Different Trees and Their Capability to Reduce Household Carbon Footprints

Francisco Escobedo, School of Forest Resources and Conservation, University of Florida, Gainesville and Henry Mayer, Miami Dade IFAS Extension Agent.

Trees perform an important function in the natural carbon cycle. Through the process of photosynthesis, trees sequester, or capture, carbon dioxide (CO2) from the atmosphere to create energy for growth. This carbon is then stored in the tree’s biomass over its lifetime. Trees store carbon in their leaves, branches, trunks, and other parts. The i-Tree software has been available for several years. It is one of the few tools available for communities at no cost, and it provides relatively easy-to-understand information based on scientific methods. It is used to evaluate the quantity, type, characteristics, as well as the benefits and needs of managing urban forests.

Homeowners usually choose trees based on their aesthetic qualities, but there is more to it...

Version española

El software de i-Tree ha estado disponible desde hace varios años. Hasta la fecha, es una de las pocas herramientas disponibles para las comunidades sin costo, y que proporciona información relativamente fácil de entender basada en métodos científicos. Se utiliza para evaluar la cantidad, el tipo, las características, así como los beneficios y necesidades de manejo de los bosques urbanos. Basado en el artículo de: Richard Vaughn, graduate student, School of Natural Resources and the Environment, University of Florida/IFAS; Mark Hostetler, professor and Extension specialist, Department of Wildlife and Conservation and Francisco Escobedo, assistant professor and Extension specialist, School of Forest Resources and Conservation.

Different Trees continued on page 14
Greetings members and friends,

Now that November has arrived, we all can begin to enjoy the cooler temperatures and the seasonal changes during this time of year living in Florida. This is my last presidential message, it has been an honor and a pleasure to have served as your Florida Chapter president for this past year. Our incoming president, Dr. A.D. Ali will continue to move the chapter forward and provide the leadership to keep the Florida Chapter strong.

I wanted to point out the great work of our education committee and how active they have been with this year’s seminars and Trees Florida. The education committee has provided you the opportunities to attend continuing education programs across the state. I value the commitment that the Florida Chapter ISA gives to its members in the way of training.

I have to point out again in my final message the importance of the TreesAreCool specialty license plate. As arborists and members of Florida Chapter ISA, we are committed to education and tree research that this TreesAreCool license plate helps to provide for Florida. If you have one for your vehicle already - great! if you wish to purchase the license plate, please see the TreesAreCool website.

I want to encourage our membership to attend meetings of the Board of Directors whenever possible.

I highly recommend to anyone to get involved with Florida Chapter ISA. You will receive great personal and professional fulfillment. You can start by volunteering for an existing committee; check out the list of standing committees at Floridaisa.org. As always, if you have any complaints or suggestions, please let me know. All my contact info is on the website.

In closing, I want to express my thanks to all who have served on the board and committees for the past year. Being volunteers, you continue to advance our profession with your passion and the care of trees in Florida. A special thanks to Norm, Jan and Patty for their continued efforts in keeping our Chapter’s business running successfully and efficiently.

Sincerely,

Patrick Miller
President, Florida Chapter ISA
Happy Holidays

From Florida Chapter ISA

Florida Chapter ISA
2013 Board of Directors

Directors
Ron Litts, Commercial Arborist Representative ('12-'14)
Phone: 727-207-1002
ronlitts@gmail.com

Richard Cervi, Consulting Arborist Rep. ('13-'15)
Cervi and Associates
1532 Connecticut Ave
St. Petersburg, FL 33703
Phone: 727-417-5873
cerviarborists@yahoo.com

Rick Joyce, Grower Representative ('12-'14)
Forestry Resources Ecological
4353 Michigan Link
Fort Myers, FL 33916
Phone: 239-334-2493
rjoyce@fri-eco.com

Ed Gilman, Educator Representative ('13-'15)
University of Florida
Dept. of Environmental Horticulture
2543 Fifield Hall
Gainesville, FL 32611-0670
Phone: 352-262-9165
egilman@ufl.edu

Todd Kucharski, Municipal Arborist Representative ('11-'13)
City of Sarasota, Public Works
1761 12th Street
Sarasota, FL 34236
Phone: 941-365-2200 x6303
todd_kucharski@sarasotagov.com

Mike Robinson, Utility Arborist Representative ('11-'13)
JEA
2325 Emerson Street
Jacksonville, FL 32207
Phone: 904-665-6134
Cell: 904-487-3636
Fax: 904-665-4097
robmm@jea.com

Jerry Renick, FUCF Representative ('12-'14)
Land Design South
400 Columbia Drive, Suite 110
West Palm Beach, FL 33409
Phone: 561.537.4540
Fax: 561.478.5012
Cell: 561.379.6016
jrenick@landdesignsouth.com

Don Winsett, at Large ('13)
Davey Tree
6500 NE 20th Ave
 Ft. Lauderdale, FL 33308
don.winsett@davey.com

Mike McCoy, At Large ('13)
Metric Engineering
13940 SW 136th Street
Miami, FL 33186
305-235-5098
mmccoy@metriceng.com

Lori Ballard, At Large ('13)
Samnik and Associates
1015 Michigan Ave.
Palm Harbor, FL 34683
Phone: 727-786-8128
Fax: 727-789-1697
Administration
Norm Easey, CEO
Jan Easey, Admin. Assist.
Patty Morrison, TF Coordinator

Directors Executive Committee
Patrick Miller, President ('13)
Cherry Lake Tree Farm
7856 Cherry Lake Road
Groveland, FL 34736
Phone: 352-429-6902 Fax: 352-429-3011
patrick.miller@cherrylake.com

Dr. A.D. Ali, President Elect ('13)
12060 Coyle Road
Ft. Myers, FL 33905
Phone: 239-728-3938
ad.ali@davey.com

Eric Hoyer, Past President ('13)
3890 N. Longvalley Rd.
Hernando, FL 34442
Phone: 863-670-0734
erich@nrpsforesters.com

Celeste White, Vice President ('13)
Orange County UF/IFAS Extension
6021 S. Conway Road
Orlando, FL 32812
Phone: 407-254-9210 Fax: 407-850-5125
cwhite@ufl.edu

Bonnie Marshall, Treasurer ('12-'13)
Marshall Tree Farm
17350 SE 65th Street
Morriston, FL 32668
Phone: 352-528-3880 Cell: 352-316-0264
Fax: 352-528-3778
Bonnie@marshalltrees.com

Adam Jackson, Secretary ('13-'14)
ValleyCrest
424 E Sandpiper St.
Apopka, FL 32712
Phone: 407-293-0146 x125 Cell: 321-303-4714
ajackson@valleycrest.com

Ron Litts, Commercial Arborist Representative ('12-'14)
Phone: 727-207-1002
ronlitts@gmail.com

Richard Cervi, Consulting Arborist Rep. ('13-'15)
Cervi and Associates
1532 Connecticut Ave
St. Petersburg, FL 33703
Phone: 727-417-5873
cerviarborists@yahoo.com

Rick Joyce, Grower Representative ('12-'14)
Forestry Resources Ecological
4353 Michigan Link
Fort Myers, FL 33916
Phone: 239-334-2493
rjoyce@fri-eco.com

Ed Gilman, Educator Representative ('13-'15)
University of Florida
Dept. of Environmental Horticulture
2543 Fifield Hall
Gainesville, FL 32611-0670
Phone: 352-262-9165
egilman@ufl.edu

Todd Kucharski, Municipal Arborist Representative ('11-'13)
City of Sarasota, Public Works
1761 12th Street
Sarasota, FL 34236
Phone: 941-365-2200 x6303
todd_kucharski@sarasotagov.com

Mike Robinson, Utility Arborist Representative ('11-'13)
JEA
2325 Emerson Street
Jacksonville, FL 32207
Phone: 904-665-6134
Cell: 904-487-3636
Fax: 904-665-4097
robmm@jea.com

Jerry Renick, FUCF Representative ('12-'14)
Land Design South
400 Columbia Drive, Suite 110
West Palm Beach, FL 33409
Phone: 561.537.4540
Fax: 561.478.5012
Cell: 561.379.6016
jrenick@landdesignsouth.com

Don Winsett, at Large ('13)
Davey Tree
6500 NE 20th Ave
Ft. Lauderdale, FL 33308
don.winsett@davey.com

Mike McCoy, At Large ('13)
Metric Engineering
13940 SW 136th Street
Miami, FL 33186
305-235-5098
mmccoy@metriceng.com

Lori Ballard, At Large ('13)
Samnik and Associates
1015 Michigan Ave.
Palm Harbor, FL 34683
Phone: 727-786-8128
Fax: 727-789-1697
Administration
Norm Easey, CEO
Jan Easey, Admin. Assist.
Patty Morrison, TF Coordinator

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: FloridaISA@comcast.net. 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 seem 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.
Natural Resource Planning Services has assisted clients with urban forest management since 1974.

To better serve our clientele we have established a division entirely focused on arboricultural and urban forestry services.

LEGACY Arborist Services

- Environmental Analysis (i-Tree & CITYgreen)
- Urban Tree Inventory
- Urban Forest Management Plans
- Pre-Development Inventory
- On-site Tree Preservation
- Hazard Tree Assessment
- Tree Appraisals
- Expert Witness Testimony

Contact us today!

Erin Givens
(352) 457-6356
Certified Arborist FL-6122A

John Holzaepfel
(352) 238-0917
Certified Arborist FL-1147A
Certified Forester CF-630

Eric Hoyer
(863) 670-0734
Certified Arborist SO-0103A
Certified Forester CF-1207
Registered Consulting Arborist
RCA-482

Mindy Moss
(352) 457-1878
Certified Arborist FL-5874A

P.O. Box 564
San Antonio, FL 33576

www.nrpsforesters.com
At first blush you may think that this article is about a small, albeit ugly armored animal and you would be justified in doing so. After all, the name Armadillo Partners conjures up a mental image of a corporate holding of armadillos, presumably for sale. Such would not be the case however. In fact, this article is about an arbor area and trees located at a shopping center called Armadillo Square in Broward County, Florida.

The Department of Transportation initiated eminent domain proceedings to acquire certain property along Griffin Road for purposes of a road widening project. Parking spaces were lost. In an effort to replace the lost parking, an arbor area was taken and replaced with parking spaces. That is all fine and good, it happens all the time. However, in this instance, the appraiser for the Department of Transportation did not include the value of the arbor area in his assessment. Horrors to be sure!

Go Forth and Testify

Goodbye Frye: The Frye test holds that expert testimony is admissible only if the scientific principle or method is generally accepted in its particular field. It ensures that only methods that are competent are heard by the trier of fact. Expert testimony is not competent and therefore inadmissible if it is essentially speculative and conjectural. But in Armadillo the court held that the failure of an expert to consider one of many factors in determining compensation goes to the weight of this testimony, and not to his competency to testify. Yikes!

The Florida Supreme Court created a new standard for expert testimony in eminent domain by parting from Frye. Expert testimony is admissible unless the method used by the expert is totally inadequate or improper and would depart from all common sense and reason or would require adoption of a new and totally unauthenticated formula. The judge is no longer gatekeeper of evidence regarding the competency of the expert’s methodology.

Of course, Armadillo regards Eminent Domain actions. Civil and Criminal actions return to the standards held by Frye or Daubert.

My best to you; now go forth and testify…

LET US HELP TRIM YOUR BUDGET WITH QUALITY EQUIPMENT, AT REASONABLE PRICES

At the Ring Power Cat® Rental Store, we have everything you need to get the job done right. Including equipment from leading manufacturers like Caterpillar® Skid Steer, Multi Terrain, and Compact Track Loaders, Terex bucket trucks, Genie lifts, and Terex chippers. Call today to find out about our flexible lease options with low payments on a variety of equipment.

No one understands your equipment needs better than we do.

888.748.7464 CatRental.RingPower.com
Eliminate Turf Blocks.

Use the WANE Tree System at half the cost with better results.

The W.A.N.E. (Water Air Nutrition Exchange) 3000 Tree Unit is a tree feeder and irrigator that supplies water, air and nutrition for trees surrounded by pavement.

These units have been used throughout the United States since 1972 in city sidewalks, roadways, parking lots, theme parks and private home sites.

View our complete brochure at wane3000.com

Eliminate sidewalk grates - use a 6" W.A.N.E. unit utilizing the soil beneath the paving and lessening the trip hazard.

WANE 3000
TREE FEEDER SYSTEM
wane3000.com

12312 Sunriver Lane • Dade City, FL 33524 • 818-961-1060
Holiday Gift Ideas for Your Favorite Arborist!

Tervis® Tumbler
Lifetime guarantee, keeps cold drinks cold (no condensation) & hot drinks
hot, dishwasher safe, BPA free
Color available: clear with forest green logo
Sizes available: 16 oz. - $12 member/$14 non member
24 oz. - $16 member/$18 non member
24 oz water bottle/lid - $21 member/$23 non member

Ball Cap
CoolCrown™ by Adams: mesh lining promotes your cool comfort!
Colors available: khaki with green brim and green logo or
tan with tan brim and brown logo
Size available: 1 size fits all, adjustable back clip on leather strap
$15 member/$18 non member

Polo Shirt
IZOD short sleeved polo shirt: 100% Pima cotton, moisture wicking,
no-roll collar, no pocket
Colors available: red with tan logo or
light blue with dark blue logo
Sizes available: M  L  XL  XXL
$25 member/$30 non member
News From International

Membership Renewal in International ISA - Save $5!

Everyone loves a sale! Here is an incentive for renewing early before your International ISA membership expires on December 31, 2013. If you renew online before this expiration date, you are eligible to receive a $5 discount by entering the coupon code: EarlyRenew2014. Renew online today!

There are some changes for the 2014 membership year:

1. ISA is restructuring its Information-Sharing Preferences which drive the types of promotional communications you receive from us. During the transition, some of your preferences may have been inadvertently altered. Please log in to your ISA account to verify and/or update your current information-sharing preferences.

2. If you want to receive a printed copy of the ISA Membership Directory, you must select this option during your renewal process. As a member of ISA, you always have full access to the online Membership Directory.

As a member of International ISA, you receive many benefits, some of which include:

- Six bi-monthly issues of Arborist News or Arboriculture & Urban Forestry. Members have the option to receive these publications online or in print.
- Free online access to Arborist News CEU quizzes.
- Discounts to Online Learning Center courses and CEU quizzes.
- Twelve electronic issues of the ISA Today newsletter, which provides a quick update on what is happening both at ISA Headquarters and within the industry on a global basis.

Thank you for your ongoing support of International ISA. Through the patronage of loyal members like you, we have been able to accomplish many significant projects and goals in 2013, such as:

- Collaborating with arborists around the world to develop and test new programs, such as the Tree Risk Assessment Qualification, which will change the way our industry assesses trees.
- Donating more than $50,000 to the TREE Fund to support the advancement of scholarships, scientific research, and education programs related to arboriculture and urban forestry.

Your membership dues make it possible for ISA to promote arboriculture and advance its mission on an international level, making the world a better place, one tree at a time.❖

Happy Holidays
You're a municipal forester and you're proud of your urban forestry program. You want to see it continue to grow and improve. Why not let your Mayor and Council know how well you're doing? You know how they love recognition and, hey, if they're happy....well, you know the rest!

You need to have your program accredited by the SMA. Show that your program compares to the best standards in urban forestry. It's now a lot easier and quicker to do. Apply once and renew annually.

Your mayor will get a plaque for his or her wall. You'll get the satisfaction of job security, budget justification, and respect. It's a win-win situation for all.
**2013-2014 SCHOLARSHIP WINNERS**

**Matthew McKernan**  
Robert Felix Memorial Scholarship ($3,000) (supported by Robert Felix Memorial Fund)  
Studying Horticulture at Kansas State University  
Anticipated graduation date: May 2015

**Luke Becker**  
John Wright Memorial Scholarship ($2,000) (supported by Wright Tree Service)  
Studying Horticulture at Kansas State University  
Anticipated graduation date: May 2015

**Maggie Harthoorn**  
TREE Fund Scholarship ($2,000) (supported by TREE Fund General Fund)  
Studying Forestry at Iowa State University  
Anticipated graduation date: May 2015

**RESEARCH AWARD UPDATES**

Hyland R. Johns Research Grants were recently awarded to:  
- Dr. Susan Day, Virginia Polytechnic Institute and State University ($25,000)  
  Project title: “Improving stormwater capture of urban forests through soil rehabilitation”  
- Dr. Zongliang Jiang, North Carolina A&T State University ($25,000)  
  Project title: “Occupational safety in arboriculture”

Arboriculture Education Program Grant was recently awarded to:  
- The Greening of Detroit to support “Our LAND” (Learn, Admire, Nurture, Dream), an environmental education program for 5th and 6th grade students in Detroit’s urban schools. ($5,000)

A complete list of TREE Fund research, education and scholarship award winners can be found online in our Grant and Scholarship Archives.

Read the results of a 5-year study by Drs. Bryant Scharenbroch and Gary Watson of The Morton Arboretum on the effectiveness of mulching, compost teas, and fertilization to improve soil organic matter and soil biology. The project, partially funded by a Hyland R. Johns grant from the TREE Fund, was featured in the October issue of TCI Magazine, Oct. 2013.

**A CLOSER LOOK**

With Florida’s unique environment, extra attention must be paid to preserving our natural resources, especially our trees. By purchasing a TreesAreCool license plate you help underwrite programs that directly benefit trees of Florida which help keep our state the uniquely beautiful place we all call home.

Healthy trees benefit wildlife, increase property values and help cool and clean the air. The Florida Chapter of the International Society of Arboriculture, a non-profit organization, is committed to serving the needs of Florida’s professional arborists and tree-care consumers. The TreesAreCool license plate revenues benefit our urban environment of Florida through tree research, the ongoing education of tree-care practitioners, and by providing public education programs about tree care and preservation.

**How to Order Your TreesAreCool Specialty Plate**

You do not need to wait for your current plate to expire. Do your part and order your TreesAreCool plate today!

You can order online at [treesarecool.com](http://treesarecool.com) or by mail. For more information, visit [treesarecool.com](http://treesarecool.com).
Now offering:

Trunk Injection Products for

**Spiraling Whitefly Control**

Lowest Cost Trunk Injectable Imidacloprid
Highest Active Ingredient (10%)
Lowest Cost Equipment

Easy
Quick
Effective

- Approximately one minute application time in palms.
- Starts killing Whitefly in less than 24 hours.
- Simple, proven and low cost application equipment.
- Completely closed system-never touch the insecticide.
- Doesn’t kill beneficial insects, only kills insects feeding on the tree.

Texas Phoenix Palm Decline and Lethal Yellowing Control Products Available Too

(561) 655-6940
palmtreesaver.com
store.palmtreesaver.com
info@palmtreesaver.com

Distributors for: Mauget
The ISA Florida Chapter is beginning this new article series as an engaging way to share information about the diseases, damage, pests, nutrient deficiencies and other maladies that can affect our Florida Trees, and how to diagnose them. This article will feature a real-world scenario encountered by one of our members. You as a reader will be given information including the location, species, recent activities and photos of the tree, and your challenge is to correctly diagnose the problem, and recommend a treatment! Some of the articles will allow you to submit your diagnosis to the email address at the end of the article – the first person that submits the correct diagnosis will be recognized in the next issue of the Florida Arborist, along with the “official” answer for the rest of us, including a description of the clues that could be used to make the correct determination. And now, on to this issue’s first case:

**PSI Case No. 1**

Approximately 42 sycamore, Platanus occidentalis, had been planted in a residential community within the past year; most are now dead and the remainder are in varying stages of decline. The trees are approximately two inches in caliper and ten to twelve feet in height. The trees had been planted as containerized trees directly into the landscape. All were mulched and some were staked. The condition of the trees range from severe crown dieback to moderate to dead. The arborist was contacted by the developer to determine the cause of the decline and to make recommendations.

**What factors did the arborist examine and what was the final diagnosis?**

**Issue:** Death/decline of landscape trees  
**Date:** Approximately 12 months prior to site visit  
**Location:** Residential community, Orange County, FL  
**Trees affected:** Sycamore: Platanus occidentalis

**Fig. 2**
Excavating around the base of the trees

**Fig. 3**

[PSI Case No. 1 Answer on page 13]
PSI Case No.1 continued from page 12

PSI Case No. 1

Answer: Upon excavating around the base of four or five of the trees, the arborist determined that the trees had been planted approximately six to twelve inches too deep (see Fig. 2). (Note the pen next to the trunk for perspective). In addition, the soil contained a high amount of clay and poor drainage was observed.

Additionally, excessive mulch depth was noted. In addition, the mulch was placed against the trunk of the trees. Approximately six to nine inches or more of mulch was noted. In fact, during the field inspection, a landscape crew was observed adding yet more mulch to the trees. (See Fig. 3)

Case #1 Conclusion:
It is likely that the deep planting directly adversely affected the survival. However, the poor drainage and excessive mulch exacerbated the detrimental effects from deep planting resulting in fairly rapid decline and death of many of the trees.

Test your expertise again! Evaluate PSI Case No. 2 on page 24
stems, and roots, and their fallen leaves contribute biomass to the soil. In addition to directly limiting carbon emissions by storing carbon, trees can indirectly limit emissions when they are positioned effectively so that they shade the house. Providing for shade and evapotranspiration near homes reduces building energy needs for cooling, allowing the homeowner to avoid unnecessary carbon emissions. Trees provide shading to homes and this reduces building temperatures and the amount of sunlight entering the home. The air conditioning unit will run less frequently and use less carbon-emitting energy to cool the home.

Not all trees avoid, sequester, or store carbon at the same rate, however. Carbon sequestration rates and avoidance of carbon emissions are based on a tree’s species, age, size, height, crown characteristics, overall health, and its location in the yard. Figure 1 illustrates the different rates of carbon sequestration by three different species: live oak (*Quercus virginiana*), magnolia (*Magnolia grandiflora*), and loblolly pine (*Pinus taeda*). Trees of different species have different biomasses. A live oak, for instance, will typically have more biomass than a pine or a magnolia for a number of reasons. First, wood density has a positive relationship with the amount of carbon stored. In general, hardwood tree species, such as oaks, tend to have a denser wood and a more open-grown structure than softwood species. Greater wood density equates to greater biomass and generally a more open grown structure means more volume and growth and, therefore, higher carbon sequestration.

To compare tree species and determine their carbon sequestration, foresters measure trees’ “diameter at breast height” (DBH—the diameter of the tree trunk at 4.5 feet above the soil). In a recent study, the average 8-inch DBH live oak tree had a higher annual growth rate and sequestered more carbon than loblolly pines and magnolias with the same DBH. All three of these trees are effective indirect limiters of carbon emissions if they are placed in an ideal location to shade the house. A shade tree will help avoid approximately 50 to 200 lbs of carbon dioxide per year in emissions from air conditioning depending on its size and species and its placement in the landscape (Figure 2). Avoidance is achieved because the trees shade the home, and the homeowner uses less energy to cool the home.

Homeowners usually choose trees based on their aesthetic qualities, but in fact a tree’s growth and mortality characteristics are also important factors to consider when selecting a residential tree. Growth and mortality rates are highly variable,
Different Trees continued from page 14

and, in fact, two trees with the same DBH may not be the same age, even when both are from the same species. A tree’s growth and mortality are influenced by any number of factors including the composition and compaction of the soil in which the tree grows its species, its location, and its access to water and light. Typically, trees that are light-demanding have higher growth rates and a shorter life cycle than shade-tolerant species. The choice of a short-lived but fast-growing tree or a slow-growing but longer-lived tree will depend on the homeowner’s time frame and the amount of carbon to be offset.

Figure 1.

The amount of carbon sequestered by one tree, expressed in pounds per year based on tree species and diameter at breast height (DBH) for a single residence area in Gainesville, Florida. Calculations provided by i-Tree Design Beta Calculator http://www.itreetools.org/design.php

Different Trees continued on page 18
Los árboles desempeñan una importante función en el ciclo natural del carbon. A través del proceso de la fotosíntesis, los árboles secuestran o captura, el dióxido de carbono (CO2) de la atmósfera para crear energía para el crecimiento. Este carbono se almacena en la biomasa del árbol durante su vida útil. Los árboles almacenan carbono en sus hojas, ramas, troncos, tallos y raíces, y cuando se caen las hojas contribuyen a la biomasa del suelo. Además de limitar directamente las emisiones de dióxido de carbono mediante el almacenamiento de carbono, los árboles pueden indirectamente limitar las emisiones cuando están colocados de forma eficaz para que se les dan sombra a la casa. La sombra y la evapotranspiración cerca de viviendas reduce las necesidades de energía para el aire acondicionado, lo que permite al propietario evitar innecesarias emisiones de carbon. Los árboles proporcionan sombra a las casas, esto reduce la temperatura y la cantidad de luz solar que entre en la casa. La unidad de aire acondicionado se prende con menos frecuencia emanando menos emisoras de carbon.

No todos los árboles evitan, secuestran o almacenan carbono a la misma tasa. Las tasas de captura de carbono y la prevención de las emisiones de dióxido de carbono se basan en las especies, la edad, el tamaño, la alturas, características de la copa, su estado general de salud y su ubicación en el jardín. La Figura 1 ilustra las diferentes tasas de secuestro de carbono de tres especies diferentes: live oak (Quercus virginiana), magnolia (Magnolia grandiflora), y loblolly pine (Pinus taeda). Diferentes especies de árboles tienen diferentes biomas. Un live oak, por ejemplo, suelen tener más biomasa que un pino o una magnolia por una serie de razones. En primer lugar, la densidad de la madera tiene una relación positiva con la cantidad de carbono almacenado. En general, especies de árboles maderables, como robles, tienden a tener una madera más densa y son de crecimiento de copa más abierta y amplia que especies de coníferas. Una mayor densidad de la madera equivale a mayor biomasa y, en general, a una estructura más abierta, más volumen y crecimiento y, por lo tanto, mayor el secuestro de carbon.

Para comparar diferentes especies de árboles y determinar su secuestro de carbono, los silvicultores miden los árboles, de acuerdo al “diámetro del tallo a la altura del pecho” (DBH- el diámetro del tronco a 4,5 metros por encima del suelo). En un estudio reciente, oaks con un average de 8 pulgadas de DBH tuvieron una mayor tasa de crecimiento anual y secuestraron más carbono que pinos loblolly y magnolias con el mismo DBH. Todas estas especies son eficaces limitando indirectamente las emisiones de dióxido de carbono si se colocan en una ubicación ideal al lado de la casa. Arboles de

Different Trees continued on page 17
sombra evitan aproximadamente de 50 a 200 libras de dióxido de carbono al año en las emisiones de aire acondicionado en función de su tamaño y de la especie y su colocación en el paisaje (Figura 2). Prevención se logra porque los árboles dan sombra a la casa, y el propietario utiliza menos energía para enfriar la casa.

Los propietarios suelen elegir los árboles basados en sus cualidades estéticas, pero, en realidad, las características de crecimiento del árbol y su tasa de mortalidad también son factores importantes a considerar cuando se selecciona un árbol residencial. Crecimiento y las tasas de mortalidad son muy variables, y, de hecho, dos árboles con el mismo DBH puede no tener la misma edad, incluso si ambos son de la misma especie. El crecimiento del árbol y su mortalidad son influenciados por diferentes número de factores tales como la composición y la compactación del suelo en el que el árbol crece, su especie, su ubicación, su acceso al agua y la luz, etc. Normalmente, los árboles que necesita mucha luz y tienen mayores tasas de crecimiento tienen un ciclo de vida más corto comparado a las especies tolerantes a la sombra. La elección de un árbol de corta duración, pero de rápido crecimiento o de crecimiento lento pero más longevidad dependerá de la del dueño de la casa así como la cantidad de carbono a contrarrestar.

La cantidad de emisiones de carbono evitadas por un árbol, expresado en libras por año sobre la base de las diferentes especies de árboles según el diámetro a la altura del pecho (DBH). Medidos en una sola zona residencial en Gainesville, Florida. Los cálculos son efectuados utilizando i-Tree Design Beta http://www.itreetools.org/design.php

En general, la preservación de los árboles es probablemente la estrategia más eficaz para reducir el nivel de carbono en residencias los barrios. La mayoría de los planificadores hacen esfuerzo para preservar los “abuelos oaks” a causa de su belleza, pero la preservación de otros árboles de gran tamaño también es esencial para la conservación, ya que tarda muchos años en crecer un árbol de gran tamaño y porque los árboles grandes secuestran mucho más carbon. Incluso la preservación de árboles jóvenes es beneficiosa. Por ejemplo, un relativamente joven

Different Trees continued from page 16

Different Trees continued on page 18

Florida e-Tree News

The Florida e-Tree News is a free monthly e-letter sent out by the Florida Chapter ISA. It is intended to inform arborists, tree care workers, landscape architects and other green industry professionals of up-to-date arboriculture information in the state of Florida. www.floridaisa.org
Different Trees continued from page 15

The amount of carbon emissions avoided by one tree, expressed in pounds per year based on tree species and diameter at breast height (DBH) for a single residence area in Gainesville, Florida. Calculations provided by i-Tree Design Beta Calculator http://www.itreetools.org/design.php

Overall, tree preservation is probably the most effective strategy to reduce carbon footprints for residential homes and neighborhoods. Most planners make some effort to preserve “granddaddy oaks” because of their beauty, but preservation of other large trees is also essential for conservation because it takes many years to grow a large tree and because larger trees sequester considerably more carbon. Even preservation of young trees is beneficial. For example, a relatively young, 8-inch DBH loblolly pine, live oak, and magnolia will together sequester approximately 350 pounds of carbon per year (Figure 2). This is roughly the same amount of carbon a personal computer emits if used 6 hours/day for a year, based on emission rate of 20 mg C/sec. This is significant because computer use accounts for 2% of all GHG emissions within a home.

Planting new trees on a property requires careful consideration because the wrong tree in the wrong spot can actually become a carbon emission source instead of a sink. A tree’s location, its size at maturity, and its maintenance requirements affect carbon sequestration and storage rates. A tree without enough room to grow or with insufficient sunlight or poor soil will sicken and eventually die. Healthy, long-lived trees remove and store more carbon than poor-condition and dying trees that can prematurely release carbon back into the atmosphere. Trees that are planted in areas that interfere with urban infrastructure or municipal utilities may also require excessive pruning or removal in the future, creating additional sources of CO2 emissions. Appropriate space allows for maximum growth potential and longevity, maximizing carbon intake while minimizing emissions due to maintenance.

Many programs designed to assist homeowners in choosing a tree are available online. The Arbor Day Foundation’s tree wizard http://www.arborday.org/shopping/trees/treewizard/intro.cfm and i-Tree’s Design Beta calculator http://www.itreetools.org/design.php are user-friendly software programs that supply information on tree selection and environmental goods and services provided by trees. Local utility companies can also be a source of information. Many of these companies promote deciduous shade trees https://usage.smud.org/ShadeTree/ that cool your home in the summer and then drop their leaves in the winter, allowing sunshine in to help heat your home. Check your local utility’s website and your Water Management District website (http://www.dep.state.fl.us/secretary/watman/) for more information concerning tree selection.

Different Trees continued from page 17

La siembra de nuevos árboles en la propiedad requiere una cuidadosa consideración porque el árbol equivocado en el lugar erróneo puede ser una fuente de emisión de carbono en lugar de un receptor. La ubicación del árbol y su tamaño cuando adulto afectan sus necesidades de mantenimiento y almacenamiento de carbono. Un árbol sin suficiente espacio para crecer o con insuficiente luz o en suelos pobres se enferma y muere! Árboles saludable, y de larga vida extraen y almacenan más carbono que los enfermos y que pueden morir prematuramente. Estos árboles liberan carbono a la atmósfera. Los árboles que se siembran en las zonas urbanas e interfieren con infraestructura o servicios públicos municipales podrá necesitar también de podas lo que crea nuevas fuentes de emisiones de CO2. Espacio adecuado permite obtener el máximo potencial de crecimiento y longevidad, maximizando la admisión de carbono y reduciendo al mínimo las emisiones debido a poco mantenimiento.

Muchos programas diseñados para ayudar a los propietarios a elegir un árbol están disponibles online. Arbor Day Foundation’s tree wizard http://www.arborday.org/shopping/trees/treewizard/intro.cfm and i-Tree’s Design Beta calculator http://www.itreetools.org/design.php son fáciles de usar y proporcionan información útil sobre la selección de los árboles y los bienes y servicios ambientales proporcionados por ellos. Las empresas de servicios públicos locales también pueden ser una fuente de información. Muchas de estas empresas promueven árboles de sombra caducifolios, https://usage.smud.org/ShadeTree que enfrian la casa en el verano y pierden sus hojas en el invierno, lo que permite que el sol caliente la casa. Para obtener más información sobre selección de los árboles chequee el sitio, web, http://www.dep.state.fl.us/secretary/watman/.
Can’t see the forest for the trees?

*We want your attention, and we know how much you like tree metaphors...*

**The big picture.**

**TCIA BUSINESS TOOLS** – From professional standards to the latest publications, TCIA provides members with dynamic tools to run your business safely, efficiently, and successfully.

**TCIA EVENTS** – Enjoy members-only savings and deep discounts for TCIA hosted workshops and events around the country and throughout the year.

**TCIA SAFETY TOOLS** – Worker safety goes hand in hand with professionalism and it’s a primary focus of TCIA. We build programs, tools and resources to improve safety for our members and the industry.

**TCIA MAJOR SAVINGS** – Enjoy deep discounts on training, educational materials and other valuable tools.

**TCIA MARKETING** – You need customers. Use our exclusive marketing materials to find, keep and impress them. From videos to radio ads, we’ve got what our members need.

Start taking advantage of your membership right away for a first-year join price of only $195.

As the only dedicated, NATIONAL trade organization specifically for tree care businesses, TCIA can show you how to find your way through the forest.

**TCIA**

*Voice of Tree Care*

*Advancing tree care businesses since 1938*

[www.tcia.org](http://www.tcia.org)

1-800-733-2622

Your search is over, join the Tree Care Industry Association today!
Call JB Toorish
He will provide you with Hands On Training using Arborjet’s latest technology.

JB Toorish has 32 years of experience in the green industry and extensive knowledge of Florida tree problems and Arborjet trunk injection solutions.

Call JB - 781.983.2613
Email JB - jbtoorish@arborjet.com

Email JB with this QR code.
Scan here with your smart phone.

The QUIK-jet device helped protect over 150,000 trees in 2011.

NOW IS THE TIME.

Prepare Your Business!

Treat For
1. SOUTHERN PINE BEETLE
2. NUTRIENT DEFICIENCIES
3. SPIRALING WHITEFLY

LEADER IN TREE INJECTION TECHNOLOGY • TREE CARE CONSULTING • INVASIVE PEST MANAGEMENT
The correct answer to PSI Case 3 of the Fall Florida Arborist was submitted (within 24 hours!) by Bob Brennan! Thanks to all who submitted answers and comments about this new feature article.

**RECAP:**

D.O.T. in the Florida Keys notice a continuous brown “line” approximately 10 inches tall by 30 feet long comprised of dead leaves and twigs in the canopies of native upland forest trees bordering US 1.

**Answer to PSI Case 3:**

A new bicycle/pedestrian pathway is being built at this location. During construction, the exhaust pipe from a construction (milling) machine caused the damage to the leaves and branches when it burned them as it passed.

**Treatment:**

Dead portions of branches will be pruned for cosmetic reasons and to help prevent branches from dropping on users of the pathway, the trees as a whole are anticipated to make a full recovery.

**Clues to making this determination:**

1) The traffic barrels and silt fence indicate an active construction site. While the extent of the construction is not entirely clear from the before and after photos, it is obvious that changes to the pavement are occurring on the road shoulder, adjacent to the trees.
2) The condition has affected more than one species, evenly and contiguously. This pattern is more consistent with mechanical damage that with damage by insects, disease or nutritional problems, which often have different patterns of effect across species and even within a given tree.
3) While power lines are present, they are much too high to have caused the damage, and the damage occurred part-way down the canopy, not at the top.

---

No Monkeying Around!

Save the date!

Central Florida only:
Saturday Feb 8, 2014
Camp Ithiel
Church of the Brethren
2037 Hempel Avenue
Gotha, FL 34734
2014 TREE CLIMBING COMPETITION

FC-TCC Chair Adam Jackson has plans in place to hold the 2014 Florida Chapter Tree Climbing Championship on February 22 at Circle Bar B Reserve outside of Lakeland, Florida. Adam currently is planning for spots for 35 climbers.

Climbers, Get Ready to Showcase Your Skills!

FCTCC Chairman: Adam Jackson, E-mail ajjackson@valleycrest.com
FCTCC Setup Chair: Danae Jackson, E-mail danaeljackson@gmail.com
FCTCC Organization Chair: Kim Paulson, E-mail treeladyoffice@aol.com

Please contact the above listed Committee members or the Florida Chapter directly if you have any questions about competing or if you can contribute to this exciting annual event.

We all look forward to seeing Florida’s best compete for the right to represent our Chapter at the International Tree Climbing Championship in Milwaukee Wisconsin, August 2-3, 2014.

FEE: $75.00 Florida Chapter Member *
$95.00 Non-Member

MAIL OR FAX the REGISTRATION FORM, WAIVER FORM & PAYMENT TO:
(make checks payable to Florida Chapter ISA or include ALL credit card information)

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

*Winner of the Florida TCC Event must be a member of the International ISA prior to the International event in August.

Volunteers

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

Donations

Donations are welcome! Various sponsorship levels are available. Contact Adam Jackson for full details and benefits. Click Here For Sponsor Forms.

2014 Tree Climbing Championship Prize Package

The 2014 Tree Climbing Championship Prize Package for the Florida Chapter event will be announced in the Spring issue. This prize package is typically offered to each chapter champion (male and female). The package is intended to help equip the chapter winner(s) for the International Tree Climbing Championship in Milwaukee, Wisconsin on August 2-3, 2014.
Why would anyone volunteer to serve on the Board of Directors for the Florida Chapter of ISA? What does it really matter anyway? How can one person really impact the board or the local Florida Chapter membership? Some of you may have thought these questions. And once upon a time, I did. Then one day about 4 years ago came a call from our Florida Chapter Chief Executive Officer, Norm Easey. He told me that the President Elect, David Reilly, was looking to appoint me to the position of an At-Large member. I was completely surprised, humbled and honored at the same time. I recall asking Norm, “What’s the catch and what do I have to do”? He stated the reason why David considered me was because of my career background in Landscape Architecture and described the role of an At-Larger member, which was only a one year term. I accepted the position and was thankful to David for the opportunity.

At my first meeting, I was amazed with the quality and diversity of people represented on the Board. It was interesting to watch the camaraderie during the meeting and the overall passion for our Florida chapter and the Arboriculture field. That meeting, as well as all the other meetings that year, allowed for full participation for each board member and it was encouraged by everyone.

Prior to my last meeting of this term, I received another call from Norm stating that the Nomination Committee had recommended me to run for the position of Municipal Arborist Representative. Again, I was surprised, humbled and honored. As luck would have it, I was elected to that position to serve for 3 years. During that term I was recommended twice by the Nomination Committee for the President Elect position. Unfortunately, I was not elected but honestly the two that were elected (A.D. Ali and Celeste White) were more worthy of the election and I am grateful they won. They will continue to serve with the high standard and professionalism we currently operate in yet bring their own personality and style to continue leading our Board and Chapter “Forward” for the next few years.

Now that my 3 year term will end this year, I can look back and easily answer the questions listed earlier.

• Why?… To participate with my professional peers on topics that help shape our Chapter and influence positively towards our profession. Not to mention, hanging out with truly awesome and profession people.

• What?… To be a part of a group of professionals that help promote proper Arboriculture practices and generate outstanding conferences and seminars that include cutting edge technology and information as well as timely topics to learn. So yes it REALLY matters!

• Lastly, How?… By participating in projects and committee work such as the Membership Committee that reached out to call our members to renew their membership and share the benefits of our chapter, the Insurance Committee that is working with State Insurance Organizations to help promote and understand proper Arboriculture practices, working with board members to improve the Chapter’s Strategic Plan, being part of updating of our Chapter Bylaws and participating with the development of our Online Learning Center, just to name a few.

In closing, I am grateful and humbled for the opportunity to service you, the members of the Florida Chapter of ISA, and my fellow Board of Directors. Thank you for allowing me this opportunity. So now is the time for one of you, our Florida Chapter members, to step in and give it a shot. You won’t be disappointed… plus they serve a great lunch at board meetings! It will be interesting to see how our organization will grow and flourish in the near future with more new people, potentially like yourself. And who knows, maybe I’ll be back one day, maybe even as President Elect. However the future unfolds, I have to say that my term on the board definitely was “time well spent”… Take care and God Bless.

Save the Date!

ADVANCED ARBORICULTURE

Join our international experts for this exciting new topic!

WEST PALM BEACH
Tuesday January 21, 2014

TAMPA
Thursday January 23, 2014

ISA Florida Chapter

UF Floradia Extension
PSI Case No. 2
The arborist was asked by a homeowner to diagnose the reason for the death of four laurel oaks, Quercus laurifolia, at a residence. The oaks were of large diameter, devoid of foliage, and the trunks exhibited a multi-gray colored appearance. Small fungal conks were present on one of the trees (Fig. 2).

What factors did the arborist examine and what was the final diagnosis?

**Issue:** Dead trees. Species: *Quercus laurifolia*

**Location:** Residence in Pasco County, FL

**Trees affected:** Species: *Quercus laurifolia*

The arborist used her knowledge of the gray colored dead bark (Fig. 1) and the fungal conks (Fig 2) to determine that the trees died of hypoxylon canker, otherwise known as “gray bark” disease. Only the laurel oaks on the property were affected. It was also noted that two laurel oaks in the front yard and two in the rear yard had died; however, several others located in between the four dead trees were still alive and were not apparently unaffected (Fig. 3).

Can anyone explain the discontinuous pattern of the canker attack?
This arborist does not have an explanation and is seeking the advice of others.

Please send replies to Eric Hoyer at erich@nrpsforesters.com

Challenge yourself on another case - Evaluate PSI Case No. 3 on page 26
The Membership committee’s latest effort is promoting the Florida Chapter only membership by initiating a pilot project where we will be sending out a flyer to tree care companies in select areas. The flyer will also promote the Treesarecool.com license plate so it will serve two purposes! You can help us to promote Florida Chapter only membership to these audiences.

- Arborists
- Tree Climbers
- Tree Workers
- Tree Care Companies
- Tree Advocates
- Tree Industry Affiliates
- 9 Board Certified Master Arborists
- 25 Municipal Specialists
- 16 Tree Workers
- 40 Utility Specialists

The Florida Chapter ISA now offers Florida Chapter dues for just $50! What does this mean for you? You can now join JUST the Florida Chapter for an annual fee of only $50! (And you do not have to join ISA International)

**Why join the Florida Chapter?**

The INTERNATIONAL SOCIETY OF ARBORICULTURE 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 of the ISA shares this same dedication, with a further commitment to serving the needs particular to Florida’s professional arborists and tree care consumers.

Increase your professionalism, knowledge, networking, and comradery by joining the Florida Chapter of the International Society of Arboriculture and receive exclusive member benefits and discounts…

- Quarterly Florida Arborist newsletter
- Discounts on Florida Chapter seminars and online learning
- Discount on annual Trees Florida Conference and Trade Show
- Discounts on Florida Chapter merchandise
- Florida Chapter awards program
- Monthly e-newsletter, Florida eTree News
- Access to the Florida Chapter lending library

**Join both ISA and Florida Chapter!**

- Receive all benefits listed above as well as receive deep discounts on certification and recertification fees.

Be a part of something great! Join the Florida Chapter ISA today! Visit [www.FloridaISA.org](http://www.FloridaISA.org)

---

**MEMBER BENEFITS**

Compare the benefits! Decide which membership suits you best: International, Florida Chapter or BOTH!

**Benefits for joining International ISA:**

- Arborist News publication
- Arboriculture & Urban Forestry publication
- Online access to ISA Today and other ISA newsletters
- Discount on annual ISA Conference
- Discounts on ISA merchandise
- Access to members-only online resources
- Use of the ISA Member logo
- ISA job bank
- ISA member directory listing
- True Professionals program
- Online Find a Tree Care Service tool

**Benefits for joining the Florida Chapter:**

- Quarterly Florida Arborist newsletter
- Discounts on Florida Chapter seminars and online learning
- Discount on annual Trees Florida Conference and Trade Show
- Discounts on Florida Chapter merchandise
- Access to Florida Chapter lending library
- Florida Chapter awards program

**JOIN BOTH!**

- Receive all benefits listed above as well as receive deep discounts on certification and recertification fees

**JOIN TODAY!**

Visit [www.FloridaISA.org](http://www.FloridaISA.org)
PSI: PLANT SCENE INVESTIGATION

PSI Case No. 3
The arborist was contacted by a homeowner in Lakeland, Florida to determine the cause of crown dieback to his laurel and live oaks in his rear yard. The oaks were affected on one side of the canopy only; dieback was slight to moderate on approximately five large trees. All of the trees were adjacent to a septic tank drain field.

What factors did the arborist examine and what was the final diagnosis?

<table>
<thead>
<tr>
<th>Issue: Crown dieback in trees in rear yard</th>
<th>Date: Date of observation: February, 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location: Residential property in Lakeland, Florida</td>
<td>Trees affected: Species affected: Live oak, Quercus virginiana and Laurel oak, Q. laurifolia</td>
</tr>
</tbody>
</table>

Fig 1.
Dieback noted on right side of tree on left and left side of tree on right (behind garage).

Send your diagnosis to Eric Hoyer at erich@nrpsforesters.com to see if you are the first one to answer correctly. Watch for the correct answer in the Spring 2014 issue of the Florida Arborist!
Florida Arborist Winter 2013

Florida Chapter Board Updates

BOARD SHORTS:

IN FOCUS: Your COR Rep Don Winsett

The fine-tuned relationships between the International ISA with all the ISA Chapters rely on the commitment and focus of the COR. In case you are not familiar with what COR is, it is the Council of Representatives, a group of chapter representatives who serve as the communication link between the International organization and the chapters throughout the world. The COR rep for Florida ISA is Don Winsett. Don was able to discuss some of the concerns of the board and Florida membership when he attended the International annual conference in Toronto this August. He brought up the difficulties being experienced with homeowner insurance agencies making demands on pruning and/or removal of trees around insured homes and heard feedback from other chapters who are experiencing similar difficulties. The Florida Chapter is spearheading efforts to educate insurance underwriters about the drawback of improper pruning and the benefits that trees provide to homes during storms. As Local Host Chair for the 2015 International Conference as well as COR rep, Don has been participating in some of the planning for the big event that will be held in Orlando. A big thanks to Don Winsett for being an important voice of the Florida Chapter.

Computer-Based Testing Increases in Popularity

Certification Liaison Norm Easey reported that ISA’s computer-based testing for all varieties of certification continues to grow in popularity. The advantages to taking your certification exam at a local Pearson Vue test center include being able to schedule your exam on a date convenient to your personal schedule, plus saving on travel expenses and perhaps lodging expenses which you might incur if you travel to take the paper test farther from home. Paper exams will continue to be offered throughout the state, but if you are planning on becoming ISA certified, make sure to look into a local testing center. For an additional Pearson Vue testing fee of $100 you might save on gas and lodging and be able to take the exam on your own time schedule. Note: the new TRAQ qualification cannot be taken at a Pearson Vue, as the TRAQ program consists of the combination of a two-day class plus a half-day practical assessment.

Election Results In!

The Florida ISA board welcomes newly elected and appointed board members. Your votes elected the following individuals for 2014. Thank you to everyone for serving the Florida Chapter membership in these various roles!

Newly elected members from the recent election:
• Vice President (will become President in 2016) - Bonnie Marshall
• Treasurer - Lori Ballard
• Municipal Arborist Representative - Dru Dennison
• Utility Arborist Representative - Don Winsett

The board also approved the at-large appointments recommended by President A.D. Ali for 2014:
• Andrew Koeser
• Doug Orr

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 floridaisa@comcast.net
# 2013 Certification Exam Schedule

The FLORIDA CHAPTER of ISA is pleased to announce our 2013 schedule of Certification exams. See the chart below for the site nearest you.

<table>
<thead>
<tr>
<th>Date</th>
<th>Exam/Class</th>
<th>Location</th>
<th>Time</th>
<th>Proctor or Instructors</th>
<th>Last Date to Register</th>
<th>Cost</th>
<th>Member/Nonmem</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 14, 2013</td>
<td>Certified Arborist Exam</td>
<td>Miami-Dade IFAS 18710 SW 288 Street Homestead, FL</td>
<td>7:30 AM to 12:00 PM</td>
<td>Dr. George Fitzpatrick</td>
<td>Minimum 12 business days prior</td>
<td>$150/$250</td>
<td></td>
</tr>
<tr>
<td>December 14, 2013</td>
<td>Certified Arborist Exam</td>
<td>pTEC 901 34th Street St. Petersburg FL</td>
<td>9:00 AM to 1:00 PM</td>
<td>Norm Easey Glenn Duncan</td>
<td>Minimum 12 business days prior</td>
<td>$150/$250</td>
<td></td>
</tr>
<tr>
<td>February 15, 2014</td>
<td>Certified Arborist Exam</td>
<td>Broward Co. IFAS 3245 College Avenue Davie, FL</td>
<td>7:30 a.m. to 12:00</td>
<td>Dr. Mike Orfanedes</td>
<td>Minimum 12 business days prior</td>
<td>$150/$250</td>
<td></td>
</tr>
</tbody>
</table>

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 - 2014 Education Schedule

*The schedule below is tentative and subject to changes.*

<table>
<thead>
<tr>
<th>Date</th>
<th>Seminar/Class</th>
<th>Location (s)</th>
<th>Open for Registration</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 21, 2014</td>
<td>Advanced Arboriculture</td>
<td>West Palm Beach</td>
<td></td>
</tr>
<tr>
<td>January 23, 2014</td>
<td>Advanced Arboriculture</td>
<td>Tampa</td>
<td></td>
</tr>
<tr>
<td>February 2014</td>
<td>Arborist Safety and Climbing</td>
<td>West Palm Beach</td>
<td></td>
</tr>
<tr>
<td>February 2014</td>
<td>Arborist Safety and Climbing</td>
<td>Ft. Myers</td>
<td></td>
</tr>
<tr>
<td>February 21, 2014</td>
<td>Outdoor Tree School</td>
<td>Polk County</td>
<td></td>
</tr>
</tbody>
</table>
Welcome!

New Florida Chapter Members

Here are the individuals that joined the Florida Chapter during the first quarter of 2013. 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.

<table>
<thead>
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>City</th>
<th>State</th>
<th>First Name</th>
<th>Last Name</th>
<th>City</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jose</td>
<td>Rausseo</td>
<td>LAKELAND</td>
<td>FL</td>
<td>Sebastian</td>
<td>Korber</td>
<td>RUSSELSHEIM</td>
<td>Germany</td>
</tr>
<tr>
<td>Brittany</td>
<td>Adamo</td>
<td>BONITA SPRINGS</td>
<td>FL</td>
<td>Rosa</td>
<td>Lopez</td>
<td>GUAYNABO</td>
<td>PR</td>
</tr>
<tr>
<td>Gustavo</td>
<td>Arteaga</td>
<td>PALM BAY</td>
<td>FL</td>
<td>Jennifer</td>
<td>Mabus</td>
<td>JACKSONVILLE</td>
<td>FL</td>
</tr>
<tr>
<td>Michael</td>
<td>Barry</td>
<td>KNOXVILLE</td>
<td>TN</td>
<td>Roderick</td>
<td>Mayard</td>
<td>MIAMI</td>
<td>FL</td>
</tr>
<tr>
<td>Trent</td>
<td>Bednar</td>
<td>WEST PALM BEACH</td>
<td>FL</td>
<td>Nicholas</td>
<td>Myers</td>
<td>TAMPA</td>
<td>FL</td>
</tr>
<tr>
<td>William</td>
<td>Broome</td>
<td>ORLANDO</td>
<td>FL</td>
<td>Joel</td>
<td>Phelps</td>
<td>FORT WHITE</td>
<td>FL</td>
</tr>
<tr>
<td>Leah</td>
<td>Connolly</td>
<td>CORAL SPRINGS</td>
<td>FL</td>
<td>Steve</td>
<td>Rogers</td>
<td>COCONUT CREEK</td>
<td>FL</td>
</tr>
<tr>
<td>Nicole</td>
<td>Cribbs</td>
<td>TAMPA</td>
<td>FL</td>
<td>Eulogio</td>
<td>Trujillo</td>
<td>MIAMI</td>
<td>FL</td>
</tr>
<tr>
<td>David</td>
<td>Cunningham</td>
<td>GRASSY KEY</td>
<td>FL</td>
<td>Jason</td>
<td>Vickers</td>
<td>NEW PT RICHEY</td>
<td>FL</td>
</tr>
<tr>
<td>Logan</td>
<td>Cunyngham</td>
<td>NEW PT RICHEY</td>
<td>FL</td>
<td>Aaron</td>
<td>Weber</td>
<td>TAMPA</td>
<td>FL</td>
</tr>
<tr>
<td>Roger</td>
<td>Ditmer</td>
<td>ST SIMONS ISLAND</td>
<td>GA</td>
<td>Bryan</td>
<td>West</td>
<td>LAKELAND</td>
<td>FL</td>
</tr>
<tr>
<td>Kevin</td>
<td>Doyle</td>
<td>DELRAY BEACH</td>
<td>FL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Betty</td>
<td>Fisher</td>
<td>LECANTO</td>
<td>FL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jennifer</td>
<td>Geiger</td>
<td>JACKSONVILLE</td>
<td>FL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Curtis</td>
<td>Gervin</td>
<td>SW RANCHES</td>
<td>FL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gitta</td>
<td>Hasing</td>
<td>WIMAUMA</td>
<td>FL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gary</td>
<td>Hill</td>
<td>LAKE MARY</td>
<td>FL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anibal</td>
<td>Ibanez</td>
<td>MIAMI</td>
<td>FL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Danny</td>
<td>Jones</td>
<td>BRADENTON BEACH</td>
<td>FL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robert</td>
<td>Kendrick</td>
<td>PORT ST LUCIE</td>
<td>FL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Andrew</td>
<td>Koeser</td>
<td>WIMAUMA</td>
<td>FL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Go to [http://www.isa-arbor.com](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: floridaisa@comcast.net

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

HAPPY NEW YEAR
Arborist Certification Committee Report
By Norm Easey, Florida Certification Liaison

There are ISA exams scheduled at four different locations in Florida within the next 6 months. Click here for the specific dates. The ISA Certified Arborist exam is also now available at Pearson Testing Centers throughout Florida. See the ISA International web site www.isa-arbor.com for more information about the various ISA arborist credentials and how to earn them.

Florida Chapter currently has 1786 Certified Arborists.

The Florida Chapter would like to congratulate the following 17 individuals for earning their Arborist Certification or Utility Arborist Certification during the third quarter of 2013:

<table>
<thead>
<tr>
<th>Certified Arborist</th>
<th>Utility Arborist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lyle Adams, Clearwater, FL</td>
<td>Robert Ramos, Melrose, FL</td>
</tr>
<tr>
<td>Brittany Adamo, Bonita Springs, FL</td>
<td></td>
</tr>
<tr>
<td>Daniel Adler, Southwest Ranches, FL</td>
<td></td>
</tr>
<tr>
<td>Gregory Gaskin, Tallahassee, FL</td>
<td></td>
</tr>
<tr>
<td>Gitta Hasing, Wimauma, FL</td>
<td></td>
</tr>
<tr>
<td>Gary Hill, Lake Mary, FL</td>
<td></td>
</tr>
<tr>
<td>Jacob James, Boca Raton, FL</td>
<td></td>
</tr>
<tr>
<td>Matthew Layne, Lakeland, FL</td>
<td></td>
</tr>
<tr>
<td>Mark Mitchell, Jacksonville, FL</td>
<td></td>
</tr>
<tr>
<td>Matthew Munilla, Miami, FL</td>
<td></td>
</tr>
<tr>
<td>Nicolas O’Dell, Naples, FL</td>
<td></td>
</tr>
<tr>
<td>Patrick Roberson, Newport Richey, FL</td>
<td></td>
</tr>
<tr>
<td>Erick Smith, Gainesville, FL</td>
<td></td>
</tr>
<tr>
<td>Andrew Taylor, Fernandina Beach, FL</td>
<td></td>
</tr>
<tr>
<td>Daniel Turbet, Jupiter, FL</td>
<td></td>
</tr>
<tr>
<td>Stephen Walton, Wellington, FL</td>
<td></td>
</tr>
<tr>
<td>Bradford Young, Tampa, FL</td>
<td></td>
</tr>
</tbody>
</table>

Are you thinking about becoming certified? Visit the International ISA website to access the certification application handbook with further information.
Register early to reserve your spot!  **SPACE IS LIMITED TO 35 CLIMBERS!**  Due by February 8, 2014

Name  _________________________________________________________________________
Company  ________________________________________________________________________
Address  ________________________________________________________________________
City  __________________________________  State  __________  Zip  _________________
Phone #  ( ______ )  __________________  T-Shirt size (register early so we can provide your requested size)  _____
EMail Address  (for contacting and to send a receipt)  ____________________________________

**OPTIONAL EDUCATIONAL EVENT**

The 2014 Outdoor Tree School is being offered on Friday February 21, 2014 **FREE OF CHARGE** to all registered competitors and volunteers. Space may be limited - we cannot always guarantee available space.

Circle B Bar Reserve - 4399 Winter Lake Road - Lakeland, FL 33803.

Fee for non-competitors or non-volunteers to attend is $50 (link at www.floridaisa.org).

☐ YES! You plan to attend the Outdoor Tree School on Friday February 21, 2014 for free as a competitor.
☐ Check here if you want your lunch to be meat-free/vegetarian.
☐ NO, you do NOT plan to attend the Outdoor Tree School.

**REGISTRATION:  $75 - ISA MEMBER  OR  $95 - NONMEMBER**

☐ $75 - ISA Member (Must provide member #:_______________)
☐ $95 - NonMember

☐ Check enclosed (Make out to Florida Chapter ISA)
☐ Cash Enclosed
☐ Credit Card  ☐ VISA  ☐ MasterCard  ☐ Discover

**If you are not comfortable emailing your credit card information as an attachment, please fax, mail or phone it in or online (link at www.floridaisa.org).**

Card Number  __________________________________________________________
Exp. Date  ______________________  3 digit Card Code  _________________
Exact name on card  ______________________________________________________
Card billing address  ______________________________________________________
Card billing City/State/Zip  _______________________________________________

Submit this entry form, the Competition waiver form and payment of $75 or $95 to:

MAIL:  Florida Chapter ISA  •  7853 S Leewynn Court  •  Sarasota, FL  34240
PHONE:  941-342-0153
FAX:  941-342-0463
EMAIL:  floridaisa@comcast.net (you may submit this form as an email attachment)
FC-TCC Tree Climbing Championship
Competition Waiver Form

Please PRINT Clearly

Contestant’s Name: _________________________________________________________ Age: ___________
Address: _________________________________________________________ Zip: ___________________
Employed by: _____________________________________________________________________________
Phone: ( ___ ) ______________________ Email: ________________________________________________
Number of years you have climbed: ______________

Waiver and Hold-Harmless by Contestant

In consideration of acceptance of my application for entry as a contestant in the Climbing Championship, I hereby
waive any and all claims I may have at anytime, and any and all claims which might otherwise be made by, or
on behalf of, or on account of me, or by me, or by any person or entity in any way as my subrogee against the
property owner and the International Society of Arboriculture, its officers, directors, employees, agents, members,
guests, invitees, and any person who would be lawfully entitled to indemnification from them for any liability to,
or on behalf of, or on account of me, for any injuries or damages of any kind whatsoever arising on account of or
in consequence of my activities or participation in the Climbing Championship, or in any other way related to the
Climbing Championship. I further agree to hold the property owner and the International Society of Arboriculture,
itself, directors, employees, agents, members, guests and invitees, safe and harmless from any expense for
defense, settlement, payment of damages, or other expenses related in any way to injuries sustained by me in any
way related to the Climbing Championship. I recognize and assume all risks and danger involved in my participa-
tion, and will not under any circumstances rely upon the care, attention or assurance of anyone other than myself
for matters relating to my safety.

Dated ___________________ Signature of Contestant  _____________________________________________

Certification and Waiver by Employer of Contestant

I hereby certify that I am the employer or a duly authorized representative of the employer of the above-named
individual planning to participate in the Climbing Championship, and that the employer has encouraged this
participation. I further certify that I have satisfactorily confirmed that the employee will be covered by statutory
protection levels of Workers Compensation Insurance or the equivalent, for any injuries sustained in the course
of participation. The employer hereby waives any and all subrogation claims it may have against the property
owner and the International Society of Arboriculture, its officers, directors, employees, agents, members, guests,
or invitees, as a result of any compensation or their benefits or expenses incurred or paid by it, its insurance carrier,
or otherwise on its behalf, in the event any claim or injury results from this participation, and will hold the property
owner and the International Society of Arboriculture, its officers, directors, employees, agents, members, guests,
and invitees safe and harmless from any expense for defense, settlement, payment of damages and other expenses
relating in any way by this employee. I further certify that I am duly authorized to execute this Certification and
Waiver on behalf of the employer and that any and all necessary resolutions have been duly passed and adopted
by the employer.

The exact name and address of the employer, and state of incorporation (if applicable):

__________________________________________________________________________________________
__________________________________________________________________________________________

Dated ______________

Signature of Employer or Authorized Representative _______________________________________________

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
2014 Florida Chapter Tree Climbing Championship
Saturday February 22, 2014
Circle B Bar Reserve
4399 Winter Lake Road
Lakeland, Fl 33803

JUDGE AND VOLUNTEER FORM

Print or Type - Due by February 8, 2014

Name ____________________________________________
Company .....................................................................
Address ........................................................................
City ___________________________ State __________ Zip _____________
Phone # ( ______ ) ___________________ T-Shirt size (register early so we can provide your requested size) _____
EMail Address (for contacting and to send a receipt) ____________________________________

OPTIONAL EDUCATIONAL EVENT

The 2014 Outdoor Tree School is being offered on Friday February 21, 2014 FREE OF CHARGE to all registered
competitors and volunteers. Space may be limited - we cannot always guarantee available space.
Fee for non-competitors or non-volunteers to attend is $50 (link at www.floridaisa.org).

☐ YES! You plan to attend the Outdoor Tree School on Friday February 21, 2014 for free as a volunteer.
☐ Check here if you want your lunch to be meat-free/vegetarian.
☐ NO, you do NOT plan to attend the Outdoor Tree School.

THANK YOU FOR YOUR OFFER TO VOLUNTEER!

I am able to help:
☐ as a judge
☐ with site pre-pruning
☐ with site preparation the week prior to competition
☐ with registration
☐ with timing and record keeping
☐ with awards
☐ at the FC-TCC dinner on day of the competition
☐ other __________________________________________________
                                                                                     __________________________________________________
                                                                                     __________________________________________________

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: floridaisa@comcast.net (you may submit this form as an email attachment)
Volunteer Form

Please PRINT Clearly

Volunteer’s Name: _______________________________________________________________________

Address: _______________________________________________________________ Zip: __________

Employed by: _________________________________________________________________________

Phone: (___ ) ______________________ Email: __________________________________________

Waiver and Hold-Harmless by Volunteer

In consideration of acceptance of my offer to be a volunteer for the Climbing Championship, I hereby waive any
and all claims I may have at anytime, and any and all claims which might otherwise be made by, or on behalf
of, or on account of me, or by me, or by any person or entity in any way as my subrogee against the property
owner and the International Society of Arboriculture, its officers, directors, employees, agents, members, guests,
invites, and any person who would be lawfully entitled to indemnification from them for any liability to, or
on behalf of, or on account of me, for any injuries or damages of any kind whatsoever arising on account of or
in consequence of my activities or participation in the Climbing Championship, or in any other way related to
the Climbing Championship. I further agree to hold the property owner and the International Society of Arbo-
riculture, its officers, directors, employees, agents, members, guests and invites, safe and harmless from any
expense for defense, settlement, payment of damages, or other expenses related in any way to injuries sustained
by me in any way related to the Climbing Championship. I recognize and assume all risks and danger involved
in my participation, and will not under any circumstances rely upon the care, attention or assurance of anyone
other than myself for matters relating to my safety.

Dated ___________________ Signature of Volunteer  __________________________________________

Certification and Waiver by Employer of Volunteer

I hereby certify that I am the employer or a duly authorized representative of the employer of the above-named
individual planning to volunteer at the Climbing Championship, and that the employer has encouraged this
participation. I further certify that I have satisfactorily confirmed that the employee will be covered by statutory
protection levels of Workers Compensation Insurance or the equivalent, for any injuries sustained in the course
of participation. The employer hereby waives any and all subrogation claims it may have against the property
owner and the International Society of Arboriculture, its officers, directors, employees, agents, members, guests,
or invites, as a result of any compensation or their benefits or expenses incurred or paid by it, its insurance
carrier, or otherwise on its behalf, in the event any claim or injury results from this participation, and will hold
the property owner and the International Society of Arboriculture, its officers, directors, employees, agents,
members, guests, and invites safe and harmless from any expense for defense, settlement, payment of damages
and other expenses relating in any way by this employee. I further certify that I am duly authorized to execute
this Certification and Waiver on behalf of the employer and that any and all necessary resolutions have been
duly passed and adopted by the employer.

The exact name and address of the employer, and state of incorporation (if applicable):

_____________________________________________________________________________________

_____________________________________________________________________________________

Dated ___________________

Signature of Employer or Authorized Representative __________________________________________

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
2014 Florida Chapter Tree Climbing Championship
Saturday February 22, 2014
Circle B Bar Reserve
4399 Winter Lake Road
Lakeland, Fl 33803

SPONSORSHIP FORM

Print or Type - Due by February 8, 2014

Name ________________________________
Company ________________________________
Address ________________________________
City __________________ State ________ Zip ___________
Phone # (______) __________________
EMail Address (for contacting and to send a receipt) ________________________________

MONETARY DONATION

Amount $ _________________

☐ Check enclosed (Make out to Florida Chapter ISA)
☐ Cash Enclosed
☐ Credit Card ☐ VISA ☐ MasterCard ☐ Discover

**If you are not comfortable emailing your credit card information as an attachment, please fax, mail or phone it in.

Card Number ____________________________________________
Exp. Date _____________________________ 3 or 4 digit Card Code _____________________________

Exact name on card ________________________________________________
Card billing address ________________________________________________
Card billing City/State/Zip ____________________________________________

Your receipt will be emailed to you (please provide an email address above).

PLEASE SEND THIS DONATION FORM WITH YOUR MONETARY DONATION TO:
MAIL: Florida Chapter ISA - 7853 S Leewynn Court - Sarasota, FL 34240
PHONE: 941-342-0153
FAX: 941-342-0463
EMAIL: floridaisa@comcast.net (you may submit this form as an email attachment)

DONATION OF EQUIPMENT, GEAR OR PRIZES

Please describe your donation below. Include a monetary value if you would like a receipt to be emailed to you (please provide an email address above).
______________________________________________________________

______________________________________________________________

PLEASE SEND THIS DONATION FORM WITH YOUR DONATED ITEM(S) TO:
BY MAIL, FED EX or UPS: Adam Jackson - 424 E Sandpiper Street - Apopka, FL 32712
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.