v7.0 (<https://canopy.itreetools.org/benefits/>).

Air Pollution Removal

Toxic air pollutants such as carbon monoxide (CO), nitrogen dioxide (NO₂), ground level ozone (O₃), sulfur dioxide (SO₂), and particulate matter (PM₁₀ and PM_{2.5}) can cause adverse effects to human health, disrupt ecosystem processes, and reduce visibility in cities (EPA 2019). Carbon monoxide, sulfur dioxide, and

nitrogen dioxide gas are released into the atmosphere mainly through the burning of fossil fuels in power plants, industrial facilities, and automobiles. Ground-level ozone is created by chemical reactions between air pollutants and sunlight (EPA 2019). Particulate matter can be released directly from a source, such as un-

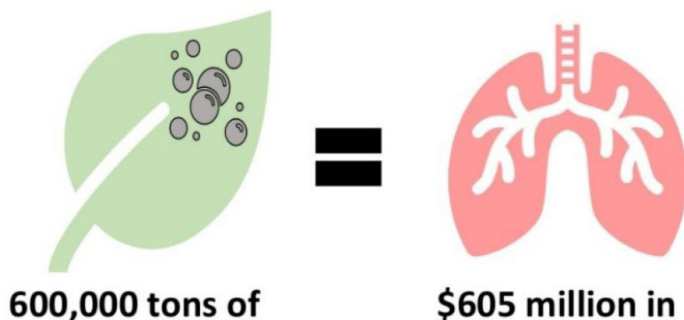


Figure 4. Tree leaves remove an estimated 600,000 tons of air pollutants each year, saving Floridians \$605 million in air-pollution-related health care costs annually.

paved roads, fields, and smokestacks, or created in the atmosphere through complex chemical reactions.

Air pollutants have been shown to affect cardiovascular and respiratory health, with long-term exposure potentially leading to the development of serious diseases (Stieb et al. 2009). In addition to the human health effects, air pollutants negatively affect the environment by contributing to pollution of coastal waters, smog production, and the formation of acid rain (Manisalidis et al. 2020).

Tree leaves primarily remove air pollutants by directly absorbing them or indirectly capturing them on their surfaces (Grote et al. 2016; Nowak et al. 2006). Altogether, the trees in Florida’s 29 census-designated areas remove over 600,000 tons of combined air pollution each year, saving Florida residents an estimated \$605 million in annual air-pollution-related health care costs. Figure 4 - below (click here to view Table 2). Estimated removal amounts for each air pollutant are listed by micropolitan and metropolitan area in Table 3 (click here to view Table 3).

Stormwater Runoff

Stormwater runoff is the rainwater that flows over the ground after a rain event. Impervious surfaces, such as roads, parking lots, and rooftops, do not allow water to infiltrate into the soil. Instead, these impervious surfaces

Trees continued on page 8



OUR TEAM

JOHN HOLZAEFFEL, CA, TRAQ
(352)238-0917

ERIC HOYER, CA, RCA, TRAQ
(863)670-0734

CHARLIE MARCUS, CA, TRAQ
(850)570-5963

STAN ROSENTHAL, TRAQ
(850)508-6771

JAY VOGEL, CA
(352)238-0458

LEGACY ARBORIST SERVICES

A DIVISION OF NRPS FOCUSED ON PROVIDING INNOVATIVE SOLUTIONS
FOR MANAGING THE URBAN FOREST

Tree Inventories and Management Plans

Tree Protection Strategies

Tree Appraisals and Risk Assessment

Tree Ordinance Analysis

Tree Health Care Treatments

Expert Witness Testimony

Educational Workshops

i-Tree/Environmental Analysis



CREATING A LEGACY, GROWING YOUR FUTURE SINCE 1974

www.NRPSforesters.com



RPG Trees Are Superior Performers In Your Landscapes

- Hardening-off Trees
- Improving Quality
- Research & Education

*Now More Than Ever...
Look for the RPG Tag for Quality!*

2015-2016 Grower Members

The Arbor Group
Orlando/407-235-8492

Nature Coast Tree Corp
Bell/386-935-9349

BE-MAC Farms
Odessa/813-920-2247

SMR Farms
Bradenton/941-708-3322

Fish Branch Tree Farm
Zolfo Springs/863-735-2242

Snapper Creek Nursery
Ft Pierce/772-216-9993

Marshall Tree Farm
Morrison/800-786-1422

Spectrum Tree Farms
Live Oak/800-753-1379

Stewart's Tree Service
Brooksville/352-796-3426

Associate Members

Cherokee Manufacturing
General Cordage
Graco Fertilizer Company

Grass Roots Nurseries
Treemart

RPG Growers are committed to enhancing the image and quality of field-grown trees through the hardening-off process. Research continues to show that hardened-off field-grown trees are more wind resistant, use water more efficiently at planting, establish faster after planting, and when planted with container trees in a situation of limited water or irrigation will have dramatically higher survival rates.

To Subscribe to the RPG Times Newsletter or to request copies of the Tree Grading, Planting or Pruning Cue Cards contact an RPG member or visit www.rootsplusgrowers.org

Trees continued from page 6

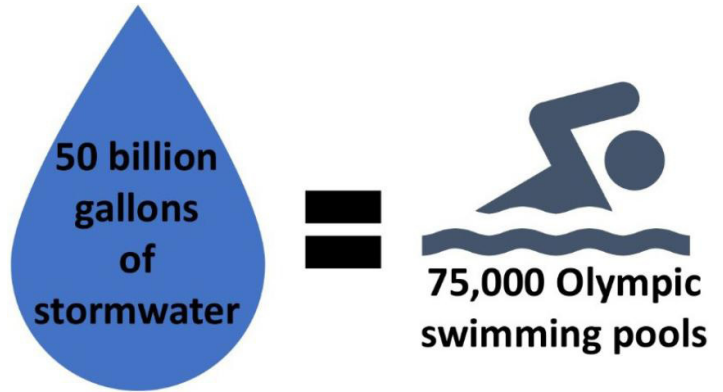


Figure 5. The amount of water Florida's urban forest reduce stormwater volumes by each year is enough to fill 75,000 Olympic swimming pools.

swiftly direct large volumes of water into nearby stormwater drains that typically discharge into neighboring waterbodies. In urban areas with increased impervious surfaces, stormwater runoff can be a significant source of pollution to local waterbodies. As water flows over impervious surfaces, it can pick up many different pollutants (e.g., antifreeze, grease, pesticides, bacteria, etc.) that are present on these paved surfaces.

Trees help combat the negative effects of stormwater runoff by capturing rainfall on their leaves and bark, thereby reducing the amount of water hitting impervious surfaces. In addition, tree roots and old fallen leaves can promote soil conditions that allow more water to enter the soil during a rain event. Collectively, the urban forests in the 29 metropolitan and micropolitan areas intercept an estimated 50 billion gallons of water a year, resulting in savings of over \$451 million in avoided annual stormwater treatment costs (Table 4). To put this volume of water in context, that is enough to fill approximately 75,000 Olympic-sized swimming pools each year (Figure 5 - below).

Carbon Sequestration and Storage

Carbon dioxide (CO₂) is a major greenhouse gas that plays a significant role in global climate change. Carbon dioxide is mainly released to the atmosphere through the burning of fossil fuels (EPA 2019). Trees can help combat climate change by taking in carbon dioxide from the atmosphere. During photosynthesis, trees take in atmospheric carbon dioxide and store it as carbon in their trunks, branches, and roots. A tree will continue to sequester and store carbon until it dies.

Carbon sequestration and storage rates are often pre-

Trees continued on page 9

Trees continued from page 8

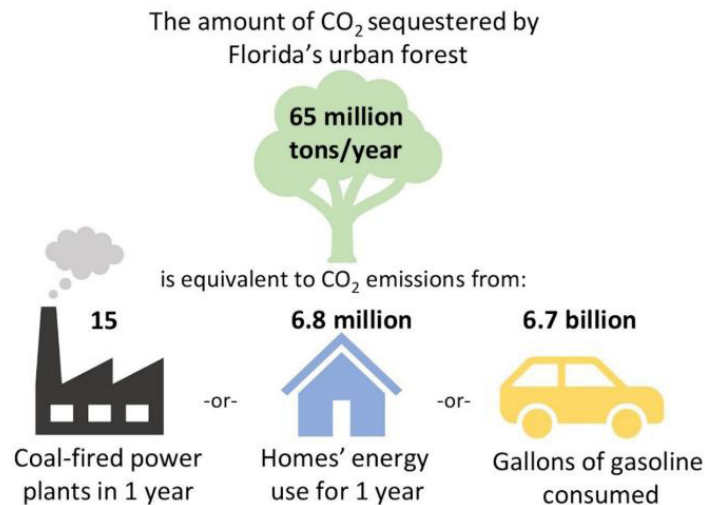


Figure 6. Carbon dioxide emission equivalent infographics. Credit: US EPA greenhouse gas equivalencies calculator presented as “carbon dioxide equivalents” as a way of mea-

Carbon Pricing

Carbon pricing is a financial-based strategy that assigns monetary value to carbon emissions to help combat climate change. The price assigned to carbon can vary depending on the source and valuation method. In addition, carbon prices are influenced by regulatory, economic, and social factors and therefore may not always reflect current market prices. Even though carbon prices are not standardized and can fluctuate over time, they can be useful tools for portraying the economic value of carbon emissions. When assigning a value to carbon, it is important not only to list the price used in the valuation but also the amount of carbon the value relates to. This will allow for comparisons of carbon valuations across different markets using different carbon prices.

suring carbon footprints. Carbon dioxide equivalents report a single number to represent the amount of carbon dioxide that would create the same impact as all of the greenhouse gases combined (e.g., carbon dioxide, methane, nitrous oxide, and ozone). For example, because methane is a more powerful greenhouse gas, one ton of methane is equivalent to 25 tons of carbon dioxide (EPA 2019).

Equivalent calculators can be used to express these extremely large emission values in terms that are easier to digest and understand. Florida's urban forests sequester (i.e., capture through active growth) 65 million tons of carbon dioxide equivalent a year, which trans-

lates to an estimated \$3 billion in annual benefits Figure 6 - below ([click here to view Table 5](#)). Florida's urban forests store (in their wood) a total of one billion tons of carbon dioxide equivalent, worth an estimated \$76 billion in services ([click here to view Table 6](#)).

Valuable Natural Resource

Florida's urban forests are an extremely valuable natural resource that provides an estimated \$4.1 billion in annual benefits for the state's citizens and visitors ([click here to view Table 7](#)). In addition, these urban forests will provide an estimated \$76 billion in climate change benefits over their lifespan as trees continue to grow, storing more carbon in their tissues. It is important to remember that the benefit numbers and monetary values presented in this report are estimations obtained from scientific models. While these numbers may not be absolute, they are based on the best available science and are important for estimating the value of urban forests and the services they provide. In addition, this valuation of Florida's urban forest only includes some of the more tangible benefits, and we did not assess every county in the state. Many of the benefits presented in this report are influenced by the health and size of an individual tree's canopy. Preservation and management of the urban forest is critical to ensure that citizens receive the maximum benefits that urban trees can provide.

Footnotes

1. This document is ENH1331, one of a series of the Environmental Horticulture Department, UF/IFAS Extension. Original publication date November 2020. Visit the EDIS website at <https://edis.ifas.ufl.edu> for the currently supported version of this publication.
2. Drew C. McLean, biological scientist; Andrew K. Koeser, assistant professor; Deborah R. Hilbert, biological scientist, Environmental Horticulture Department, UF/IFAS Gulf Coast Research and Education Center; Shawn Landry, associate professor, USF Water Institute, University of South Florida; Amr Abd-Elrahman, associate professor; Katie Britt, geomatics program specialist, Geomatics Department, UF/IFAS Gulf Coast Research and Education Center—Plant City Campus; Mary Lusk, assistant professor, Department of Soil and Water Sciences, UF/IFAS Gulf Coast Research and Education Center; Michael G. Andreu, associate professor, School of Forest Resources and Conservation, UF/IFAS Extension, Gainesville, FL; and Robert J. Northrop, Extension forester, UF/IFAS Extension Hillsborough County, Seffner, FL.

The authors would like to acknowledge the following people for their indispensable help conducting the canopy assessments: Brooke Anderson, Saige Middleton, and Hunter Thorn. ❖

Consultant's Corner

by Joe Samnik, Expert Forensic Arborist



NEIGHBORS AND TREES

Most diligent arborists are aware of what self-help means. Self-help is the only available option when managing an uncooperative neighbor whose tree is encroaching onto or into an adjoining property owners land. Of course, it is incumbent upon each of us to attempt a mutual agreement between two neighbors regarding the costs of mitigating complaints as well as limiting the issue at hand.

But what to do when the neighbor who owns the tree is uncooperative and will not participate in mitigating the danger or nuisance of his tree to your client. The answer is of course, self-help. There is no shortage of case law regarding this issue of self-help.

Please note that this article cannot be construed as giving legal advice. The author is not an attorney. The author is not qualified to give legal advice. If you need legal advice, seek the services of a qualified attorney.

There are rules to self-help. Every arborist working on an adjoining property owners' tree must know the limitations when it comes to working on that tree. Here are the basic rules to follow when engaging in self-help:

1. You cannot trespass. That means even leaning across a property line to make a cut with your saw. You do not need to move equipment or yourself or your workers onto a neighboring property to be guilty of trespassing. Courts take an extremely narrow view of trespassing. If you were guilty of trespassing, you have two significant issues. One issue may be the self-help you initiated in the way that you did it. But the other issue is that you trespassed and that is extremely difficult to defend. Courts of law instruct jurors to guard against underpaying the owner of the tree more carefully than to overcharge the arborist who damaged it. Do not trespass.
2. You cannot cause irreparable harm to the subject self-help tree. Flush cuts are one example of irreparable damage because the damage cannot be repaired. A topping cut in many cases can be repaired. However, the topping cut is almost always made on your side of the property line. If you make a corrective cut, you will be trespassing. That means the owner of the tree is going to call another arborist

to come in and make corrective cuts on your work. You may well be responsible for paying that bill. Make certain that the cuts you are making are correct and professional. If you cannot make correct and professional cuts, you may wish to consider not engaging in the assignment. Alternatively, consider explaining why you cannot make a proper cut without trespassing. If your explanation falls on deaf ears, think twice before making a cut that will need to be repaired by yet another arborist which you will pay for.

3. You cannot remove the entire tree. And you cannot effectively remove the entire tree by over pruning or pruning it in such a manner that causes irreparable damage; effectively removed. If the trunk of a tree sits on a property line, regardless of the percentage owned by either owner, then all owners of the tree share equal ownership of that tree. Permission must then be received by all parties of ownership to remove the tree.
4. Get everything in writing. Sure, right now your client is telling you that his neighbor and he are great friends. That the neighbor himself does not like the tree and wants it removed or pruned. That the neighbor is even going to pay for some of the treatment costs. That is all fine and good until the neighbor sees his tree after you have pruned it. Or after you have removed it. Then, suddenly, the owner of the tree gets amnesia. The owner of the tree hires another arborist to put a value on the subject tree. And you get served with a lawsuit for damages. You need this permission to work on the subject tree in writing. The person who owns the tree must be aware that you are going to work on it, this includes removal. Have the owner of the tree reduce to writing some type of a dated memo or letter stating that he is aware of what you are going to do and that it is okay by him. If you do not "get it in writing" you may well find yourself in court defending that thank you which cannot be defended.
5. Do not disturb the peace. Tempers and emotions run high when it comes to trees. We all know that. But with self-help there are many triggers which get pulled. If there is an argument between the two neighbors, step aside and get out of it. It is not your business. You can answer questions which have been asked of you by any of the parties involved. Perhaps your expertise will settle some type of a dispute. But stay out of the fight. It is no place for an arborist.

Everybody loves trees until they become a neighbor's tree. Take great care as to not make an already bad matter, worse. ❖

TREE CARE INDUSTRY ASSOCIATION



TCIA

YOUR ROAD MAP TO A SUCCESSFUL **TREE CARE** BUSINESS



BUSINESS ACCREDITATION
ONLINE RESOURCES
TCI EXPO & OTHER EVENTS



EXPERTS MENTOR PROGRAM
INDUSTRY PARTNERS
TCIA STAFF



SAFETY CERTIFIED TREECARE
SAFETY PROFESSIONAL
TRAINING MANUALS
WORKSHOPS



**JOIN
TODAY!**

First-time/first
year offers
available!

TCIA.ORG | 800.733.2622 | membership@tcia.org

THE ROUTE TO BUSINESS GROWTH BEGINS HERE!

Arbor Day: Is it still relevant?

Henry Mayer, UF/IFAS Miami-Dade Urban Commercial Horticulture Extension Agent

Arbor Day is celebrated nationally, and in every state. We need to thank Mr. J. Sterling Morton from the state of Nevada for this holiday, which was established on April 19, 1872. Approximately one million trees were planted on the first Arbor Day!

In Florida, since 1886 we have celebrated Arbor Day on the third Friday of the year. However, is Arbor Day still relevant? I know that “I am preaching to the choir” writing this article for the Florida Arborist newsletter, but to me Arbor Day has to be celebrated every day! Not only with more tree plantings, but also with more funding **for maintenance!** In order to appreciate the economic benefits that trees provide to the state, take a look of the University of Florida publication, “Florida’s Urban Forest: A Valuation of Benefits” <https://edis.ifas.ufl.edu/ep595>

In Florida, because of trees, the estimated annual monetary value for air pollution removal, avoided stormwater runoff, and carbon dioxide sequestration is the astonishing amount of **\$4,117,480,527**.

Air pollution removal:

Trees remove air pollutants primarily through leaves. The main pollutants are carbon monoxide (CO), nitrogen dioxide (NO₂), ground level ozone (O₃), sulfur dioxide (SO₂), and particulate matter (PM₁₀ and PM_{2.5}). Trees remove them directly by absorbing or indirectly capturing them on their surfaces. Altogether, the trees in Florida remove over 600,000 tons of combined air pollution each year, saving Florida residents an estimated **\$605 million in annual air-pollution-related health care costs**.

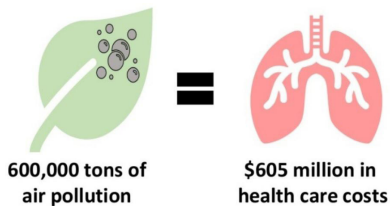


Fig. 1. - Estimated tons of air pollutants removed every year by trees, courtesy of UF/IFAS

Stormwater runoff:

Stormwater runoff is the precipitation that does not evaporate or penetrate into the ground, only flows over the surface after a rain event. Impervious surfaces, such as roads, parking lots, and rooftops, increase the runoff because they do not allow water to infiltrate into the soil.

In urban and suburban areas, stormwater runoff could be a major source of pollution as they collect sediments, grease, chemical contaminants, and dog feces before flowing into a nearby river or stream. Trees are increasingly recognized for their importance in managing runoff by capturing rainfall on their leaves, bark and roots, thereby reducing the amount of water that goes to impervious surfaces. They also provide surface area where rainwater lands and evaporates. Furthermore, tree roots absorb water as well as fallen leaves improve soil properties allowing more water to infiltrate during a rain event.

The urban forests intercept an estimated 50 billion gallons of water a year, resulting in savings of over **\$451 million in avoided annual stormwater treatment costs**. To put this volume of water in context, that is enough to fill approximately 75,000 Olympic-sized swimming pools each year!

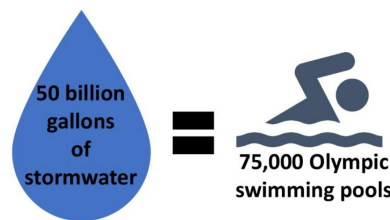


Fig. 2. - Amount of stormwater runoff reduction (gal.) very year by trees, courtesy of UF/IFAS

Carbon storage and sequestration:

During photosynthesis, trees remove atmospheric carbon dioxide (sequestration) and store it in the trunks, branches, and roots (storage). Therefore, trees can help mitigate the effects of climate change and will continue to sequester and store carbon until they die. Florida’s urban forests sequester 65 million tons of carbon dioxide a year, which translates to an estimated \$3 billion in annual benefits, and store a total of one billion tons

Arbor Day continued on page 14

Día del Árbol: ¿Sigue siendo relevante?

Henry Mayer, UF/IFAS Miami Dade -Urban Commercial Horticulture Extension Agent

El Día del Árbol se celebra a nivel nacional y en todos los estados. Necesitamos agradecer al Sr. J. Sterling Morton del estado de Nevada por la festividad que fue establecida el 19 de abril de 1872. ¡Aproximadamente un millón de árboles fueron plantados en el primer Día del Árbol!

En Florida, desde 1886 celebramos el Día del Árbol el tercer viernes del año. Sin embargo, ¿Sigue siendo importante el Día del Árbol? Sé que “estoy predicando al coro” escribiendo este artículo para el boletín de Florida Arborist, pero para mí, ¡el Día del Árbol tiene que celebrarse todos los días! ¡No solo con más siembras de árboles sino también con más fondos para el mantenimiento! Para apreciar los beneficios económicos que los árboles nos brindan, eche un vistazo a la publicación de la Universidad de Florida, “Florida’s Urban Forest: A Valuation of Benefits” <https://edis.ifas.ufl.edu/ep595>

En Florida, debido a los beneficios de los árboles, el valor monetario anual estimado por eliminación de la contaminación del aire, la escorrentía de aguas de lluvia y el secuestro de dióxido de carbono es la asombrosa cantidad de **\$4,117,480,527**.

Eliminación de contaminantes del aire:

Los árboles eliminan los contaminantes del aire principalmente a través de las hojas. Los principales contaminantes son el monóxido de carbono (CO), el dióxido de nitrógeno (NO₂), el ozono a nivel del suelo (O₃), el dióxido de azufre (SO₂) y las partículas (PM₁₀ y PM_{2.5}). Los árboles pueden eliminar directamente estas partículas absorbiéndolas o capturándolas indirectamente en sus superficies. En total, los árboles en Florida eliminan más de 600,000 toneladas de contaminantes del aire cada año, lo que les ahorra a los residentes de Florida un estimado de **\$605 millones en costos anuales de atención médica relacionados con la contaminación del aire**.

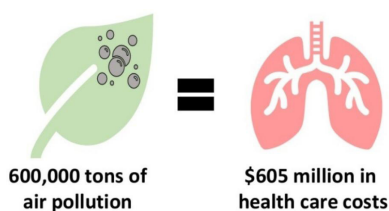


Figura. 1. - Toneladas estimadas de contaminantes del aire eliminados cada año por los árboles, cortesía de UF/IFAS

Escorrentía de aguas de lluvia:

Escorrentía de aguas de lluvia es la precipitación que no se evapora ni penetra en el suelo, solo fluye sobre la superficie después de un evento de lluvia. Las superficies impermeables, como carreteras, estacionamientos y tejados, aumentan la escorrentía porque no permiten que el agua se infiltre en el suelo.

En áreas urbanas y suburbanas, la escorrentía podría ser una fuente importante de contaminación ya que acumula entre otras cosas sedimentos, grasa, contaminantes químicos y heces de perro antes de desembocar en un río o arroyo cercano. Los árboles son reconocidos por su importancia en el manejo de la escorrentía al capturar la lluvia en sus hojas, corteza y raíces, reduciendo así la cantidad de agua que va a las superficies impermeables. También proporcionan un área de superficie donde el agua de lluvia cae y se evapora. Además, las raíces absorben agua y las hojas caídas mejoran las propiedades del suelo permitiendo que se infiltre más agua durante un evento de lluvia.

Los bosques urbanos interceptan aproximadamente 50 mil millones de galones de agua al año, lo que resulta en ahorros de más de **\$451 millones en costos anuales de tratamiento de aguas pluviales. Para poner este volumen de agua en contexto, ¡eso es suficiente para llenar aproximadamente 75,000 piscinas olímpicas cada año!**

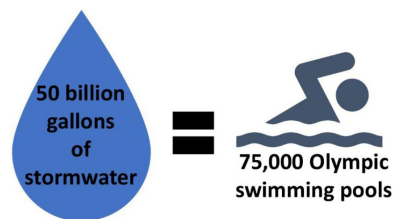


Figura. 2. – Reducción anual de escorrentía de aguas de lluvia debida a los árboles (gal.), cortesía de UF/IFAS

Almacenamiento y secuestro de carbono:

Durante la fotosíntesis, los árboles eliminan el dióxido de carbono atmosférico (secuestrando) y lo almacenan en el troncos, ramas y raíces (almacenamiento). Por lo tanto, los árboles pueden ayudar a mitigar los efectos del cambio climático y continuarán secuestrando y almacenando carbono hasta que mueran. Los bosques *Arbor Day continued on page 14*

Arbor Day continued from page 12

of carbon dioxide equivalent, worth an estimated **\$76 billion in services!**

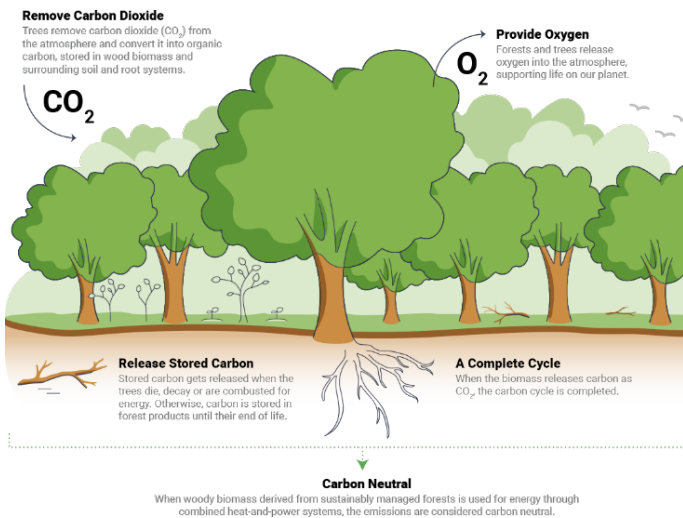


Fig. 3. – Carbon cycle, courtesy of EPA.

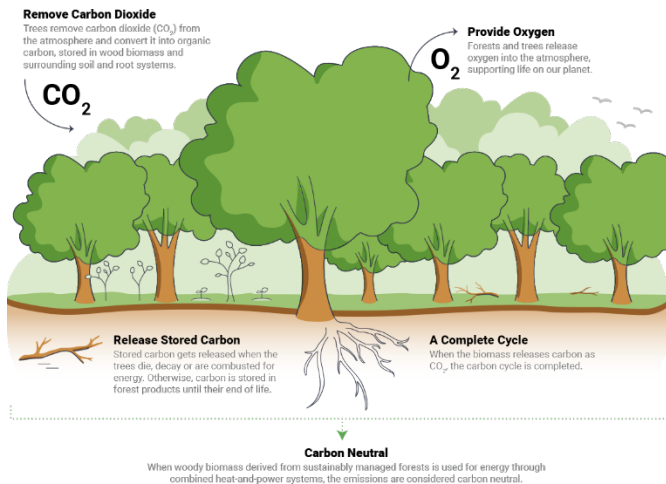
Florida’s urban forests are an extremely valuable natural resource that provides an estimated \$4.1 billion in annual benefits for the state. In addition, these urban forests will provide an estimated \$76 billion in climate change benefits over their lifespan as trees continue to grow, storing more carbon in their tissues.

References:

- McLean, D. et. al. Florida’s Urban Forest: A valuation of Benefits
<https://edis.ifas.ufl.edu/ep595>. Nov. 2020
- Arbor Day Foundation
<https://shop.arborday.org/>
- Trees are Good by ISA
<https://www.treesaregood.org/> ❖

Arbor Day continued from page 13

urbanos de Florida secuestran 65 millones de toneladas de dióxido de carbono al año, lo que se traduce en aproximadamente \$ 3 mil millones en beneficios anuales, y almacenan un total de mil millones de toneladas de dióxido de carbono equivalente, con un valor esti-



mado de **\$76 mil millones en servicios.**

Figura. 3. – Ciclo del carbon, cortesía de EPA.

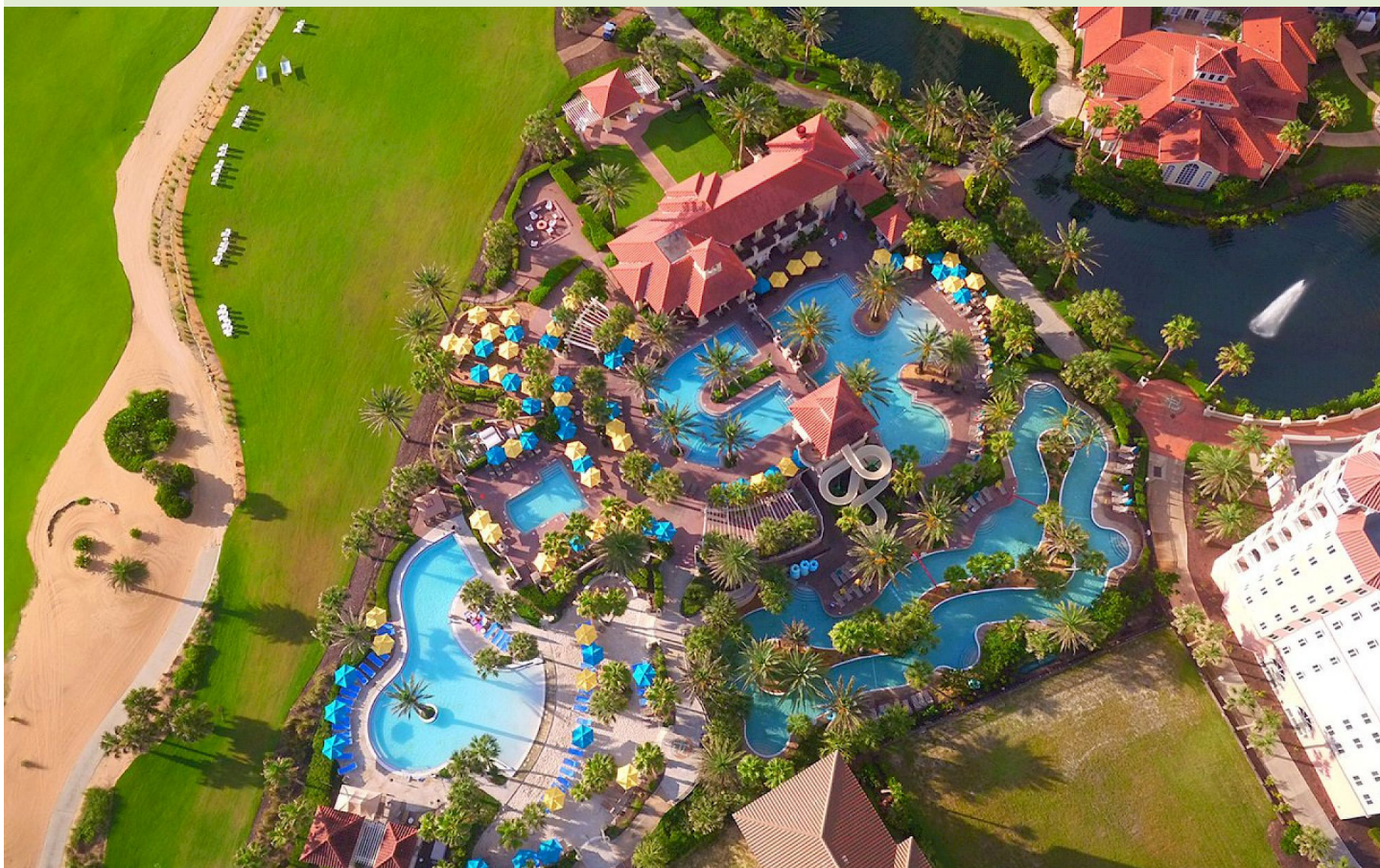
Los bosques urbanos de Florida son un recurso natural extremadamente valioso que proporciona un estimado de \$ 4.1 mil millones en beneficios anuales para el estado. Además, estos bosques urbanos proporcionarán aproximadamente \$ 76 mil millones en beneficios sobre el cambio climático durante su vida útil a medida que los árboles continúen creciendo, almacenando más carbono en sus tejidos.

Referencias

- McLean, D. et. al. Florida’s Urban Forest: A valuation of Benefits
<https://edis.ifas.ufl.edu/ep595>. Nov. 2020
- Arbor Day Foundation
<https://shop.arborday.org/>
- Trees are Good by ISA
<https://www.treesaregood.org/> ❖

TREES FLORIDA 2021

CONFERENCE AND TRADE SHOW



IN PERSON

JUNE 7-8-9, 2021

**Hammock Beach Resort
Palm Coast, Florida**

Registration available in early April
Watch TreesFlorida.com for updates

EXHIBITOR and SPONSOR opportunities
Registration available now ONLINE!

[Online EXHIBITOR registrations](#)

[Online SPONSOR donations](#)

Exhibitors call Hammock Beach directly to
reserve a hotel room

TREE Fund Update



Building Sustainability: The 2020 Year-End Appeal

As a Vice President for Bartlett Tree Experts, I'm keenly aware of the importance of both containing and covering the costs of doing business. I'm equally aware of the importance of reinvesting in the business, so it has the capacity to perform well, respond to the market, and grow.

As a member of the TREE Fund Board of Trustees, I apply that same awareness to a nonprofit business. Nonprofits are businesses, and the principles of good business apply: We must contain and cover our costs of doing business, invest in good people, and build for the immediate and long-term future.

The TREE Fund is launching its annual year-end appeal, and I'm asking you to give. This year, we're working to build our capacity to achieve sustainability.

The TREE Fund is an effective nonprofit business. We're exploring and sharing the science of trees to contribute to the lives of people, communities, economies, and the environment. The more than \$4.5 million it's given in grants and scholarships since 2002 has acted as seed money--every \$1 given brought in an average of \$2.63—resulting in nearly \$12 million of support for the research that supports trees and our work among them.

The TREE Fund is an efficient nonprofit business. By cutting its already lean operating budget by more than 25%, reallocating resources, and quickly adapting, the TREE Fund survived the 2020 pandemic.

Our analysis of how to sustain this nonprofit business into the future revealed that our greatest strengths are our dedicated staff, our reputation for applicable

research, and our endowed grants. We need, however, to strengthen our capacity to cover the full cost of our programs, respond to the emerging economy, and build for a sustainable future. When the TREE Fund can cover its full costs and maintain a reserve for crises, it will be a healthy, resilient nonprofit business on which we can depend for decades to come.

That's where you come in. The variety of events on which we have relied for capacity funding have been eliminated or dramatically altered by the pandemic, so we are relying on you to meet the need. We are exploring new ways to cover our full costs in the years to come, but we need your help in that process.

Please visit treefund.org today and help us help you.

Thank you.

Paul Fletcher, BCMA, RCA, Vice President
Bartlett Tree Experts
Member, TREE Fund Board of Trustees ❖

FLORIDA CHAPTER JOHN P. WHITE SCHOLARSHIP

Students! Remember to submit your [scholarship application](#) to the Chapter office no later than June 15th for the 2021 Fall scholarship.

2020 International Society of Arboriculture Council of Representatives Annual Meeting

Kim Pearson, Florida Chapter Representative and Chair

The International Society of Arboriculture (ISA) Council of Representatives (CoR) held their Annual Meeting virtually on Wednesday, December 2, 2020 via Zoom. While the meeting was a stand-alone event (meaning separate from the international conference) it was still considered a great success with 42 of 66 CoR component groups in attendance, representing 22 countries across the globe!

Components are an affiliated or independent society, chapter, branch, special-interest group, or division of an international, national, state, regional, or local organizations. Component members of CoR make services and benefits available to members through their affiliates.

The CoR is an integral part of the governance of ISA, with their mission statement pledging CoR to support ISA by facilitating collaboration between their 66 components and the ISA Board of Directors. To accomplish this collaboration, the CoR establishes and administers an appropriate forum where this collaboration can occur in order to foster the free exchange of ideas and information among their components. For example, the CoR Executive Committee (CoR EC) surveyed each component this past August, asking for each to prioritize nine different topics for group discussions. The results of that survey gave the CoR EC direction to plan their Annual Meeting around *COMPONENT MEMBERSHIP*. This topic was truly relevant because each CoR member acts as a liaison between ISA and the component group bringing all pertinent information to the CoR and returning all pertinent information back to the component group.

The discussion of *COMPONENT MEMBERSHIP* was geared around the question ‘What does component membership mean to you?’ and was broken down into four topics: Development – how do you develop your component membership; Benefits – what benefits does your membership provide to your component; Engagement – in what ways does your component engage your membership; and Retention – what actions does your

component take to retain your membership. CoR EC members Stefania Gasperini (Italy Chapter), Anne-Marie Moran (New England Chapter), Bas Poutsma (Netherlands Chapter) and Mike Watson (Ontario Chapter) moderated each session and received feedback based on these discussion points. Thank you to each of the 42 components that participated and offered such honest and meaningful feedback for all to learn from and share with individual components.

The feedback is summarized as follows:

Development

- o Include membership option with seminar registration
- o Offer multi-year membership options
- o Ensure each new member received copy of ANSI Z-133
- o Offer memberships based on generational needs and expectations
- o Create student group through high school and college programs
- o Host Hospitality Night for connecting mentors with mentees
- o Create a college degree in Arboriculture with a curriculum for arborists
- o Create and provide a New Member Professional Kit for personalized welcome

Benefits

- o Provide members access to technical information first
- o Represent as an entire expert community
- o Develop technical information into useful graphics
- o Offer discounts on everything for members
- o Bargain with membership numbers to negotiate with insurance companies
- o Provide access to a stocked library
- o Offer free virtual ‘lunch and learn’ for members only
- o Include members in arborist directory for local service search

CoR continued from page 17

Engagement

- o Create and maintain specific and outstanding Social Media presence
- o Offer translation service for publications, presentations, exams, etc.
- o Schedule virtual engagement for smaller target groups – first 20 minutes is educational presentation with remainder of meeting is open-format for networking
- o Commit to a consistent weekly virtual meetings to share local information and maintain communication
- o Social Media used for fun quiz to keep relationship authentic and unconditional
- o Ask members what their component should be doing over the next 5 years
- o Offer free registration to virtual seminars, and only charge if you don't show
- o Have levels to measure engagement (attendance, voting, committee serviced, clicking links on opened email, etc.) for tracking viable engagement points
- o Assign a 'theme' for each component event, creating a local signature or special flair

- o Make engagement personal – answer questions, discover member stories and why they joined, meet with new members, etc.

Retention

- o Communicate often and accurately – social media must be current
- o Set a solid goal and illustrate progress
- o Emphasize accomplishments
- o Promote renewal early
- o Encourage current members to recruit new members
- o Host alumni event for different memberships
- o Host outreach events at renewal time
- o Offer group membership discounts as an office holiday gift
- o Follow up surveys consistently sent to make feedback a priority
- o Work continuously to enhance events with new speakers and diverse topics
- o Allow members to bring a free guest to seminar or meeting

The CoR EC will be using this feedback to keep their agenda topics relevant and interesting throughout 2021. ❖

HIRING Remote Arborist Sales Representative

A national tree service company is seeking an Arborist Sales Representative. The Arborist Sales Representative will work exclusively in the Membership Department yet work closely with Business Development.

An ideal candidate will be proficient in the use and navigation of various mobile applications and can also quickly learn Timber Warriors' own applications.

This is a remote position; experience in various remote learning and virtual meeting methods or platforms is required. Ideal candidates will have:

- 10+ years of experience in arboriculture industry
- Sales experience
- Exceptional communication skills
- ISA Certified (preferred)
- Previous business owner or high-management experience (highly preferred)

If you enjoy networking, competitive work environments, and working with individuals who share the same passion for the industry and arborists, then Timber Warriors wants you to join its office staff team.

Please email your resume to fj@timberwarriors.com





EHAP

Electrical Hazard Awareness Training for ALL ARBORISTS

with DR. JOHN BALL

**CHOICE of IN-PERSON EVENT
or LIVE STREAM EVENT**

PLANT CITY IN-PERSON: Friday, April 23, 2021

LIVE STREAM: Friday, April 23, 2021

FLYER

ISA CEUs: Cert Arb - 6 BCMA - 6 (M) Utility Specialist - 6
also CTSP - applied for

To advertise in the
Florida Arborist contact the
Florida Chapter office at
941-342-0153.

*Our electronic version of the Florida
Arborist allows for an active link
directly to your website!!*

Single Issue advertising rates are as follows:

- Full Page - \$250/issue
- Half Page - \$200/issue
- Quarter Page - \$150/issue
- Business Card - \$75/issue
- Classified Ad - \$25/issue

Discounts for a commitment of 4 consecutive issues:

- Full Page - \$200/issue
- Half Page - \$150/issue
- Quarter Page - \$100/issue
- Business Card - \$50/issue
- Classified Ad - \$25/issue

Prices include one link from the ad to your website.
Additional links are \$25/link per issue.

call 941-342-0153
or email jan@floridaisa.org



Morrison, Florida

Quality, Variety & Service since 1984

2" to 12" caliper specimens with over
30 varieties for our Southeastern landscapes

Customer Service is our specialty, we provide
quotes, pictures and deliveries on your schedule

Visit us at www.marshalltrees.com



Call for current availability
800.786.1422



News From International

ISA International Conference is Going Virtual Again in December 2021

We would like to thank everyone who attended, sponsored, volunteered and partnered with ISA for helping us make the ISA 2020 International Virtual Conference a great success. With over 3,600 arborists and urban foresters from around the world, new connections were made, CEUs were earned and, most importantly, our attendees were able to improve their arboricultural knowledge. In light of this success, and to ensure the safety and well-being of our attendees, members, employees, partners and vendors, ISA is excited to share that ISA's 2021 Conference will be a virtual event again in December.

Our 2022 conference will be hosted in September in Malmö Sweden! Be on the lookout for more information in the coming months.

2021 International Tree Climbing Competition (ITCC) Update

With the uncertainty of future shut downs, and the continuation of travel and meeting restrictions globally ISA made the decision to NOT hold the 2021 International Tree Climbing Competition (ITCC). The safety of our members, competitors, volunteers, and team members remain our priority. The next ITCC will be held in September of 2022 in Copenhagen, Denmark.

ISA International Election

The ISA Board of Directors is an elected board of 15 directors, including ten (10) directors voted in by general election; three (3) directors filled by an election from within the Council of Representatives; and a president/chair of the board, and a president/chair-elect, elected by the Board of Directors from within the current board.

This year's general election begins 15 January 2021; ISA International members will have the opportunity to vote to elect three (3) individuals to the Board of Directors. You will also have the opportunity to elect three (3) individuals to the ISA Nominating and Elections Committee (NEC). The NEC oversees and supervises the nominating and election process for both the ISA Board of Directors and the Nominating and Elections Committee itself, subject to policies adopted by the Board of Directors. Each voting member will receive a link emailed from invitations@mail.electionbuddy.com.

The ISA International election will run from 15 January 2021 through 1 March 2021.

Congratulations to the 2020 ISA Awards of Distinction Winners

The ISA Awards of Distinction are the highest honors given by the organization. Recipients are nominated by ISA members and industry professionals. Nominations are then reviewed by the ISA Awards Committee. Sign in as an ISA member and [read the full article](#).

Certification Deadlines

If you have an **ISA certification that expired on 30 June 2020**, the final deadline to meet all the recertification requirements to complete your recertification cycle (this includes meeting all CEU requirements **AND** making the recertification fee payment) is **February 25, 2021**.

BOOKSTORE: Plant Appraisal Guide 10th Edition DIGITAL FORMAT Release

On behalf of the Council of Tree & Landscape Appraisers, ISA announces the release of the *Guide for Plant Appraisal, 10th Edition* in **digital format**. The digital version of the Guide is now available for purchase on ISA webstore. The CTLA is offering a discounted price of \$30.00 on the purchase of the digital version of the book through February 28th (regular pricing after February 28th will be Member: \$75 and Non-member: \$90. <https://www.isa-arbor.com/store/product/4472>

BOOKSTORE: The Newly Revised Tree Climbers' Guide, 4th edition is Now Available

Written specifically from the tree climbers' perspective, the **newly revised** Tree Climbers' Guide, 4th edition, by Sharon J. Lilly, helps arborists learn safe climbing and aerial tree work principles. This guide is a basic text for tree climbers, as well as a study guide for the ISA Certified Tree Worker Climber Specialist® and Aerial Lift Specialist® exams. Each chapter includes a list of key terms and concludes with a workbook section. Member: \$90 and Non-member: \$125 <https://www.isa-arbor.com/store/product/4471/cid/56/> ❖

Scientists are trying to develop sustainable biomaterials from wood Hemicelluloses are already used in food packaging, hydrogels, and more

Lauren Sara McKee
Microbiology, Biochemistry, and Biotechnology, KTH Royal Institute of Technology

To grow tall and withstand high winds, plants need to be strong and flexible in just the right ways. Trees gain these properties from natural polymers in their cell walls. Cellulose is the most famous cell wall polymer, and gives the plant cell its shape and structure, while lignin gives rigidity and strength.

Lesser known components of wood are the hemicelluloses – long chain complex carbohydrates such as xylan and mannan. Hemicelluloses are often flexible and slightly soluble, so their function in the stiff and strong wood cell wall is a bit mysterious. But their properties make them valuable components in food packaging, wound dressings, and more.

New research published in Nature Communications has investigated the structural roles of hemicelluloses extracted from wood by developing a simplified model of a wood cell wall, using bacterial cellulose.

The research has illuminated the biological functions of xylan and mannan, as discussed in a Behind the Paper blog by the paper’s lead author, Francisco Vilaplana. It revealed that xylan makes the cell wall more stretchy, while mannan makes it more resistant to compression. The ultimate goal of Vilaplana’s research program is to inform the design and development of new bio-based materials from industrial wood waste.

In particular, Vilaplana believes this work will help material scientists find better ways of using cellulose, and said via email: “We now know that mixing cellulose with xylan makes it more extensible, which is really useful for making packaging materials, whereas adding mannan improves the compressive properties, which could be helpful in light construction materials.” This could directly inform the work of companies such as Cellutech, which are already developing cellulose-based packaging materials.

Scientists continued on page 23

Preserve Florida’s Greatest Green Resource - Trees!

**Buy a TreesAreCool plate!
Send in your receipt and
get a free Florida ISA
1-day seminar -
promotion is going on now!**

Through your purchase of the TreesAreCool License Plate for your vehicle, you help benefit our Florida urban tree environments through:

- Tree research
- Scholarships
- Ongoing education of tree-care practitioners
- And provide public education programs about tree care and preservation.

The Tree Tag...Get it Today!



WEB: www.floridaisa.org P: 941-342-0153 E: jan@floridaisa.org

The Florida Chapter of the International Society of Arboriculture (ISA) is a non-profit organization committed to serving the needs of Florida’s professional arborists and tree-care consumers.



Wedgle® Direct-Inject™ TREE INJECTION SYSTEM

Our advanced technology
for tree treatment
allows you to

INCREASE THE NUMBER OF TREES YOU TREAT IN A DAY!



- ◆ No drilling damage
- ◆ No mixing at job sites
- ◆ No guarding or return trips
- ◆ No waiting for uptake
- ◆ Treats most trees in five minutes or less!
- ◆ Successful and most profitable add-on service

Multiple injection tips designed for all types of trees, conifers and palms

Insecticides • Fungicides • PGRs • Antibiotics • MicroNutrients

AVAILABLE AT:

WINFIELD™

855-880-0048

www.winfieldpro.com

ArborSystems

Tree Injection Solutions

ArborSystems.com

Scientists continued from page 21

Being able to tailor the properties of naturally occurring materials is an important step to making their use economically attractive, helping us move towards an overall more sustainable bio-based industrial economy. ❖

2020 Florida Chapter Awards



We want to heartily congratulate the following for being chosen as Florida Chapter ISA award recipients for the 2020 year.

- | | |
|----------------------|-----------------|
| BOK Award | Eric Hoyer |
| Educator Award | Dr. Ed Gilman |
| Award of Distinction | Bonnie Marshall |
| Westenberger Award | Mark Torok |

COVID changed our usual plans for our 2020 conference and our 2020 Florida Chapter awards presentations. Due to this anomaly, the Florida Chapter awards for 2020 will be presented at the Trees Florida 2021 Conference, along with the 2021 awards. We look forward to honoring these individuals at the Hammock Beach Resort in Palm Coast, FL during the Wednesday luncheon on June 9, 2021.

CONGRATULATIONS EVERYONE!

**Spotted Lanternfly
See something! - Say something!**

Arborists - you are on the front line



Pinned spotted lanternfly adult with wings open. Note the bright red coloration now visible on the hindwings. This cannot be seen when the insect is at rest. Credit: Pennsylvania Department of Agriculture

The spotted lanternfly (SLF) has been a growing concern to the agricultural community since its introduction in 2014. It feeds on economically important plants, which could lead to devastating losses in logging, fruit tree, and grape industries. It has 70 documented host plants, 25 of which grow in the U.S. such as: grape vines, apples, birch, cherry, lilac, maple, poplar, and stone fruits. The SLF seems to prefer the tree-of-heaven (*Ailanthus altissima*), an invasive tree present in most of the U.S., and is likely to establish itself wherever the tree-of-heaven is present.

SLF has not been reported in Florida. Since the invasive tree-of-heaven and many of the other agriculturally important host plants preferred by this pest are found/grown in Florida, we need to stay vigilant. Efforts are focused on early detection to prevent the spread of the SLF to new locations.

<https://www.aphis.usda.gov/aphis/resources/pests-diseases/hungry-pests/the-threat/spotted-lanternfly/spotted-lanternfly>

The Economic Impact of Urban Trees in Florida

Co-Authors: John Harris, ISA Certified Arborist and Darlene Harris, Senior Biologist



Lack of urban trees creates a barren, sterile community...

Everyone should take a look around their neighborhood, at least once in a while, and look for where there are trees. Why look for trees? What makes them important you ask? How do they benefit urban communities?

Unlike bricks and mortar, trees in urban settings are living things that continue to grow and mature. Over time, as trees grow, so do their benefits! Their benefits grow in the volume of them that are identified, the diversity of benefits identified, in the positivity of urban trees for society overall, and in the economic contributions of urban trees within individual communities where they are located.

Billions of dollars in economic activities are generated annually in Florida by those who provide communities with trees and care for them; not millions of dollars, BILLIONS of dollars are generated. These urban trees that we care for, by their life processes, are also providing billions of dollars of health and environmental and economic benefits to communities. Our work benefits trees which benefit communities.

Each of us is part of the billions of dollars generated by our work, and we all live in communities that benefit from billions of dollars of benefits provided by the trees we care about, and care for. More trees will do more good for more people.

Here in Florida, we have internationally recognized researchers working to identify, quantify, and value the benefits of trees for communities. The results of a recent research project, done by University of Florida Professor Andrew Koeser and his co-researchers, calculated

a total value of the benefits provided by urban trees in Florida as approximately \$4.1 billion dollars. Yes, that is a total value of benefits in billions of dollars.

For those who work in the Green Industry, more specifically those working in Arboriculture and Urban Forestry, knowing how your work with trees is part of increasing billions of dollars of urban tree benefits is positive information to use in your marketing. Knowing more about the benefits of trees should also inform you for what tree care practices you perform can better increase tree benefits. In a nutshell, there are many marketing messages and public education topics we can all share with the communities we live in and work in. One is: Trees are good for communities, for people, and for our economy.

Since one of the most recognizable shades of green for people is the green of money, urban trees are valued for how they add dollars to our economy. Economists value goods and services in their research. A macro-economic way to value the importance of trees in urban areas is to value the economic impact of the industry that provides and maintains them. In Florida, an Economic Impact Study (EIS) was done focused on the urban forestry industry. This includes the goods and services by people and businesses involved in producing trees, planting trees, maintaining trees, managing trees, and supporting the businesses that do this work. In research done by Dr. Alan Hodges and Dr. Christa Court of the University of Florida, which was funded by the Florida Forest Service, the total economic impact of the urban forestry industry in Florida was valued at approximately \$4.3 billion dollars for 2017.

[Impact continued on page 25](#)

Impact continued from page 24



... vs. a welcoming neighborhood with an entirely different ambiance – the difference is urban trees.

Keeping up on current tree research can give you an advantage when you need to argue for more dollars to be spent on tree planting and tree care in your community. Sharing the results of these studies can help you sell the need for tree maintenance, for tree planting, for tree inventories; really, can help your success in your job. This research values of the importance our industry for our communities.

Here are some sources for you that are updated regularly whenever research is completed, which discuss and verify many of the multiple urban tree benefits we know about so far:

- www.HealthyTreesHealthyLives.org - Research results and public education information about the many tree benefits that improve the wellbeing, and health, of humans in communities.
- www.TreesAreGood.org - ISA public information and education and promotional materials about why trees are good for people and communities, and how to better maintain and manage trees to do more good.
- www.SUFC.org - Sustainable Urban Forests Coalition- National coalition of organizations, businesses, and individuals that are promoting and educating and collaborating for improving and expanding the importance of urban forests and trees
- GreenInfrastructure - Green Infrastructure Institute.
- www.vibrantcitieslab.com - The most comprehensive website describing and providing examples for many tree benefits, including an urban forestry tool-

kit and other resources.

- www.AREA - ISA's Arboriculture, Research, Education.
- www.fs.usda.gov/managing-land/urban-forests/ucf - United States Forest Service Urban and Community Forestry Program and resources.
- www.urbanforestrysouth.org - Southern Region Urban Forestry Research Center of the USFS- information and resources and example projects, including urban forest management plan tools, urban tree canopy assessments (UTC), Urban Forest Strike Team (UFST), Stormwater credits, and other example research and projects.

Once you dig deeper into the multiple benefits provided by trees to our communities, and the important correlations between healthier trees providing greater quantities of benefits, you may be interested in identifying and calculating the amounts of different benefits your current trees are providing. One question many communities want to answer initially is, "How many more trees do we need to plant and maintain to meet our community sustainability and resiliency goals?"

Back to our initial question "Why look at the trees in your neighborhood?". It is usually most effective to have examples close to home that we can refer to, and refer politicians and decision makers to, for actions to be taken. Important actions such as: Increasing staffing, increasing projects, and increasing funding, for urban tree planting, tree care, and urban forest management. Meeting in the field to look at a tree, or a set of trees, that people pass by each day without really taking time to think about the good they provide, can bring new meaning to these trees that are so often taken for granted by all of us.

Being an active professional in Urban Forestry and Arboriculture is getting more exciting, and more beneficial. Our importance as an industry grows as the research about the importance of trees to people and our environment grows. Our importance for producing and providing and managing and maintaining trees grows as the interest of communities to increase the benefits of their urban forests grows. I will continue to do what I can to value trees, and to value all the people who work with trees across Florida. I look forward to continuing working with all of you for a better shared environment. ❖

Welcome!

New Florida Chapter Members

Below are the individuals that joined the Florida Chapter during the fourth quarter of 2020. If you see a name from your area of the state, look up their phone number online* and give them a call. Introduce yourself and find out what aspect of arboriculture the new member is involved in. Let's make the Florida Chapter friendlier.

We're all working in different ways for the same goals. Get to know other Chapter members! You might make some helpful connections for the future.

We would like to also thank our renewing members throughout the past year. We sincerely appreciate your support of the Florida Chapter, especially during these current unusual times.

- | | | |
|--|---------------------------------------|------------------------------------|
| Anthony Adams, Port Saint Lucie, FL | Shawn Kingery, Deland, FL | Austyn Roth, Jupiter, FL |
| Lauren Adams, Ormond Beach, FL | Peter Kisicki, Ocoee, FL | Jovan C Sands, Monroe, GA |
| Corey L Anderson, Daytona Beach, FL | David Loats, Longwood, FL | Sandra Shinabery, Davie, FL |
| Paul Bays, Inverness, FL | Nicolas Reid Lopez, Tampa, FL | Lonnie Simpson, Seminole, FL |
| John Behling, Duette, FL | Andrew John Malmquist, Tampa, FL | Nick Skarecki, Boynton beach, FL |
| Franklin Scott Berggren, Naples, FL | Brandon Mayhone, St Petersburg, FL | Keri Smith, West Palm Beach, FL |
| Gregory Bori, Gotha, FL | Julie McCrystal, Osteen, FL | John W. Snow, Tarpon Springs, FL |
| Derek Cadotte, Palm Bay, FL | Grady McCullough, Longwood, FL | Christopher Spatafore, Sanford, FL |
| Andrew Carter,
Green Cove Springs, FL | William Mohler III, Ft Lauderdale, FL | Zane Sundquist, Stuart, FL |
| Chris Chase, Orlando, FL | Daniel Montalvo, Mulberry, FL | Jesse Edward Thorne, Dade City, FL |
| Garrett Chiellini, Riverview, FL | Rory P. Mueller, Sebastian, FL | Joseph Tollis, Pembroke Pines, FL |
| Justin R Combs, Clermont, FL | Jeremy Mullon, Oakland Park, FL | Tiffany Turnquest, Loxahatchee, FL |
| Tom Cruxon, Largo, FL | Ruben J Nieves, Boca Raton, FL | Jason Tyrell, Fort Pierce, FL |
| Samuel Dunbar, Jacksonville, FL | Jose Orellana, Miami, FL | Michael Varn, Winter Springs, FL |
| Britton James Durbin, Dunnellon, FL | Luis Paba Rubio, Longwood, FL | Andres Viamontes, Miami, FL |
| Dominick Falcone, Homestead, FL | James Plowman, Plantation, FL | Dana Wagner, Longwood, FL |
| Trevor Gould, Venice, FL | Eric Plumley, Sarasota, FL | Richard B. Wiland, Fort Myers, FL |
| Mark Gould, Saint Petersburg, FL | Maya Quiñones, San Juan, PR | |
| Robert Derek Hall, Bushnell, FL | Romy Ramirez, Miami, FL | |
| Christopher Hallauer, Palm Coast, FL | Colin M Richards, Myakka City, FL | |
| Kathrin Harper, Wesley Chapel, FL | Francisco P Rivera, Plant City, FL | |
| Miguel Jaraz, Myakka City, FL | Roberto Rodriguez, Hialeah, FL | |
| Trevor Lawrence Jessup, Sarasota, FL | Luis Rodriguez, Saint Augustine, FL | |
| Richard L King, Myakka City, FL | Eric Rogers, Tallahassee, FL | |
| | Kyle Rose, Valrico, FL | |

**Go to <http://www.isa-arbor.com>, then go to "Members Only" and log in. Then go to ISA membership directory. If you do not know your log in for members only, contact ISA headquarters at (888) 472-8733. Once you log in, you can update your address, check your CEU's, edit or verify Certified Arborist information and search the membership list.*

Letters to the Editor

We welcome your thoughts about Florida Arborist articles, about your Florida Chapter, or about tree issues in general.



Email your letters to:
jan@floridaisa.org

or mail to:
Florida Chapter - ISA
7853 S. Leewynn Court
Sarasota, FL 34240

Please remember: Letters should be no longer than 300 words. We reserve the right to condense letters, or to edit as necessary.

An invitation to all members
to attend a

Board of Directors Meeting!
Call 941-342-0153
for specific times and locations

Up-coming 2021 Board Meeting - Dates & Locations

February 19, 2021: Zoom
April 16, 2021: Zoom
July 17, 2021: TBA

Arborist Certification Committee Report

By Norm Easey, Florida Certification Liaison

[Click here to view all scheduled exams](#) ; clicking on the “state” column will group all Florida exams together for easy searching. Relatively few in-person exams are currently scheduled; look into taking your exam at a Pearson Testing Center (throughout Florida - most are open with COVID safety precautions).

See the ISA International website www.isa-arbor.com for more information about the various ISA arborist credentials and how to earn them.

Florida Chapter currently has 2136 Certified Arborists.

The Florida Chapter would like to congratulate the following 40 Florida or Florida Chapter individuals for earning their certifications during the 4th quarter of 2020 as Certified Arborist, Board Certified Master Arborist, Municipal Specialist, Utility Specialist and Certified Tree Worker:

Certified Arborist

Jesse Barnett, Tampa, FL
 Nathan M. Bower, Bradenton, FL
 Lagarion Deon Brown, Homestead, FL
 Alicia Calley, Mary Esther, FL
 Louis Carricarte , Homestead, FL
 Michele Cordioli, Clearwater , FL
 Christopher Forrest, Holly Hill, FL
 Brenda Gonzalez, Miami, FL
 Richard Joseph Gray, Jacksonville , FL
 Stephanie Harman, North Miami, FL
 Robert Harper, Grand Island, FL
 Matthew Harrington, Largo, FL
 William R Howe, Mascotte, FL
 Miguel Jaraz, Myakka City, FL
 Richard L King, Myakka City, FL
 Luke Little, Fort Myers, FL
 Matthew McDermott, Winter Garden, FL
 Joe Musgrove, Ponte Vedra Beach, FL
 Jacob Newell, Lady Lake, FL
 Samuel Ortega Monroy , Bradenton , FL

Dianne Pacewicz, Fruitland Park, FL
 Nicole Perez, Miami, FL
 Francisco P Rivera, Plant City, FL
 Leonel O Rodriguez, Miami, FL
 Kyle Rose, Valrico, FL
 Paul Sands, Miami, FL
 Zane Sundquist, Stuart, FL
 Alex Torres, Naples, FL
 LJ Tucker, Oldsmar, FL
 Krystee Van Den Bosch, Minnedosa, MB

Board Certified Master Arborist

Michael Lindsey, Tallahassee, FL
 Mr. Michael Lousias, Tampa, FL
 Maily Martinez-Ravelo, Miami, FL

Municipal Specialist

Claudia Patricia Alzate, Boca Raton, FL

Utility Specialist

John Munro, Hollywood, FL
 Gregory Piechowicz, Ocala, FL
 Joseph Riddle, Port Saint Lucie, FL
 John J. Rohan, Fort Myers, FL
 Stephen J. Rounds, Bonita Springs, FL

Tree Climber Specialist

Danae Jackson, Apopka, FL



Are you thinking about becoming certified?

[Visit the International ISA website](#) To access the certification application handbook with further information.

Florida Chapter ISA - 2021 Education Schedule

*The schedule below is tentative and subject to changes.

[View Florida Chapter Seminars Online](#)

Date	Seminar/Class	Location (s)	Open for Registration
April 23, 2021	Electrical Hazard Awareness IN-PERSON	Tampa Area	Register
April 23, 2021	Electrical Hazard Awareness	Virtual Zoom	Register
June 7-8-9, 2021	Trees Florida 2021 Conference and Trade Show	Palm Coast	Registration opens in April

International Society of Arboriculture Florida Chapter

Our Mission: "To Promote and Improve the
Scientifically Based Practice of Professional Arboriculture"



Arborist Code of Ethics

Strive for continuous self-development by increasing their qualifications and technical proficiency by staying abreast of technological and scientific developments affecting the profession.

Not misuse or omit material facts in promoting technical information, products or services if the effect would be to mislead or misrepresent.

Hold paramount the safety and health of all people, and endeavor to protect property and the environment in the performances of professional responsibilities.

Accurately and fairly represent their capabilities, qualifications and experience and those of their employees and/or agents.

Subscribe to fair and honest business practices in dealing with clients, suppliers, employees and other professionals.

Support the improvement of professional services and products through encouraging research and development.

Observe the standards and promote adherence to the ethics embodied in this code.



Florida Arborist
Florida Chapter ISA
7853 South Leewynn Court
Sarasota, FL 34240