

Winter 2017 In This Issue:

Can We Vaccinate Trees?	1
President's Message	2
Memo Board	2
Florida Chapter Board Updates	6
Formosan Subterranean Termite	10
Green Industry Contributes More	13
Conehead Termites in Florida	14
In The News	15
Industry News	17
Hurricane Irma Loss English/Spanish	16
Consultant's Corner	19
TREE Fund Liaison Report	21
Tree Climbing Championship 2018	24
News From International	25
Florida Chapter Cert. Exam Schedule	27
Florida Chapter Education Schedule	27
New Florida Chapter Members	28
Arborist Certification Committee Report	29
TCC Forms	30-35

CAN WE VACCINATE TREES TO PROTECT AGAINST DISEASES?

by Dr. G. Percival, Bartlett Tree Research Laboratory

Reprinted with permission from ISA Ontario. First published in the June/July 2017 issue of the Ontario Arborist

PART 2: PUTTING SCIENCE INTO PRACTICE

Part 1 was published in the [Fall 2017 Florida Arborist](#)

Introduction

In the previous edition of Ontario Arborist, the author spoke about the science behind the theory of boosting a tree's own immune system i.e. vaccinating a tree, to protect against tree pests and diseases. In this edition the author talks about putting the science learnt into practice.

Vaccinating trees using soil amendments

Given the fact that previous research demonstrated trees defense systems could be promoted by applying amendments into the soil, and with funding secured from the TREE FUND, Hyland Johns Grant "Can Soil Amendments Reduce Disease Severity in Trees?" research at the Bartlett Tree Research Laboratory now aimed to evaluate four potentially powerful, stable and non-toxic soil amendments singly and in combination. These included, chitin, phosphites, biochar (a form of activated charcoal) and pure mulches i.e. a mulch made from a single tree species such as willow or eucalyptus. Importantly most of the products tested (biochar, chitin, mulch) are derived from waste materials that would otherwise go to landfill.

Chitin

Chitin is a naturally occurring constituent of fungal cell walls that can also be sourced from waste crustacean (crabs, lobsters, crayfish, and shrimp) shells. Application of chitin or a derivative known as chitosan, has been shown to enhance bio-control efficacy when applied to soils in combination with other bio-control fungi (Trichoderma) and bacteria (Bacillus). Applied alone, chitin and chitosan have shown potential for the control of soil borne diseases. Chitin acts as a "food" source in soils, stimulating soil microorganisms to release chitinolytic enzymes to break down the chitin molecule. An increased level of soil chitinolytic enzymes aids in the suppression of pathogenic fungi such as Rhizobium and Fusarium root rots, while the increase in chitinolytic bacteria such as

[Vaccinate continued on page 4](#)

A Message From the President



Florida Chapter ISA Members,

It's been a year?

It's been a great year!

Representing the Chapter as the 2017 president has been a challenging yet rewarding experience. I was able to work along with the current board of directors to continue the work of our previous

president Bonnie Marshall, as well as move forward with several of my own goals and objectives which I believe will help the Chapter's continued success in the future.

At our recent board meeting, the board of directors approved the ballot to elect members of the Florida Chapter board for 2018. The ballot included the new Climber/Production Arborist Representative seat. This will be a three-year commitment and the representative elected will support the climbers in our Chapter. This person will also work with the newly created Climber Committee to address the needs of this division of our industry including member benefits and education.

We are continuing to work with ISA International developing the new Pruning Credential. The purpose of this credential is to instruct those who touch trees how to prune trees according to the most current industry standards. The hope is to offer this credential not only to improve tree work but to also provide a more universal program that municipalities could adopt as requirements in their municipal boundaries.

Our committees are also moving forward. Bonnie Marshall, Chair of the Ad-hoc By-laws Committee, reported that the committee is well underway of completing the task of updating, revising and streamlining our current by-laws and policies. Ed Gilman, Chair of the Grant Committee, led the discussion which resulted in the board voting to approve a grant for research to determine the Texas Phoenix Palm Decline vector. During the Education Committee report it was stated, "Although it was not easy based on the success of Trees Florida 2017, the 2018 schedule will prove to be as good or better."

Unfortunately, due to Hurricane Irma we were forced to postpone the Outdoor Tree School (OTS) and the Florida Tree Climbing Championship (FLTCC). These events will be rescheduled to take place in February of

2018. If you have not attended the FLTCC I encourage you to attend and get involved. The FLTCC is a great opportunity to experience the overall skills, athleticism and sportsmanship of the climbers in our industry.

Even though this is my final message as president of the Florida Chapter, my dedication persists. Next year I will work alongside the incoming president, Scott Shultz to ensure the continued success of my initiatives and help him

President continued on page 3

MEMO BOARD

An Arborist's Master Class
 Fort Walton Beach
 December 8, 2017

- ▷ Register
- ▷ Flyer

Advanced Arboriculture - Wood Decay
 Orlando - January 10, 2018
 Ft Lauderdale - Jan. 12, 2018

- ▷ Register
- ▷ Register
- ▷ Flyer

Sustainable Landscapes
 Tampa
 March 2018

President continued from page 2
reach his goals for the Chapter.

As president you start the year with specific objectives in mind and you work with the board, committees and staff to meet your goals. I personally thank each of you along with the membership for your support and dedication. I am very passionate about this organization and I can only hope that I

met and exceeded your expectations during my year as president when it counted most.

Lori Ballard
President, Florida Chapter ISA

Florida Chapter ISA
2017 Board of Directors

Executive Committee

Lori Ballard, President ('17)
Samnik & Ballard Expert Tree Consultants
12103 98th Ave.
Seminole, FL 33772
Phone: 727-786-8128
Cell: 727-403-5980
loriballard@experttreeconsultants.com

Bonnie Marshall, Past President ('17)
Davey Tree Expert Co.
1500 North Mantua Street
Kent, OH 44240
bonnie.marshall@davey.com

Scott Shultz, Vice President ('17)
Walt Disney World
1550 N. Bear Island Road
Lake Buena Vista, FL 32830-1000
Phone: 407-938-3957
Cell: 321-229-7492
Scott.Shultz@disney.com

Adam Jackson, Treasurer ('16-'17)
Davey Tree Expert Company
123 Atlantic Drive
Suite 111, Maitland, FL 32751
Phone: 407-331-8020
Cell: 407-616-8618
adam.jackson@davey.com

Directors

Bill Armstrong, Commercial Arborist Representative ('15-'17)
Armstrong Tree Service
4426 Rabbit Pond Rd.
Tallahassee, FL 32309
850-443-2178
armstrongtree@comcast.net

Jordan Upcavage, Consulting Arborist Rep. ('16-'18)
Independent Tree Service, Inc.
PO BOX 4875
Tampa, FL 33677
Phone: 813-245-1566
Jordan.independenttree@gmail.com

Rick Joyce, Grower Representative ('15 - '17)
Forestry Resources Ecological, Inc.
4353 Michigan Link
Ft. Myers, FL 33916
Phone: 239-851-9366
rjoyce@fri-eco.com

Dr. Ed Gilman, Educator Representative ('16-'18)
University of Florida
Dept. of Environmental Horticulture
2543 Fifield Hall
Gainesville, FL 32611-0670
Phone: 352-262-9165
egilman@ufl.edu

Kimberly Pearson, Municipal Arborist Representative ('17-'19)
City of Fort Lauderdale
700 NW 19th Avenue
Fort Lauderdale, FL 33311
Phone: 954-828-5200
kpearson@fortlauderdale.gov

Ron Collins, Utility Arborist Representative ('17-'19)
Asplundh
106 SW 140 Terrace, Suite 3
Newberry, FL 32669
Phone: 352-333-9370
Ron.collins@asplundh.com

Rob Calley, Climbing Rep. ('17)
Backridge Tree Service Inc.
11 Miracle Strip Pkwy, Ft. Walton Beach, FL 32548
Office Phone: 850 240-2829
Personal Phone: 850 699-2474
backridge17@gmail.com

Julie Iooss, FUCF Representative ('16-'18)
City of Orlando Parks Division
1206 W Columbia St.
Orlando, FL 32805
407-246-3989
jiooss9@yahoo.com

Ryan Jones, Attorney Representative ('16-?)
Traub Lieberman Straus & Shrewsberry
181 - 79th Street S.
Petersburg, FL 33707
crj.esq@gmail.com

Matt Anderson, At Large ('17)
City of Clearwater
100 S. Myrtle Avenue
Clearwater, FL 33756
Phone: 727-224-7380
matthew.anderson1@myclearwater.com

Jeremy Chancey, At Large ('17)
JTC Management Group, Inc.
2500 SW 21st Street
Ft. Lauderdale, FL 33312
Phone: 754-551-6954
jtcgroup.inc@gmail.com

Florida Chapter Trustee:
Mr. Rick Joyce

Florida Chapter Standby Interim Director:
Dr. Andrew Koeser

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

We honor and thank the Florida Chapter ISA Past Presidents

2016 - Bonnie Marshall
2015 - Celeste White
2014 - Dr. AD Ali
2013 - Patrick Miller
2012 - Eric Hoyer
2011 - Don Winsett
2010 - David Reilly

2009 - Mike Robinson
2008 - Mary Edwards
2007 - Rick Joyce
2006 - Rick Joyce
2005 - Bruce Smith
2004 - Michael Marshall
2003 - Perry Odom

2002 - Perry Odom
2001 - Loren Westenberger
2000 - Dane Buell
1999 - Dr. Ed Gilman
1998 - Richard Bailey
1997 - Joe Samnik
1996 - Joe Samnik

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



RPG Trees Are Superior Performers In Your Landscapes

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

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

2015-2016 Grower Members

The Arbor Group
Orlando/407-235-8492

Nature Coast Tree Corp
Bell/386-935-9349

BE-MAC Farms
Odessa/813-920-2247

SMR Farms
Bradenton/941-708-3322

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

Snapper Creek Nursery
Ft Pierce/772-216-9993

Marshall Tree Farm
Morrison/800-786-1422

Spectrum Tree Farms
Live Oak/800-753-1379

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

Associate Members

Cherokee Manufacturing
General Cordage
Graco Fertilizer Company

Grass Roots Nurseries
Treemart

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

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

[Vaccinate continued from page 1](#)

Bacillus licheniformis, Stenotrophomonas maltophilia, and B. thuringiensis aid in the control of Oomycetes such as Phytophthora cactorum. Recently, chitosan has also shown potential as an insecticide, controlling a range of aphid species and lepidopteran pests via ingestion of foliage with chitosan either applied to the leaf surface or translocated within the vascular system of a plant.

Biochar



(Photograph 1) Several articles show soil fertility and quality are improved with the addition of biochar. As well as altering the physical and chemical properties of the soil around the rhizosphere, biochar also alters the biological dynamics of a soil through several mechanisms. Biochar is initially sterile and therefore has no indigenous populations

of microorganisms. Instead, the physical structure of the biochar encourages colonization by various arbuscular mycorrhizal fungi, nematodes and bacteria. Biochar adsorbs humic acid, which is used as sustenance by soil microbes, and humic acid adsorbs fertilizers, preventing them from leaching out of the soil. Roots can access this stored fertilizer. Numbers of plant-enhancing microorganisms, such as Trichoderma, are boosted in soils amended with biochar. Studies have shown a significant interaction between biochar and Fusarium oxysporum that strongly reduces disease severity. Recent research has shown that soil-applied biochar also induces resistance to the fungal diseases such as Botrytis cinerea (gray mold), Leveillula taurica (powdery mildew) as well as the insect mite pest Polyphagotarsonemus latus. Zwart and Kim (2012) identified that a 5% biochar application (by soil volume) resulted in a significantly greater stem biomass in A. rubrum compared with plants inoculated with Phytophthora cinnamomi, suggesting that biochar amendment has the potential to alleviate disease progression and physiological stress caused by Phytophthora canker. It has also been suggested that the

[Vaccinate continued on page 7](#)

Wedgle® Direct-Inject™ TREE INJECTION SYSTEM

Our advanced technology for tree treatment allows you to **INCREASE THE NUMBER OF TREES YOU TREAT IN A DAY!**

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

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

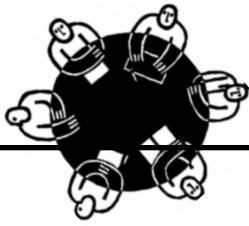


Insecticides • Fungicides
PGRs • Antibiotics
MicroNutrients



AVAILABLE AT:
WINFIELD™
855-880-0048
www.winfieldpro.com





Florida Chapter Board Updates

BOARD SHORTS:

2017 CHAPTER GRANT AWARDS



The Florida Chapter ISA board of directors approved two Chapter grants to be awarded for 2017. Congratulations to the following recipients of a Florida Chapter Grant:

- Epidemiology of Texas Phoenix Palm Decline (TPPD) in Florida Vector (Brian W. Bahder, Ph.D.)
- Assessing Tree Risk Assessment - Impact of the Method and Time Frame or Risk Assessment (Dr. Andrew Koeser and Ryan Klein, MS/Doctoral Student)

Grant proposals for 2018 will be accepted from January 15, 2018 and April 1, 2018. Updated application forms will be available at <http://www.floridaisa.org>

THANK YOU FOR YOUR SERVICE TO THE FLORIDA CHAPTER



There are several board members who will be rotating off the Florida Chapter board at the end of 2016. Many thanks for all your time, energy and guidance that you provided during the past year, or longer. Your input is much appreciated by the entire membership.

Thank you to

- Bonnie Marshall - Past President
- Matt Anderson - At large
- Bill Armstrong – Commercial Representative
- Rob Calley – Climbing Representative
- Jeremy Chancey – At large
- Adam Jackson - Treasurer
- Rick Joyce – Grower Representative



**PROTECTING THE REPUTATION
OF THE UTILITIES WE SERVE...
IT'S PART OF OUR JOB**

Nelson
TREE SERVICE, INC.

VEGETATION MANAGEMENT SPECIALIST

800-522-4311 • www.nelsontree.com/ad/reputation.html

▶ See the video



[Vaccinate continued from page 4](#)

beneficial microorganisms encouraged by biochar application could produce antibiotics to directly affect bacterial plant pathogens. Ultimately, biochar offers potential to be used in conjunction with other biologicals to increase treatment efficacy.

Phosphites

Inorganic phosphite salts are a family of potential plant protection agents. When applied to plants as a foliar spray or soil drench phosphites exhibit two modes of action; acting directly on the disease and indirectly by stimulating plant host defence responses, such as the accumulation of plant antibodies (phytoalexins), hypersensitive cell death, cell wall lignification and formation of lytic enzymes that in turn inhibit pathogen growth. Research has found potassium phosphite salts to be effective in the control of Oomycetes such as *Phytophthora* root rot and canker pathogens, fungal pathogens such as *Venturia inaequalis* (apple scab) and pathogenic bacteria such as *Erwinia amylovora* (apple fire blight) and *Pseudomonas syringae* pv *aesculi* (bacterial bleeding canker).

Pure Mulches

Studies have shown mulches can provide an integral cultural control method for suppressing disease development of several plant diseases. Cellulose forms part of the component of the primary cell wall of green plants acting as a structural polymer to provide plant rigidity. Following the application of a mulch to a soil surface the concomitant microbial and fungal population build-up promotes a reservoir of enzymatic activity such as cellulase and laminarinase to induce mulch decomposition. Cellulose microfibrils in *Phytophthora* cell walls are susceptible to enzymatic destruction particularly by cellulases present in mulch litter layers that cause cell wall lysis and, by default, a subsequent reduction in *Phytophthora* pathogen severity. In addition, mulches also contain a variety of soil microbes that can exert biological control over soil borne pathogens, either through resource competition or antibiosis (production of antibodies). Limited studies exist focusing on the efficacy of mulches derived solely from one tree species, defined as pure mulch on suppression of diseases. However, information available indicates the use of a pure mulch can have a powerful influence on transplant success and survival of trees. Pure mulches derived from the common hawthorn (*Crataegus monogyna* JACQ),

and common cherry (*Prunus avium* L.) increased survival rates of European beech (*Fagus sylvatica* L.) from 10 to 70% following containerisation and under field conditions enhanced fruit tree crown volume and fruit yield by 53 and 100% compared to non-mulched trees. Disease suppressive effects may also relate to allelochemicals released as mulches degrade. For example, allelopathetic testing of water soluble extracts of pure mulches derived from hawthorn, cherry, silver birch, English and evergreen oak positively increased pea seed germination, relative growth rate and photosynthetic efficiency of established seedlings. A pure mulch derived from willow (*Salix*) will be the focus of attention for this study. Willow tissue is naturally high in salicylic acid a powerful stimulator of plant defence pathways. Indeed application of salicylic acid to plants has been shown to confer resistance against several plant pathogens to include early blight of potato (*Alternaria solani*), powdery mildew (*Erysiphe cichoracearum*), tobacco mosaic virus, fire blight (*Erwinia amylovora*), *Sclerotinia sclerotiorum* and *Phytophthora palmivora*.

Case Study: Apple scab (*Venturia inaequalis*)

The trial site consisted of a 1.5 ha block of apple cv. Crown Gold (an apple scab sensitive species) with individual trees of Red Delicious and Gala as pollinators. Planting distances were based on a 3 by 3 m spacing with the trees trained as a bush shaped tree to an average height of 2.0 to 2.5 metres. Historically the trial site suffered heavily from apple scab on an annual basis. Consequently prior to the trial commencing trees were inspected the year before and only those trees rated with 50-80% of leaves affected,



representing severe foliar discoloration and scab infection were used in the trial. Treatments were applied to a soil depth of 20-30 cm using an air-spade in early February (Photograph 2) with the exception of a pure willow bark mulch which was applied to the soil surface at a depth of 10 cm. As an industrial comparative the synthetic fungicide

[Vaccinate continued on page 8](#)

Vaccinate continued from page 7



penconazole was applied at bud break, early flowering, 90% petal fall and early fruitlet as a foliar spray until run-off using a hand-sprayer at manufacturers recommended rate (1.0ml penconazole per litre of water): Soil amendments (i.e. treatments used): i) Chitin (5% by soil volume i.e. 1:19 ratio), ii) Biochar, (5% by soil volume), iii) Chitin (2.5% by soil volume) + Biochar (2.5% by soil volume), iv) Willow Mulch, v) Willow Mulch + Chitin (5% by volume), vi) Willow Mulch + Biochar (5% by volume), vii) Willow Mulch + Chitin (2.5% by volume) + Biochar (2.5% by volume), viii) Non- amended soil (controls), ix) Fungicide (penconazole) spray.



Photograph 3 shows the degree of scab severity on recorded on non-treated control leaves compared with leaves on a tree where the soil was amended with biochar + chitin (Photograph 4) and leaves on a tree that were sprayed four times with a synthetic fungicide (Photograph 5) at the end of the 2016

growing season. In summary, photograph 4 shows that soil amendments that promote tree defence systems provided a significant degree of protection against apple scab, however,



control generally was less effective than that achieved with four sprays of a standard fungicide (penconazole). However, results do show that these soil amendments work under field conditions and potentially offer a potential management strategy of apple scab. If, however, a zero scab policy is adopted then

application with conventional synthetic fungicides would be required. Alternately with ornamental apples which are grown and planted for aesthetic reasons within town and city landscapes lower scab levels are generally acceptable as the fruit is not eaten. In addition, these soil amendments can be incorporated into an integrated control system and/or be used preventatively to bolster general plant health. In these instances, the reductions in scab severity recorded in this investigation may warrant the use of soil amendments as an alternative or compliment to conventional synthetic fungicides.

Conclusions

Studies to date suggest that use of the soil amendments outlined above offers potential alternatives for help in managing a broad spectrum of economically important foliar and root fungal diseases of urban trees. Many of the products used here are waste or by-products of industry (chitin, biochar, wood chip mulch) which present a “green” environmentally benign approach to pest and disease management. It is also important to emphasise that these products should not be used as a “stand alone” treatment for pest and disease management. Management should also rely on promoting tree vitality and alleviating all forms of stress where possible. Aftercare is always critical to pest and disease management. This should include: - Frequent inspections for health and structural issues; - Soil de-compaction if required; - Monitoring of soil moisture to protect against over and under irrigation; - Prescription fertilisation for optimal tree nutrition; - Mulching the critical root zone

Select References

Garbelotto, M., D.J. Schmidt, and T.Y. Harnik. 2007. Phosphite injections and bark application of phosphite and pentra-bark control sudden oak death in coast live oak. *Arboriculture and Urban Forestry*. 33:309-317. Graber, E. R., and Elad, Y. (2013). Biochar impact on plant resistance to disease. *Biochar and Soil Biota*, 278; Hadwiger, L. (2013). Multiple effects of chitosan on plant systems: Solid science or hype. *Plant Science*, 208, 42–49; Hailey L.E and Percival G.C (2014). Comparative assessment of phosphites formulations for apple scab (*Venturia inaequalis*) Control. *Arboriculture and Urban Forestry*. 40(4): 237-243; Kim, Y. C., Jung, H., Kim, K. Y., & Park, S. K. (2008). An effective biocontrol bioformulation against *Phytophthora* blight of pepper using growth mixtures of combined chitinolytic bacteria under different field conditions. *European Journal of Plant Pathology*, 120(4), 373–382; Percival, G.C. (2013) Influence of pure mulches on suppressing *Phytophthora* root rot pathogens. *Journal of Environmental Horticulture*. 31 (4); Percival G.C. and J.M. Banks (2014). Evaluation of plant defence activators for the potential control of *Pseudomonas syringae* pv *aesculi*. *Arboricultural Journal*. 36(2): 76-88; Zwart, D.C., and S.H. Kim. 2012. Biochar amendment increases resistance to stem lesions caused by *Phytophthora* spp. in tree seedlings. *HortScience* 47:1736-1740.

WANE 3000[®] TREE SYSTEM

...Since 1972

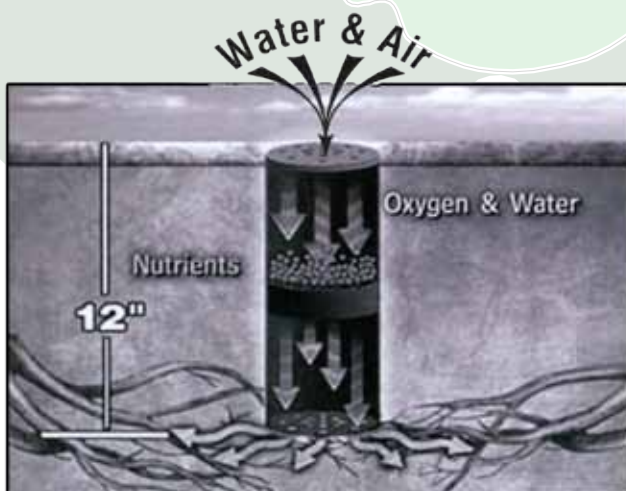
- County Library Parking Lots
- Fire House Parking Lots
- City Side Walks
- Major Florida Amusement Parks



Pinellas County Utilities

145 S. Fort Harrison Ave., Downtown Clearwater, FL

50 Wane Units were installed around this large Live Oak Tree in 1983.



WANE 3000[®] TREE SYSTEM

www.wane3000.com

(813) 961-1060

casmith@tampabay.rr.com

Adopting New Management Strategies to Reduce the Invasive Formosan Subterranean Termite in Urban Trees in Jacksonville

The Formosan termite, *Coptotermes formosanus*, a native of Asia, has been in Florida since 1980. With changing environments and movement of wood, these invasive termites have spread throughout the southeastern US threatening historic structures and communities across the southeastern states. Once this termite has infested an area, it has never been successfully eradicated. Damage from subterranean Formosan termites can be quite extensive due to their large colony size. They will happily infest living trees and will consume sound wood, leaving paper-thin pieces behind.

Formosan termites were catapulted into the spotlight in Jacksonville in the summer of 2016 when the Cummer Museum of Art and Gardens made the decision that it would have to destroy their 89-year-old building because of substantial termite damage. The museum had invested \$7 million in the structure and it was listed on the National Register of Historic Places. The museum estimated it would have to invest



Author with Formosan termite "carton" nest (a mixture of termite fecal matter and wood fragments) that was removed from a tree stump. *ptured Termites on a Glue Board*

a total of \$10 million to correct the structural damage done by the termites. The loss of this historic structure, economic impact on the museum, and potential for future losses of historical structures sparked community interest.

As a result of this interest, the University of Florida Extension in Duval County and the City of Jacksonville, partnered to form the Jacksonville Formosan Termite Task Force. Members include UF Extension faculty, several depart-

[Subterranean continued on page 11](#)

New Tree Bills Proposed in Florida Legislature



Florida Arborists need to be aware of two bills that have been proposed in both the Florida House and Senate for the 2018 Legislative Session. The Florida Senate bill is [SB 574](#) and Florida House bill is [HB 521](#). Please use these links to read the bills. These bills impact Florida cities and counties ability to regulate urban trees.



Subterranean continued from page 10



Formosan Termite Soldiers

ments from the City of Jacksonville, the Mayor's Office, pest management professionals, real estate associations, historic preservation groups, the Florida Department of Agriculture and Consumer Services, urban foresters, and the Jacksonville Electric Authority. **The goal is to educate residents**

through a community-wide effort about the identification and detection of wood destroying organisms, including the invasive Formosan subterranean termite, while providing a research-based integrated approach to reducing these pests to maintain our urban tree canopy.

Trees on city property are the major focus of the task force. For the last year, volunteers and task force members have been inspecting trees throughout the historic Riverside area to monitor termite populations. As part of the city's tree inventory, trees with potential termite infestations have been recorded in addition to tree species, location, and health. These surveying projects will help guide the task force in creating recommendations for landowners in Jacksonville and also help the city develop protocol when a tree on city property is identified as having Formosan subterranean termites.

Formosan termites swarm in late April to the beginning of August. Colonies swarm when they have reached a large size, so swarming events can give a basic idea of possible areas with termite populations you might not normally notice and how large the colonies are at the time. Through community support, the UF Extension Office in Duval County was able to partner with Jacksonville Mosquito Control, Jacksonville Electric Authority, the Jacksonville Fire and Rescue Department, and volunteers to install and monitor 130 Formosan subterranean termite monitoring stations throughout Jacksonville.

The monitor stations were constructed of glue boards mounted on clipboards that were then attached to light poles and distributed to all Jacksonville Fire

and Rescue Stations throughout Duval County. Stations were placed as close as possible to lights because when termites swarm they are attracted to bright lights. Each week the glue board was switched out for a new one and the termites were counted and identified. The intent of the project was to map the spread of the invasive Formosan termite and determine where in the county they are currently found. An interactive map of the results can be found at <http://duval.ifas.ufl.edu/termites.shtml>. The most heavily infested areas seem to be the historic downtown areas near the river and areas near city parks and historic cemeteries where there are a number of large, older trees.



Author with Formosan termite "carton" nest (a mixture of termite fecal matter and wood fragments) that was removed from a tree stump.

Subterranean continued on page 12

**SAME GREAT QUALITY.
NEW LOOK.**

FEA has been serving the forestry industry for years with quality equipment. We are still that same great company, but now with the added strength of Utility One Source!

FOR MORE INFORMATION PLEASE VISIT:
www.utility1source.com

OR SCAN HERE TO LEARN MORE

CONTACT INFORMATION
12600 E. Lynchburg Salem Turnpike, Forest VA 24551
Phone: 434.525.2999
Fax: 434.525.1917
E-Mail: travels@u1source.com
www.utility1source.com

Subterranean continued from page 11



Captured Termites on a Glue Board

This data, in conjunction with the tree inventories, will help the City of Jacksonville develop a treatment plan. Currently, the city is moving forward developing a management plan which will include treating trees on city-owned right-of-ways and city parks. Because other factors such as age, disease pressure, safety, and future planning

also need to be considered when deciding which trees to treat, this program will be an on-going partnership between city foresters and the pest management company hired to treat the trees. We are hoping the data from the tree inventory will also be able to guide future tree installation decisions. However, it seems species may have less to do



Termite damage in oak tree

with whether the termites will infest the tree versus other stress factors, such as availability to moisture and age of the tree.

We believe this program will be successful in Jacksonville because of the community-wide approach. It is heavily grassroots driven and is important to local government. Other similar programs throughout the country have been examined and consulted, so that we are using the best

methods from each program. We continue to receive help and guidance from the New Orleans Mosquito, Termite, and Rodent Control Board, LSU Extension, and FAMU. This is truly a program that is bringing together concerned citizens, government, UF extension and research faculty, industry, government agencies, and preservation groups to address an

invasive pest that is doing significant economic damage in our community and forever changing our urban tree canopy. For more information about the Jacksonville Formosan Termite Task Force, please contact the author, Erin Harlow at eeeck@ufl.edu. Erin Harlow is the UF/IFAS Commercial Horticulture Extension Agent in Duval County.

References

B. J. Cabrera, N.-Y. Su, R. H. Scheffrahn, F. M. Oi, and P. G. Koehler. (2017, Reviewed). Formosan Subterranean Termite. University of Florida/IFAS Publication ENY-216. ❖

JOHN P. WHITE MEMORIAL SCHOLARSHIP




Supporting education
in the arboriculture/urban
forestry industry.

Applications for the Spring 2018
semester are due by November 15, 2017

[Get More Info ▶](#)

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

SAVE THE DATE



TREES FLORIDA 2018

June 11-12-13, 2018

Sanibel Harbour Resort

Fort Myers, FL

Green Industry Contributes More Than \$20B to Florida Economy: Up 19 Percent From 2000

By: Brad Buck, University of Florida bradbuck@ufl.edu

GAINESVILLE, Fla. --- Florida’s environmental horticulture industry is recovering from the recession of 2007 to 2009, and it is growing in many sectors, with \$21.8 billion in annual economic contributions. This is an increase of 19.2 percent from 2000, a new University of Florida report shows.

The environmental horticulture industry, or the “green industry,” includes landscaping, nurseries, greenhouses, wholesale and retail distributors and allied manufacturing, said Alan Hodges, an Extension scientist in the UF/IFAS food and resource economics department. Those “allied” industries include firms that produce fertilizers, chemicals, mulches and other products people use in their landscapes and nurseries, Hodges said.

“The green industry has rebounded from the recession very well due to growing incomes and consumer demand for plants in other states. Additionally, housing and commercial development in Florida is on the uptick again,” he said.

Hodges led the group of researchers who produced the annual report on the economic impact of environmental horticulture in Florida.

That [UF/IFAS report](#) presents information from a survey of the industry for 2015, and extends findings from previous studies for 2000, 2005 and 2010. To gather the data, UF/IFAS economists surveyed 1,546 Florida businesses.

In addition to overall economic contributions, UF/IFAS economists estimated the industry employs 232,648 full- and part-time workers. Direct employment in the nursery

and landscaping industries increased 13.5 percent since 2000, though it declined by 17.2 percent from 2010 to 2015 due to the overall economic trend in workforce reduction.

Economic contributions include “multiplier effects,” such as indirect employment, wages, food, utilities and more that researchers count as part of the ornamental horticulture’s overall impact on Florida’s economy. For instance, when nursery workers get paid, they spend their money on groceries and other necessities. Researchers include those expenses in the economic contributions, Hodges said.

As for specific sectors, economic contributions in landscaping went up by 49 percent, and wholesale and retail distribution increased by 209 percent -- though nurseries went down by 49 percent, according to the report.

Survey respondents reported sales of \$1.2 billion in 2015, while UF/IFAS researchers estimated total industry sales at \$10.7 billion by extrapolating the average sales reported by survey respondents to reflect the population of all businesses.

Respondents reported spending nearly \$50 million in investments in 2015, while they expect to invest nearly \$90 million from 2016 to 2018.

“The green industry is making big investments in nursery buildings, equipment and information technology to become more productive and remain competitive in the global market,” Hodges said. ❖

**ADVANCED ARBORICULTURE:
WOOD DECAY
BIOLOGY AND ID**

ORLANDO:
Wednesday, January 10, 2018

FORT LAUDERDALE:
Friday, January 12, 2018

80 SEATS AT EACH LOCATION

CEUS: *ISA-6-75 BCMA-6-75 (5) FNGLA-4 LIAF-4*

Conehead Termites in Florida

Sue Alspach

FDACS - Division of Agricultural Environmental Services

Sue.Alspace@FreshFromFlorida.com



The

FDACS is attempting to locate all populations of conehead termites in Florida so that we can eradicate the termite before it spreads further in Florida. To that end, we are reaching out to appropriate forums to help us educate Florida's residents, landowners, natural area managers, and others on how to identify a cone-



head infestation and where to report possible sightings. Arborists are particularly appropriate for sharing this information with since the conehead termite is an arboreal species which builds readily visible tunnels and nests on trees.

only known populations of conehead termites in the entire United States are in Broward County – one in Dania Beach and one in Pompano Beach - but there may be additional populations in Florida that have not yet been discovered. Conehead termites are native to Central America and northern South America and to many of the islands in the Caribbean.

Click here for a brochure describing the program or click the link to visit the FDACS webpage with further information. [Conehead Termite Program / Termites / Protect Your Home from Pests / Health and Safety / Consumer Resources / Home - Florida Department of Agriculture & Consumer Services.](#) ❖

In The News

FLORIDA MINIMUM WAGE INCREASE



On January 1, 2018, Florida’s hourly minimum wage rises 15 cents to \$8.25 per hour. In 2004, Florida voters approved a constitutional amendment requiring our state to annually adjust the rate based on the federal Consumer Price Index. While Florida’s minimum wage can go up, it can never go down. This is the second consecutive minimum wage bump. Florida employers must pay at least the state or federal minimum rate whichever is higher. Since Florida’s rate is higher than the federal \$7.25 rate, you must pay at least the Florida \$8.25 hourly rate beginning January 1, 2018. Be sure your pay scale and business plan for next year reflect this adjustment.

WORKER’S COMPENSATION RATE DECREASE - MAYBE



A welcome decrease in workers’ compensation rate appears increasingly likely. As the rating agency for most of Florida’s insurance carriers, the National Council on Compensation Insurance is proposing an average 9.3% premium rate drop. The good news is NCCI says this proposed rate decrease is the result of increased workplace safety. However, it does not reflect the potentially spiraling future impact of recent court decisions which removed the cap on attorneys’ fees. So, any welcome rate decrease might just be temporary. Stay tuned. Source: FNGLA

IRS TAX RELIEF



The title is a bit unusual even for Washington, yet the relief is real. Congress recently passed, and President Trump signed into law, “The Disaster Tax Relief and Airport and Airway Extension Act of 2017.” It provides targeted tax relief for those impacted by Hurricanes Harvey, Irma and Maria. Among its many provisions, the law allows:

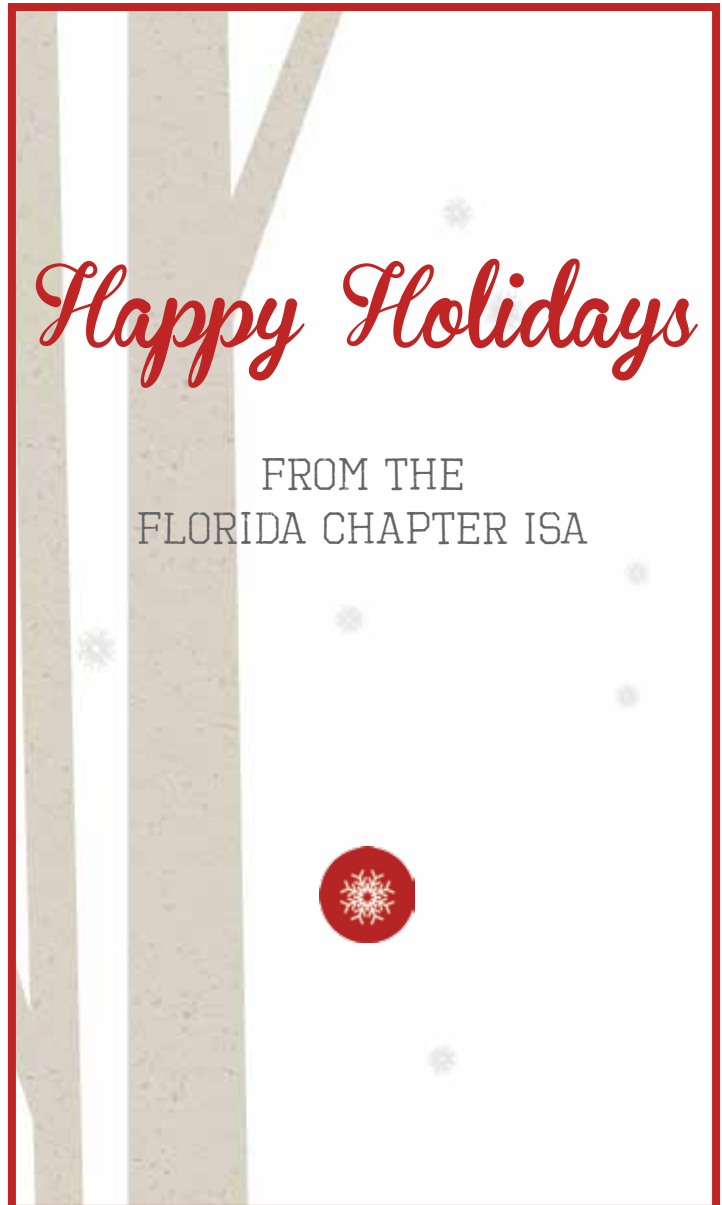
- Uncompensated personal casualty losses do not need to exceed 10% of adjusted gross income in order to qualify for deduction;
- Deductions do not need to be itemized to access this tax relief;
- An exception to the 10% early retirement plan withdrawal penalty for qualified hurricane relief distributions
- Flexibility for loans from retirement plans for

qualified hurricane relief;

- Limitations are temporarily suspended on charitable contribution deductions associated with qualified hurricane relief made before December 31, 2017;
- A tax credit for 40% of wages (up to \$6,000 per employee) paid by a disaster-affected employer to each employee from a core disaster area

The above is a partial listing of the tax relief provisions available to many Florida businesses and residents. To determine the tax relief opportunities for which you may be eligible, do not rely on those listed above. Contact your accountant or tax attorney. And, here are two helpful tax relief links:

>> [Access IRS Tax Relief Info for Hurricane Irma](#) ❖



Hurricane Irma and Tree Canopy Loss: How Did This Happen?

Henry Mayer, UF/IFAS Urban Commercial Horticulture Extension Agent and Claudia Alzate, Superintendent Miami Dade County Parks, Recreation and Open Spaces Right of Way Aesthetic and Assets Management Division (R.A.A.M)



Lack of soil space

When hurricane Irma hit South Florida on September 10th, we did not know what to expect. After the high winds ceased, many of us found ourselves with no power, damaged buildings and vehicles, and significant tree damage. How much tree canopy did we lose? I don't know the exact number, but I can assure you that it was a lot! Why did this happen? Is this the normal outcome after every storm or hurricane? It was sad to see many big and old trees uprooted. The answer is not simple, but it appears that it was due to a combination of factors:



Shallow roots and compact soil.

1. - Species selection does count! Many mahoganies (*Swietenia mahagoni*) sea grapes (*Coccoloba uvifera*) silver buttonwood (*Conocarpus erectus* var. *sericeus*) ficus (*Ficus spp.*); copperpod (*Peltophorum pterocarpum*), wild tamarind (*Lysiloma latisiliquum*), royal poinciana (*Delonix regia*) pongam (*Pongamia pinnata*), laurel oak (*Quercus laurifolia*) black olive (*Bucida buceras*), Cassia, (*Cassia surattensis*), hong kong orchid (*Bauhinia x blakeana*), tabebuia (*Tabebuia spp.*) and other, performed poorly, I found several trees snapped in half, heaved over, and toppled.

Some other, like bald cypress (*Taxodium distichum*), live oak (*Quercus virginiana*), dahoon holly (*Ilex cassine*), royal palm (*Roystonea elata*), ironwood (*Kruegeodendrum ferrum*), sabal palm (*Sabal palmetto*), pigeon plum (*Coccoloba diversifolia*), stoppers (*Eugenia spp.*); and others performed better. These observations were made by myself and other colleagues and are not the result of research – just observations!



Girdling roots

2.- Soil volume does count! Large trees that were planted

in a restricted and limited soil space, like sidewalk medians, performed worse than trees located in open spaces. Soil volume is the main driver for good root development and support.

3.- Drainage is very important! Unfortunately, the physical characteristics of the urban soils in south Florida are not ideal for normal tree growth. It is common to find very compacted soils with poor drainage, that prevent the roots to grow as needed.



Circling roots

4.- The quality of the root system makes a huge difference! Many of the uprooted and leaning trees had circling and girdling roots! The trees' "life insurance" policy consists in developing a good support system. Unfortunately, if the trees were planted with circling roots many years ago, they don't have the capacity to fix the problem. Trees graded Florida #1 or better will be better survivors during the next hurricane.

5.- Maintenance is key! Many codominant trunks split at the weak point. This is not a surprise! Species like mahoganies, cassias, black olives, wild tamarind, sea grapes and others require regular structural pruning. At least one pruning every 24 months.

6.- Trees are better protected when they are together! When the space is available, trees must be planted in groups in order to resist the wind better.

As you can see, there are many variables that come together in order to answer the question why so many trees fell down. Selecting the wrong species, with poor quality root systems, in restricted and compacted soils, with poor drainage, with little or no maintenance, is a recipe for disaster. I know we can do better! Quality planting is more important than quantity! One tree at a time. Trees deserve it, they have rights! ❖



Codominant defect

Huracán Irma y la Perdida de Árboles, ¿Cómo Sucedió Esto?

Henry Mayer, UF/IFAS Urban Commercial Horticulture Extension Agent and Claudia Alzate, Superintendent Miami Dade County Parks, Recreation and Open Spaces Right of Way Aesthetic and Assets Management Division (R.A.A.M)



Lack of soil space

Cuando el huracán Irma azotó el sur de la Florida el 10 de septiembre, no sabíamos qué esperar. Después de que cesaron los fuertes vientos, muchos de nosotros nos encontramos sin energía, edificios y vehículos dañados y daños significativos a los árboles. ¿Cuánto cobertura arbórea se perdió? No sé el número exacto, pero puedo asegurarles que fue bastante.

¿Por qué pasó esto? ¿Es este el resultado normal después de cada tormenta o huracán? Fue triste ver desarraigados muchos árboles grandes y viejos. La respuesta no es simple, pero parece que se debió a una combinación de factores:



Shallow roots and compact soil.

1.- ¡La selección de especies cuenta! Muchos mahoganies (*Swietenia mahagoni*) sea grapes (*Coccoloba uvifera*) silver buttonwood (*Conocarpus erectus var. sericeus*) ficus (*Ficus spp.*); copperpod (*Peltophorum pterocarpum*), wild tamarind (*Lysiloma latisiliquum*), royal poinciana (*Delonix regia*) pongam (*Pongamia pinnata*), laurel oak (*Quercus laurifolia*) black olive (*Bucida buceras*), Cassia, (*Cassia surattensis*), hong kong orchid (*Bauhinia x blakeana*), tabebuia (*Tabebuia spp.*) y otros, se cayeron o rompieron, encontramos varios árboles partidos por la mitad, volteados y derribados.

Otros árboles como: bald cypress (*Taxodium distichum*), live oak (*Quercus virginiana*), dahoon holly (*Ilex cassine*), royal palm (*Roystonea elata*), ironwood (*Kruegeodendrum ferrum*), sabal palm (*Sabal palmetto*), pigeon plum (*Coccoloba diversifolia*), stoppers (*Eugenia spp.*); y otros se comportaron mejor.



Girdling roots

¡Estas observaciones son de mí mismo y de otros colegas y no son el resultado de investigación.

2.- ¡El volumen del suelo sí cuenta! Los árboles que se plantaron en espacios restringidos y limita-

dos, como aceras, se comportaron peor que los árboles ubicados en espacios abiertos. El volumen del suelo es el principal impulsor para un buen desarrollo y soporte de la raíz.

3.- ¡El drenaje es muy importante! Desafortunadamente, las características físicas de los suelos urbanos en el sur de Florida no son ideales para el crecimiento normal de los árboles. Es común encontrar suelos muy compactados con drenaje pobre, que impiden que las raíces crezcan.



Circling roots

4.- ¡La calidad del sistema raíz hace una gran diferencia! ¡Muchos de los árboles desarraigados e inclinados tenían raíces circulares! El “seguro de vida” de los árboles consiste en desarrollar un buen sistema de apoyo. Desafortunadamente, si los árboles fueron plantados con raíces circulares, éstos no tienen la capacidad de arreglar sus raíces. Los árboles clasificados como Florida # 1 o Florida Fancy sobrevivirán mejor el próximo huracán/ tormenta.

5.- ¡El mantenimiento es la clave! Muchos árboles con tallos codominantes se dividieron en el punto débil. ¡Esto no es una sorpresa! Especies como mahoganies, casias, black olives, lysilomas, sea grapes y otros requieren de poda estructural regularmente. Al menos una poda cada 24 meses.

6.- ¡Los árboles están mejor protegidos cuando están juntos! Cuando el espacio es disponible, los árboles deben plantarse en grupos para resistir mejor el viento.



Codominant defect

Como pueden ver, hay muchas variables que se unen para responder a la pregunta de por qué se cayeron tantos árboles. Seleccionar las especies equivocadas, con sistemas de raíces de mala calidad, en suelos restringidos y compactados, con drenaje deficiente, con poco o ningún mantenimiento, es una receta para el desastre. ¡Sé que podemos hacerlo mejor! ¡Sembrar menos árboles pero en mejores condiciones es mejor que sembrar muchos árboles en malas condiciones! Un árbol a la vez! Los árboles lo merecen, ¡tienen derechos! ❖



Morriston, Florida

Quality, Variety & Service since 1984

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

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

Visit us at www.marshalltrees.com



Call for current availability
800.786.1422



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

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

Single Issue advertising rates are as follows:

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

Discounts for a commitment of 4 consecutive issues:

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

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

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

Preserve Florida's Greatest Green Resource - Trees!

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

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

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

The Tree Tag...Get it Today!



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

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

Consultant's
Corner

by Joe Samnik, Expert Tree Consultant



WHEN IS A PALM
FROND DANGEROUS?

A guest from a well-known and well-publicized hotel alleged he was struck by a falling palm frond. The hotel motioned for a summary judgment which was granted.



The guest appealed and the summary judgment was reversed.

In this personal injury action, a palm frond fell, striking and injuring a guest of the hotel. The trial court granted defendant's motion for summary judgment on the grounds that plaintiff could not show that the defendant had actual or constructive knowledge of the danger from the fronds. Constructive

knowledge is that knowledge which somebody knew or should have known.

The evidence demonstrated that the subject palm tree, as well as other palm trees in the area, had fronds which were brown or were in the process of turning brown; dead or dying.

An expert for the plaintiff testified that browning palm fronds dipping below the horizontal plane present an identifiable risk of danger to those who come near them. Fronds turning brown are a sign of danger and aging, as is the dipping below the horizontal. Further testimony revealed that an owner or guest of this property could reasonably have known or foreseen that such affected palm fronds might detach and fall from the palm tree and thereby injure a person who was invited onto the property.

The ANSIA 300 standards allow for the removal of dead or dying parts of trees at any time. It seems a foregone conclusion, in a vacuum of knowledge, that a palm frond which is dead or dying should be removed from the subject palm tree immediately. ❖



An Arborist's

MASTER CLASS

North Florida:

FORT WALTON BEACH

Friday, December 8, 2017

[FLYER>>](#)

[REGISTER>>](#)

CEUs:

ISA - 7 BCMA - 1.75(M) and 5.25(P)

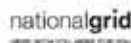
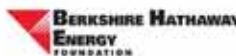
FNGLA - 4 LIAF - 4

Celebrating 15 Years of Empowering Science-Based Tree Care



Since 2002, TREE Fund has empowered research to address the tree care challenges you face, and education programs to inspire new tree stewards. Just as mature trees continue to require care, TREE Fund depends on faithful annual support. Help us celebrate 15 years of advancing tree care with a gift to our 15th Anniversary Appeal. Your support today will secure a better future for our community canopy.

Donate at treefund.org today.



See our full partner list at treefund.org/about/our-partners



October 20, 2017

Chairman

Brian Sayers, PhD

Chair Elect

Steven Geist, BCMA, RCA

Vice Chairman

Thomas Wolf

Treasurer

Ray Henning

Trustees

James Barborinas
 Arnold Brodbeck, PhD
 Paul Fletcher, BCMA, RCA
 George Hudler, PhD
 Sharon Jean-Philippe, PhD
 David Krause
 Sharon Lilly
 Wilbur Nutter
 William Schleizer
 James Urban, FASLA
 Jeff Wilson, ex-officio
 Thomas Wolf

Trustees Emeritus

John Lloyd
 James Zwack

Chairman Emeritus

Allan J. West

President and CEO

J. Eric Smith

Contact

552 S Washington St, #109
 Naperville, IL 60540
 630-369-8300
 TREEFund.org

Dear ISA Friends,

As the leaves turn glorious colors across much of the nation this month, we find it a good time for pausing to consider TREE Fund’s roots, which run deep and strong, anchoring us against challenges, both anticipated and unforeseen.

2017 marks the 15th anniversary of the trust agreement signed by esteemed industry titans Allan West and Jerry Morey to create Tree Research and Education Endowment Fund (“TREE Fund”), and we celebrate their foresight in empowering a model that works effectively and efficiently to this day. But our roots go even deeper than that, as TREE Fund is the successor organization to the International Society of Arboriculture Research Trust (ISART, founded in 1976) and the National Arborist Foundation (NAF, 1985), which were established to formalize and streamline the acquisition of knowledge in the fields of arboriculture and urban forestry, and the professional training and certification of businesses and individuals who plan, plant, preserve and protect our crucial urban forests.

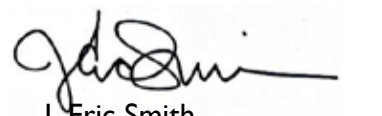
Tens of thousands of individuals and businesses have worked together and pooled their resources since those early organizational days to empower scientific advancements and disseminate findings to tree care professionals, municipalities, urban planners and architects, and to property owners and the general public. The power of such partnerships is profound, and has directly contributed a greater understanding of the role trees play in the urban biome, and their benefits to our shared community health, environment and economy.

Our organizational roots are healthy, and they are anchored in the good and fertile soil of scientific inquiry and exploration. But that does not mean our work is done: just as mature trees with strong roots require attention and care to respond to changing situations, so too does TREE Fund depend on faithful annual support for today’s needs, even as we build endowments to secure our long-term work.

One of the 1976 signatures on the original ISART articles of incorporation read “Hyland R. Johns” – and we are honored that Hyland is joining us as co-Chair of our 15th Anniversary Appeal. Please join us in supporting TREE Fund with a gift of \$150 or whatever you can contribute to commemorate this milestone, empower our staff today, and push for our next decade of transformational operations from a position of financial health and stability. Thank you for your consideration. We appreciate it, and it will make a difference.

With gratitude and best regards,


 Hyland R. Johns
 Founding ISART Trustee


 J. Eric Smith
 TREE Fund President/CEO

FLORIDA CHAPTER TREE CLIMBING CHAMPIONSHIP

WATCH FOR NEW DATE ANNOUNCEMENT



2018 FCTCC Arbor Fair Chair: Julie Iooss, Julie.Iooss@cityoforlando.net
FCTCC Climbing Chair: Adam Jackson, adam.jackson@davey.com

Contact the Committee members above if you have any questions 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 2018.

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.](#)

EXHIBITORS

Join us on Saturday for a full day of exhibiting.

[Click Here for Exhibitor Forms](#)

Growth Rings in the New Year

What would the TREE Fund's 2016 annual growth ring tell you about our nonprofit organism if you peeked inside?

Awarding more and bigger grants

Adding more programs

Opening the circle to new donors

Injecting new revenue streams



TREE FUND
Cultivating Innovation

Donate to the TREE Fund today!

Online: www.treefund.org
By phone: 630-369-8300

By mail: TREE Fund
552 S. Washington St. Ste. 109
Naperville, IL 60540

We're setting the stage for transformative growth in 2017. With your support, growth can ring in the New Year from day one.



THE NEXT GENERATION OF TREE I.V. HAS ARRIVED

F SERIES TREE I.V.



FAST

First ever 120 PSI injection system



FLEXIBLE

1.5L or 650mL - Choose the right bottle for your tree



EFFICIENT

Lightweight and easy turn valves allow for total control



EASY FILL

Quickly add product without removing cap



RELIABLE

Hex PDS Technology distributes product evenly to parallel injection lines



PRODUCTIVE

Maximize output with 6 lines, or use 12 with the built-in expansion system

News From International

ISA Donates \$56,000 to TREE Fund

During the ISA Annual Leadership Workshop, President-elect Pedro Mendes Castro presented to TREE Fund President and CEO J. Eric Smith ISA's 2017-18 donation of \$56,000 for the support of research and its dissemination for healthier trees and more sustainable communities. >> [Read more](#)

ANSI Z133 Updates

As the 2017 revision of the Z133 Standard (Safety Requirements for Arboricultural Operations) is now completed and available for purchase, the new Accredited Standards Committee for the 2022 revision of the Z133 is in the process of being seated. And, check out the sharp, new "Z" logo! >> [Read more](#)

TRAQ Renewal Information

Effective September 15, 2017, the time period for renewal of a Tree Risk Assessment Qualification (TRAQ) begins 18 months prior to the credential holder's expiration date. >> [Read more](#)

Tree Fund Update

In the [October issue of TREE Fund Bulletin](#), read Dr. Whitney Cranshaw's study, *Improving management tools for drippy blight of red oaks*, which was partially funded by a John Z. Duling Grant. Don't miss this bulletin's announcement of a free TREE Fund webinar on November 30 by Dr. Andrew Hirons, *Drought Tolerance in Trees — Improving Tree Selection for Challenging Urban Sites*. And read more about TREE Fund fundraising activities. ❖



JOIN ISA!

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

Benefits for joining International ISA:

- 'Arborist News' and 'Arboriculture & Urban Forestry' publications
- Online access to 'ISA Today' and other ISA electronic news
- Access to members-only online resources
- Discount on annual International ISA Conference and Trade Show
- Discounts on ISA merchandise
- Use of the ISA Member logo
- Access to ISA Job Bank
- ISA member directory listing
- 'True Professionals' program
- Online 'Find a Tree Care Service' tool

International Society of Arboriculture MEMBERSHIP

Benefits for joining the Florida Chapter:

- Quarterly *Florida Arborist* newsletter
- Discounts on Florida Chapter seminars
- Discount on annual Trees Florida Conference and Trade Show
- Discounts on Florida Chapter merchandise
- Florida Chapter Awards program

JOIN BOTH International ISA and the Florida Chapter !

- Receive all benefits listed above PLUS deep discounts on certification and recertification fees



JOIN TODAY!

visit www.FloridaISA.org



OUR TEAM

JOHN HOLZAEPFEL, CA, ACF, CF
(352)238-0917

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

CHARLIE MARCUS, CA
(850)570-5963

JAY VOGEL, CA
(352)238-0458

LEGACY ARBORIST SERVICES

A DIVISION OF NRPS FOCUSED ON MANAGING THE URBAN FOREST

Tree Risk Assessments

Tree Appraisals

Pre-Development Tree
Evaluations

Expert Witness Testimony

On-site Tree Preservation

Arborjet Tree Injections

Natural Areas Management
Planning

Street / Park Tree Inventory

Canopy Analysis

Urban Forest Management
Planning

i-Tree Analysis

Grant & Ordinance Preparation

Educational Workshops

Urban Forestry Outreach &
Promotion

CREATING A LEGACY, GROWING YOUR FUTURE SINCE 1974

www.NRPSforesters.com

2018 Certification Exam Schedule

The FLORIDA CHAPTER of ISA is pleased to announce our 2018 schedule of Certification exams. See the chart below for the site nearest you.

Date	Exam/Class	Location	Time	Proctor or Instructors	Last Date to Register	Cost Member/Nonmem
Jan. 12, 2018	ISA Certified Arborist, Utility Specialist, and Municipal Specialist Exam	Leon County UF-IFAS Exension, Tallahassee, FL	9:00 AM to noon	Stan Rosenthal and TBD	Minimum 12 business days prior	\$170/ \$280

Watch for exams to be scheduled in February and April, 2018. Click [here](#) to view all currently available exams. The ISA Certified Arborist exam is now available at Pearson Testing Centers throughout Florida with an additional test center fee. See the ISA International web site www.isa-arbor.com for more information.

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 International office in Champaign, IL must receive your application and exam fees AT LEAST TWELVE BUSINESS DAYS before the exam date. NO EXCEPTIONS. (The ISA International office is closed New Year’s Eve, New Year’s Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and the day after, and Christmas week.) First-time applicants can apply online at www.isa-arbor.com.

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

Florida Chapter ISA - 2018 Education Schedule

*The schedule below is tentative and subject to changes.

Date	Seminar/Class	Location (s)	Open for Registration
December 8, 2017	An Arborist’s Master Class	Ft. Walton Beach	Register Online
January 10, 2018	Advanced Arboriculture - Wood Decay	Orlando	Register Online
January 12, 2018	Advanced Arboriculture - Wood Decay	Fort Lauderdale	Register Online
February 2018	Outdoor Tree School (re-scheduled from fall 2017)	Orlando	
March 2018	Sustainable Landscapes	Tampa	
April 2018	2-day Arboriculture Short Course with Ed Gilman	Orlando	
May 2018	Plant Health Care	Largo, West Palm Beach	
June 11-13, 2018	Trees Florida 2018	Sanibel Harbour, Fort Myers	

Welcome!

New Florida Chapter Members

Here are the individuals that joined the Florida Chapter during the third quarter of 2017. 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.

Josue Alvarado, Miami, FL
 Kevin Bradberry, Tallahassee, FL
 Stephen Briggs, Champions Gate, FL
 Autumn Briggs, Champions Gate, FL
 Simone Brown, Lakewood Ranch, FL
 Indyli Brown, Sunrise, FL
 Michael Diemer, Howey In The Hills, FL
 Lyzabeth Fiore, Oakland Park, FL
 Caleb Fletcher, Saint Augustine, FL
 Chad Gregg, Orlando, FL
 Aaron Hallett, Fort Lauderdale, FL
 Harold Hansen III, Ridge Manor, FL
 Shannon Harry, Palmetto Bay, FL
 Ben Henry, Fort Myers, FL
 Tylor Hudson, Crawfordville, FL
 David Juchnowicz, Sarasota, FL
 Kevin Kaulbars, Naples, FL
 Esperanza Kelly, Miami, FL
 Kenneth Layel, McLean, VA
 Evon Leach, Satsuma, FL
 Sol Looker, Bunnell, FL
 Shelby McCullough, Orlando, FL

Matthew Melvin, Miami, FL
 Carmen Mendez-Mackesy, Miami, FL
 Christopher Rocklyn, North Miami, FL
 Jacqueline Rodriguez, Miami, FL
 Heath Swihart, Sarasota, FL
 Clinton Thomas, Winter Park, FL
 Laura Tooley, Fort Lauderdale, FL
 John Tutton, Orlando, FL
 Alison Walker, Miami, FL
 William Webb, Deland, FL

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

Letters to the Editor

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

Email your letters to:
jan@floridaisa.org

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

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



An invitation to all members
to attend a

Board of Directors Meeting!

Call 941-342-0153
for specific times and locations

Up-coming 2017 Board Meeting - Dates & Locations
December 14, 2017 - Orlando

Arborist Certification Committee Report

By Norm Easey, Florida Certification Liaison

There is currently one ISA certification exam scheduled in Florida during the fourth quarter of 2017. [Click here to watch for future dates.](#) The ISA Certified Arborist exam is now available at Pearson Testing Centers throughout Florida. See the ISA International website www.isa-arbor.com for more information about the various ISA arborist credentials and how to earn them.

Florida Chapter currently has 1943 Certified Arborists.

The Florida Chapter would like to congratulate the following 19 Florida or Florida Chapter individuals for earning their certifications as: Certified Arborist, and Utility Specialist :

Certified Arborist

Kathryn Bongarzone, Pompano Beach, FL
Joyce Brown, Mount Dora, FL
Clayton Lee Cantley, Tallahassee, FL
Abdias Dalisma, North Lauderdale, FL
Terra Freeman, Saint Augustine, FL
Sherri French, Wesley Chapel, FL
Steven Grant, North Port, FL
Neil Christian Greishaw, Gainesville, FL
Ron Lamneck, Lake Worth, FL
Chase Lunn, Jupiter, FL
Nicholas Myers, Saint Petersburg, FL
Elder Ripper, CLERMONT, FL
Mark Allan Templeton, Naples, FL
Clinton Thomas, Winter Park, FL
Adelle Tucker, Oldsmar, FL
Paul William Urbanek, Jr., Wimauma, FL
Andrea Walker, Pompano Beach, FL
Gregory White, Coral Gables, FL



Utility Specialist

Jerry C. Locke, Sneads, FL

Are you thinking about becoming certified?

[Visit the International ISA website](#)

To access the certification application handbook with further information.

[CLICK HERE TO VIEW EXHIBITOR RULES](#)

EXHIBITOR FORM: Saturday only

Florida Chapter Tree Climbing Championship

See www.floridaisa.org for full details on dates, location and due date.

Fill out and send this Exhibitor Form; the park may require further items.



Please PRINT or TYPE:

Contact Name _____

Company _____

Address _____

City _____ State _____ Zip _____

Phone # _____ EMail Address _____

Please list the names of the individuals (and tee shirt sizes) who will be representing your company (registration is for two representatives per exhibitor booth for **Saturday only**)

Name on badge 1 _____ Tee Shirt size _____

Name on badge 2 _____ Tee Shirt size _____

Lunch preference: Regular lunch Vegetarian lunch

TREE CLIMBING CHAMPIONSHIP & FIELD DAY EXHIBITOR OPPORTUNITIES

Outdoor Exhibitor space for Equipment/Trucks/Displays \$ 400.00
(payable with a monetary payment, appropriate gear or prizes, of combination of both)

- Exhibitor SETUP will be from 8:00 am to 9:00 am on Saturday, the morning of the climbing preliminary event.
- Exhibitor BREAKSOWN is when competition ends or 30 minutes before sunset
- Exhibitors provided space for one (1) large truck or two (2) small pieces of equipment, or an outdoor display.
- Exhibitors will be provided on-site signage and recognition in the Field Day program
- Each park has its individual rules regarding active selling of goods and services; please inquire.

*see Exhibition rules attached to this form or at www.floridaisa.org

I have read the terms and conditions of this application and the attached Florida Chapter ISA Tree Climbing Championship & Field Day Exhibition rules and agree to them accordingly.

Print Name _____ Signature _____ Date _____

MONETARY PAYMENT

Payment: Charge to Visa, MasterCard or Discover Check enclosed (payable to Florida Chapter ISA) Check # _____

Card Number _____ Exp Date _____ CV Code _____

Name on Card _____

Card Billing Address (if different than above) _____

Card Billing City/State/Zip _____

*** IN-KIND EQUIPMENT, GEAR OR PRIZES ***

If you plan to include gear or prizes for the TCC as part of your payment, or in addition to your exhibitor space registration, please describe your item(s) below and include a monetary value (**required**). Please contact the Florida Chapter prior to shipping items: jan@floridaisa.org

MAIL FORM OR ITEMS TO: Florida Chapter ISA - 7853 S Leewynn Court - Sarasota, FL 34240
or SCAN/EMAIL or FAX to: jan@floridaisa.org FAX: 941-342-0463 PHONE: 941-342-0153



[CLICK HERE TO VIEW SPONSOR BENEFITS](#)

SPONSOR FORM: Sponsorship Levels listed on next page
Florida Chapter Tree Climbing Championship

See www.floridaisa.org for full details on dates, location and due date.
 Fill out and send this Sponsor Form.
 Read details regarding sponsor benefit levels.



Please PRINT or TYPE:

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

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 YOUR MONETARY DONATION WITH THIS DONATION 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)

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 YOUR DONATED ITEM(S) WITH THIS DONATION FORM TO:

BY MAIL, FED EX or UPS: Adam Jackson - 2111 Edmands Place - Apopka, FL 32703

CLIMBER ENTRY FORM (Limited to 40 climbers: max of 4 from out-of-state)
Florida Chapter Tree Climbing Championship and Field Day
 See www.floridaisa.org for full details on dates, location and due date.
 Fill out and send **BOTH** this climber form **AND** the climber waiver.



SPACE IS LIMITED/First-come, First-serve! **CHECK DUE DATE ON www.floridaisa.org**

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) _____
 Gender: Male Female
 Lunch preference: Regular lunch Vegetarian lunch

OPTIONAL EDUCATIONAL EVENT

The Outdoor Tree School is being offered on Friday (the day before the climbing event) FREE OF CHARGE to all registered competitors. Space may be limited - we cannot always guarantee available space.
See www.floridaisa.org for location and time.
 Registration fees for non-competitors to attend class: \$55-Florida Chapter Member or \$65-Nonmember)

- YES! You plan to attend the Outdoor Tree School on Friday for free as a climber.
 Regular lunch Vegetarian lunch
- NO, you do NOT plan to attend the Outdoor Tree School.

REGISTRATION FEES

- \$75 - Florida Chapter ISA member price
- \$125 - nonmember price **includes membership in Florida Chapter ISA for 1 year
- 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, 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, the Climber Waiver form and payment to:

MAIL: Florida Chapter ISA ♦ 7853 S Leewynn Court ♦ Sarasota, FL 34240
 PHONE: 941-342-0153 FAX: 941-342-0463
 EMAIL: jan@floridaisa.org



**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, its officers, 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 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 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**

JUDGE & VOLUNTEER FORM
Florida Chapter Tree Climbing Championship

See www.floridaisa.org for full details on dates, location and due date.
 Fill out and send **BOTH** this volunteer form **AND** the volunteer waiver.



Please PRINT or TYPE:

Name _____

Company _____

Address _____

City _____ State _____ Zip _____

Phone # (_____) _____ T-Shirt size (volunteer early so we can provide your requested size) _____

E-Mail Address (for contacting) _____

Allergies? Yes No Please list if yes: _____

Have you ever volunteered at any TCC event before? Yes No

List year(s): _____

Are you First Aid/CPR Certified? Yes No

Do you have experience as a gear check technician? Yes No

List any specific qualifications or past experience: _____

Lunch preference: Regular lunch Vegetarian lunch

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



**FC-TCC TREE CLIMBING CHAMPIONSHIP
VOLUNTEER WAIVER 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, 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, its officers, 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 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 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 volunteer waiver form
along with the volunteer registration form to:
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.



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