

## Fall 2007

### In This Issue:

|   |    |
|---|----|
| Boron Deficiency In Palms   | 1  |
| President's Message   | 2  |
| In the News   | 3  |
| ISA Research Award:<br>Dr. Ed Gilman  | 8  |
| Pruning Pointers  | 10 |
| Why Topping Hurts Arborists   | 12 |
| Tree Fund Update  | 12 |
| Crime Prevention Through<br>Environmental Design                                  | 14 |
| Florida Chapter<br>Board Updates  | 20 |
| Right Tree Right Place:<br>It's The Law in Florida                                | 20 |
| CTLA's Role in Revising<br>The Guide to Plant Appraisal                           | 16 |
| Florida Chapter<br>Education Schedule   | 18 |
| 2007 Florida ISA TCC  | 21 |
| New Florida Chapter<br>Members  | 22 |
| 2007 Certification Exam<br>Schedule   | 23 |
| Urban Forests, Stormwater<br>Runoff, and Water Quality<br>English/Spanish Version | 24 |
| SAF Approves Urban Forestry<br>Accreditation Standard                             | 27 |
| Trees Florida 2007<br>- Awards  | 28 |
| Arborist Certification<br>Committee Report  | 31 |

## Boron Deficiency in Palms

By Dr. Timothy K. Broschat

Professor, Environmental Horticulture Department  
University of Florida

*This document is 6 of a 6 part series covering nutritional deficiencies in palms.  
(Nitrogen Deficiency in Summer 2006, Potassium Deficiency in Fall 2006, Magnesium Deficiency in Winter  
2006, Iron Deficiency in Spring 2007 and Manganese Deficiency in Summer 2007).*

### Symptoms

Boron (B) deficiency causes a wide array of symptoms, not only among species of palms, but also within a single species. Symptoms always occur on newly emerging leaves, and remain visible on these leaves as they mature and are replaced by younger leaves. One of the earliest symptoms of B deficiency on *Dypsis lutescens* (areca palm) and *Syagrus romanzoffiana* (queen palm) is transverse translucent streaking on the leaflets. In many species including *Cocos nucifera* (coconut palm), *Elaeis guineensis* (African oil palm), and *S. romanzoffiana*, mild B deficiency is manifested as sharply bent leaflet tips, commonly called "hookleaf". These sharp leaflet hooks are quite rigid and cannot be straightened out without tearing the leaflets. In some species, these "hooks" drop off.

Another symptom associated with chronic B deficiency in *S. romanzoffiana* is the production of weak, narrow leaflets towards the tips of newly emerging leaves. These leaflets often drop off, leaving the rachis tip devoid of leaflets. Boron deficiency can be very transient in nature, often affecting a developing leaf primordium for a very short period of time (e.g., 1 to 2 days). This temporary shortage of B can cause necrosis (death) of the primordial spear leaf for a distance of about 1 to 2 cm. When such leaves eventually expand, this "point" necrosis affects the tips of all leaflets intersected by that necrotic point, the net result being the appearance of a blunt, triangular truncation of the leaf tip). This pattern can be repeated as many as 3 times during the development of a single leaf of *Cocos nucifera* (about 5 weeks).

One of the most common symptoms of B deficiency is the failure of newly emerging spear leaves to open normally. They may be tightly fused throughout their entire length, or the fusion can be restricted to basal or distal parts of the spear leaf. In a chronic state, multiple unopened spear leaves may be visible at the apex of the canopy. Perhaps the most unusual symptoms of chronic B deficiency is the tendency for the entire crown to bend in one direction. This is one form of epinasty that can also cause twisting of petioles and leaves or sharp bends in the petiole, resulting in a single new leaf growing downward along the trunk. These epinastic symptoms are believed to be caused by a B deficiency-induced decrease in IAA oxidase activity and therefore excessive auxin concentrations within the leaves.

*Boron Deficiency continued on page 7*

## A Message From the President



*President Rick Joyce*

Welcome to the dawg days of August. In many ways, August is a month of energy. The heat and rain driven humidity is really cooking. Those powerful summer squalls unleash their fury of lightning and booming thunder. Many plants are growing profusely, responding to rainfall and preparing for fall set of seed. While some things slow down in the heat, other things crank up. The rainfall has sure been welcome.

My wife Cheryl is a registered nurse (RN) and has always, year after year, sends the summer message to anyone she knows and I am passing it to you. Be careful out there. Summer heat, direct sun and lightning can be a hazard to your health. Cheryl has always promoted the drinking of water. It seems simple enough. She points out that water, not soda, tea, sports drinks, juice or ale, is needed to hydrate and lubricate the body. Those others drinks can provide required electrolytes and be good for you, but you should drink simple, unadulterated water for basic health maintenance. Are you drinking enough?

Did you go to Trees Florida 2007? What a great event it was. If you did not make it this year, be sure you plan for next year. The knowledge and networking for any of us who work with trees, cannot be compared. My thanks again go out to Dr. Ed Gilman for his hard work in securing a nothing short of impressive group of presenters. The depth and range of tree related topics provided at Trees Florida is just outstanding. Thank you to the sponsors, committee members and attendees who make this a very special event.

My congratulations and appreciation is also extended to all who participated or supported in the Florida Tree Climbing Championship (TCC) at Trees Florida 2007. These climbers are very special stewards of Florida's trees. I must acknowledge the outstanding performance of Colin Kelly



*Participates & Judges in the Florida Chapter Tree Climbing Championship (FCTCC) at Trees Florida 2007*

and his representation of Florida ISA at the International TCC. Sincere thanks are extended to Florida TCC leader Kris Stoltz of Stiles Landscape. Lastly, the ongoing dedication and contribution by Past President of Florida ISA Bruce Smith and his wife Lita from Arborscape, Inc is a great thing. At the July 2007 International TCC in Hawaii, Bruce served and represented Florida ISA as the Head Judge and Lita served as Head Scorer. Bruce was even interviewed by the Hawaiian newspaper, the Star Bulletin. He said good things about Florida trees. How cool is that!

Did I say cool? Oh baby, cool is coming. As you look in your vehicles rear view mirror... the Florida specialty license plate "Trees are cool.com" is closer than it appears! This very attractive license tag will be coming soon to a tag office near you this winter. This is a truly exciting, long-term investment in the future of trees in Florida. Don't forget to tell, or better yet, get your Mom, cousins, friends and anyone else who licenses a vehicle in Florida to tag up.

And lastly... but not least importantly, I leave you with a couple of thought provoking quotations that I believe directly apply to the care of trees.

"We are what we repeatedly do. Excellence, then, is not an act, but a habit." Aristotle

"Health, south wind, books, old trees, a boat, a friend."  
Ralph Waldo Emerson

"I said I had the tree. It wasn't true. The opposite was true. The tree had me. The minute it was left with me alone, it caught me up as if I were the fish. And it the fishpole." Robert Frost ■

# In the News

## Lethal Yellowing on Phoenix Palms?

Dr. Monica Elliot, Palm Pathology Specialist, at the University of Florida reported that a new disease similar to Lethal Yellowing has been found in Hillsborough County. It is affecting Phoenix palms, particularly Canary Island Date Palms so far. It is caused by a phytoplasma, and can only be properly diagnosed by DNA samples. It causes decline from the lower leaves upwards and eventually kills the spear leaf. Rotting flowering parts cause a fruit drop. "The cases which I have seen look similar to rachis blight or fusarium wilt, but the symptoms are not one sided, as these diseases usually are", said Dr. Elliot.

Dr. Elliot further reported that, at this point, this information seems to suggest a strong similarity to Lethal Yellowing, which we do not have in Hillsborough County. Lethal Yellowing is spread by an insect which can not overwinter in Tampa. DNA samples have confirmed that the phytoplasma causing this new disease, which is being called the Texas Phoenix decline, is not the same as that causing Lethal Yellowing.

Dr. Elliot will provide more info as she receives it she also hopes to put together a fact sheet soon. In the mean time it is assumed that management will likely be similar to that of Lethal Yellowing. Take a look at the comments of Dr. Elliott, concerning management of Lethal Yellowing and check out the publication on Lethal Yellowing for more information.

"Regarding control methods, we assume that the antibiotic oxytetracycline HCl will be as

effective on this phytoplasma as on the Lethal Yellowing phytoplasma. As are closely related genetically - i.e., they belong to the same sub-group of phytoplasmas", said Dr. Elliot. There is only one company that supplies this material, which is an EPA registered product only for use in Florida. The company web site is <http://www.palmtreesaver.com/index.htm> The UF document on Lethal Yellowing can be found at <http://edis.ifas.ufl.edu/PP146>.

The information about LY will be the same as for the phytoplasma infecting Phoenix palms on the west coast of Florida. The primary difference is likely going to be the insect vector - i.e., the insect vector for Texas Phoenix Decline phytoplasma is more than likely different from the one that vectors Lethal Yellowing. The other difference

*In the News continued on page 4*

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mandreu@ufl.edu

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FUFC Rep.

Janet Maland  
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Marshall Tree Service  
michael@marshalltrees.com

**Way Hoyt**  
At Large

Tree Trimmers & Associates  
wayhoyt@aol.com

**Dr. Ed Gilman**  
At Large

University of Florida - IFAS  
Dept. of Environmental Horticulture  
egilman@ufl.edu

**Ron Litts**  
At Large

Outside Interests  
redraz@usa.com

**Administration**  
**Norm Easey**  
Executive Director

**Monique Schalk**  
Administration Assistant

**Patty Morrison**  
Trees Florida Coordinator

Florida Chapter ISA  
Phone: (941) 342-0153  
FloridaISA@comcast.net

**Newsletter Editorial Committee**

**Dr. Michael Andreu**  
Assistant Professor of Forest Resources, UF  
**Norm Easey**  
**Monique Schalk**  
FloridaISA@comcast.net

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## In the News, continued

*In the News continued from page 3*

will be the host range, as we assume the host range will be different between these two phytoplasmas (perhaps because of the vectors). Injections of the antibiotic, are best used as a preventive action to protect the Canary Island date palms (and any *Phoenix dactylifera* or *Phoenix sylvestris* palm) from infection. It can be used as a curative material, but is only successful if the disease is caught in the early phases. In the case of Canary Island date palms, if the spear leaf has already died, there is no point to inject with the antibiotic as the apical meristem (bud) is already dead.

### **No Red Palm Mite In Florida — Yet**

Surveys of Florida nurseries searching for red palm mite were completed in May and the pest, *Raoiella indica*, was not found. But officials feel it may be only a matter of time before this mite makes the leap from the Caribbean to the U.S. mainland. Since its first detection in Martinique 3 years ago, red palm mite has spread throughout the Caribbean. It's been called the biggest mite explosion ever observed in the Americas. The pest, which feeds on palms, bananas, heliconias and other ornamentals, is such a threat that some have said its presence would ruin coconut palm production in the state. Red palm mite can spread via wind so officials fear the pest could arrive in Florida during the 2007 hurricane season. Source NMPRO.

### **Echinacea:**

#### **Is it really good for you?**

The garden plant/herbal remedy Echinacea might just be getting a boost of popularity. Researchers have shown that the plant actually does help people fight the common cold. In a study conducted by Univ. of Conn. School of Pharmacy that involved 1,600 people, Echinacea decreased the odds of developing the common cold by 58%. It also reduced the duration of colds by 1.4 days. The research was led by assistant professor Craig Coleman and published in the journal *Lancet: Infectious Diseases*. Source NMPRO.

### **Chemical Could Attract Beneficial Insects**

USDA researchers discovered a compound that attracts lacewings, which are naturally occurring beneficial insects that could assist growers in pest-control programs. The product is derived from catnip oil. Scientists describe it

as lacewing "cologne." It's potent -- just 25 milligrams is sufficient to treat an acre of land. Results from a 2-year field study show the compound attracts both male and female lacewings, which later produce another generation of beneficial predators. Chemist Kamal Chauhan is working with Sterling International in Spokane, Wash., to commercialize formulations that attract specific beneficial insects. Source NMPRO

### **English-Only Initiatives Gain Momentum**

English-only workplaces garnered more support after the Senate Appropriations Committee passed legislation to "prevent the U.S. Equal Employment Opportunity Commission from bringing new lawsuits against companies that require that their employees speak English." The EEOC specifies that business owners may develop an English (as the main language) policy because of a safety concern (in cases preventing an emergency situation), a "legitimate business justification" between co-workers and customers or for nondiscriminatory reasons. An English-only policy should not, however, be applied to employee work breaks. Source NMPRO

### **Immigration and Border Security Reforms**

Recently, the White House announced its immigration and border security reforms. If an employer receives a Social Security no-match letter, the company has 90 days to explain the discrepancies. If the discrepancies can't be resolved, the employee must be fired. If an employer fails to adhere to the new rules, civil fines or criminal investigations are possible. The no-match rule is expected to take effect Sept. 10. The White House pledged to streamline the H-2A program, but gave no specifics. To speed up H-2B processing, the Dept. of Labor will move from a government-certified system to an employer-attestation system. Source NMPRO

### **Consumers:**

#### **Businesses Must Preserve Environment**

A survey conducted by Cone Consumer Environmental Survey showed that America is becoming more environmentally conscious. The May poll showed that 88% of consumers are as or more interested in the environment as they were a year ago. An overwhelming 93% believe American businesses have an obligation to preserve the environment. Environmentalism is also driving purchases.

*In the News continued on next page*

CCES reported 63% of consumers would pay more for environmentally friendly products that are “readily available” where they shop, and 72% would pay more if those products would save them money long term.

### Broken Records and Familiar Champions in 2007 ITCC

The winners of this year’s International Tree Climbing Championships might seem familiar to many. For his seventh time, Bernd Strasser of the Germany Chapter took home the title of world champion. In the women’s division, Chrissy Spence, New Zealand Chapter, won her second Master’s Challenge title (2005).

Competing against Strasser in the men’s Master’s Challenge were (in order of final placement) Mark Chisholm, New Jersey Chapter; Brett Hamlin, Australia Chapter; and Todd Kramer, Illinois Chapter. Spence’s challengers included two



*Chrissy Spence and Bernd Strasser took home the titles of Master’s Challenge champion again.*

past champions Kiah Martin, Australia Chapter (2003); and Kathy Holzer, Pacific Northwest Chapter (2004), placing respectively.

The winner’s of the head-to-head secured footlock competitions were also the winners of the preliminary event. Both broke world records for their divisions. 2006 ITCC Champion Elena O’Neill, New Zealand Chapter, climbed 40’ in 18.52 seconds, shaving 2 seconds off the previous record, then broke her own record again during the head-to-head with a time of 17.74. Chisholm, two-time champion and past record holder, reclaimed the record by climbing 50’ in 13.80 seconds.

Climbers had beautiful weather and were surrounded by an amazing atmosphere at the University of Hawaii – Manoa Campus and the lawn of the Royal Hawaiian.

### Intl’ Board Votes in Two New Executive Committee Members

With Lauren Lanphear taking over the role of ISA president and Melinda Jones moving into the position of president-elect, two board vice presidents seats were up for election at this year’s ISA Annual Conference and Trade Show in Honolulu, Hawaii.



*The newest EC members danced in with the current members during conference’s Opening Ceremony.*

Four board directors were nominated for these positions including Dave Scharfenberger, Wisconsin Chapter; and D’Arcy Schenk, Prairie Chapter, Bill Fountain, Kentucky Chapter; and Mike Walterscheidt, Texas Chapter.

Scharfenberger and Fountain won the election and will fill the two vice president seats. Fountain’s term will end July 2009 and Scharfenberger’s term will end July 2010.

ISA wishes all the officers the best of luck in their new positions!

### Circling Roots Causing Long-Term Problems

Dr. Ed Gilman, Professor at the University of Florida, recently reported that his research has determined that many trees fail in the landscape and during storms as a result of circling roots that were created in containers. Dr. Gilman further reported that innovative growers are now root pruning each time trees are potted from one container size to another, or when field growers plant container trees into the field. Root systems are sliced deeply along the sides, and kinked and circling roots on top are removed. This reduces the chances of producing culls, and reduces the likelihood that circling roots will cause problems later in the landscape. ■

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*Boron Deficiency continued from page 1*

Boron deficiency in its acute form produces yet other symptoms. Often leaves emerge greatly reduced in size and crumpled in a corrugated fashion (accordion-leaf). Palms may grow out of these symptoms or the deficiency can kill the meristem.

Boron-deficient palms often abort their fruits prematurely and inflorescences may have extensive necrosis near their tips. These symptoms are very similar to those of lethal yellowing in species affected by that disease. The calyx end of fallen coconuts from LY-infected *Cocos nucifera* will be blackened, whereas coconuts from B-deficient trees will not have this blackened end.

## Causes

Boron deficiency is caused by insufficient B in the soil. Boron is readily leached through most soils, with a single heavy rain event temporarily leaching most available B out of the root zone. When this leaching stops, B released from decomposing organic matter will again provide adequate B for normal palm growth in most cases.

## Occurrence

Boron deficiency is very widespread on palms growing in wet climates throughout the world, but can also occur in desert situations. It was considered rather uncommon in Florida, but for reasons not yet understood, has become a widespread and serious problem on landscape palms throughout the state in recent years. Abnormally high rainfall associated with the 4 hurricanes that hit Florida in 2004 are thought to be one factor. Use of fertilizers that contain no B is an obvious cause, but B deficiency can occur in properly fertilized palms as well. This is most likely due to the exclusive use of water-soluble B sources in blended palm fertilizers that are highly susceptible to leaching. Boron deficiency has been observed in container-grown palms, but it is rather rare in this environment.

## Diagnostic Techniques

Boron deficiency symptoms are quite distinctive and are usually sufficient for diagnosis by themselves. Manganese deficiency in *Cocos nucifera* produces symptoms similar to those of B deficiency, but no other common deficiency produces symptoms that could be confused with those of B deficiency.

Because B deficiency is so transient in nature, the element is immobile within the palm (cannot move from one leaf to another), and deficiencies affect only leaf primordia developing within the bud area, leaf analysis is not particularly useful. Leaf analysis tells you the B status of the single leaf that you sampled, but that is not the current B status of the newly developing leaves within the bud area. Rather, it is the B status of the palm 4 or 5 months ago when the sampled leaf itself was in the developmental stage within the bud. The B status of the palm is likely to have changed considerably one way or another during 4 or 5 months since the affected leaf became old enough to sample. Thus, leaf analysis, or even leaf symptoms, unless the deficiency is chronic (regularly occurring), cannot tell you about the current B status of a palm. Similarly, soil analysis is not recommended for diagnosis of B deficiency.

## Management

Fertilization to correct or prevent B deficiency in palms is problematic at this time. The only B sources currently used on palms are water soluble sodium borates. In high rainfall climates such as that of Florida, an application of water-soluble B can be completely leached out of the root zone with a single heavy rain shower. Slow release B fertilizers are an obvious solution to this problem, but rates have yet to be determined for palms. Several slow release B fertilizers being tested at the University of Florida for their release characteristics appear to release slowly over a period of at least one year. Thus regular use of these products could result in a build-up of B within the soil to potentially toxic levels. Unfortunately, the difference between deficiency and toxicity levels of B within palms is rather small and correction of a B toxicity caused by over-application of slow-release B fertilizers could be very difficult.

Current recommendations for correcting B deficiencies in palms are intentionally conservative because of the potential for toxicity. Dissolve about 4 oz of Solubor or Borax in 5 gallons of water and drench this into the soil under the palm canopy. Do not repeat this for at least 5 months, since it will take this long to see the results of the first application. ■



## Dr. Ed Gilman Receives International Society of Arboriculture's Research Award



*Dr. Ed Gilman*

Ed Gilman has been working with trees for most of his life. He's spent the last 21 years researching tree production, pruning and protection. Because of his efforts, the International Society of Arboriculture recognized Gilman with the 2007 L.C.

Chadwick Award for Arboricultural Research on July 30 in Honolulu, Hawaii. This award is granted to individuals in recognition of research that has contributed valuable information to the arboriculture profession.

"This is a humbling award that reflects the quality of my staff," said Gilman, University of Florida environmental horticulture professor.

Gilman has conducted more than 60 published, peer-reviewed research studies. These have contributed to widespread development and improvement of tree growth in urban and suburban areas. He has also authored six books about trees, shrubs and landscapes. Gilman's Web site (<http://hort.ufl.edu/woody>) has more than 9,000 pages related to trees and shrubs. The site also provides more than 10,000 photos and illustrations on tree management.

Gilman's current research focuses on tree response during strong winds. Recent hurricanes have increased interest in tree sturdiness and safety, as well as prompted some homeowners to panic and cut down otherwise healthy trees. ■

## Letters to the Editor

*Please let us know what you think about Florida Arborist articles, about your Florida Chapter or about tree issues in general. E-mail your thoughts to [Floridaisa@comcast.net](mailto:Floridaisa@comcast.net) or mail to:*

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



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# Pruning Pointers

## Proper structural pruning in the landscape will result in safer, longer-lasting trees.

*By D. Scott Shultz*

Trees grow in many directions in the landscape. As they get taller and wider, they brush up against buildings and block the view of signs and other important vistas. Sometimes, branches grow lower and droop downwards over sidewalks and streets. It is no wonder many tree maintenance companies are consumed with clearance issues. This leaves little time to address other pruning opportunities, such as structural pruning.

Structural pruning is looking at the interior branching patterns of the tree and making cuts to optimize branch strength. Stronger branches help minimize breakage, thus making trees safer and longer lived. Structural pruning focuses on good branch-to-trunk architecture. These unions are the building blocks of the canopy of the tree. If a branch breaks off at the trunk, decay can proceed down into the trunk of the tree and lead to its removal.

### Aspect Ratio

Good branch-to-trunk architecture consists of a small diameter branch relative to the diameter of the trunk (called the aspect ratio). For example, a 3-inch branch coming off a 10-inch trunk would have an aspect ratio of 30%. The goal on any branch-to-trunk attachment is to have an aspect ratio of less than 50%.

When the branch is smaller in size compared to the trunk, the union is stronger. This strength is derived from how the tree expands in girth every spring. The branch expands in



*Photo courtesy of Ed Gilman, University of Florida*

diameter and lays down branch wood lower on the trunk of the tree. The trunk increases in diameter next and wraps around this branch wood. The branch is “laminated” to the trunk by these alternating wood layers each year. When the branch is the same size as the trunk, this laminating process usually does not occur and there is a weaker union.

### Branch Protection Zone

Another feature of good branch-to-trunk architecture is the presence of the branch protection zone. According to Edward F. Gilman and Sharon J. Lily’s *Tree Pruning – Best Management Practices*, the branch protection zone is “a thin zone of starch-rich tissue at the base of a branch into which chemicals are deposited to retard the spread of discoloration and decay.” This zone helps to keep decay out of the trunk. If the trunk starts to decay, this can severely diminish its strength and lead to the removal of the tree. The branch protection zone tends to form in branches with a small aspect ratio.

### Included Bark

Another feature of good branch-to-trunk architecture is the absence of included bark. Included bark is “bark pinched between two stems or between a branch and trunk preventing formation of a typical branch bark ridge; an indication of a weak union” according to Gilman and Lily. Included bark reduces the amount of attachment of the branch to the trunk. This can lead to the branch splitting off of the trunk due to a weak attachment.

### Recognize Branching Patterns

Another important part of structural pruning is recognizing the branch pattern along the trunk and throughout the canopy. Branches can be codominant or aggressive.

Codominant stems are relatively the same size as the trunk. In fact, oftentimes it is hard to distinguish which one is the trunk or should be the trunk. You can have several codominant stems competing for the apical dominance of the tree. Ideally, you want one trunk in the center of the tree. The codominant stems have a high aspect ratio (90% to 100%). They usually do not have a branch protection zone and can be vulnerable to included bark.

Aggressive branches usually have a 50% to 80% aspect ratio. They either grow aggressively sideways or turn upward parallel to the trunk. When they grow sideways, they often

*Pruning Pointers continued on next page*

stick outside the canopy and make the tree unbalanced. They also can have excessive end weight and split out from the tree. Or, if they are low in the canopy, they may have to be removed due to clearance issues and can make large pruning wounds on the trunk. When they turn upwards, they crowd out the normal growth of branches further up the trunk of the tree.

Both branch types are not structurally sound for the tree. Ideally, branches should have a small aspect ratio with scaffold branches evenly, alternately, and spirally spaced up and down the trunk of the tree.

### Shortening Branches

Once you have learned to recognize codominant stems and aggressive branches, one technique used to correct their growth is to simply shorten them (also known as reduction or dropcrotch pruning).

To shorten a branch, start at the outer edge of the branch and drop down to a crotch or another smaller branch that is at least one-third the diameter of the branch you are removing to make your cut. This effectively slows the growth of the branch by removing food-producing foliage from the branch.

Another technique to shorten a branch is to double-drop-crotch prune. This is reducing the branch in two different places by picking another lateral on the remaining branch and making a cut. This helps when you absolutely want to slow down a codominant or aggressive branch. Shortening also allows other branches to grow into the space once occupied by the codominant stem or aggressive branch.

### Timing, Amount, And Frequency

If they are healthy, most trees can be pruned year-round in warmer climates. The optimal time is when the tree is dormant. The least optimal time is  
*Pruning Pointers continued on page 12*




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*Pruning Pointers continued from page 11*

during spring flush, when so much of the tree's energy is being consumed producing new leaves, shoots, and roots.

In general, prune no more than 25% of the foliage in any one year. Make fewer, larger cuts to maximize your efforts. Younger trees may be able to exceed this amount. Mature trees should be less.

Trees can be structurally pruned every year if you do not exceed the 25%- foliage-removal goal. This frequency will depend largely on how much the tree has been structurally pruned before. Young trees that have been structurally pruned will require less structural pruning in the future.

## Kill Two Birds With One Stone

There will always be the immediate concern of clearance issues with trees. When making clearance cuts, take a look at the internal structure of the tree. Perhaps by making two or three structural cuts, you can also solve your clearance issues. Remember, structural pruning improves the long-term health of the tree and reduces its risk in the landscape. ■

## TREE Fund Update

Thanks to the generosity of ISA members and many others, 70-plus cyclists and corporate sponsors have raised more than \$333,000 in the 2007 TREE Fund Tour des Trees "Shade Crusade" in Northern California. Riders were finished pedaling Thursday, July 26 in San Jose. Because donations are still rolling in, final totals won't be available until late August. In addition to extensive TV, radio, and newspaper coverage, the riders were proud to plant 15 trees in public awareness events throughout the tour, including five trees in Honolulu, Hawaii during the first days of the ISA Annual Conference and Trade Show.

Overall, our fundraising events in Hawaii were great. The golf outing benefiting the TREE Fund was challenging, but fun and successful. As more than 250 attendees can attest, the Raise Your Hand for Research Gala Auction was a fabulous evening of food, drink, and lively bidding in the Royal Hawaiian Hotel. Over \$65,000 in silent and live auction proceeds, plus sponsorships, will be a huge boost to the Hyland Johns grant program. From the TREE Fund staff and board, a great big "Mahalo!" to all volunteers, donors, bidders, sponsors, and friends who helped make these events so successful. ■

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## Why Topping Hurts Arborists

*By Sharon Lilly, ISA Director of Educational Goods & Services*

"Why Topping Hurts Trees" is ISA's most popular consumer education brochure, selling tens of thousands per year. Arborists buy them in bulk quantities to give to customers who think they want their trees topped. Home owners sometimes feel that their trees have become too large for their property, and people fear that tall trees may pose a hazard to their property.

Arborists often find themselves trying to convince their clients that topping trees can make them more hazardous in the future, can lead to internal decay, will stress the trees through starvation, and makes them downright unsightly. "Why Topping Hurts Trees" can help explain these problems, with the full weight and credibility of the International Society of Arboriculture behind the message.

I'd be willing to bet that every arborist reading this column already knows these things and probably has experience in educating home owners about the potential harm of topping

*Why Topping Hurts Arborists continued on next page*

trees. Explaining the perils of tree topping to homeowners is one thing, but explaining the perils to “tree experts” is something else. I frequently speak at conferences, and one of my favorite topics is pruning. I’m often approached afterward by arborists, or others engaged in tree work, with a common question:

What can I say to clients who still insist on having their tree topped, even after I’ve explained why not to do it? Sometimes they tell me that if I don’t do it, they’ll find someone who will.

The most emphatic and personally satisfying answer is a clear, “Your reputation is worth more than that one job. Walk away from it.” That answer, however, does not provide much of a foundation to build upon- and might not be enough for someone struggling to build a business.

Actually, the question is made a bit more complex by the things I preach in my seminars. I like to say that, most of the time, we prune trees for “people reasons”- to reduce potential hazards, clear street signs and structures, allow more sunlight to the grass or under story plants, or to improve aesthetics. There are some reasons to prune trees to improve tree health, but they don’t apply to most of the pruning performed on a daily basis. In fact, much of the pruning we do compromises tree health by reducing photosynthetic capacity and inflicting wounds. Nevertheless, if trees and people are to coexist in an urban environment, arborists will always play a role in making the compromises between tree health and societal functions. Our recommendations should be founded on the best research-based information available.

“So,” I am asked, “if professional pruning generally compromises tree health, and we prune trees for people reasons, why not give the clients what they ask?” In response, I ask the arborists if they understand how topping can make trees more prone to failure in the future (decay, weakly attached sprouts, etc.). The answer is almost always yes. Then I ask them to imagine the following scenario.

Against your better judgment, you acquiesce and top your client’s silver maple tree. Your client is satisfied and pays you promptly. Three years later, a portion of the tree fails in a windstorm and kills the neighbor’s child. The neighbor files suit against the client, against your company and against you personally. Attorneys are hired and begin to build their cases. They easily discover that our profession has A300 standards

and best management practices that clearly state that topping is an unacceptable practice. The Arborists’ Certification Study Guide and the Introduction to Arboriculture CD-ROMs explain in detail why topping is bad for trees. Even ISA’s consumer education brochure, “Why Topping Hurts Trees” starts off with, “Topping is perhaps the most harmful tree pruning practice known”.

The next step for the attorneys is to get expert witnesses. Lo and behold, professional arborists line up to testify that (1) topping is an unacceptable practice, (2) any reasonable and minimally educated arborist knows this, (3) topping can make a tree more prone to failure in the future, and--the nail in the coffin, (4) topping this particular tree could be considered a proximal cause to its failure.

This is a grim scenario, but it’s plausible and similar to some very real cases.

As professional arborists, we have an obligation to conduct ourselves in a professional manner and adhere to the standards and best management practices of our profession. For most Certified Arborists, the knowledge that topping can hurt trees is enough for them to steer away from the practice. Perhaps for others, understanding that topping can lead to the loss of life, the loss of their business or a possible criminal negligence conviction will convince them to stop the practice.

I look forward to a day when a true commitment to safe, healthy trees guides how arborists practice their trade. Moreover, I look forward to a day when professional ethics overcome the desire to make a few dollars by performing substandard practices.

As I preach to the choir--those brilliant arborists who are so dedicated to their profession that they actually read my column--I wish to add a final thought. We must resist the urge to condemn and banish the tree toppers. The condemnation path hasn’t worked; it has further alienated the perpetrators, and, with every tree they top, they continue to mar our professional image. Instead, we must educate them and bring them into our ranks. If it isn’t enough to know how topping hurts trees, perhaps the next lesson is how topping hurts arborists. ■

## Crime Prevention Through Environmental Design

The following definition comes from a training manual on CPTED produced by the Virginia Crime Prevention Association (VCPA).

*The proper design and effective use of the built environment can lead to a reduction in the incidence and fear of crime and an improvement in the quality of life.*

### What Role Can Landscapes Play In Restoring Order?

At first it would seem that the role of landscapes in maintaining order would be minimal. But, since disorder and the fear of crime precedes crime, landscapes can be particularly useful since properly designed and maintained landscapes improve property value, demonstrate that the property owner cares and can positively influence the perception of the public. Compared to other crime prevention approaches, landscaping is inexpensive and simple. Perhaps the best reason to promote the use of landscaping in crime prevention is that

it provides an opportunity for citizens to actively participate in crime prevention. Few crime prevention approaches are successful without the involvement of citizens. Landscaping may be the vehicle to help reintroduce citizens to that most important civic duty – looking out for their own safety and personal property. Landscapes can help people define their space. Proper tree selection is critical in making areas more comfortable and thus, more likely to be occupied.

Citizens are more likely to claim ownership and utilize spaces when they “want” to be in that particular space. Therefore, it’s important that these spaces are recognized as being pleasing and comfortable by the intended users. Well designed and maintained landscapes have proven themselves very capable of providing attractive and inviting outdoor spaces. Limited landscaping resources can be concentrated in certain areas deemed strategically important by crime prevention specialists

Deciduous trees cool areas inside and outside of buildings. Landscaping can help to block or channel away unwanted noise. In addition to creating more pleasing sounds (leaves

*Crime Prevention continued on next page*

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rustling and bird songs). Naturally, plants can be selected that produce blooms or present outstanding colors of foliage throughout the growing season. The ability of plants to generate pleasing smells may be particularly useful to mask unwanted odors (i.e. public restrooms and dumpsters).

The "roots" of CPTED and urban forestry can be traced to the mid-1960s when President Johnson initiated a number of commissions and taskforces to study urban issues. Since that time both movements have remained largely unappreciated and misunderstood. CPTED and Urban Forestry can both claim to be the mayor's greatest asset in that they improve the health, safety, and well-being of the community. CPTED and urban forestry both need to be highly visible in order to positively influence the public's perception of their environment. Visibility is a problem that urban forests and CPTED share. The public is often unaware of the benefits being provided by urban forests and crime prevention measures. Often these are the first programs to be cut when funding problems occur in a municipality. Only in the absence of these programs does the community realize the benefits that urban forests and crime prevention provide. CPTED and urban forestry share the attractive potential of being very cost effective. There is also a significant savings

in property loss/damage and the personnel involved in the arrest and incarceration every time a crime doesn't occur thanks to CPTED. Because of the close relationship between CPTED and urban forests, each benefits from the success of the other resulting in a synergistic relationship. Reducing crime and improving landscaping in commercial districts increases property values and attracts business - two key components of urbanization.

Potential conflicts will certainly occur between crime prevention programs and tree planting organizations if representatives from each side fail to work together. However, the goals should be the same - matching the right tree to a particular site goes a long way to helping the tree reach its ultimate height and shape. When the tree is healthy and mature it can better fulfill its role in the urban forest and the crime prevention strategy for that particular area.

This is a partial copy of an article published by Joseph Murray and can be found at

<http://www1.brcc.edu/murray/research/cpted/>

Another article on this subject can be found

Is There A Role For Trees In Crime Prevention? in the ISA's Arborist News (August, 2006) by Nancy Khurana. ■

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## **CTLA's Role in Revising *The Guide to Plant Appraisal***

The Council of Tree and Landscape Appraisers (CTLA) is in the midst of revising the Guide for Plant Appraisal. This article discusses the impetus behind the 10th Edition, highlights some of the proposed features of the text, and describes the process the Council is following.

### **How Did We Get Here?**

Plant appraisal has come a long ways. So has the Guide for Plant Appraisal. Prior to the 8th Edition (1992), the Guide looked at trees mainly as things having intrinsic value, more or less independent of their contribution to the market value of the property on which they sit. Formulaic approaches were the focus, with attempts to utilize standard assigned dollar values per cross sectional square inch and develop cost-based estimates that would satisfy insurance companies and the courts. Plant appraisers were “plantsmen”, emphasizing – and in some cases advocating for – intrinsic plant values. After all, plants support the very essence of life, providing humans with oxygen, shade, and other benefits while recycling carbon dioxide and pollutants. Many plant appraisers have held that these benefits translate directly into “value,” as evidenced by the fact that customers pay real money to have plants installed.

The real estate industry has enjoyed phenomenal growth since WWII. As people in the United States have become more prosperous, we have seen rapid growth in the nursery and landscape industry. Plants and outdoor hardscapes now represent a multi-billion dollar industry, and the need for professional plant appraisal services has never been greater.

### **Why Produce a New Edition?**

There are three principal reasons for producing the 10th Edition. First, the 9th Edition does not offer satisfactory guidance in problem identification and solving. Second, the terminology and concepts historically applied are inadequately defined and often conflict with terms and concepts promulgated by the real estate appraisal profession; there is no legitimate reason for this to remain the case. Third, the plant appraisal profession suffers from a credibility problem arising from two primary sources: (a) unwarranted advocacy, and (b) practices that are not rooted in economic reality or empirical data.

The IRS does not accept formulaic cost methods to determine appraised values. The courts, while at times recognizing the intrinsic value of trees and shrubs, generally prefer to see realistic replacement or restoration costs, and in many cases insist that plant valuations reflect their contribution to the overall market value of the property upon which the plants sit. The 10th Edition will place more emphasis on these issues.

As noted above, early editions of the Guide instructed appraisers to estimate tree value by assigning a dollar value per cross-sectional area. The 9th Edition (2000) began to de-emphasize formulaic solutions, adding more about how plant values are indeed related to real property value. It reflected an increased emphasis on market value and related concepts. Yet, it remained overly focused on only one of the three basic methods of appraisal – the cost approach – while giving short shrift to the sales comparison (market) and income approaches. Moreover, it has been criticized by many users for not providing clear guidance to appraisers in defining the nature of the appraisal problem and determining which methodology is best to apply. A “guide” should guide! It should provide sufficient detail to enable the appraiser to follow a systematic process for defining the appraisal problem, identifying the proper appraisal approach, and developing a credible conclusion.

### **What Will the 10th Edition Look Like?**

The Council expects the 10th Edition to reflect a significant point of departure from past editions. It will discuss plant appraisal in relation to real property appraisal, highlighting where the two professions intersect and where they depart from one another. Where terminology between these two professions differs, we will offer suggestions for reconciling terms so as to mitigate confusion and progress toward a more common language.

The Internal Revenue Service and some courts have rejected traditional cost approach methods that are the primary focus of the 9th Edition. The Council therefore will strive to provide more balance to the text and advance ideas more consistent with principles of real property appraisal. We will clarify where cost methods may be appropriate, and how to tie them into market value if the assignment calls for doing so. We will distinguish among basic concepts such as cost, price, and value. We will expand upon the issue of reasonableness, exploring why certain jurisdictions reject traditional plant appraisal methods, and offering alternative procedures.

*CTLA continued on next page*



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A simple example will illustrate the sort of tension we seek to resolve. What is the difference between “appraisal” and “valuation?” The real estate appraisal profession sees these terms as synonyms – basically, an unbiased estimate of some specifically defined monetary value. In contrast, some plant appraisers hold that a “valuation” assignment allows the appraiser to be an advocate for the client. The Council prefers treating the two terms as synonyms, in concert with the real estate appraisal industry. Moreover, the very notion that an appraiser should be allowed to act as an advocate for the client is antithetical to ASCA’s Standards of Professional Practice, the Appraisal Foundation’s Uniform Standards of Professional Appraisal Practice, and the codes of ethics of organizations like the Appraisal Institute.

The 10th Edition will offer practical advice on how to avoid unethical practices; how to deal with clients who ask the appraiser to deliver a “fairy tale” appraisal or act as an advocate; how to properly characterize cost estimates; how to avoid calling something “market value” when common sense and market evidence dictate otherwise; how to apply the sales comparison and income approaches to plant appraisal; and how to know when the appraisal problem calls for assessments of highest and best use and market value.

The reader may wonder why the 10th Edition will place so much emphasis on market value and real estate. First,

plant appraisal is but a subset of real property appraisal in many situations. Moreover, the Council authors increasingly observe – indeed, participate in – the intersection of the plant appraisal and real estate appraisal professions. Efforts to minimize confusion and misunderstanding between the two professions will benefit both of these communities and the users of their services. Moreover, many practitioners and users of plant appraisals have observed that there needs to be more accountability in the work that plant appraisers do, and the real estate profession has much to offer on this subject.

While we recognize the traditions of plant appraisal, the Council notes that the real estate appraisal profession is relatively mature and offers many useful, time-tested ideas from which plant appraisers can benefit. Therefore, the 10th Edition will borrow terms and concepts from the real estate appraisal community – terms that augment the plant appraiser’s vocabulary and help provide a foundation for understanding concepts relating to highest and best use, contributory value, the principles of diminishing returns and balance, and other important concepts that are fundamental to economic theory and market behavior. These ideas lend credibility to the appraisal process if properly understood and applied.

The 10th Edition is intended to be used as a guide and reference. Just because you read this text does not mean you

*CTLA continued on page 18*

*CTLA continued from page 17*

will be qualified to appraise plants or landscaping – no more than reading a book on medicine will qualify you to be a doctor. There is no substitute for experience. On the other hand, many plant appraisers will likely find that the 10th Edition challenges how they have traditionally interacted with clients and conducted their work.

Beyond this book, the plant appraiser should expand his or her abilities and services by seeking out advice from peers through networking opportunities, consulting list serves, researching articles in various trade and professional journals, and reading a wide variety of materials on real property appraisal. We also recommend that plant appraisers take advantage of the excellent instruction offered by leading appraisal organizations. The appraiser must be guided by a wide variety of resources and experiences. The Guide will not, by itself, prepare the appraiser for the job.

Ultimately, we anticipate that the 10th Edition will help the plant appraiser to better identify and understand the type of value being appraised, the proper techniques to apply, and a clear framework for communicating the results – all while adhering to the highest standards of professionalism and ethics.

### What is the revision process like?

The Council is currently comprised of one delegate from each of seven organizations, and its current chairperson is a member of four of these groups:

Chairperson (Jim Ingram)

American Nursery and Landscape Association (Dick Gooding)

American Society of Consulting Arborists (Denice Britton)

American Society of Landscape Architects (Timothy Toland)

Association of Consulting Foresters of America (Bret Vicary)

International Society of Arboriculture (Russ Carlson)

Professional Landcare Network (Lew Bloch)

Tree Care Industry Association (David Hucker)

The Council meets several times per year to review draft material that various members have been asked to produce, as well as written suggestions from outside sources. The strength of the Council derives from its broad representation; its delegates offer wide diversity of experience and perspectives. Our editorial meetings reflect an open, free-flowing process, and all ideas are considered without prejudice. We seek consensus on matters where we disagree.

There is no hard and fast time table for completing the 10th Edition. We have remained focused in our efforts, but have found the need for extensive revisions to require substantially more effort than initially anticipated. We are driven by the need to complete the work in a timely fashion while soliciting appropriate suggestions from those outside the Council.

We welcome written comments from outside the Council. Written comments are the only means by which each member of the Council can have equal opportunity to consider outside ideas. Meanwhile, in the interest of maintaining focus and avoiding an unmitigated free-for-all, we intend to wait until our first draft is complete before turning it over to reviewers. The Council will assess the reviewers' comments and produce at least one more draft before sending the text to a professional editor.

Realizing our responsibility to the plant appraisal community, the Council expects to provide leadership by offering future training seminars on plant appraisal.

For those interested in providing suggestions for the 10th Edition, please send your comments in writing to your organization's CTLA representative. ■

## Florida Chapter ISA - 2007 Education Schedule

| Date          | Seminar/Class  | Location (s)   |
|---------------|--|----------------|
| Oct. 29, 2007 | Tree Appraisal: Theory and Practice, Art and Science | Ft. Lauderdale |
| Fall 07       | Disney Coast Seminar                                 | Orlando        |
| Fall 07       | Sun Coast Seminar                                    | Tampa          |
| Fall 07       | Gold Coast Seminar                                   | West Palm      |
| Spring 08     | Advanced Pruning Seminar with Dr. Gilman             | Ft. Lauderdale |
| Spring 08     | Advanced Pruning Seminar with Dr. Gilman             | Naples         |
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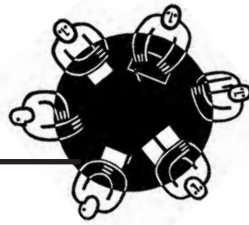


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# Florida Chapter Board Updates



## “Trees Are Cool” License Plates A Reality!

The Florida Chapter’s “Trees Are Cool” speciality license plate has cleared it’s last hurdle when the bill was signed by Governor Crist. The next step in the process is the construction of the plate printing press. The plates are expected to be available to the public this winter. License plate Committee Chair Don Winset has been actively working with his committee to select a marketing company to assist us in selling the plate. Proceeds from the plate benefit trees through research and education. Spread the word to your tree-lover friends and family, the plates go on sale soon! ■

The plates are expected to be available to the public this winter. License plate Committee Chair Don Winset has been actively working with his committee to select a marketing company to assist us in selling the plate. Proceeds from the plate benefit trees through research and education. Spread the word to your tree-lover friends and family, the plates go on sale soon! ■

## Right Tree Right Place: It’s The Law in Florida

*By F. Perry Odom*

*Electric Utility Forester, City of Tallahassee, Florida*


Don’t you just hate the way trees look when electric utility tree trimmers come through and top out trees that are growing under power lines? Do you sometimes think that there must be something that can be done about it? Well in 2006 the Florida Legislature finally did something to help prevent this from happening to trees in the future.

Florida Statute section 163.3209 prohibits local governments from adopting an ordinance or land development regulation that requires the planting of a tree or other vegetation that will achieve a height greater than 14 feet in an established electric utility right-of-way or that will intrude from the side closer than the clearance distance specified in Table 2 of ANSI Z133.1-2000 for lines affected by NERC Standard FAC 003.1 section R1.2. While this statute does not apply to all overhead power lines it is a good beginning. The statute also prohibits local governments from requiring or applying any permits or other approvals or code provisions for or related to vegetation maintenance and tree pruning or trimming within the established right-of-way. This includes the pruning of trees with branches that extend into the established right-of-way.

The statute is not directed to local governments only; it also places requirements on Utilities as well. One requirement

is that utilities notify local governments five business days prior to performing scheduled routine vegetation maintenance. This does not apply to emergency pruning to restore electric service or to prevent imminent tree related outages. If requested by the local government, the utility must meet with them to discuss and submit their maintenance pruning plan. All maintenance pruning conducted by the utility shall conform to ANSI A-300 (Part I)-2001 and ANSI Z133.1-2000. All maintenance pruning shall be supervised by qualified electric utility personnel or contractors trained to conduct maintenance pruning in accordance with these standards or by ISA Certified Arborists.

This statute does not apply nor is it needed if a local government, with input from the utility, has a written plan for vegetation maintenance by the utility. Any written plan must be consistent with the National Electric Safety Code and shall not require the planting of trees within the rights-of-way that will achieve a height of more than 14 feet. This section is one of the most important aspects of the statute in that it encourages local governments and the utilities that serve them to sit down and discuss what is best for their community. ■

|  |   |  |
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# 2007 Florida ISA Tree Climbing Championship

*By Kris Stultz, FCTCC Chairman*

I want to take this opportunity to congratulate all 14 competitors who took part in the 2007 Florida Chapter Tree Climbing Championships (FCTCC), along with the numinous men and women who helped with site and event setup. You truly are the heart and soul of our chosen profession.

The FCTCC went off this year without any problems. For the first time since the April Competition in 2004 we had great sunny weather. The site, AL Anderson Park, ended up being a fine venue with very competitive trees and a great team of professionals running the event.

This year's event was run a little differently than past events in that the judging team purposely held event contestant check-in and the Aerial Rescue, Throw-line and Speed Climb events on Saturday. Sunday was the final preliminary events of the Footlock and Work Climb, with the top 3 competitors moving into the Masters Challenge later that afternoon. Colin Kelly, Eli Villagran and Eddie Bingle moved onto the Master's Challenge, each climber performed exceptionally in the preliminary events earlier in the day on Sunday and the prior day's events on Saturday. Luck was not in the air for them Sunday afternoon; each was disqualified during the Master's. With an issue never considered in past FCTCC's we now had the winner being declared based on points accumulated in the preceding preliminary competition. Colin Kelly had received 163 points from a possible total of 200. This leading point total made Colin the declared Champion and the representative of the Florida Chapter to the International Competition in Hawaii, held this past month at the Manoa Campus of the University of Hawaii.

Colin did very well in his first International Competition, finishing 27th over all and scoring points in each individual preliminary event. Congratulations to Colin Kelly on a job well done.

The 2008 FCTCC will be held in the Fort Lauderdale area, further information will be available as the site for this event



has not yet been decided. If anyone is willing to support next year's event please feel free to contact the 2008 Conference Committee or me personally, your help would be greatly appreciated. Thank you to all of the people who have given their support in time and effort that has made our Chapter's TCC a great success.

Thank you, Kris Stultz  
 FCTCC Chairmen  
 E-mail [kris.stultz@stiles.com](mailto:kris.stultz@stiles.com) ■



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# Welcome!

## New Florida Chapter Members

Here are the individuals that joined the Florida Chapter during the third quarter of 2007. 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.

| First Name | Last Name  | City           | State | First Name  | Last Name  | City                    | State |
|------------|------------|----------------|-------|-------------|------------|-------------------------|-------|
| Russell    | Adams      | CHATTANOOGA    | TN    | Jim         | Lott       | FERN PARK               | FL    |
| Joseph     | Agrifolio  | OCALA          | FL    | Henry       | Matott     | COCOA                   | FL    |
| Joe        | Akers      | LINWOOD        | NC    | Michael     | Mays       | TAMPA                   | FL    |
| Stevie     | Allman     | GREAT FALLS    | MT    | Jeffrey     | McMillan   | APOPKA                  | FL    |
| Theresa    | Badurek    | TAMPA          | FL    | Christopher | Nelson     | HUDSON                  | FL    |
| Ronald     | Belko, Jr. | ST. PETERSBURG | FL    | Clyde       | Osborne    | BOYNTON BEACH           | FL    |
| Jason      | Bennett    | SARASOTA       | FL    | Glenn       | Peroni     | GROVELAND               | FL    |
| Charise    | Boone      | VIERA          | FL    | Shane       | Peterson   | HASTINGS                | FL    |
| Randall    | Burton     | PINELLAS PARK  | FL    | David       | Rankin     | TALLAHASSEE             | FL    |
| Andrew     | Camizzi    | BOYNTON BEACH  | FL    | Russell     | Reeder     | SEFFNER                 | FL    |
| Robert     | Campbell   | PALMETTO       | FL    | Matthew     | Rich       | DADE CITY               | FL    |
| David      | Cissell    | SPRINGFIELD    | MO    | Aurelian    | Richard    | ORMOND BEACH            | FL    |
| James      | Collins    | SARASOTA       | FL    | William     | Robbins    | FT. LAUDERDALE          | FL    |
| Sharon     | Doll       | BRADEN RIVER   | FL    | Erin        | Santiago   | FT. LAUDERDALE          | FL    |
| Charles    | Flowers    | LAKE SUZY      | FL    | Michele     | Scheiber   | APOPKA                  | FL    |
| Francis    | Gabry      | OSPREY         | FL    | Jason       | Sellers    | BRANFORD                | FL    |
| Charles    | Gay        | PIERSON        | FL    | Charlene    | Shere      | VILLAGE OF PALMETTO BAY | FL    |
| Sam        | Geiger     | CRAWFORDVILLE  | FL    | Leonard     | Siebenthal | FT. LAUDERDALE          | FL    |
| Nogamy     | Gramajo    | HOLLYWOOD      | FL    | Debra       | Siegel     | ST. PETERSBURG          | FL    |
| Kelly      | Greer      | CLERMONT       | FL    | Jonathan    | Stirman    | OVIEDO                  | FL    |
| John       | Hall       | KISSIMMEE      | FL    | Natalia     | Strattman  | HOMESTEAD               | FL    |
| Kristoffer | Harvey     | TITUSVILLE     | FL    | Gary        | Thaden     | DUNEDIN                 | FL    |
| Joshua     | Henley     | BEVERLY HILLS  | FL    | Terry       | Treverton  | BROOKSVILLE             | FL    |
| Jacob      | Heredia    | LARGO          | FL    | David       | Vanvekoven | JUPITER                 | FL    |
| Tracy      | Hickler    | STUART         | FL    | Brian       | Voelker    | PEMBROKE PINES          | FL    |
| Cathleen   | Kabat      | HAWTHORNE      | FL    | R.          | Walker     | WINTER PARK             | FL    |
| Jeffrey    | Kerley     | OCALA          | FL    | Dawna       | Warren     | BRANFORD                | FL    |
| Wanda      | Langston   | TRENTON        | FL    | Erik        | Webster    | SARASOTA                | FL    |
| Thomas     | Locke      | TALLAHASSEE    | FL    | Robert      | Williamson | BAGDAD                  | FL    |
| Daniel     | Lopez      | DELRAY BEACH   | FL    | Carole      | Wilschke   | POMPANO BEACH           | FL    |

\*Go to <http://www.isa-arbor.com>, then go to "Members Only" and log in. Then go to ISA membership directory. If you do not know your log in for members only, contact ISA headquarters at (217) 355-9411. Once you log in, you can update your address, check your CEU's, edit or verify Certified Arborist information and search the membership list.

## 2007 Certification Exam Schedule

The **FLORIDA CHAPTER of ISA** is pleased to announce our revised 2007 schedule of Certification exams and Study Guide review sessions. See the chart below for the site nearest you.

| Date             | Exam/<br>Class | Location  | Time                 | Proctor or<br>Instructors             | Last Date<br>to Register | Cost        |
|------------------|----------------|---|----------------------|---------------------------------------|--------------------------|-------------|
| Oct. 6,<br>2007  | Exam           | Duval Co. Extension<br>1010 N. McDuff Ave<br>JAX, FL 32254  | 7:30 A.M.<br>to Noon | Larry Figart and<br>Becki Jordi       | Sept. 19,<br>2007        | \$125/\$225 |
| Oct. 27,<br>2007 | Exam           | Hillsborough Extension<br>5339 CR 579<br>Seffner, FL 33584  | 7:30 A.M.<br>to Noon | Norm Easey and<br>Rob Northrop        | Oct. 11,<br>2007         | \$125/\$225 |
| Nov. 17,<br>2007 | Exam           | Miami Dade Extension<br>18710 SW 288 St.<br>Homestead, FL 33030                                   | 7:30 A.M.<br>to Noon | George Fitzpatrick and<br>Henry Mayer | Oct. 25,<br>2007         | \$125/\$225 |
| Dec. 15,<br>2007 | Exam           | Pinellas Tech. Ed. Ctr.<br>901 34th Street South St<br>Petersburg, FL 33711<br>727-893-2500 X1101 | 7:30 A.M.<br>to Noon | Michael Pettay and<br>Greg Charles    | Nov. 29,<br>2007         | \$125/\$225 |
| Dec. 15,<br>2007 | Exam           | Indian River<br>Community College<br>500 NW California<br>Port. St. Lucie, FL 34986               | 7:30 A.M.<br>to Noon | Norm Easey and<br>Ann McMullen        | Nov. 29,<br>2007         | \$125/\$225 |

This schedule is subject to change as additional tests and review sessions may be added.

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 order online.

The ISA Illinois must receive your application & exam fees **TWELVE WORKING 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) **\*\*\*PREPAYMENT IS REQUIRED\*\*\***

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| <p style="text-align: center;">Come see what your<br/>Chapter is up to by attending a<br/><b>Board of Directors<br/>Meeting!</b></p> | <p>This invitation is open to<br/>all members.</p> <p>Please call<br/><b>941-342-0153</b><br/>for times and location specifics.</p> | <p><b>2007 Board Meeting<br/>Dates &amp; Locations</b></p> <p>September 14, 2007 in Orlando<br/>November 9, 2007 in Sarasota</p> |
|--|---|--|

The following article is provided in English and Spanish

## Urban Forests, Stormwater Runoff, and Water Quality

*Jenny Seitz, Extension Associate, School of  
Forest Resources and Conservation*

*Dr. Francisco Escobedo, IFAS School of  
Forest Resources and Conservation, Asst. Professor*

*Henrique Mayer, Miami-Dade IFAS  
Extension Agent y ISA Hispanic Committee*

The loss of tree cover in cities due to development has resulted in increasing stormwater runoff and decreasing water quality. What does this mean for me? The potential for an increased pollutants and chemicals flowing into the water supply, potential health risks to citizens, and increased taxpayer's dollars to treat the water.

Communities can lessen the effect of these damages by maintaining or increasing the amount of trees in their communities and by decreasing the amount of roads, pavement, and other impervious covers in our cities. Urban trees can assist in maintaining our watershed health by decreasing soil erosion, reducing stormwater runoff and sediment; thereby improving water and soil quality; and lowering maintenance and construction costs of water storage and treatment systems.

### How do trees affect the water cycle?

Trees are part of the water cycle. The combination of a tree's leaves and branches create a canopy. When it rains, the tree's canopy catches many of the raindrops and stores, absorbs, or releases some of them back into the atmosphere.

#### Three things can happen to the rain captured by trees:

# 1

One, the capture of rain by the tree canopy is defined as rainfall interception. The amount of rainfall a tree can intercept is dependent on the type of tree and rainfall characteristics such as a light rain versus a downpour or summer versus winter rain. Studies have shown that a mature deciduous tree (loses

leaves during the winter such as sweetgums) can intercept 500–700 gallons of water per year. Mature evergreen trees (retain leaves year round such as magnolia or hollies) can intercept more than 40,000 gallons per year (Cappiella and others 2005).

Trees intercepting rain can reduce stormwater. This is the rainfall that accumulates on the ground during and immediately after a rain storm and flows over the surface towards natural waterways and/or constructed storage systems. By intercepting this rain, the amounts of costs needed to construct storage systems are reduced. In Santa Monica, CA, rainfall interception was measured for street and park trees. 29,299 trees intercepted 1.6% of total precipitation over a year providing a value of \$110,890 (\$3.60 per tree) saved on avoided stormwater treatment and flood control costs associated with runoff (Xiao and McPherson 2003).

# 2

Secondly, some of the water held by the canopy returns to the air by evaporation. The tree also uses some of the rainfall and through their leaves, release the unused portion back into the atmosphere through a process called transpiration. Close to a million gallons of rainfall per acre is transpired by a Florida pine forest (Riekerk and others 1995). In addition, the tree canopy reduces the impact of the raindrops allowing less ground and soil displacement that results in erosion.

# 3

Finally, water stored in the canopy will drip down to the ground as the canopy fills with water. The rain that falls through the open spaces of the canopy is called throughfall. Rain that flows downward along the stem of the tree is called stemflow. Once rain falls to the ground it continues to infiltrate into the litter, soil, and groundwater. The leaf litter underneath the tree serves as a sponge for the water. Trees can also absorb water in the soil by root uptake. Together the roots and leaf litter stabilize soil and reduce erosion. Foot and vehicle traffic, roads and removal of tree cover can result in soil becoming compacted which reduces the downward movement of water from the surface into the soil called infiltration. Reduced infiltration



causes water to run off along the surface until it reaches a stormwater storage system or waterway. Excessively deep mulch and litter can also reduce rainwater infiltration.

### How can urban forests reduce stormwater?

Since the amount of surfaces in many communities are increasingly becoming impervious (e.g., parking lots, roof tops, driveways, roads), water can not infiltrate and runs off as stormwater. The sum of all of a community's trees and their ability to intercept and evapotranspire rain and the combined infiltration and storage capacity of tree litter and soil growing spaces all work together towards reducing the amount of stormwater. The purpose of drainage systems in urban areas is to move this water quickly away from homes and businesses to reduce the risk of flooding. By maintaining existing trees or planting trees and vegetation in strategic places, this will increase the opportunity for water to be absorbed into the ground and clean the water of pollutants and eventually flow into the aquifer. For example, tree canopy in heavily forested areas near Baltimore Maryland reduced total runoff by as much as 26% (Neville 1996). It is important to not over fertilize since excess fertilizer can contribute to water pollution. Trees over soil or vegetation are much more effective at reducing runoff than trees over impervious surfaces. Additionally roads and curbs in an urban forest may be curved to reduce stormwater flow and city buildings can be raised higher than the street to allow water to flow freely towards storage systems. ■



El siguiente artículo está escrito en Inglés y en Español.

## El arbolado urbano, el agua de escorrentía y la calidad del agua

*Jenny Seitz, Extensionista, School of Forest Resources and Conservation*

*Dr. Francisco Escobedo, Profesor Asistente, School of Forest Resources and Conservation*

*Henry Mayer, Miami-Dade IFAS Agente de Extensión y ISA Comité Hispano*

Pérdida de la cobertura de árboles en las ciudades debido a la urbanización ha dado lugar al aumento del agua de escorrentía y al empeoramiento de la calidad del agua. ¿Como esto me afecta? Con el aumento de los agentes contaminantes y de productos químicos que fluyen en el agua, los riesgos de salud a los ciudadanos, y mayor cantidad de recursos monetarios dirigidos al tratamiento del agua.

Las comunidades pueden disminuir el efecto de estos daños manteniendo o aumentando la cantidad de árboles en sus comunidades, así como disminuyendo la cantidad de pavimento, y de otras cubiertas impermeables en nuestras ciudades. Los árboles en la ciudad ayudan en mantener las cuencas en buenas condiciones disminuyendo la erosión del suelo y reduciendo el escurrimiento superficial y la sedimentación. Esto hace que mejore la calidad del agua y del suelo y bajen los costos de mantenimiento y de construcción de sistemas de almacenaje y de tratamiento de agua.

### ¿Cómo los árboles afectan el ciclo del agua?

Los árboles forman parte del ciclo del agua. La combinación de hojas y sus ramas crean la copa. Cuando llueve, la copa capta el agua, almacenándola, absorbiéndola, o saltándola nuevamente a la atmósfera.

### Tres cosas pueden suceder a la lluvia capturada por los árboles:

1

Una, la captura de la lluvia por la copa del árbol se define como intercepción. La cantidad de precipitación que un árbol puede interceptar depende del tipo del árbol y de las características de la precipitación - una lluvia ligera opuesta a un aguacero o una lluvia de verano contra una de invierno. Los

estudios han demostrado que un árbol adulto de hoja caduca (suelta las hojas durante el invierno tal como Liquidambar) puede interceptar 500-700 galones de agua por año. Los árboles siempre-verdes adultos (conservan todo el año las hojas, por ejemplo magnolia o hollies) pueden interceptar más de 40.000 galones por año (Cappiella y otros 2005).

Los árboles que interceptan la lluvia reducen el agua de escorrentía. Esta es la precipitación que se acumula sobre la superficie inmediatamente después de una tormenta y que fluye hacia los cauces naturales y/o los sistemas de almacenaje. Esta característica permite reducir los sistemas de almacenaje y los costos asociados con ellos. En Santa Mónica, CA, la interceptación de la precipitación fue medida para árboles ubicados en calles y parques. 29.2999 árboles interceptaron 1.6% de la precipitación total en un año, Un valor de \$110.890 (\$3.60 por árbol) fueron ahorrados al evitar el tratamiento y control de inundación del agua de escorrentía (Xiao y McPherson 2003).

**2** En segundo lugar, algo del agua que ésta en la copa es devuelta a la atmósfera por la evaporación. El árbol también utiliza algo de la precipitación y a través de sus hojas libera la porción no usada a la atmósfera a través de la transpiración. Cerca de un millón de galones de agua por acre son transpirados por un bosque de pino en la Florida (Riekerk y otros 1995). Además, la copa del árbol reduce el impacto de las gotas de agua al suelo reduciendo así su erosión.

**3** Finalmente, el agua almacenada en la copa goteará a la tierra cuando se llene de agua. La lluvia que cae a través de los espacios abiertos de la copa se llama lavaje foliar. La lluvia que fluye hacia abajo a lo largo del tronco del árbol se llama lavaje de tallo. Una vez que la lluvia baja a la tierra continuará infiltrándose a través del suelo hasta llegar al agua subterránea. La hojarasca por debajo del árbol sirve como esponja para el agua. Los árboles también absorben el agua en el suelo por medio de las raíces. Juntas las raíces y el mantillo de hojas (hojarasca) estabilizan el suelo y reducen la erosión.

El tráfico a pie y/o por vehículos, las vías de transporte y la eliminación de la cubierta vegetal puede causar un suelo compactado, reduciendo así la infiltración del agua. La infiltración reducida hace que el agua se acumule y escurra a lo largo de la superficie hasta que alcanza un cauce o sistema de almacenaje. También la excesiva aplicación de mulch o de mantillo de hojas disminuye la infiltración.

### ¿Cómo pueden los bosques urbanos reducir el agua de escorrentía?

Puesto que la cantidad de superficies en muchas comunidades está llegando a ser cada vez más impermeable (e.g., áreas de estacionamiento, las azoteas, las calzadas, carreteras), el agua no puede infiltrarse y escurre como agua de escorrentía. La suma de todos los árboles de una comunidad y su capacidad para interceptar la lluvia, la evapotranspiración, la infiltración y el almacenamiento del agua en el mantillo de hojas y en el suelo reducen la cantidad de agua de escorrentía. El propósito de los alcantarillados en áreas urbanas es mover el agua rápidamente lejos de hogares y negocios para reducir el riesgo de inundaciones. Manteniendo los árboles existentes o plantando árboles en lugares estratégicos, aumentará la infiltración del agua y remoción de gran parte de los agentes contaminantes que eventualmente llegan al acuífero. Por ejemplo, la cobertura vegetal en las áreas forestadas cerca de Baltimore, Maryland lo redujeron en un 26% (Neville 1996).

Es importante no sobre fertilizar ya que pueden contribuir a la contaminación del agua. Árboles sobre cobertura vegetal o suelo permeable reducen en mayor grado el agua de escorrentía que sobre suelos impermeables. Además las vías y los brocales en un bosque urbano se pueden curvar para reducir el flujo de la escorrentía y los edificios se pueden levantar más arriba que la calle para y así permitir que el agua fluya libremente hacia los sistemas del almacenaje. ■



# SAF Approves Urban Forestry Accreditation Standard *By Alan Jones*

Beginning in August, the Society of American Foresters (SAF) will grant accreditation to urban forestry programs. This is the first standard approved by the SAF beyond traditional forestry in more than 70 years of accreditation.

## What is accreditation?

“Certification”, “registration” and “licensing” are terms we all live with, but “accreditation” may be something new. Nearly all colleges and universities are accredited by some organization. Accreditors set minimum standards for education and work with educational institutions to maintain those standards. Like certification, registration or licensing, accreditation is a rung up in the professional development ladder.

## Why is urban forestry accreditation important?

It should be noted that urban forestry/arbiculture has a specific-skill set, just as traditional forestry or environmental horticulture, in spite of the common denominator of all three involving working with trees. Forestry programs, like horticulture, have a lot to offer urban forestry and arbiculture, but, because traditional forestry has such stringent requirements to qualify for SAF accreditation, there is little opportunity for focused study in urban forestry—there is not enough time in a four-year college degree!

To graduate, the forestry student who wishes to pursue urban forestry as a profession is forced to take required traditional forestry classes that have little or no direct application to urban forestry. From an urban forestry/arbiculture point of view, this has hamstrung the education of such students and limited their career choices.

As urban forestry has steadily moved into the mainstream and traditional foresters have begun working in rapidly urbanizing areas, it became apparent to SAF and forestry

educators that a different palette of courses was necessary to properly prepare a student for a career in urban forestry. For this reason, SAF created a committee of educators and practitioners from around the country to address this issue and create a standard for urban forestry accreditation.

MAC-ISA members Alan Jones and Jessica Strother were part of this committee. Dr. Harold Burkhart, head of the Department of Forestry and strong advocate of urban forestry education, represented Virginia Tech on the committee. Supporting him were two more MAC-ISA members from Virginia Tech— Dr. Eric Wiseman and Dr. Susan Day, who created the two-track model curriculum (Urban and Community Forestry and Arbiculture) that served as the cornerstone of the urban forestry accreditation standard. Both were also involved with public review comments and providing insightful guidance.



## What does this mean for arbiculture and urban forestry?

Like the intent of traditional forestry accreditation, the urban forestry accreditation standard is intended to improve urban forestry education at four-year institutions. It is an important step in opening up the educational field for students of urban forestry and arbiculture. Universities around the country will now be able to offer the curricula needed for urban forestry and arbiculture while still maintaining their prestigious SAF-accredited status. It is our sincere hope that universities will respond to this new accreditation standard and create the educational opportunities students want and demand to pursue a career with trees in urban settings.

For more information, contact Terry Clark, SAF associate director of Science and Education by e-mail at [ClarkT@safnet.org](mailto:ClarkT@safnet.org). ■

# TREES FLORIDA 2007 – AWARDS

By Mike Conner

Every year at Trees Florida Conference, the Florida Chapter and the Florida Urban Forestry Council present the Edward W. Bok Award, and awards for Outstanding Professional, Outstanding Individual, Outstanding Tree Advocacy Group, 2006 Florida Tree City of the Year, Outstanding Urban Forestry Program, and Outstanding Project. Here are this year's results:



## **Outstanding Professional: Howard Jeffries**

Recently retired after more than 35 years of working in the horticultural field. He began his career as a "horticulturist in training" with the National Park Service, then served in the U.S. Air Force in Thule, Greenland, where helped build a golf course, served as the Base Beautification Officer for a while, and eventually became Chief of Operations and Maintenance. There, he also earned the nickname, "Mr. Green Thumb of the Artic." He then moved on to a V.A. hospital in Oregon, where he created a horticulture therapy and rehabilitation program that has now been adopted by many other V.A. hospitals across the country. Then in 1981, he began working for the City of Sanford as Parks and Grounds Manager. Over the course of 22 years there, he developed 16 new parks, upgraded others, initiated a street tree planting program and established the largest Famous and Historic Tree Grove in Florida. In 2003, he moved on to the City of Leesburg, where he initiated a city-wide tree survey and established a city nursery and community garden. In addition to all that, he found time to serve on the executive boards of the Florida Urban Forestry Council and the Florida Institute of Park Personnel, and has been a past president of both.



## **Outstanding Individual: Anna Dooley**

A woman who is both highly organized and intensively motivated, and who cares deeply for trees and her community. Since 1997, she has been Executive Director of Greenscape of Jacksonville; she is also the current Chair of The Keep Jacksonville Beautiful Commission. She brings enthusiasm and focus to any project she works on.... And when it comes to tree projects, she is not afraid to think big, and to think the unthinkable. To celebrate Arbor Day this year, she helped plan an outrageous event, The Great Greenscape Tree Giveaway, which gave away 20,000 trees in one morning! Actually, in only one-hour and fifteen minutes! That must be a record! This program was also sentimental, in that it was meant to replace the aging "Liberty Oaks" that had been given away and planted throughout the City of Jacksonville at the end of World War II.

## **Outstanding Tree Advocacy Group: Greenscape of Jacksonville**

This award recognizes an organization that has actively encouraged or implemented exceptional landscape beautification, tree planting, and related public educational programs within their community. Greenscape of Jacksonville was founded in 1975 by two women interested in planting trees in downtown Jacksonville. Those trees were the first of over 180,000 trees that this volunteer-driven organization has added to the canopy of their city. To ensure that all of these trees are being cared for, Greenscape meets with the stakeholders before-hand, to plan the design, installation, and continued maintenance of all of their tree planting projects. Recently, this group was challenged to reach beyond their role as a tree advocate to promote literacy in Jacksonville's schools. Seizing upon this opportunity, Greenscape has proposed donating 590 copies of Marcie, the Marvelous Tree to all of the third grade classrooms in the city. In addition, an educational CD entitled "How Trees Work: A Guide to Trees in Your Community" was donated to all of the fifth grade classrooms in Duval County.



## **Outstanding Urban Forestry Program: Sarasota County**

This award recognizes a local government or organization that provides exemplary leadership and vision to a comprehensive urban forestry program. This year's award  
*Trees Florida 2007 continued on next page*

recipient has a well-established program, which focuses on the urban forest as “Green Infrastructure,” and seeks to maximize the return of the social, economic, and environmental benefits of its trees. To date, they have implemented more than 70 street tree projects, and more than 40 neighborhood tree planting projects. In addition, they maintain more than 60 certified canopy roads throughout the county. In the past year, they have developed numerous audio visual presentations and hands-on educational programs, including “The Role of an Urban Forest in Watershed Management,” “Walking Small: Reducing your Ecological Footprint...,” and “Dollars and Sense of the Urban Forest.” They are currently developing a fully-animated interactive forestry website for children (ages 5-9), entitled “Forestopia.”

### **Outstanding Project: Bonita Bay Group**

This award recognizes a residential or commercial project that demonstrates tree preservation, tree planting, tree maintenance or environmentally sound planning and design. This year’s awards recipient was certified as Florida’s First Green Land Development by the Florida Green Building Coalition, and also received the Florida Realtor Association’s 2006 Environmental (ENVY) Award. Before developing its Verandah Community, the Bonita Bay Group conducted an extensive inventory of the site’s natural attributes, historic features, and its existing trees, including several hammocks of large live oaks, some of them nearly 100 years old. Then their planners designed the neighborhoods, streets, and infrastructure to impact as few of those trees, as possible. Instead of building a traditional, grandiose clubhouse, they devised a “River Village” concept of smaller buildings nestled among the trees. Of course, some trees were ultimately impacted by development. So, Bonita Bay Group teamed up with O’Donnell Landscapes to relocate more than 120 oak trees and 1,200 sabal palms on the site. By respecting the land and making a commitment to preserve the property’s trees, Bonita Bay Group has created a timeless look, one that appears much older and established than its four years.



### **Edward W. Bok Award: Jim Marshall, Sr.**

This award recognizes career long distinguished service and dedication to the advancement of arboriculture. This year’s award recipient is very deserving of this honor. Jim has been a long time friend and supporter of Trees Florida, the Florida Urban Forestry Council, the Florida Chapter of ISA, and FNGLA. After more than 40 years in the industry, Jim is not only known for growing quality trees, but also for being very generous when it comes to sponsoring seminars and conferences put on by these organizations to help educate professionals in our field. Marshall Tree Farm was established in 1984, when Jim, with the help of his family, planted the first ten acres in Morristown, Florida. Even then, his goal was to produce the best tree possible. Jim drew upon his educational background from the University of Florida, as well as his own practical experience, to pursue his desire to offer consumers a quality, hardened-off field grown tree. Now with over 400 acres and 50 employees, you can see this same desire for quality in the working staff he has assembled for this family business. The core of that staff of course being his three children, Mike, Jimmy, and Bonnie. They all display the same integrity and work ethic as their father, which has made Jim one of the most well-respected individuals in our industry! We all know Jim as a quiet and humble man, who prefers not to be in the limelight, but the spotlight is on him now, and what you see is a man of integrity, determination, and generosity. We are very privileged to have a man of this caliber in our organization.

### **Florida 2006 Tree City of the Year: City of Eustis**

This award is selected from all of the cities recognized as a Tree City USA, and as a Tree City USA Growth Award in the State of Florida. This year’s recipient has been a Tree City USA for 15 consecutive years, and has received the Growth Award 14 years, which qualifies them to receive the Sterling Tree City USA award.

In 2006, the City of Eustis submitted a growth award application that included a number of activities in all four categories. Some were initiated for the first time, and others had been significantly improved upon during the past year. They included public education, worker training, a new tree inventory and a computerized tree management system. The City is particularly proud of their policy which requires that two replacement trees be planted for every tree that is removed. Often times, in the

*Trees Florida 2007 from on page 29*

case of narrow streets, these replacement trees are planted on the adjacent private property, and historically the owners take very good care of them. This is further evidence of the citizen support that the City has for its tree program.

**Trees Florida 2007  
Committee Members:**

**Jan Rahill, City of Orlando**

Chair – Conference

**Celeste White, University of Florida IFAS Extension**

Chair – Education

**Ken Miller, Professional Horticultural Services**

Chair – Exhibitors/Sponsors

**Mike Marshall, Marshall Tree Farm**

Chair – Promotion

**Bonnie Hall, Marshall Tree Farm**

Chair – Silent Auction

**Kris Stultz, Stiles – Arbor Services**

Chair – Tree Climbing Championship

**Darcy Meagher, A Budget Tree Service**

Chair – Sunday B.B.Q.

**Janet Maland, Windermere Tree Board**

Chair – Family Fun Day

**Eric Hoyer, Natural Resource Planning Services**

Chair – Tours/Field Study

**Scott Shultz, Walt Disney Arboriculture**

Chair – Audio/Visual

**Ed Gilman, University of Florida IFAS Extension**

Education

**Glenda Hall, City of Boynton Beach – Awards**

**Henry King, Arbor Metrics Solutions – Education**

**Don Goulding**

Co-Chair, Chair of Trees Florida 2008

**Norm Easey, Florida Chapter ISA**

Executive Director

**Sandy Temple, Florida Urban Forestry Council**

Executive Director

Next year, we head South to Broward County and the Bonaventure Resort and Spa in Weston for Trees Florida 2008, and I am sure that Don Goulding would welcome any volunteers for next year’s committee. ■

**FREE Certification  
Study Material**

Planning to take the Arborist Certification Exam? Need Study Materials to prepare yourself?

ISA is conducting a study to compare educational materials. Participants who complete the study will receive one Arborists’ Certification Study Guide, plus seven “Introduction to Arboriculture” interactive CD-ROMS - FREE!

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# Arborist Certification Committee Report

*By Norm Easey, Florida Certification Liaison*

The Florida Chapter would like to congratulate the following 131 Florida individuals for earning their: Arborist Certification, Municipal Specialist, Tree Worker, or Utility Arborist Certification, during the second quarter of 2007.

## **Certified Arborist:**

Darrell Abrahamson, DeLeon Springs, FL  
 Richard Allison, Clearwater, FL  
 Juan Alonso, Miami, FL  
 Emilyvette Alvarado, Tampa, FL  
 Robert Amon, Largo, FL  
 Mari-Jean Anderson, Lake Worth, FL  
 Harold Babcock, St. Petersburg, FL  
 Amanda Bearkland, Palm Harbor, FL  
 David Bebak, Sarasota, FL  
 Kimberly Bentley, Largo, FL  
 Edward Bingle, North Port, FL  
 Peter Bogle, Port Richie, FL  
 Charise Boone, Viera, FL  
 Bryon Brown, Boca Raton, FL  
 Mark Brumet, Hollywood, FL  
 James Butler, Largo, FL  
 Anthony Burzo, Pembroke Pines, FL  
 Robert Campbell, Palmetto, FL  
 Raymond Caranci, Palm Beach Gardens, FL  
 Ray Carolan, Ft. Lauderdale, FL  
 Leroy Chin, Clearwater, FL  
 Joshua Clayton, St. Cloud, FL  
 John Cochran, Palm Beach Gardens, FL  
 William Conlon, Clearwater, FL  
 Arthur Davidson, Lake Worth, FL  
 Deena Davis, Dunedin, FL  
 Steve Davis, Bushnell, FL  
 Robert DeBrock, Lehigh Acres, FL  
 Sharon Doll, Braden River, FL  
 Debra Donovan, Tarpon Springs, FL  
 John Dubois, Cutler Ridge, FL  
 George Earle, Key Biscayne, FL  
 Joshua Eibeschutz, Ft. Lauderdale, FL  
 Jon Erickson, Ft. Myers, FL  
 Scott Fey, Sarasota, FL  
 Patrick Foslin, Bradenton, FL  
 Jim Fritchey, Naples, FL  
 Tammie Fulco, Tampa, FL  
 Gregory Geissinger, Boynton Beach, FL  
 Curtis Gervin, Southwest Ranches, FL  
 John Graham, Royal Palm Beach, FL  
 Todd Grande, Parkland, FL  
 Kevin Green, Sarasota, FL  
 Michael Gross, Debary, FL  
 Wayne Grubbs, Sarasota, FL

Sergio Guadix, Miami Lakes, FL  
 Debra Hamilton, Wesley Chapel, FL  
 Annemarie Hammond, New Port Richey, FL  
 Rick Harman, Stuart, FL  
 Timothy Hellijas, Clearwater, FL  
 Alexandre Lapierre, Coconut Creek, FL  
 Jacob Heredia, Largo, FL  
 Jeremy Hinkle, Miami Beach, FL  
 Ryan Horstman, Tampa, FL  
 Greg Houser, Jacksonville, FL  
 Susan Jenkins, New Port Richey, FL  
 Jeffrey Kerley, Ocala, FL  
 Charles Kent, Jacksonville, FL  
 Michael Kirk, Miami, FL  
 Shawna Kormel, Flagler Beach, FL  
 Dale Lesinski, West Palm Beach, FL  
 Dale Linder, Jacksonville, FL  
 Rodney Livermois, Clearwater, FL  
 Shawn Loff, Jupiter, FL  
 Peter Lucadano, Holiday, FL  
 Gary MacMeeken, Seminole, FL  
 Matthew Marano, Southwest Ranches, FL  
 Michelle Marshall, Pembroke Pines, FL  
 Roderick Mayard, Miami, FL  
 James McCann, Orlando, FL  
 Carmen Mendez, Goulds, FL  
 Thomas Merrell, Bradenton, FL  
 Brandon Miller, Delray Beach, FL  
 Frank Mirabito, Cocoa, FL  
 Gerald Navin, Davie, FL  
 Elena Neal, Tampa, FL  
 Todd Nuro, Boynton Beach, FL  
 Ken Ohm, Sarasota, FL  
 Clyde Osborne, Boynton Beach, FL  
 Kristina Pacheco, Delray Beach, FL  
 Robert Palmer, Ft. Lauderdale, FL  
 Elisabeth Payne, Hudson, FL  
 Glenn Peroni, Groveland, FL  
 Oliver Petereit, Bradenton Beach, FL  
 Conor Petren, Clearwater, FL  
 Brian Pope, Dade City, FL  
 David Rankin, Tallahassee, FL  
 Matthew Rich, Dade City, FL  
 Alfredo Rivero, Miami Lakes, FL  
 Lucas Roosa, Southwest Ranches, FL  
 Robert Rognstad, Dunedin, FL

Anthony Santangelo, Inverness, FL  
 Erin Santiago, Ft. Lauderdale, FL  
 Alexander Schore, Plantation, FL  
 Leon Scott, Plantation, FL  
 Elvis Seay, Orlando, FL  
 Michelle Shepard, Orlando, FL  
 Leonard Siebenthal, Ft. Lauderdale, FL  
 Juan Sierra, Weston, FL  
 Richard Sirois, Pinellas Park, FL  
 Kevin Songer, Jacksonville, FL  
 Edward Skvarch, Ft. Pierce, FL  
 Natalia Strattman, Homestead, FL  
 Charles Sturgill, St. Petersburg, FL  
 Martin Tapia, Pompano Beach, FL  
 Alice Tate-Barnett, Ocoee, FL  
 Arthur Ullian, Ft. Lauderdale, FL  
 Erik Webster, Sarasota, FL  
 Leah VanVels, Ft. Lauderdale, FL  
 Ruben Vargas, St. Petersburg, FL  
 David Vaughn, Coral Springs, FL  
 Tim Walters, Tallahassee, FL  
 Booker Washington, West Palm Beach, FL  
 David Washington, Jacksonville, FL  
 Michael Washington, Punta Gorda, FL  
 Joseph Waters, Orlando, FL  
 Bruce Weitzner, Greenacres, FL  
 Robyn Wharton, Miami, FL  
 Edward White, St. Petersburg, FL  
 Marc White, Atlantic Beach, FL  
 Alan Willis, Sanford, FL  
 Carole Wilschke, Pompano Beach, FL  
 Craig Wilson, Dunedin, FL  
 Matthew Yeager, St. Petersburg, FL  
 James Yelverton, Englewood, FL  
 Richard York, St. Petersburg, FL

## **Utility Arborist:**

Steve Poulson, Boca Raton, FL  
 Colleen Zak, North Port, FL

## **Municipal Specialist:**

Brian Kane, Boca Raton, FL

## **Tree Worker:**

Gereth Coggan, Brandon, FL  
 Brian Gould, Boynton Beach, FL



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Florida Chapter, ISA  
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## 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.