

Florida Arborist

A Publication of the Florida Chapter ISA Volume 19, Number 2, Summer 2016

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Why more cities need to add up the economic value of trees

Dr. Jack Payne, UF/IFAS Senior Vice President



Our parents were wrong: money *does* grow on trees.

Cities routinely rake up tens of millions of dollars from their urban

forests annually in ways that are not always obvious. Leafy canopies lower summer air conditioning bills, but more shade also means less blade to maintain thousands of acres of grass. Health-wise, trees contribute to lower asthma rates and birth defects by removing air pollutants.

Across the nation this Arbor Day, city foresters should celebrate trees as economic drivers and get past the false dichotomy of economy versus environment.

Portland, New York City, Milwaukee and Atlanta are among the cities that have quantified the payoff from pines and palms, olives and oaks. It's part of a breakthrough in thinking among city planners in recent decades who now realize that a city runs not just on engineering, but on biology and ecology as well.



What's a tree worth?

Tampa, Florida demonstrated that kind of thinking in moving its leading tree official, Kathy Beck, from the Parks and Recreation Department onto its <u>chief planning</u> <u>team</u>. Tampa approaches trees as part of a green public works system, the

Value continued on page 4

A Message From the President



Dear Florida Chapter ISA Members.

As many of you know, National Arbor Day was Friday, April 30th. With many celebrations taking place I hope that you were able to enjoy one!

We recently held our second board meeting of the year; I would encourage members to attend at least one of our five meetings during the year. It's an opportunity for you to see how the board works together for the benefit of the membership. If you're unable to attend please contact a member of the board and ask them to share ideas on your behalf. We have had several visitors last year and at our first meeting this year and we appreciate their input. Please see the Florida Chapter website for meeting dates and times.

Along those lines, a topic that has come up several times lately is what is being done to bring young people into arboriculture, as they will be the future of the industry. More specifically what are you doing to bring young people into the profession? Perhaps you know of an aspiring arborist that needs mentoring. Bring them with you to an ISA class, board meeting or the Trees Florida Conference. Let's show them the benefits of becoming an ISA member and how it will enhance their career.

Unfortunately, for the past couple of years we have had difficulty finding a chair for the Loren Westenberger Work Day. Because of this we will not have an event in 2016. We would like to continue to help non-profits in need of tree care. If you are willing to donate your time and volunteer to chair the 2017 Loren Westenberger Work Day, please contact me.

If you are interested in donating tree work for a great cause in 2016, please consider supporting "Saluting Branches." These are arborists united for veteran remembrance. This is the 2nd annual event for this organization and they will be trimming trees in 33 veteran's cemeteries in 25 states. This year one of the locations is in Florida at the Bay Pines Veteran's Cemetery, 10000 Bay Pines Blvd, St. Petersburg, Florida. The event will be held on Wednesday, September 21, 2016. For more information, go to www.salutingbranches.org.

Trees Florida 2016 is right around the corner. It will be held at the Delray Beach Marriott June 12-14th. The conference is a great opportunity to learn, visit with vendors, old friends and make new friends. It's a combination of great educational opportunities and a lot of fun! We'll be celebrating our 20th year as the Florida Chapter throughout the conference. I'm looking forward to seeing you there!

Bonnie Marshall

President, Florida Chapter ISA

"In the woods we return to reason and faith." - Ralph Waldo Emerson









Trees Florida Past Presidents' Picnic

June 11

Red Reef Park, Boca Raton

register when you register for the Trees Florida 2016 Conference

OR

click here to register for just the picnic even if you are not planning to attend the Conference

Trees Florida 2016 Conference and Trade Show June 12–13–14 Delray Beach Marriott

Click here for flyer pdfClick here to register online

UPDATE YOUR ADDRESS BOOK! You can contact us using these email addresses:

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Value continued from page 1

living equivalent of roads and bridges. It's a case of what Beck calls "green meets gray."

Part of how Tampa gets it right on trees is that planners can shield themselves from partisanship, protest and profit motives by relying on science to decide on what, where and how many trees to plant.

To get the biggest bang for tree planting and maintenance bucks, Tampa turns to my colleague, University of Florida Institute of Food and Agricultural Sciences urban forester Rob Northrop, for information on which trees provide the greatest shade, which can be planted closest to sidewalks and parking lots without root growth buckling pavement and which species best withstand floods in a city already impacted by sea level rise. University of Florida scientists Michael Andreu, Andrew Koeser and Paul Monaghan and the USDA Forest Service's Geoff Donovan have also provided valuable expertise.

Under New York City's green infrastructure plan, the city has installed 'bioretention facilities' to reduce stormwater runoff and thereby lower the chances of overflow of sewage into local waterways.

Northrop and other natural resource scientists see intrinsic value in trees. But he recognizes the tremendous economic pressures communities are under, so he and economists collaborate to get at the straight-dollar costs and benefits.

The most recent <u>study</u> of Tampa's trees estimated that they save the city nearly US \$35 million a year in reduced costs for public health, stormwater management, energy savings, prevention of soil erosion and other services.

JOHN P. WHITE
MEMORIAL SCHOLARSHIP

Supporting education in the arboriculture/urban forestry industry.

Applications for the Fall 2016 semester are due by June 15, 2016

Sponsored by:
Florida Chapter International Society of Arboriculture and Florida Urban Forestry Council

Drilling down even further, the University of South Florida has begun mapping individual trees. So planners know, for example, that the live oak on the 4200 block of Willow Drive has a 38-inch diameter and a \$453 annual payoff.

Coping with urban growth

Through the painstaking work of compiling an inventory of a city's green infrastructure, policymakers can make more informed decisions on where to focus resources.

Just as the most decrepit or most used roads get more attention, key trees might get pruned or watered more often. Tampa has assessed the health of trees that line its evacuation routes. This kind of information would have been valuable to transportation officials in the San Francisco area, for example, before a commuter train was recently derailed when it struck a fallen tree.

Other cities recognize the importance of urban forestry. The Atlanta Tree Conservation Commission, for example, is appointed by the mayor and City Council to oversee urban forestry. Portland, Oregon, has a Parks and Recreation Urban Forestry Division that manages and regulates 236,000 street trees and 1.2 million park trees.

But in general, few cities employ people with deep expertise in urban forestry.

The Society of American Foresters didn't start accrediting university programs in the discipline until 2005. There's not even consensus on a definition of urban forestry, though Beck, from Tampa, describes it as the science of addressing both people with tree problems and trees with people problems.

In coming years, the nation will continue to grow and urbanize. One study suggests that in the next half-century, seven million acres in Florida alone could convert from rural and natural to urban use.

The push into formerly natural areas will bring with it more impacts on trees. At the same time, we'll need trees more than ever to create and maintain livable cities.

Let's love our trees. More than hugs, they need science. The quiet efforts of planners and scientists are our best bet for green cities that inspire us to marvel year-round at the natural canopies above us and the ground beneath our feet. •



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Florida Chapter Board Updates

BOARD SHORTS:

registration.

Work Day Alternative



The Florida Chapter continues to look for a Chairperson to oversee the Westenberger Volunteer Workday; the event was cancelled this spring due to lack of a chair.

I f you are still interested in helping with your arborist skills, consider volunteering at "Saluting Branches – Day of Service". "Saluting Branches" is a great opportunity to honor our veterans by making their final resting places beautiful and safe for their loved ones to visit.

2nd Annual Saluting Branches Day of Service will be on Wednesday, September 21, 2016. The Florida military



cemetery chosen for 2016 is Bay Pines National Cemetery 10000 Bay Pines Blvd. St. Petersburg FL 33708 Website: http://www.

salutingbranches.org/

Come One – Come All... to Red Reef Park



Join the fun at the Florida Chapter Past Presidents' picnic in Delray Beach just before the Trees Florida 2016 Conference and Trade Show! Mark your calendar for Saturday, June 11, 2016. There is no fee to attend the picnic

but you must pre-register. Join us for a tour of the Gumbo Limbo Nature Center and then return to Red Reef Park on the beach for grilled food options provided by Char-Hut. Enjoy, network, join in the fun with the Past-President's raffle.

- If you plan to attend the conference, indicate if you will be coming to the picnic when you <u>register online for Trees Florida</u>.
- If you can't make the conference, you're still very welcome to come to the picnic for an evening of relaxation and networking. <u>Click here for PICNIC-ONLY</u>

GIVE 'EM A PAT ON THE BACK!



Applications to nominate a deserving individual in our industry for a Chapter award are due on May 15, 2016 so don't delay! Click here for the application pdf – open it in Adobe Reader so it is interactive, then fill it in and email it back to

jan@floridaisa.org.

It couldn't be simpler to show someone your admiration and appreciation! �

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!!

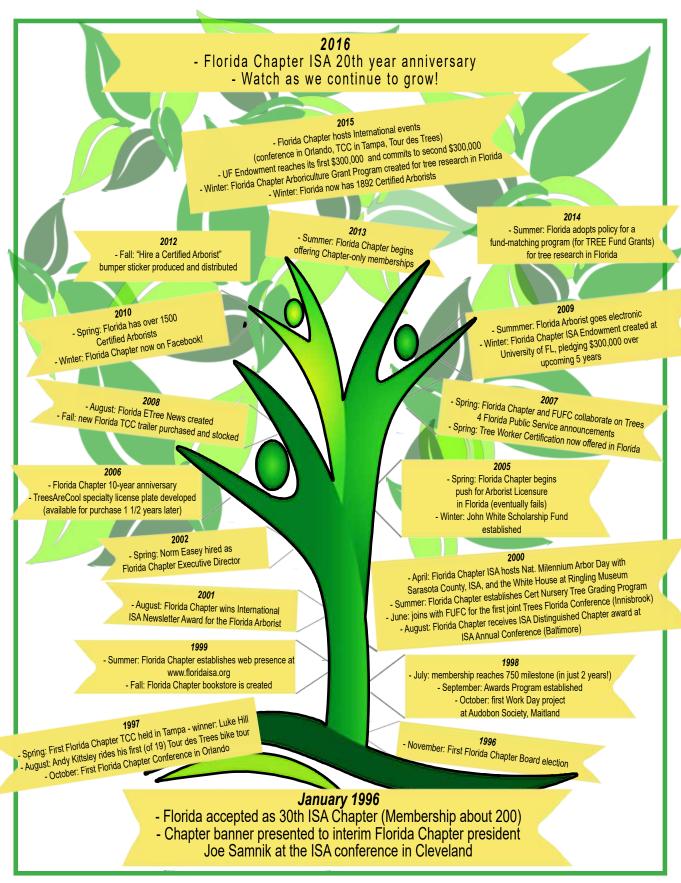
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call 941-342-0153 or email jan@floridaisa.org



LOOK HOW WE HAVE GROWN TOGETHER FOR 20 YEARS!

News From International

ISA ANNOUNCES 2016 ITCC WORLD CHAMPIONS

Congratulations to James Kilpatrick and Chrissy Spence, both of the New Zealand Chapter, who are the 2016 ITCC Men's and Women's Masters' Challenge Champions! This year's event took place April 1-3 in San Antonio, Texas, along with educational workshops and the Arbor Fair and Expo. Complete ITCC competition results are posted on the ITCC website and are also posted on the ISA Facebook page.

JOIN US IN FORT WORTH, TEXAS - THE CITY OF COWBOYS AND CULTURE

The ISA Annual International Conference and Trade Show in Fort Worth, Texas, August 13-17, 2016, will offer the outstanding educational and networking opportunities you've come to expect from our conference as well as great new options and features for all attendees. Check out the new registration options and rates and register online today.

Conference Hotels: Don't forget to book your hotel. Reservations at the discounted rate are available until July 15, 2016 or until the room block is sold out. We encourage you to make your reservation as soon as possible. Once the deadline has passed or the room block is full, ISA and the hotels are no longer able to guarantee room availability or discounted rates.

Start planning your trip now by checking out interesting facts about Fort Worth and things to do while you're there.

BCMA EXAM RELAUNCH: DETERMINING EXAM QUESTIONS AND PASSING SCORE

ISA takes great pride in its credentialing program and the

formal scientific methods that are used to develop valid and reliable questions and to determine the passing score for each certification exam. With the recent relaunch of the BCMA exam, we would like to share more detailed information with ISA members and credential holders about the process we undertook to <u>update the BCMA exam and determine its passing score</u>.

ISA GENERAL MEMBERSHIP ELECTION TO BEGIN MAY 16, 2016

International ISA members will have the opportunity to vote by electronic ballot in a May election to fill expiring positions on the ISA Board of Directors and the Nominating and Elections Committee. ISA membership dues must have been paid by April 30, 2016 in order to participate in this election.

Click here to find out more about the positions being filled and how you will receive your voting ballot.

Polls will be open from May 16 through June 30, 2016. ISA staff will email a link to the voting ballot to ISA members who purchased their memberships by April 30, 2016. Watch your inbox for your chance to vote, and have a voice in these important decisions.

PBS WORLD PREMIER: TREES IN TROUBLE

This week, regional public television channels and PBS's World Channel are including multiple showings of Trees in Trouble as part of their Earth Day/Arbor Day programming. Trees in Trouble (partially funded by the TREE Fund) tells the story of the importance of America's urban and community forests and the serious threats they now face. Designed for audiences of all ages, this documentary inspires viewers and offers first steps for taking action to protect our trees. Don't miss the opportunity to view this important film and share it with others. •

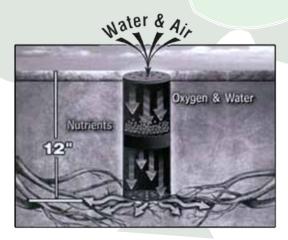


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- Sunday Reception with Exhibitors
 - Sunday Night Pub Crawl
- Monday Night Anniversary Social

for details visit www.treesflorida.com

Tree Care in the Ocean Air

TREES FLORIDA 2016

Conference and Trade Show June 12 - 13 - 14



FLORIDA CHAPTER TREE CLIMBING CHAMPIONSHIP OCTOBER 2016

Join us in Orlando for the Florida Chapter Tree Climbing Championship and Arbor Fair - October 15-16, 2016 at Moss Park: 12901 Moss Park Rd, Orlando, FL 32832



2016 FCTCC Arbor Fair Chair: Julie Iooss, Julie. Iooss@cityoforlando.net FCTCC Climbing Chair: Adam Jackson, adam.jackson@davey.com FCTCC Setup: Danae Jackson, danaeljackson@gmail.com

Contact the Committee members above if you have any question about competing or volunteering, or being an exhibitor or a sponsor! We all look forward to seeing Florida's best climbers compete for the opportunity to represent the Florida Chapter at the International Tree Climbing Championship in 2017.

CLIMBERS GET READY TO SHOWCASE YOUR SKILLS!

Register early - climbing spots are limited.

Click here for the Climber Forms.

FEES:

- \$75.00 Florida Chapter Member *Winner of the Florida Chapter TCC will need to be a member of International ISA in order to compete at the International TCC
- \$125.00 Non-Member **includes Florida Chapter membership for 12 months!

MAIL, EMAIL, OR FAX the REGISTRATION FORM, WAIVER **FORM & PAYMENT TO:**

Florida Chapter ISA 7853 S. Leewynn Court Sarasota, FL 34240 FAX: 941-342-0163

(make checks payable to Florida Chapter ISA or include ALL credit card information)

Volunteers

Volunteers are needed for site preparation, event assistance and judging. Click Here for Volunteer Forms.

Sponsors

Sponsors are greatly appreciated at our annual event!

Monetary and/or Gear donations are accepted. Click Here for Sponsor Forms.

2017 ARBORMASTER CLIMBING KIT PRIZE PACKAGE

The Florida Chapter ISA is pleased to announce the 2017 ArborMaster Climbing Kit Prize Package for the Tree Climbing Champion (TCC), held in conjunction with the Chapter's 2017 Tree Climbing Championship (TCC) event.

This climbing kit is being offered to each chapter champion (both man and woman, if applicable)! The package is intended to help equip the Chapter representative(s) for the International Tree Climbing Championship (ITCC) Competition.

GET GEARED UP!

Each prize package includes:

- Arborist Technical Helmet by Petzl, Husqvarna Composite Multi-Purpose Ax, and Husqvarna Technical Pro Zipper Apron Wrap Chap
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- Tree Squeeze provided by Buckingham
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- OREGON® Tool Bag
- Vermeer logo 'd Camelback Water Bottle
- 50% savings for an ArborMaster® 2-Day or 3-Day Hands-On Training Module

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Greenness Around Homes Linked to Lower Mortality



Women live longer in areas with more green vegetation, according to new research funded by the National Institute of Environmental Health Sciences (NIEHS), part of the National Institutes of Health. Women with the highest levels of vegetation, or greenness, near their homes had a 12 percent lower death rate compared to women with the lowest levels of vegetation near their homes. The results were published April 14 in the journal Environmental Health Perspectives.

The researchers found the biggest differences in death rates from kidney disease, respiratory disease, and cancer. The researchers also explored how an environment with trees, shrubs, and plants might lower mortality rates. They showed that improved mental health and social engagement are the strongest factors, while increased physical activity and reduced air pollution also contribute.

"It is important to know that trees and plants provide health benefits in our communities, as well as beauty," said NIEHS director Linda Birnbaum, Ph.D. "The finding of reduced mortality suggests that vegetation may be important to health in a broad range of ways."

The study, conducted by scientists at Harvard T.H. Chan School of Public Health and Brigham and Women's Hospital in Boston, examined greenness around the homes of 108,630 women in the long-term Nurses' Health Study. The researchers mapped home locations and used high resolution satellite imagery to determine the level of vegetation within 250 meters and 1,250 meters of homes. They then followed the women from 2000 to 2008, tracking changes in vegetation and participant deaths. During the study, 8,604 deaths occurred.

The scientists consistently found lower mortality rates in women as levels of trees and plants increased around their homes. This trend was seen for separate causes of death, as well as when all causes were combined. When researchers compared women in the areas with highest greenness to women in the lowest, they found a 41 percent lower death rate for kidney disease, 34 percent lower death rate for respiratory disease, and 13 percent lower death rate for cancer in the greenest areas.

"The finding of reduced mortality suggests that vegetation may be important to health in a broad range of ways."

- Linda Birnbaum, Ph.D., Director, NIEHS

"The ability to examine vegetation in relatively fine detail around so many homes, while also considering the characteristics of the individual participants, is a major strength of this study," said Bonnie Joubert, Ph.D., NIEHS scientific program director overseeing the study. "This builds on prior studies showing the health benefits of greenness that used community-level or regional data."

The scientists also looked at characteristics that can otherwise contribute to mortality risk, such as age, race, ethnicity, smoking, and socioeconomic status. This enabled them to be more confident that vegetation plays a role in reduced mortality, rather than these factors. If participants moved or the vegetation near their homes changed during the study, the scientists took those changes into account in their study. •

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TREE FUND

CONGRATULATIONS

Congratulations to ISA Member Michael Arnold, Ph.D. of Texas A&M University for his research project on "Long-term impact of container size on tree establishment," assisted by a \$10,000 John Z. Duling Grant from the TREE Fund. Read about this and several other current research projects in a March 14, 2016 TREE Fund press release.

Also, read the March 2016 TREE Fund Bulletin for updates on current application deadlines for research grants and scholarships, information about the premier of the PBS documentary film Trees in Trouble on April 29, 2016 (National Arbor Day), a free TREE Fund CEU webinar featuring Dr. Ed Gilman of the University of Florida, and much more. ❖





Contact JB Toorish for more information: jbtoorish@arborjet.com or 781.983.2613.



How Salinity Affects Plants Henry Mayer and John McLaughlin, Miami Dade IFAS Extension Agents

Most people are only too aware of the damage and corrosive effects of salt on automobiles, but plants also are affected.

Plants vary considerably in their tolerance to salt. For example, turf grasses, most annuals, and deciduous plants typically tolerate more salts than evergreens and perennials. The more salt tolerant the plant, the more it can adjust osmotically to absorb more water in the presence of moderate to high amount of salt in the soil. As a result of the osmosis process, water in the soil



Photo 1. Plant exhibiting symptoms of damage due to soil containing excessive amount of salt.

solution moves from an area containing less salt to an area containing more salts. Plants growing in soils with high salts concentrations need more energy for roots to absorb the water from the soil. Potentially, this can cause plants to become highly stressed.

If the soil salt level exceeds the level of salt tolerance, then the plant will exhibit symptoms of salt injury. Stunted growth and yellowed leaves are the first signs. In broad-leafed species, the second stage involves leaves dying, followed by leaves dropping off. Typically, the margins and tips of older leaves are the most affected, while the new leaves are ok. In conifers, the second stage involves needles turning brown, followed by dropping off. In extreme cases the plants could die.

The electrical conductivity of water, or ECw, is the principal parameter used nowadays to measure a solution's salt content. Measuring EC works well as an index of for total dissolved solids (TDS) which refers to any minerals, salts, metals, cations or anions dissolved in water. The ability to conduct an electrical current is directly related to the concentration of salts in solution.



Photo 2. Salt-tolerant plant

In other words, salty water is a good conductor of electrical current, whereas pure water is a poor conductor.

Rainwater typically has a TDS of 20 mg/L or less. Fresh water from lakes, rivers, and groundwater is more variable, with TDS ranging from 20 mg/L to approximately 1,000 mg/L. Brackish water is, by definition, water with TDS exceeding 1,000 mg/L and ranging as high as that of seawater, at approximately 35,000 mg/L. An ECw of 3 dS/m (equivalent to a TDS of about 2000 mg/L) is the upper limit for nearly all landscape plants.

The internationally accepted standard unit for reporting ECw is deciSiemens per meter (dS/m). An older, equivalent unit is millimhos per centimeter (mmho/cm).

The equivalent is: $1 \text{ dS/m} = 1 \text{ mmho/cm} = 1000 \mu\text{mho/cm}$ TDS (in mg/L) = ECw (in dS/m) \times 640

Cómo La Salinidad Afecta a Las Plantas

Henry Mayer, Miami Dade IFAS Extension

La mayoría de las personas están conscientes de los daños y efectos corrosivos de la sal en los automóviles, pero las plantas también se ven afectadas.

Diferentes plantas varían considerablemente en su tolerancia a la cantidad de sales. Por ejemplo, el césped, plantas anuales, y de hoja caduca normalmente toleran más sales que las plantas no caducifolias y perennes. Mientras mas tolerantres a la sal las plantas son, seran más capaces de ajustarse osmóticamente y podran absorber más agua en presencia de moderada a alta cantidad de sales en el suelo. Debido al proceso de osmosis, el agua en la solución del suelo se mueve de un área que contiene menos sal a un área que contiene más sales. Las plantas que crecen en suelos con altas concentraciones de sales necesitan más energía para absorber el agua. Potencialmente, esto puede causar un alto nivel de estrés en las plantas



Photo 1. Plant exhibiting symptoms of damage due to soil containing excessive amount of salt.

Si el nivel de sal del suelo excede el nivel de tolerancia a la sal de la planta, ella exhibira síntomas de lesiónes por la sal. Retraso en el crecimiento y hojas amarillentas son los primeros sintomas que se presentan. En especies de hoja ancha, las hojas se empiezan a morir y luego se caen. Por lo general, los márgenes y las puntas de las hojas más viejas son las más afectadas, mientras que las hojas nuevas no presentan síntomas. En las coníferas, las agujas se tornan marrón y comienzan a caerse. En casos extremos, la planta puede morir.

La conductividad eléctrica del agua, o ECW, es el parámetro principal que se utiliza hoy en día para medir

el contenido de sal de una solución. EC funciona bien como una representación de los sólidos totals disueltos (TDS). Esto se refieren a los minerales, sales, metales, cationes o aniones disueltos en agua. La capacidad de



Photo 2. Salt-tolerant plant

conducir una corriente eléctrica está directamente relacionada con la concentración de sales en solución. En otras palabras, el agua salada es un buen conductor de la corriente eléctrica, mientras que el agua pura es un conductor pobre.

El agua de lluvia tiene típicamente un TDS de 20 mg/L o menos. El agua dulce de los lagos, ríos y aguas subterráneas es más variable, con TDS que van desde 20 mg/L a aproximadamente 1,000 mg/L. El agua salobre es, por definición, el agua con TDS superior a 1,000 mg/L y que van tan alta como la del agua de mar, aproximadamente 35,000 mg/L. Un ECw de 3 dS/m (equivalente a un TDS de aproximadamente 2,000 mg/L) es el límite superior para casi todas las plantas del jardín.

La unidad estándar internacionalmente aceptado es ECw, la cual es deciSiemens por metro (dS/m). Una unidad más antigua y equivalente es millimhos por centímetro (mmho/cm).

Las equivalencias son: $1 \text{ dS/m} = 1 \text{ mmho/cm} = 1000 \text{ } \mu \text{mho/cm}$ TDS (in mg/L) = ECw (in dS/m) × 640

From Your TREE Fund Liaison Chair - Eric H. Hoyer



TREE Fund News – 20th TDT Ride for Andy Kittsley, \$3 Million Endowment, and Other Nuggets

The TREE Fund (Tree Research, Education, and Endowment) reached a milestone at the end of 2015 by achieving an endowment level of \$3,000,000. This is a new level of achievement and is the first step toward the ultimate goal of \$30,000,000. This amount of money will allow the TREE Fund to award much larger grants for urban forestry and arboricultural research where the interest only can be utilized, allowing the endowment (principal) to stay intact. As a comparison, the endowment as of June 2006 was only \$1.1 million. The performance of the endowment fund has averaged 5.72 percent over the past ten years; this is a very good return considering the downturn in the economy starting in 2007 and lasting for several years. Over \$300,000 was awarded for various grants last year; the total distribution since 2002 has been \$2.6 million.

The impetus behind increasing the endowment, as well as other ambitious goals, is Eric Smith, the new President and CEO of the TREE Fund. Eric replaces long time executive, Janet Bornancin, who retired in 2015. Eric is retired from the military and has previous non-profit experience. I have heard Eric speak and outline his ideas for the TREE Fund; he has some great ideas to move the TREE Fund forward. Eric is aware of the image that some people have of the TREE Fund in regards to the administration costs vs. monies raised and is addressing this issue. Eric is making a point to visit all US Chapters by the end of 2016 and is hoping to make an appearance at our 2016 Trees Florida conference.

The primary fundraiser for the TREE Fund each year is the Tour des Trees bike ride. This year's ride, to be held in October, will start and end in Charlotte, N. Carolina with a portion of the ride to include South Carolina. Bartlett has served as a major sponsor for the Tour for the past several years and this year will host a tour of their research facility located in Charlotte. Speaking of the Tour, Florida's Andy Kittsley, Urban Forester for Orlando, will be riding in his 20th Tour des Trees. Andy is the longest serving tour rider and has raised close to \$100,000 over this time. In addition to Andy, Team Florida includes Chuck Theurer, owner of Arboricultural Solutions in Winter Garden, Scott Davis, and Cheyanne Quigley of Pensacola, a Prescribed Fire and Land Management Technician with the Florida Park Service. Chuck and Scott rode in the 2015 ride as a new rider and this year the Team welcomes Cheyanne to her first ride. Last year, the Tour des Trees raised over \$600,000; your support of any or all of these riders will go toward much needed research in our profession.

Links:

Scott Davis

https://www.crowdrise.com/STDTteamflorida2016/fundraiser/scottdavis5

Andy Kittsley

https://www.crowdrise.com/STDTteamflorida2016/fundraiser/andrewfkittsley

Cheyanne Quigley

https://www.crowdrise.com/STDTteamflorida2016/fundraiser/cheyannequigley

Chuck Theurer

https://www.crowdrise.com/STDTteamflorida2016/fundraiser/charlestheurer







Salinity continued from page 18

Salinidad continued from page 19

Table 1. List of plants with various degrees of salt tolerance.

Tabla 1. Lista de plantas con diferentes grados de tolerancia a la sal.

Highly Salt Tolerant	Moderately Salt Tolerant	Low Salt Tolerant
Cocoplum	Italian Cypress	Bald Cypress
Live Oak¹	Dahoon Holly	Fountain Grass
Oleander	Bottlebrush	Canna Lily
Pittosporum Tobira	Indian Hawthorne	Viburnum Spp.
Sabal Palmetto	Crinum Lily	Hibiscus
Muhly Grass ²	Mexican Heather	Verbena
Lantana	Firebrush	Vinca
Seaside Goldenrod ²	St. Augustinegrass	Copper Leaf
Seashore Paspalum	Liriope	Crape Myrtle
Gumbo Limbo	Porterweed	Croton
Black Olive	Royal Poinciana	Ligustrum
Bay Cedar	Canary Island	Plumbago
Buttonwood	Chrismas Palm	Coleus
Frangipani	Mondograss	Bauhinia
Geiger Tree	Paurotis	Ixora
Mahogany	Queen Palm	
Pigeon Plum	Royal Palm	
Madascar Olive	Satin Leaf	
Coconut	Pink allamanda	
Garcinia	Thryallis	
Crown-of-Thorns	Porterweed	
Natal Plum	Washingtonia	
Sea Grape	Confederate Jasmine	
Bouganvillea	Podocarpus	
Bermudagrass	Muhly Grass	
Coontie	Seaside Goldenrod	
Pursalane	Golden Dewdrop	
Zoyssia		
West-Indian Sea Lavender		
Tree Heliotrope		
Jamaica Dogwood		
Black Torch		
Date Palm		

¹ not for salt spray only for salt in the soil

² salt spray tolerant not soil

¹ no para la sal en el viento, sólo para sal en el suelo

² no para la sal en el suelo, solo en el viento

Forest Discovery: Trees Trade Carbon Among Each Other

Date: April 14, 2016

Source: University of Basel, Switzerland

Forest trees use carbon not only for themselves; they also trade large quantities of it with their neighbors. Botanists from the University of Basel report this in the journal *Science*. The extensive carbon trade among trees -- even among different species -- is conducted via symbiotic fungi in the soil.

It is well known that plants take up carbon dioxide from the air by photosynthesis. The resulting sugar is used to build cellulose, wood pulp (lignin), protein and lipid -- the building blocks of plants. While growing, the tree transports sugar from its leaves to the building sites: to the branches, stems, roots and to their symbiotic fungi below ground (mycorrhizal fungi).

Carbon dioxide shower for trees

Dr. Tamir Klein and Prof. Christian Körner of the University of Basel together with Dr. Rolf Siegwolf of the Paul Scherrer Institute (both in Switzerland) now report that this sugar export goes further than previously thought. In a forest near Basel the researchers used a construction crane and a network of fine



A construction crane is used to treat the crowns of spruce trees with labeled carbon dioxide

tubes to flood the crowns of 120-year-old and 40-meter-tall spruce trees with carbon dioxide that carried a label. The researchers used carbon dioxide that, compared to normal air, contains less of the rare and heavier 13C atom.

While this modification made no difference for the trees, it allowed the botanists to track the carbon through the entire tree using an atomic mass spectrometer. This way they were able to trace the path of the carbon taken up by photosynthesis from the crowns down to the root tips. The researchers found the labelled carbon not only in the roots of the marked spruce trees; the roots of the neighboring trees also showed the same marker, even though they had not received labelled carbon dioxide. This included trees from other species.

"Forest is more than the sum of its trees"

The only way the carbon could have been exchanged from spruce to beech, pine or larch tree -- or vice versa -- is by the network of tiny fungal filaments of the shared mycorrhizal fungi. Understory plants which partner up with other types of fungi remained entirely unmarked. The research group called the discovered exchange of large quantities of carbon among completely unrelated tree species in a natural forest "a big surprise."

According to the researchers, the discovery questions the concept of tree individuality with regard to the single largest constituent of the biosphere, tree carbon. Furthermore, the results of the study funded by the Swiss National Science Foundation add a new dimension to the role of mycorrhizal fungi in forests. "Evidently the forest is more than the sum of its trees," comments Prof. Christian Körner the findings.

Story Source:

The above post is reprinted from materials provided by <u>University of</u> Basel. ❖

TREESARECOOL LICENSE PLATE PHOTO OF THE MONTH CONTEST



Submit a photo of yourself with your TreesAreCool license plate in the background for a chance to win a voucher for one **FREE Florida Chapter ISA 1-day seminar!**

Winners will be announced in each monthly issue of the Florida eTree News (photo will be included). Send your entry with your name, email address and a suggested caption for the photo to patty@floridaisa.org.

Deadline for entry is the 20th of each month.





Florida Chapter ISA Awards Application

Due Date: May 15 (annually)

Enter yourself	or a colleague. Please select <u>one</u> award category:
☐ EDWARD W. BO	OK AWARD
☐ AWARD FOR E	KCELLENCE IN EDUCATION
☐ AWARD OF DIS	STINCTION
☐ THE LOREN WE	STENBERGER AWARD
Applicant Information	
Name of Applicant	
Street Address	
City ST ZIP Code	
Home Phone	
Cell Phone	
E-Mail Address	
Submission Information	
Submitted by Name	
Email Address	
Date submitted	
Qualifications	ations for a consultation on the Addistruction of t
Summarize applicant's qualific	ations for award category. Attach additional pages if needed. Limit 3.

Mail to: Florida Chapter ISA + 7853 S. Leewynn Court + Sarasota, FL 34240 or fax to: 941-342-0463

UF researchers tell group to use science to make decisions about trees

By Ryan Summers, Correspondent

Gainesville's Community Development Committee might have to consider science before changing the city's tree ordinance.

University of Florida researchers presented the committee and the public with data ranging from the types of trees that make up the city's leaf area and total tree population, to the potential temperature reduction in different land use areas, from a 2006 urban forestry study in Gainesville.

The outcome for the committee: more ideas to consider before recommending to the city commission whether the current tree ordinance is comprehensive or needs to be changed or updated.

The second of three Community Development Committee meetings was held Wednesday and consisted of presentations by Perkins + Will and UF researchers Michael Andreu and Rob Northrop.

Andreu and Northrop gave the committee an urban forest planning presentation, based on their ongoing work in the city of Tampa.

The presentation included reasons a city might adopt an urban forestry management planand data from a 2006 independent study UF researchers conducted in Gainesville.

Northrop repeatedly asked the group to consider three forestry management questions.

"Management is basically three simple questions," Northrop said. "What do you have? What do you want? And how are you going to get what you want?"

Northrop and Andreu's have studied trees in Tampa for more than 10 years. And although Northrop said he isn't particularly familiar with Gainesville's ordinance, he said if there are pressing issues with it, action should be taken.

"Given the fact that it would take a while and we can't say exactly how long it will take to get through the process of doing the inventory, collecting the data and working with everybody to do the management plan

... If they have real issues right now, they need to address them right now," Northrop said. "And then when they get the data, they might have a clearer picture of what's going on." .*









moo-acrasoffu@adaacvot

Consultant's Corner

by Joe Samnik, Conmsulting Arborist

THE ULTIMATE TEST OF VALUE



I recently had a case in one of the southern states across from an alphabet soup guy. He had, to be sure, all the qualifying letters behind his name. Very impressive. The matter at hand was several trees that allegedly died due to utility pruning. The arborist across from me used the Trunk Formula Method as his approach to value. That's fine but there was one small problem: his basic unit number; where did he get it?

I started digging and discovered that this particular chapter of the ISA, like other chapters, published the value and size of the largest, most commonly available tree. That may or may not be a good idea. If a chapter is to publish a tree value, it can only be accomplished by those who know how to do it. Those people are a rare commodity in the marketplace. I know of two arborists that know how to comparably price a tree or plant; maybe three. It's a very difficult learning curve. The apprenticeship of a beginner is at least three years before they can think of trying it on their own. Add another year or two for fine tuning before testifying in court. And if a chapter is going to publish a marketplace value the value must be updated at least every quarter. Better every month. A daunting task to be sure.

The arborist across from me used a comparable price that was



fourteen years old and published by the chapter of which he was a member. The result was a devastating loss for his client. You simply cannot use a comparable much past thirty days old. And do you really want to use in court a pricing value that somebody else came up with?

Pack your own chute. Don't go into an appraisal dispute using old comparables written by someone else. It won't work – period. Guaranteed to lose every time.

In another case of much greater consequence the valuation of the plant material was thirty million in round numbers. I sat listening to the salient facts of the case with the litigation team of which I was the arborist representative. The meeting took place in a palatial building located on the famed and fabled Brickell Avenue. The office consisted of the entire penthouse floor. Oil paintings of the founding partners hung illuminated on the walls.

The managing director of the firm's practice said just one thing to me: *Remember, comparable pricing is the ultimate test of value*. That's it. That's all he said to me for the entire meeting.

I took note of that comment and have never looked back.

The arborist across from me, who was published and had the soup letters after his name, was well known and held in high esteem. As he should be. But he didn't know the nuances of comparable pricing. Those little, minuscule words that change the meaning of your work product and your opinion of value. The small subtleties that take the air from your main sails in deposition or mediation.

The case settled on my number. Not because I'm smart, because I know how to comparably price.

You cannot learn how to comparably price from reading a book. As previously stated, five years minimum to perfect your skills. But you can learn the ground rules so that you're standing on solid ground when presenting your opinions. You can learn right now the factors that will set you apart from the competitive market place and enable you to better yourself and our industry.

Set aside what you think you know regarding valuations that you were taught by tree people of how to appraise a



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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

Ultimate Test continued from page 25

tree. Now try learning from the legal viewpoint. From the master attorney's lips to your ears. You can always go back to that place you think you know and trust.

Thus, following are the time honored rules, recognized by the courts for comparable pricing, the ultimate test of value:

- 1. The value of a tree is based upon the legal premise of what price a person willing, but not obligated to buy, would pay a seller willing but not obligated to sell.
- 2. The transaction must be based upon fair negotiations.
- 3. All relevant facts must be known.
- 4. There can be no compulsion of necessity.
- 5. There can be no unusual circumstances.

In the world of arboriculture these conditions have very real implications. An examiner will attempt to impeach the tree appraiser expert witness.

I often find myself across from very proficient arborists. They are all very smart professionals. They are all credentialed. They are all very good people. They may lose from simply being lazy and not calling to check facts or they may incorrectly calculate the value due to a difference between one trunk and multiple trunk trees. With just a bit of fine tuning they each may become highly proficient at plant valuations.

The courts do not care about formulas to obtain plant values. They don't care too much about the limited and misunderstood approaches to value the arboricultural community applies to valuations. Every approach to value that arborists use, is based at the core of comparable pricing. You just may not realize it.

Well over a decade ago I found myself at an annual conference of the elite plant appraisers in our industry. As I was walking down a hall I could not help but over hear a brief exchange between the then executive director and a leader in the plant appraisal world. The executive director was adamant in his belief that the tree appraisers of the world simply must conform more to the principles of The Appraisal Institute whose members are called, MAI's (Members of The Appraisal Institute). Both seemed to be in agreement and were committed to the

New Method May Help Detect Avocado Pathogen Earlier

November 16, 2015

Brad Buck, University of Florida

University of Florida researchers have found an algorithm to help them detect laurel wilt, the deadly pathogen that threatens Florida's \$100 million-a-year avocado industry.

Photo by By Gabriel Hurley

Reza Ehsani, an associate professor of agricultural and biological engineering, said the algorithm finds laurel wilt-infected avocado trees before symptoms are visible to the naked eye. About 500 growers produce Florida's avocado crop annually, and more than 98 percent of the fruit is grown in Miami-Dade County. UF

scientists estimate laurel wilt could severely reduce the commercial avocado industry if they don't find control strategies for the pathogen and ambrosia beetles.

UF scientists already know they can find infected trees through camera images taken from small planes at low altitudes.

In the study, published in the journal Remote Sensing of Environment, scientists determined the parameters necessary to take the image as well as the factors needed to develop and use the algorithm, said Ehsani, who works at the UF Institute of Food and Agricultural Sciences Citrus Research and Education Center in Lake Alfred.

Ehsani and his postdoctoral research associate, Ana de Castro, worked on the study with professors Jonathan Crane and Randy Ploetz from the UF/IFAS Tropical Research and Education Center in Homestead and the Avocado Administrative Committee's administrator,

Avocado continued on page 28



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Avocado from page 27

Alan Flinn and their laurel wilt Coordinator, Don Pybas, in Homestead, where the study was conducted. Researchers will take aerial photos and use the algorithm to analyze the images and create a map that shows the infected avocado tree.

"Knowing the location of infected trees at early stage is very critical in controlling and managing the disease," Ehsani said. "The goal here was to find the optimal flight height that reduces the flight duration while maintaining the accuracy of detecting infected trees."

Geometric parameters defined the optimum flight altitude, Ehsani said. Flight altitude defines the image resolution, and there is a tradeoff between image resolution and accuracy. Flying too low provides higher resolution and better accuracy in detecting the infected disease, but it also adds to the flight duration and overall costs of obtaining the aerial image.

The ambrosia beetle, which transmits laurel wilt, was discovered in the U.S., in Georgia, in 2002 and the link between the beetle and the fungal pathogen was made in 2003. The devastating disease has spread rapidly through the natural landscapes along the southeastern seaboard of the U.S. and has begun to slightly affect commercial avocado production in Florida.

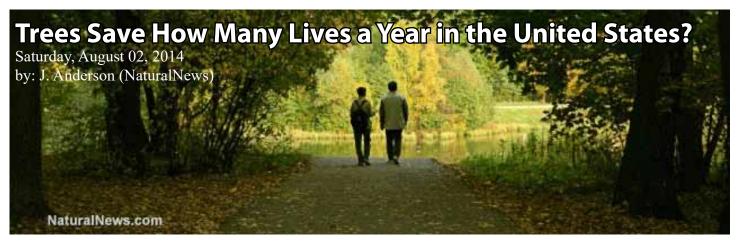
Laurel wilt is spread by ambrosia beetles and among avocado trees through their interconnected roots of avocado trees. The time from infection to tree mortality ranges from four to eight weeks. To prevent spread of the disease, it is important that trees be destroyed as soon as they are affected by the disease. ❖











Trees are naturally helping to save hundreds of lives per year. In fact, in the first broad-scale approximation of its kind, researchers have estimated that trees save over 850 lives per year. Not only that, but they also can help reduce and prevent more than 670,000 cases of severe respiratory symptoms as well.

The study illustrates the importance of trees not only for sequestering carbon but also for helping to remove pollutants from the air. The research indicated that the benefits of trees are especially important in urban areas due to their close proximity to humans and because 80% of the United States population lives in urban areas.

The Study

The study, which was published in the journal Environmental Pollution and conducted by scientists from the Davey Institute and the U.S. Forest Service, calculated how helpful trees were in removing four EPA quality standard indicators. These four air pollutants were ozone, sulfur dioxide, nitrogen dioxide and particulate matter less than 2.5 microns. By removing these pollutants, the researchers estimated that trees help save \$7 billion annually in human health costs that are associated with air pollution by merely improving air quality by less than 1 percent. That 1 percent saves a hefty cost to humans.

While there was a bigger improvement in air quality in rural areas, the effect that this improvement had on human health was greater in urban areas. Dave Nowak, who was part of the U.S. Forest Service research team, said, "In terms of impacts on human health, trees in urban areas are substantially more important than rural trees due to their proximity to people. We found that in

general, the greater the tree cover, the greater the pollution removal, and the greater the removal and population density, the greater the value of human health benefits."

Trees Improve Our Health

Not only do trees help reduce air pollution and therefore help us breathe easier, but it has also been found that simply touching a tree or being near one can make you feel healthier and happier. By helping to improve reaction times, depression, concentration levels, etc., trees and plants can help improve your mental outlook and overall sense of well-being.

Research presented at a 2009 American Association for the Advancement of Science conference in Chicago indicated that people who live in areas that have more trees, parks, grass and green areas live longer and had improved mental and physical health. One study even indicated that your overall health could be predicted by the total amount of green space within a 1- to 3-mile radius of your home.

Conclusion

While this study was carried out in the United States, these results could be correlated for the rest of the world's trees, parks and green spaces. Trees can help benefit us in so many ways and, in fact, they are actually saving lives. From improving the quality of our air to increasing our mental/physical health to saving us billions of dollars in medical bills, they are one of our biggest natural assets. Maybe we should all plant a tree today!

http://www.naturalnews.com/046280_trees_human_lives_pollution.html

Ultimate Test continued from page 26

idea. As I look back on that day it seemed to be the turning point in how we are taught to appraise plants today.

The pontificators and pipe puffing intellectuals that teach us how to appraise plants have only a tangential connection to how the real estate profession approaches appraisal problems. This lose connection is misunderstood but an assertive attempt to weave those real estate principles into the fabric of arboriculture appraisals has been taught and published in our relevant community.

Much to the chagrin of many striving for success in this niche but vital market, are witnessing future attempts to align with the real estate market by publishing revised strategies of how to appraise trees and plants based upon another profession's expertise which we will never, ever have. ❖



NEW National Standard Approved for Integrated Pest Management

A new ANSI Standard, Part 10 Integrated Pest Management (IPM), has been approved and is now available.

The purpose of A300 Part 10 IPM is to provide written standards for the practice of IPM and to aid in developing specifications to implement IPM programs for trees, shrubs, and other woody plants. These standards, when implemented, help the user to avoid or mitigate unacceptable levels of pest damage with the goal of minimizing negative or adverse environmental impacts.

A300 Part 10 IPM includes an outline for the performance standards for IPM practices and specifications writing. The items addressed in the new standards include:

- Purpose, implementation and safety
- IPM management strategies
- Client communication
- Establishment of objectives for an IPM program
- Pest management decision making

- Plant and site assessments
- Monitoring
- IPM management methods
- Material selection
- IPM program reporting and evaluation

American National Standard

Adjoined in the standard are definitions, a specification writing guide and IPM policy statements.



2016 Certification Exam Schedule

The FLORIDA CHAPTER of ISA is pleased to announce our 2016 schedule of Certification exams. See the chart below for the site nearest you.

Date	Exam/	Location	Time	Proctor or	Last Date	Cost
	Class			Instructors	to Register	Member/
						Nonmem
June	Certified	Delray Beach	8:30	Norm Easey,	Minimum 12	\$150/
12,	Arborist	Marriott	AM	Erik Nobs	business days	\$250
2016	Exam	Delray Beach, FL	12:30		prior	
			PM			
June	Certified	North Fort Myers	9:30	TBA	Minimum 12	\$150/
25,	Arborist		AM		business days	\$250
2016	Exam		1:30		prior	
			PM			

This schedule is subject to change as additional tests and review sessions may be added. Visit www.floridaisa. org for updates.

For an application form to register for an Exam call the ISA Office in Champaign, IL at 888-472-8733. To purchase an ISA Certification Study Guide, call the Florida Chapter ISA at 941-342-0153 or fax an order form to 941-342-0463.

The ISA Illinois must receive your application & exam fees A MINIMUM OF TWELVE BUSINESS DAYS prior to the exam date. NO EXCEPTIONS! (ISA Illinois is closed New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and the day after, and Christmas Day). First-time applicants can apply online at www.isa-arbor.com.

PREPAYMENT IS REQUIRED VISA/MC/AMEX accepted. US FUNDS ONLY

Florida Chapter ISA - 2016 Education Schedule

*The schedule below is tentative and subject to changes.

<u>Date</u>	Seminar/Class	Location (s) Open for Registration
June 12-14, 2016	Trees Florida 2016	Delray Beach Register Online
August 2016	Tree ID	Largo and Orlando
September 2016	Advanced Pruning &	West Palm Beach
	Advanced Climbing Skills	
October 2016	Advanced Pruning	Tallahassee and Ft. Lauderdale
October 2016	Outdoor Tree School	Orlando Area

Welcome!

New Florida Chapter Members

Here are the individuals that joined the Florida Chapter during the first quarter of 2016. 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.

Phania Alcena, Belle Glade, FL

Katherine J. Asony, Tampa, FL

Brian Keith Ball, Cape Coral, FL

Billy Joe Barnes, Keystone Heights, FL

Lindsay Lee Brock, Clearwater, FL

Dylan Carlson, Lutz, FL

John Castle, Cape Coral, FL

Christopher Adam Cumston, Royal Palm Beach, FL

Thomas Dalessio, Fort Pierce, FL

Edward Delehanty, Venice, FL

Steve Demello, Land O Lakes, FL

Joseph Paul Devito, Fort Myers, FL

Joseph Albert DiEmmanuele, Weston, FL

Douglas S. Engle, Lancaster, PA

Luis Arnaldo Espino, Greenacres, FL

Alexander Ward Fearn, Safety Harbor, FL

Vernon R. Gingras, Largo, FL

Robert Giordano, Little River, SC

Colin C Goldsmith, Loxahatchee, FL

Michael Hardy, Tallahassee, FL

Robert Leon Hastings, Keystone Heights, FL

Jason Hale Hilburn, Safety Harbor, FL

Sergio Iglesias, Miami, FL

Christopher Ryan Jones, Saint Petersburg, FL

David Thomas Jones, North Miami, FL

Derek Miles Kern, Palm Harbor, FL

Jason P. Kozakiewicz, Coral Springs, FL

Nicholas Alexander Larsen, Canal Point, FL

Yin Pong Lau, Kowloon, Hong Kong

Karl David Lauridsen, Pembroke Pines, FL

Chi Ka Law, Tuen Mun, Nt

Richard Leon, Jacksonville, FL

Charles G. McDonald, Wildwood, FL

Raymond H. McKee, Jr., Boca Raton, FL

Marco Montanaro, Miami Lakes, FL

Patrick E Murphy, Fort Lauderdale, FL

Manuel Richard Nassar, Coconut Creek, FL

Charles K. O'Steen, Southwest Ranches, FL

James Michael Oyler, Apopka, FL

William Michael Price, Tallahassee, FL

Bradley Radecki, Saint Cloud, FL

Regina Ramos, Orlando, FL

Gene Francis Rathka, II, Miami, FL

David J Rivera, North Lauderdale, FL

Chase Rogers, Ormond Beach, FL

Lee Romanello, Saint Petersburg, FL

Dana Rushetsky, Cooper City, FL

Uriel Salgado, Fort Lauderdale, FL

Beau Monroe Skinner, Hollywood, FL

Tyler Stibal, Davie, FL

Christina Gail Stocking, Miami Lakes, FL

Wan Ki Suen, Tsz Wan Shan, Hong Kong

James Henry Thompson, II, Milton, FL

Matthew David Tindall, Davie, FL

Paul William Urbanek, Jr., Wimauma, FL

Orli Kate Zimmerman, Delray Beach, 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 th right to condense letters, or to edit as necessary.

An invitation to all members to attend a

Board of Directors Meeting!

for specific times and locations

Up-coming 2016 Board Meeting - Dates & Locations

June 11, 2016 - Delray Beach September 16, 2016 - Orlando

Arborist Certification Committee Report

By Norm Easey, Florida Certification Liaison

There is currently one ISA certification exam scheduled in Florida within the next six months. <u>Click here for the specific dates.</u> The ISA Certified Arborist exam is also now available at Pearson Testing Centers throughout Florida. See the ISA International web site <u>www.isa-arbor.com</u> for more information about the various ISA arborist credentials and how to earn them.

Florida Chapter currently has 1872 Certified Arborists.

The Florida Chapter would like to congratulate the following 25 Florida or Florida Chapter individuals for earning their certifications as: Certified Arborist, Board Certified Master Arborist, Municipal Specialist, and Utility Specialist:

Certified Arborist

Robert Elvis Barkley, Ocala, FL Joshua Collazo, Miramar, FL Steve Corbae, Melbourne, FL Joseph Albert DiEmmanuele, Weston, FL Dustin Durrell Ferland, Palm Bay, FL Jesus Hernandez, Loxahatchee, FL Richard A. Kesselring, Jr., Ocala, FL Westley Kingsbury, Tarpon Springs, FL Liliana Kolluri, Jacksonville, FL Brad Lovett, Miami, FL Curtis Allen Morgan, Eustis, FL Leonard Paul Owens Nelson, Miami, FL John Walter Rukkila, Lakeland, FL Julie Ann Schelb, Wimauma, FL Raymond Olin Sharp, Jr., Lynn Haven, FL Matthew Austin Spahlinger, Naples, FL Wan Ki Suen, Kowloon, Hong Kong Thomas L. Wogan, Palmetto Bay, FL

Municipal Specialist

Elizabeth A. Baylis, Saint Petersburg, FL Yin Pong Lau, Kowloon, Hong Kong Chi Ka Law, Tuen Mun, Hong Kong

Utility Specialist

Justin Arthur Hancock, Sumterville, FL



Board Certified Master Arborist

Peter John Zielinski, Alva, FL

James Warren Yelverton, Port Charlotte, FL

YeshohaYHWH Azzuwr Ben Yisrael, St. Petersburg, FL

Are you thinking about becoming certified?

Visit the International ISA website

To access the certification application handbook with further information.

2016 Florida Chapter Tree Climbing Championship

Preliminary Events: Saturday October 15, 2016 Masters Challenge: Sunday October 16, 2016

Mandatory gear check will be required - details to be announced

TENTATIVE LOCATION: Moss Park - 12901 Moss Park Road - Orlando, FL 32832

SPONSOR FORM



	Please PRINT or 1	ГҮРЕ:	
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МО	NETARY DO	NATION	
Amount \$			
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Exp. Date			
Exact name on card			
Card billing address			
Card billing City/State/Zip			
Your receipt will be emailed to you (plea	ise provide an em	nail address abo	ove).
PLEASE SEND YOUR MONETAR MAIL: Florida Chapter ISA - PHONE: 941-342-0153 FAX: 941-342-0463 EMAIL: floridaisa@comcast.ne	7853 S Leewynn (Court - Sarasota	, FL 34240
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Please describe your donation below. Include (please provide an email address above).	de a monetary valu	e if you would lil	ke a receipt to be emailed to you
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BY MAIL, FED EX or UPS: Adam Jackson - 2111 Edmands Place - Apopka, FL 32703

Florida Chapter Tree Climbing Championship and Field Day

Preliminary Events: Saturday October 15, 2016 Masters Challenge: Sunday October 16, 2016

Mandatory gear check will be required - details to be announced

TENTATIVE LOCATION: Moss Park - 12901 Moss Park Road - Orlando, FL 32832

NOTE: NO PETS are allowed at this park **CAMPING** is available at this park

THIS PARK HAS AN ENTRY FEE of \$3/day unless you are camping in the park

CLIMBER ENTRY FORM

Register early to reserve your spot!	SPACE IS LIMITED!	Due by September 24, 2016
Name		
Company		
Address		
City	State	Zip
Phone # ()	_ T-Shirt size (register ea	orly so we can provide your requested size)
EMail Address (for contacting and to send	a receipt)	
OPTIONAL	. EDUCATIONAL	. EVENT
The Outdoor Tree School is being offered on Fripetitors and volunteers. Space may be limited - Tentative location: MOSS PARK, Orlando, FL (registration fees for non-competitors or non-volunte	we cannot always guara	intee available space.
☐ YES! You plan to attend the Outdoor T☐ NO, you do NOT plan to attend the Outdoor T☐ Check here if you want your lunch to I	tdoor Tree School.	
REG	ISTRATION FEE	S
\$75 - Florida Chapter ISA member\$125 - nonmember price **include		da Chapter ISA for 1 year
Check_enclosed (Make out to Florid	da Chapter ISA)	
☐ Cash Enclosed☐ Credit Card☐ VISA☐	MasterCard ☐ Disc	over
**If you are not comfortable emailing you	r credit card information,	, please fax, mail or phone it in.
Card Number		
Exp. Date	3 digit Card	Code
Exact name on card		
Card billing address		
Card billing city/state/zip		
Submit this entry form, th	e Competition wai	ver form and payment to:

Florida Chapter ISA • 7853 S Leewynn Court • Sarasota, FL 34240

jan@floridaisa.org (you may submit this form as an email attachment)

941-342-0463

FAX:

MAIL:

PHONE:

EMAIL:

941-342-0153

	FC-TCC Tree Climb Competition	
	Please PRIN	T Clearly
Contestant's Name	·	Age:
Address:		Zip:
Employed by:		
Phone: ()	Email:	
Number of years yo	ou have climbed:	
	Waiver and Hold-Harn	nless by Contestant
waive any and all con behalf of, or on property owner and guests, invitees, and or on behalf of, or consequence of r. Climbing Champion its officers, director defense, settlement, way related to the Consequence to the Consequence.	claims I may have at anytime, and any account of me, or by me, or by any p the International Society of Arboricult any person who would be lawfully en account of me, for any injuries or dainy activities or participation in the Cliruship. I further agree to hold the proper es, employees, agents, members, guests, payment of damages, or other expense climbing Championship. I recognize an ader any circumstances rely upon the c	as a contestant in the Climbing Championship, I hereby and all claims which might otherwise be made by, or erson or entity in any way as my subrogee against the ure, its officers, directors, employees, agents, members titled to indemnification from them for any liability to mages of any kind whatsoever arising on account of on bing Championship, or in any other way related to the ty owner and the International Society of Arboricultures and invitees, safe and harmless from any expense for es related in any way to injuries sustained by me in any d assume all risks and danger involved in my participater, attention or assurance of anyone other than mysels.
Dated	Signature of Contestant	
	Certification and Waiver by	Employer of Contestant
individual planning participation. I furth protection levels of of participation. Th owner and the Inter or invitees, as a resu or otherwise on its b owner and the Inter and invitees safe an relating in any way	to participate in the Climbing Chamber certify that I have satisfactorily conference or the employer hereby waives any and all mational Society of Arboriculture, its coult of any compensation or their benefits behalf, in the event any claim or injury remains a Society of Arboriculture, its conference of the event any claim or injury remains a Society of Arboriculture, its conference of the event any expense for defend by this employee. I further certify that	ded representative of the employer of the above-named appropriate that the employer has encouraged this affirmed that the employee will be covered by statutory the equivalent, for any injuries sustained in the course I subrogation claims it may have against the property officers, directors, employees, agents, members, guests or expenses incurred or paid by it, its insurance carrier esults from this participation, and will hold the property officers, directors, employees, agents, members, guests se, settlement, payment of damages and other expenses I am duly authorized to execute this Certification and dessary resolutions have been duly passed and adopted
The exact name and	d address of the employer, and state of	incorporation (if applicable):
Dated		

Mail, fax or email (you may submit as an email attachment) this completed competition waiver form along with the competition registration form and payment to:

Florida Chapter ISA ◆ 7853 S Leewynn Court ◆ Sarasota, FL 34240

2016 Florida Chapter Tree Climbing Championship

Preliminary Events: Saturday October 15, 2016 Masters Challenge: Sunday October 16, 2016

Mandatory gear check will be required - details to be announced

TENTATIVE LOCATION: Moss Park - 12901 Moss Park Road - Orlando, FL 32832

NOTE: NO PETS are allowed at this park

CAMPING is available at this park

THIS PARK HAS AN ENTRY FEE of \$3/day unless you are camping in the park

JUDGE & VOLUNTEER FORM

Please PRINT or TYPE:

Name		
Company		
Address		
City	State	Zip
Phone # ()	T-Shirt size (volunte	er early so we can provide your requested size)
EMail Address (for contacting)		
Allergies? \square Yes \square No Please list if y	res:	
Have you ever volunteered at any TCC event	before? ☐ Yes	□ No
List year(s):		
Are you First Aid/CPR Certified?	nician? 🗌 Yes	
THANK YOU FOR Y	OUR OFFER T	O VOLUNTEER!
am able to help: as a judge with site pre-pruning with site preparation the week price with registration with timing and record keeping with awards at the FC-TCC dinner on day of the	competition	

Submit this Volunteer form and the Volunteer Waiver form to:

MAIL: Florida Chapter ISA - 7853 S Leewynn Court - Sarasota, FL 34240

PHONE: 941-342-0153 FAX: 941-342-0463

EMAIL: jan@floridaisa.org (you may submit this form as an email attachment)

Volunteer

FC-TCC TREE CLIMBING CHAMPIONSHIP



	VOLUNIEER WAIVER FORM	
	Please PRINT Clearly	,
Volunteer's Name:		
Address:		Zip:
Employed by:		
Phone: ()	Email:	
	Waiver and Hold-Harmless by Volunteer	
and all claims I may have a of, or on account of me, or owner and the International invitees, and any person whon behalf of, or on account in consequence of my activithe Climbing Championship riculture, its officers, direct expense for defense, settlem by me in any way related to	the ce of my offer to be a volunteer for the Climbing Champic to anytime, and any and all claims which might otherwise by me, or by any person or entity in any way as my subspace of Arboriculture, its officers, directors, employees no would be lawfully entitled to indemnification from the of me, for any injuries or damages of any kind whatsoever it is or participation in the Climbing Championship, or inc. I further agree to hold the property owner and the Interpretations, employees, agents, members, guests and invitees, satisfied, payment of damages, or other expenses related in any the Climbing Championship. I recognize and assume all I not under any circumstances rely upon the care, attentions relating to my safety.	be be made by, or on behalt rogee against the propert a, agents, members, guests tem for any liability to, of er arising on account of on any other way related to rnational Society of Arbo afe and harmless from any any way to injuries sustaine risks and danger involve
Dated	Signature of Volunteer	
	Certification and Waiver by Employer of Volunteer	
individual planning to volu participation. I further certif protection levels of Workers of participation. The employ owner and the International or invitees, as a result of ar carrier, or otherwise on its be the property owner and the members, guests, and invite and other expenses relating this Certification and Waive duly passed and adopted by	e employer or a duly authorized representative of the employeer at the Climbing Championship, and that the employee was Compensation Insurance or the equivalent, for any injuryer hereby waives any and all subrogation claims it may Society of Arboriculture, its officers, directors, employees by compensation or their benefits or expenses incurred coehalf, in the event any claim or injury results from this parallel in the event any claim or injury results from this parallel in any way by this employee. I further certify that I am deer on behalf of the employer and that any and all necess the employer, and state of incorporation (if applicable).	loyer has encouraged thirdly be covered by statutories sustained in the cours have against the propert, agents, members, guests or paid by it, its insurance articipation, and will holectors, employees, agents ment, payment of damage duly authorized to execut ary resolutions have bee
Dated		

Florida Chapter ISA • 7853 S Leewynn Court • Sarasota, FL 34240

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.

