Cold Damaged Palms

Trying to grow tropical palms in sub-tropical and temperate climates means cold damage is inevitable. This year’s cold weather is not atypical for Florida. For example, in the late 1970s and early 1980s, a series of hard freezes destroyed much of the citrus industry located north of Orlando, which is why that industry pushed south to Immokalee. During that same time period, severe freeze damage occurred on palms throughout the state. The only difference between then and now is that there are a lot more palms planted in communities that did not even exist in the early 1980s. So, for many people, this is their first experience with severe cold damage.

This paper is in response to your many questions about cold damage on palms and expands upon some themes outlined in the EDIS document “Treating Cold Damaged Palms” at http://edis.ifas.ufl.edu/mg318.

As described in the EDIS document “Cold Protection of Ornamental Plants” (http://edis.ifas.ufl.edu/mg023), tropical and sub-tropical plants can be damaged at temperatures above freezing, and there are two different types of freezes or frosts – radiational and advective. Furthermore, while some years experience only one cold event the entire winter season, in other years, such as the current one, you may have an extended cold season.

“Patience is essential with cold-damaged palms! Avoid the temptation to immediately trim damaged leaves.”

In most cases, the petiole and rachis will still be green. As long as any green tissue remains, the leaf should not be removed. Damaged leaves may provide some protection during subsequent cold events, plus green tissue is photosynthetic tissue. Even a completely dead leaf may provide some insulating protection, especially against a radiational freeze or frost. Once the palm has produced substantial new
A Message From the President

It will be my pleasure to serve the membership of the Florida Chapter this year as President. We will be a month or so into 2010 when this is published. I hope that during this year the economy will start to turn around. I know it has been difficult for many of our members. In recognition of these troubling times the chapter has not raised the chapter dues and remains one of the ISA chapters with the lowest dues.

It seems like every year the chapter reaches a new milestone and my thought is “how can we top this”. Last year the chapter pledged $300,000 as an endowment through the University of Florida for arboriculture research and education. This was made possible by the successful introduction of the Trees Are Cool specialty license plate the year before last. So, what can we expect for this year? A major initiative is to start a distance learning program. This will enable arborist to get a portion of their CEU’s on-line. We will bring the same quality education from our seminars to the web. Keep an eye out for more information in the coming issues. And…. with any luck this might be the year that Arborist Licensure is passed. We have been close to being successful on a couple of occasions but politics is a strange mechanism and often does not follow logic. Maybe by the Trees Florida Conference in June we will know something with respect to this ongoing endeavor.

Speaking of the Trees Florida Conference and Trade Show, it will held June 13th – 15th at the Casa Marina Resort in Key West; I hope to see you all there. Mike Conner, Chair of the Trees Florida Committee and the rest of the members are once again developing a superb agenda of education and fun. In the past I used to go to the conference for the education and CEU’s. The past few years it has become a family learning vacation. You will often see me with my lovely wife Bonnie and one or more of my grandchildren. We all have a good time and look forward to the conference every year.

I would also like to thank Dr. Gilman and the Education Committee for another successful year of informative and enjoyable seminars. I know that 2010 will be no less exhilarating. Thanks to Bill Slaymaker and the Workday Committee for taking a lifeless program and making it a huge success. Everyone who has volunteered for the Workday really enjoyed the day in their region. More information on this year’s February 13th event can be found on the Florida Chapter’s web site. Thank you to President Elect Don Winsett for his tireless efforts promoting the Trees Are Cool license plate. None of the Chapter’s success would be possible without the diligent efforts of staff. I want to thank Norm, Jan and Patty for all the work they do and often do not get the recognition they deserve. Finally, thanks to all the members on the Board of Directors, past, present and those yet to come for their efforts and time. They have worked so hard to make the Chapter one of the best in the world and to make arboriculture in the state of Florida a recognized and respected profession.

As I conclude my first message as President, I put forth a challenge to all our members. Reach out and contact a tree practitioner in your area. Get their mailing address and forward to staff. This way they can be put on our mailing list and contacted with information about upcoming seminars. I am convinced that once they have been to one our seminars they will be hooked.

David Reilly, President, Florida Chapter ISA
2009 Florida Chapter Expenses
How the Chapter’s money was spent during the 2009 Fiscal Year

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growth (2 to 3 new leaves), damaged leaf tissue can be removed. If trunk damage is observed externally due to a freeze, it is likely that there is substantial internal damage to the vascular and structural trunk tissue. These palms should be removed as they can pose a structural hazard in the landscape.

All new leaves of a palm develop from the apical meristem (bud), so the primary tissue that needs to be protected is the apical meristem. Since leaf bases provide insulating protection to the apical meristem, this is one reason to not over trim palms at any time of the year. Furthermore, good fertilization practices, including routine applications of 8-2-12-4Mg (100% slow-release N, K and Mg), has been shown to greatly enhance cold tolerance.

Copper fungicides are recommended as an attempt (not a guarantee) to protect the apical meristem and developing leaves from secondary microorganisms that may attack damaged spear leaf tissue. There is no research to confirm if this is effective or not. The recommendation is based on what has been observed regarding cold damage to palms and our knowledge of fungicides. In most situations, it is the base of the spear leaf not yet emerged from the whorl of leaf bases that is damaged first, leading to a spear rot, which may then lead to a bud rot. Thus, the goal of a copper fungicide is to prevent this spear rot from developing into a bud rot that kills the apical meristem, and thus the palm.

Copper fungicides are recommended over all other group of fungicides because they have broad activity against both bacteria and fungi. No other fungicides have this broad spectrum of activity. Note that we are not concerned about the typical bud rot pathogens (e.g., Phytophthora). Instead, we are concerned about non-specific, secondary pathogens. Copper fungicides are contact fungicides and not systemic fungicides. Thus, you must have complete coverage of the target tissue to be effective – in this case, the base of the spear leaf and the bud. This is more difficult to accomplish in some palm species than others, particularly those with crown shafts, because the leaf bases tightly surround the emerging spear leaf, preventing movement of a fungicide into the bud region.

If the spear leaf does rot and can be easily pulled from the bud, it should be removed immediately, followed by a copper fungicide spray or drench of the bud region, which is now exposed. It is important to use a copper fungicide and not a copper nutrient solution. Copper fungicides are insoluble and will not be absorbed by the plant tissue. This limits phytotoxicity and provides the protective barrier needed on the plant tissue.

The normal recommendation is to apply the copper fungicides no more than twice because of the possibility of copper phytotoxicity. If it is believed that more chemical protection of the bud is needed after the copper fungicides have been applied, a broad-spectrum contact fungicide may be beneficial. Remember, the bud rot is not due to the primary pathogens we associate with typical bud rots, but is due to secondary microorganisms. The goal is to protect the apical meristem (bud). It is not known if using a copper fungicide prior to a freeze event provides any protection against freeze damage to the bud.

You will not know if the apical meristem has survived until new growth emerges, which may be 4 to 7 months later. Hence, the need for patience! The new growth may be severely malformed or damaged, but the emergence of any living leaf tissue is a sign the palm is alive. Subsequent leaves will gradually improve in quality, but it may take as long as a year before normal leaves emerge.
Watch for postcards, brochures and emails containing information on Trees Florida 2010 classes and events

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The Case of the Gratified Grandiflora

Her rounded form was waving in the wind, dazzling me into submission. Her deep green, lustrous sheen pulled me helplessly toward her. I was lost in a tremulous trance. I had to experience oneness with this being, so I ardently ascended. Her long, spreading limbs enveloped me in their embrace as I thrust my way into her canopy. Through the layers of leathery emerald verdure, I glimpsed the Carolina blue sky. As I slithered farther out on her limbs, the delicious fragrance of the nectar glistening on her pure white flowers wafted up my nostrils and intoxicated my mind. I was hers—totally, completely, and not at all discreetly.

The ringing phone snapped me out of my reverie. It was a heavy-hearted call from a stressed-out Southern belle who told me her name was Lilly DuBois. Her anxiety adjusted my mood from rapture to action as she told me her tale of two southern magnolia trees. One was magnificent, but the other was getting suspiciously one-sided. I piled my gear into my oversized white pickup and tooled into the golf-course community. I really should wash this thing some day, I thought, as I parked the truck in front of her humble mansion across from the ninth fairway.

Ms. DuBois poured my glass full of iced tea, then poured out the whole tragic tale. The pair of Magnolia grandiflora was planted in the 1940s with the dream that they would bring not only grand flowers but a solid, gleaming green canopy to grace the front yard.

In the early years, they grew toward fulfilling that vision—a pair of adolescent beauties that were the envy of the neighborhood. But some years later, just as they should have been delivering on that promise, Ms. DuBois noticed that one of them started looking weak on the side away from its twin.

The change was subtle at first. The green in the leaves wasn’t so deep and glossy, and their size was smaller. Then some leaves dropped, and barren twigs in the tips over the lawn began to show. Her yardman couldn’t put his finger on the culprit. Her arborist had a hunch about the perpetrator but had no plan to knock it out of commission. Each year, the magnolia looked a little worse, until she couldn’t stand it any more. Driven to desperation, she finally called me, Detective Dendro. I tested the trunk and climbed throughout the crown, searching for signs of some kind of disease or insect infestation. I assessed the soil to see whether it contained sufficient nutrients, air, and water. I poked around the outer roots, looking for fungal or drought damage, damage from trenching or compaction, and signs of silent, allelopathic battles with the turfgrass. I finally looked where I should have looked first—and saw what was crimping this tree’s style. A possum named Pogo had the answer, in a comic strip long ago.

A gradual decline in the magnolia on the right, culminating in dropped leaves and barren twigs, prompted a call to Detective Dendro.

What’s the detective’s diagnosis? See page 10 for the answer.
## Pest / Tree Health Problem | Product Solution | Additional Information
--- | --- | ---
Aphids | Xytec<sup>®</sup> | 1
Bronze Birch Borer | and/or Bifenthrin | 2
Gypsy Moth | Spinosad Acephate | 3
Spray at early instar stage. Broad programs often use Bacillus thuringiensis.
Aphids | Xytec<sup>®</sup> | 1
Fall application provides control next season.
Aphids | and/or Bifenthrin | 2
And/or Bifenthrin | 3
Chlorosis | Hemlock Woolly Adelgid | 1
Chlorosis | and/or Bifenthrin | 2
Dutch Elm Disease | Arbotect<sup>®</sup> | 3
Injured Roots | Cambista<sup>®</sup> Prevention Air Tools | 2
Injred Roots | and/or Bifenthrin | 3
Emerald Ash Borer | Xytec<sup>®</sup> | 1
Japanese Beetle | Xytec<sup>®</sup> and/or Bifenthrin | 2
Japanese Beetle | Xytec<sup>®</sup> and/or Bifenthrin | 3
K Deficiency | Fertilizer | Essential element and macronutrient.
Leptodoptera | Spinosad Acephate | Foliar spray works best for early instar caterpillar stages.
Lack of Wilt | Alamo Fungicide | Foliar spray works best for early instar caterpillar stages.
Mites | Aracnate<sup>®</sup> | and/or Bifenthrin | 1
Mites | Aracnate<sup>®</sup> | and/or Bifenthrin | 2
Mites | Aracnate<sup>®</sup> | and/or Bifenthrin | 3
Needlecast | Chlorothalonil | Requires two applications; one at 1/2 candle extension and one at full extension.
Quercus Decline | Cultural Practices | Caused by a complex interaction of biotic and abiotic stresses.
Two-Lined Chestnut Borer | and/or Bifenthrin | 1
Two-Lined Chestnut Borer | and/or Bifenthrin | 2
Two-Lined Chestnut Borer | and/or Bifenthrin | 3
WEEILS | Xytec<sup>®</sup> | Fall application provides control next season.
Xylella fastidiosa | | 1
Zimmerman Pine Moth | Bifenthrin | Apply to trunk and main branches in spring and again midsummer.

### Application Method
- 1. Foliar Spray
- 2. Soil Applied
- 3. Tree Injection

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Pogo said, “We have met the enemy, and he is us.”

This magnolia’s magnificence was being robbed by the stranglehold its own roots put on the trunk, squeezing hard enough to stop the circulation.

I could see small roots lapping over buttress roots above the soil surface, so I swiftly solved that problem with my trusty loppers.

Next, it was time for a root collar examination. I shoveled away some soil and found deeper roots wrapped around the trunk. That’s where things got real interesting—the squeeze was the tightest on the side that exhibited dieback in the top.

In past cases, I’d seen that oak branches are nourished by the roots right below them. Could it be that magnolias are also ring porous?

Some books say that you can do more harm than good by removing big, girdling roots. The tree needs roots for uptake, and it’s hard to avoid wounding the trunk while removing those roots; therefore, some say it’s best not to disturb them.

But the thought of this Southern belle spending the rest of her years watching her beloved magnolia slowly strangle itself was more than I could stand. I had to do something. But what?

I took a page out of the pruning book and figured that if I limited the amount of root pruning to 20 percent per visit I oughta be okay. First with chain saw, then handsaw, hand pruners, and finally with hammer and chisel I sliced out three root sections. My nerves were frazzled by the fear that I’d gouge the trunk or that the bark on the roots would be stuck to the bark on the trunk. Thankfully, the root sections came off clean with a “pop!”

I think I saw the trunk tissues gratefully swelling out as the circulation came back, but I mighta been imagining things. It had been a long day. The next problem was, how could I tell what percentage I just took off? Branches you can see, but with roots it’s a guessing game. I decided to call it quits before attacking the biggest girdler.

My plan is to come back in late winter to aerate, inoculate, fertilize, and mulch the soil in order to stimulate root function out around the drip line. Next fall, I’ll return with the weapons and cut away some of the worst of the misguided roots that are putting the squeeze on my client’s assets. Each year, I’ll check to see that the roots don’t get any funny ideas about growing back over the trunk. If they do, they’re gonna get it good. After a while, I figure my Southern belle can watch her magnolia grow instead of dying a little each year.

Relief replaced the strain around her eyes as I told Ms. DuBois the plan. She told me to come back when the time was right, so I packed up my gear and drove the old pickup back across the tracks to my crib. I scrawled a reminder on the March page of my desk calendar to frazzle all the big roots on every tree that I ever plant, guiding them straight away from the trunk. I’d hate to see the next generation of Detective Dendros frazzling their nerves when they’re forced to chisel girdling roots off a trunk just to stop a tree from strangling itself. Instead they should be coaxing the beauty out of trees—and making their clients’ dreams come true.

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Pruning Palms (Part 1)

by Donald Hodel

Reprinted with permission from the Western Arborist. This article, part of a series discussing various topics about the selection and management of landscape palms, addresses pruning, perhaps the major management activity of established palms. (Pruning palms — Part 2 will appear in the next Florida Arborist issue.)

Unlike many dicotyledonous and coniferous trees, which often need regular pruning to maintain aesthetic quality, overall structure, and flower and fruit production, palms require little or no pruning to achieve and maintain optimal growth and presentation in the landscape. Pruning dicotyledonous and coniferous trees involves removal of growing points, such as shoot tips, buds, and sometimes even entire branches. In contrast, pruning palms is mostly relegated to removal of individual leaves and inflorescences and infructescences (Fig. 1). Rarely does pruning a palm involve removal of a growing point, and only then is it used to remove trunks or basal suckers from species with multiple or clustered trunks. Indeed, removal of the growing point or apical meristem of a palm trunk will nearly always kill that trunk.

Hodel (1999) noted that palms are normally pruned to: 1) remove unwanted leaves; 2) remove unwanted inflorescences and infructescences; 3) remove unwanted trunks of multi-trunked species; and 4) reduce leaf area during transplanting.

1. Leaf Removal

Purpose

Leaves that have completed their natural life span and are functioning at a much reduced level or are dead can be removed. Such leaves are older and in the lower par of the crown, have changed color from a normal green to yellow or brown, and might persist on the trunk, lending an unsightly and untidy appearance to the palm. Consider removing leaves if they are heavily diseased or insect infested, have sustained damage from abiotic factors, or are simply blocking the view of an important or attractive feature of the palm trunk.

In many cases old, dead persistent leaves and/or leaf bases may partially or entirely clothe the trunk, sometimes for the life of the palm, as in Washingtonia filifera and W. robusta. The persistent “petticoat” or skirt of old, dead leaves, while a natural and not unattractive feature of some species, may need to be pruned periodically if it becomes ragged or uneven or poses a hazard from fire, vermin or falling debris (Fig. 2).
Cold-damaged or –killed leaves should be removed once danger of further cold weather has passed because they might impede the emergence of new undamaged leaves and trap moisture and promote rot of the apical meristem. Frequently secondary, opportunistic diseases and/or insects will invade this cold-damaged tissue and accelerate or expand the decay. Broschat and Meerow (2000) recommend removing cold-damaged leaves only after the danger of freeze or frost has passed because they provide some insulation to the apical meristem. A future installment of this series will discuss abiotic disorders of palms in detail, including how to recognize and treat cold damage.

Leaves or parts of leaves that pose a hazard should be removed. The lower pinnae of Phoenix spp. are modified into sharp, long, rigid spines that can enter the flesh deeply and easily and cause serious harm (Fig. 3, above). These spines are especially hazardous when the leaf is dead because they are hardened yet brittle and their long tips easily break off and remain deeply embedded in the flesh. In addition to the actual physical puncture wound, the tips of these spines, especially those from dead leaves, seem to cause a numbing, aching reaction in the area of the wound.

Many palms are armed with similarly hazardous spines, especially on petioles (Fig. 4). Palms with such armor are especially hazardous when

Pruning Palms continued from page 12

Figure 3. The lower pinnae of Phoenix spp. are modified into sharp, long, rigid spines that can enter the flesh deeply and easily and cause serious harm.

Figure 4. Many palms are armed with hazardous spines, especially on petioles, as here on Chamaerops humilis.

Pruning Palms continued on page 14
small and their leaves are near the ground. Consider cutting or clipping off spines until the leaves are high enough to be out of reach if the palm is in a site easily accessible to people.

Sometimes leaves or old leaf bases are removed to “clean up” the trunk, making it more uniform, smoother, and attractive. This practice is called “peeling” or “skinning” on Washingtonia filifera and W. robusta (Fig. 5) and “slicking” on Phoenix canariensis. When excessive and done improperly it can result in removal of the pseudo-bark and create serious wounds that can leave unsightly scars and serve as entry points for insects and disease (Fig. 6).

**Pruning Palms continued from page 13**

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**Figure 5.** Sometimes old leaf bases are removed, in a process called “peeling” or “skinning,” to clean up the trunk, making it more uniform, smoother, and attractive, as here on Washingtonia robusta.

**Figure 6.** Severe, excessive “skinning” can result in removal of the pseudo-bark and create serious wounds that can leave unsightly scars and serve as entry points for insects and disease, as here on Phoenix canariensis.

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**Pruning Palms continued on page 15**
Pruning Palms continued from page 14

Self-cleaning palms

Some palms with a crownshaft, such as Archontophoenix cunninghamiana, Dypsis lutescens, Rhopalostylis sapida, and Roystonea spp., are considered self cleaning because their old, dead leaves and even inflorescences and infructescences usually fall away cleanly and neatly on their own. However, there are situations when it is best to remove them just before they would naturally fall because, when they do fall, they do so with little or no warning and could damage property and/or cause injuries or even death. Other palms, like Washingtonia filifera and W. robusta, are well known and often highly prized for their conspicuous, handsome skirt of old, dead, persistent leaves.

Even palms that retain dead leaves for lengthy periods can drop them eventually. Strong winds and stormy weather often precipitate the falling of these leaves. It would be prudent to remove the dead, persistent leaves of high-profile or –visible palms or those whose falling leaves pose the threat of damage or injury before the arrival of expected windy or stormy weather.

Which leaves to remove

Normally remove only dead or dying leaves. Avoid removing healthy, green leaves. Remove heavily diseased or insect-infested leaves but avoid removing leaves showing macronutrient deficiencies like potassium and magnesium. These elements are “mobile” in the plant and Broschat (1994) found that such removal can “push” the deficiency symptoms higher up in the canopy, accelerating the problem.

If green leaves must be removed, avoid removing those that originate above the horizontal, a level imaginary line running through the middle of the crown. If the crown of leaves is likened to the face of a clock, this imaginary line would run through the center from nine o’clock to three o’clock.

In contrast, the typical industry practice is more intense and excessive, and removes most of the leaves, leaving only those originating between the 10 o’clock and 2 o’clock positions. Frequently even more leaves are removed, sometimes leaving just one or two in the very center of the crown (Fig. 7)!

How to remove leaves

Remove unwanted leaves neatly and cleanly with a sharp saw or clippers, cutting the petiole and/or leaf base as close to the trunk as possible, taking care not to damage or wound the trunk (Fig. 8). Be-
Tammy Kovar, TREE Fund Liaison

Two projects here in Florida are the recipients of John Z. Duling grants: Dr. Ed Gilman’s ‘Effect of Tree Form and Branch Orientation on Load Response’ and Dr. Monica Elliott’s ‘Uptake, Distribution and Persistence of Systemic Fungicides in Large Palms’. Congratulations to both recipients. Our thanks to you for your dedication and commitment to improving Florida’s trees and environment.

The next annual Coast Series seminar may very well provide new knowledge on these two subject matters. Watch for any updates in the future.

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Cycle Illinois with the 2010 STIHL Tour des Trees

America’s Largest Fundraiser for Tree Research Rides a “Chicago Loop” this July!

Registration is now open for America’s largest fundraiser for tree research, the 2010 STIHL Tour des Trees to benefit the Tree Research and Education Endowment (TREE) Fund.

The weeklong cycling event launches from Chicago’s magnificent Millennium Park on July 18, 2010 and travels westward to the Mississippi River and Iowa before looping back to the world famous Morton Arboretum in Chicago’s western suburbs on July 24.

“Last year’s STIHL Tour des Trees had so many memorable moments, from our daybreak ride through Manhattan and Rolling Stones keyboardist Chuck Leavell playing for us at the launch, to all the trees we planted in New England along the way,” said Paul Wood, owner of Black Bear Adventures and tour director for the past five Tours.

“We’re looking forward to making more great memories this year, as we launch from the most spectacular venue in Chicago, finish at the Morton Arboretum, and cycle through some of the Midwest’s prettiest country in between,” Wood said. “The Tour is a great way to support tree research, make lifelong friends, and see the country in a completely new way.”

Cyclists interested in riding in the STIHL Tour des Trees can register online at www.stihltourdestrees.org. Riders can sign up for the full 7-day Tour or any portion thereof. The registration fee is $100 until June 1 and $125 from June 2 until registration closes July 5.
To participate in the weeklong Tour, riders must raise a minimum of $3,500, which will be applied toward scientific research grants and educational scholarships administered by the TREE Fund. Full- and partial-Tour registrants receive all lodging, meals, snacks, beverages, and mechanical support for the duration of the Tour, along with an official STIHL Tour des Trees cycling jersey, wind jacket and t-shirt.

New for 2010 is a one-day ”Ride for Research” on Saturday, July 24 featuring two of Chicagoland’s most scenic and noteworthy research facilities, Fermilab and the Morton Arboretum. Local riders are invited to join the STIHL Tour des Trees for the day to help raise awareness of the need for tree research and professional tree care. The $75 registration fee for the “Ride for Research” covers lunch, a t-shirt, entrance to the Morton Arboretum and a donation to the TREE Fund.

Last year’s STIHL Tour des Trees, which kicked off in New York City, raised nearly a half million dollars to benefit the TREE Fund, and 100% of the costs of the event were supported by its sponsors. In addition to their financial support, 2009 Tour sponsors STIHL Inc., Asplundh Tree Expert Co., The Davey Tree Expert Co., and Bartlett Tree Experts went on to partner with New York City’s MillionTreesNYC Training Program. Managed by the New York City Department of Parks & Recreation and New York Restoration Project, the program provides paid on-the-job forestry, ecological restoration and horticulture training and career guidance to unemployed young adults in New York City. The MillionTreesNYC Training Program is a pilot program of the Mayor’s Fund to Advance New York City.

Sponsors of the 2010 STIHL Tour des Trees include STIHL Inc., Wright Tree Service, ITC Holdings, APS, and Utility Lines Construction. More information on the STIHL Tour des Trees, including details on riding in the Tour or donating to the TREE Fund, is available at www.stihltourdestrees.org.

For more information, visit www.treefund.org.

Click here to donate to the TEAM FLORIDA riding team!
STIHL Inc. manufactures the world’s largest selling brand of chain saws and produces a full line of powerful, lightweight, and versatile handheld outdoor power equipment for homeowners and professional users. STIHL products are sold through servicing power equipment retailers from coast to coast—not mass merchants. STIHL products sold through U.S. STIHL dealers are for distribution in the United States only. For more information or for the name of the closest STIHL retailer, call toll free 1-800-GO STIHL (1-800-467-8445) or visit the STIHL Web site at www.stihlusa.com. STIHL is pleased to also support the work of the Tropical Forest Foundation, the International Society of Arboriculture (ISA), the Tree Care Industry Association (TCIA), National FFA, Professional Landcare Network (PLANET), the American Tree Farm System (ATFS), and the National Association of State Park Directors (NASPD).
Oh lo, how many years have passed since one of the country’s leading property rights attorneys asked me to meet with him and his assistant to go over my deposition prior to giving it. He was the lead property rights attorney for Florida’s oldest law firm. He was located over 400 miles away, and wanted me to meet him at a pancake house at 5:00 AM. My deposition was at 9:00 AM the same day. The matter evolved around the governments taking of private property for public use - eminent domain - which may be found under Article 5 of the Bill of Rights. The issue of eminent domain is, and was, so crucially important to our founding fathers that the same number of jurors required for capital murder is also required for eminent domain trials. When you work in the field of eminent domain you are working in the literal heartbeat of our constitution.

And such it was at 5:00 AM on a particular summer day that I met with this fierce and dedicated proponent of property rights. His assistant, whom I recently heard from and who has since moved to a nose bleed floor atop one of South Florida’s most prestigious law offices, was in his infancy as it relates to knowledge of eminent domain and plant appraisals. It seemed that he was in good company with me or vice versa, as I to was just joining the ranks of the initiated as it relates to appraising plants in property rights cases.

And this was not to be a perfunctory baptismal into the murky waters of knowledge regarding the appraisal of plants in front of a home or business. No, it had to be a tree farm where there were not only plants which were going to be taken due to community improvements but plants whose loss would go into perpetuity and with resultant damages to the remainder nursery. To further numb my mind, and that of my learned colleague, the area to be taken was partial in nature, and had a temporary construction easement, as well as a utility easement. Little did I know: this was to be a swell morning.

After approximately an hour and a half of the master attempting to teach his grasshoppers the fundamentals of plant appraisals as it relates to case law, he slammed his fist upon the table knocking coffee out of cups and proclaimed to the upstart attorney, “I would expect him (meaning me) to be an idiot, but not you”. So, I was indeed in good company. The remark left me feeling rather brilliant (there was an attorney as stupid as me) as I am sure it left him feeling rather poorly (he was as dumb as an arborist like me). In the end, the master in a final fit of frustration vociferously proclaimed the three principles which inculcate any plant appraisal, to wit:

1. the plant must be appraised for its in-place (as-is) value
2. the plant must be appraised for its cost of cure or repair
3. severance damages (economic damages done to the remainder property due to the taking or casualty).

PERIOD. No exceptions.

After three hours of additional instruction, I had one hour to get across town and into deposition. While I do not remember much regarding that deposition I do remember that it turned on my testimony of the in-place value first, and cost to cure second. The expert arborist across from me did not first apply an in-place value; instead, he went on to financially cure the damaged nursery. While his approach was rather brilliant, the disposition of the case went against him because there was no in-place value of the product ever established.

Consultant’s Corner continued on page 21
Years have passed, more than a decade now, and I just recently came up against three venerable plant appraisers, two of which were Board Certified Master Arborists and Registered Consulting Arborists, and one of which was a Member of the Appraisal Institute. Three separate cases and three separate appraisers, all of whom had one thing in common: they went directly to the cost of curing the casualty trees and plants without first establishing their in-place value. This mistake was lethal to their side even though their costs to cure numbers were generous and well thought out.

Consider that you were appraising a car that had just been in a wreck. We have all heard the word “totaled” before. It alludes to the fact that repairing the car will cost as much as or more than the value of the casualty car itself. One cannot “total” a car unless one first knows the value of the car at the time it became a casualty. Moreover, we cannot provide a cost to cure (repair the casualty car) unless we know the value of the car to begin with. Case law is clear on this matter and as well it should be. As an example, an insurance company will not provide as a cost to cure the value of a new Cadillac if the car that was wrecked was an early model compact vehicle, or vice versa. The cost to cure number cannot exceed the value of the part taken, nor can the cost to cure number exceed the value of the severance damage. One notable exception to this rule is if the casualty tree or plant has no value, or even a negative value, providing that the cure cost relates to appraising the lost function of the casualty tree or plant. When appraising a tree whose value cannot be established in the marketplace, or has a negative value, the plant appraiser must be careful not to provide a betterment as it relates to species, size, or quantity.

Appraising the value of plants is a matter of science and art. The approaches to value are almost as varied as the different scenarios faced in plant appraisals. Some appraisers like to use the Tree Trunk Formula Method while others prefer replacement cost or inch-for-diameter-inch replacement. Still others prefer to integrate the approach of land values as it relates to plant valuations. The list of possibilities goes on. Whichever approach to value that you use to determine the in-place value of a plant, the cost to cure does not belong in the equation.

I do not know if it is hubris, ignorance, or rank going to one’s head, but it really doesn’t make a difference what designation you have behind your credentials as long as you follow the basics of plant appraisals; otherwise, you risk feeling like an upstart attorney sitting next to an arborist in a pancake house at 5 o’clock in the morning.
News From International

ISA Annual Conference
July 23-28, 2010 Chicago, IL

**July 23-25** at Morton Arboretum in Lisle, IL
Up By Roots, ITCC, Arbor Fair, and Tree Academy Workshops

**July 26-28** at Navy Pier, downtown Chicago
Educational Sessions and Trade Show

Headquarters Hotel
The [Sheraton Chicago Hotel and Towers](#)
301 E. North Water Street
Chicago, IL 60611
Single.............$191/night + taxes
Double.............$201/night + taxes
For reservations call 1-800-233-4100 or 312-329-7000 (reference “International Society of Arboriculture”).
The reservation cut off date is July 1, 2010.
[Click here to make online reservations.](#)

Additional rooms are also available at:
[Doubltree Hotel Chicago Magnificent Mile](#)
300 E. Ohio Street
Chicago, IL 60611
Single/Double...............$139/night + taxes
For reservations call 312-787-6100 (reference “ISA” or “International Society of Arboriculture”).
The reservation cut off date is July 1, 2010.
[Click here to make online reservations.](#)

2010 True Professionals of Arboriculture

ISA is now accepting nominations for the 2010 True Professionals of Arboriculture Award Recognition.

The deadline to submit nominations is April 30, 2010. This award recognizes ISA members and certified professionals for outstanding representation of the profession through interaction with customers, leadership of employees, innovative educational programs, and involvement in community education and initiatives. Click here to nominate someone for the True Professionals of Arboriculture. ISA members may read case studies about the 2009 True Professionals of Arboriculture Award winners, by logging into the Public Relations Toolbox.

News From Around Florida

2009 Friends of Our Urban Forest Award Program Winners

The Florida Urban Forestry Council proudly announces the winners of the 2009 Friends of Our Urban Forest award winners; winners were presented their award during local events in their region of the state. Congratulations to everyone.

- Outstanding Professional - Rob Williamson
- Outstanding Public Educational Program - Broward County Tree Trimmer Certification Program
- Outstanding Project - Lake Nona
- Outstanding Project - Nova Southeast University Lower School and Central Plant Project
- Outstanding Urban Forestry Program / Large Community - Town of Davie
- Outstanding Urban Forestry Program / Small Community - City of St. Augustine Beach
- Lifetime Achievement Award - Jeffrey Siegel
What Do You Know About Water Conservation?

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

Does an urban forest use the same amount of water in January as it does in July? Water restrictions have become a way of life for Floridians. Most customers usually never think about cutting back on watering cycle unless they feel the need to save on the water bill. Similarly, landscapers and arborists usually don’t adjust the timer because everything is green and the customer is not complaining and irrigation technicians usually don’t adjust the timer because the landscaper/arborist is not complaining. What if you could break this cycle of apathy and discuss proper irrigation scheduling with your customer?

Are you as an arborist affected by watering issues? All the green professionals, homeowners, and business alike have been, and are, being affected. The following are a few tips that you should be aware of in order to help conserve water.

- Plant the right plant in the right place: take into account proper landscape plants for sunny and shady areas.
- Maintain controllers and timers: use the correctly timed and programmed mechanisms to properly control irrigation functions in your property.
- Use rain sensors: these devices automatically send a signal to the irrigation controller when rainfall is detected, thus preventing unnecessary watering and use.
- Use suitable plant spacing: place trees, shrubs and ground covers using appropriate and recommended planting space. You need to use the mature size of your plant to establish appropriate spacing.
- Use permeable or pervious surface covers: Pervious surfaces such as bioretention cells, rain gardens, bioswales, and pervious paving as opposed to gravel or pavement, can infiltrate water needed by plants and lowers excess runoff.

As a green industry professional you should be able to read a landscape and understand what is telling you. You can see visual signs of under and overwatering. Underwatering landscapes with insufficient soil moisture storage capacity (e.g., Permanent Wilting Point; PWP) could cause irreparable damage to the plants. How many times do leaves turn brown and shortly after the plant dies after installation because of improper irrigation and watering needs? We should never let our landscapes get to the PWP. So, to avoid this condition, we often overwater our landscape by two or three times the actual amount needed to be sure the plants will never wilt and reach PWP. Often, you can determine if the landscape has been overwatered by looking for dollar weeds and root rot. Also, you can sometimes see fungi growing on mulched or areas of bare soil.

It is our responsibility as an arborist and landscapers to educate our clients on how to conserve their landscapes and save money by implementing a proper irrigation schedule. Given the difficulties we are facing today, this is an opportunity to think outside the box. The bottom line is to adding more services to your portfolio.

Further information can be found at: http://manatee.ifas.ufl.edu/lawn_and_garden/fyn/edis-publications.shtml#watering; http://edis.ifas.ufl.edu/topic_residential_sprinkler_systems.
¿Qué Usted Sabe Sobre la Conservación de Agua?

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

y Dr. Francisco Escobedo, Escuela de Recursos Forestales y de Conservación de la Universidad de la Florida, Gainesville.

¿Un bosque urbano, utiliza la misma cantidad de agua en enero como en julio? Las restricciones del agua se han convertido en una manera de vida para los Floridanos. La mayoría de los dueños de casa generalmente nunca piensan en ajustar los sistemas de riego a menos que sientan la necesidad de ahorrar en la cuenta de agua. Similarmente, los paisajistas y los arboristas no ajustan el controlador de riego porque todo es verde y los dueños de casa no se quejan. Y los técnicos de la irrigación no ajustan nada ya que al paisajista/el arborista no se quejan. ¿Qué pasaría si se rompe este ciclo de apatía y se discute los requerimientos de riego con el cliente?

¿Está usted como arborista afectado por las restricciones de riego? Todos los profesionales, dueños de casa y negocios han estado igualmente afectados. Los siguientes son algunos consejos que usted debería tomar en cuenta para conservar el agua.

- Plante la planta correcta en el lugar correcto: con sidere las plantas apropiadas para las áreas aso leadas y con sombra.
- Mantenga los reguladores y los controladores de riego: utilice los sistemas correctamente para controlar correctamente la irrigación en su propiedad.
- Utilice los censores de la lluvia: estos dispositivos envían automáticamente una señal al regulador de irrigación cuando detecta precipitación, previniendo así malgaste de agua y uso innecesario.
- Utilice el espacio adecuado para la planta: siembre los árboles, arbustos y las plantas de cobertura usando el apropiado espacioamiento. Usted necesita utilizar el tamaño adulto de la planta para establecer el espacioamiento apro piado.

Como un profesional de la industria usted debería poder detectar los síntomas de exceso o deficiencia de agua en las plantas. Plantas con deficiencia de agua (Punto de marchites permanente; PWP) en algunas ocasiones no se recuperan. ¿Cuántas veces después de una siembra notamos que las hojas se tornan marrones y la planta muere por falta de riego? Nunca debemos dejarnos que las plantas lleguen al PWP. Así, para evitar esta condición, a menudo regamos demasiado las plantas, dos o tres veces la cantidad necesaria para estar seguro que las plantas nunca se marchitarán! A menudo, usted puede determinar si el paisaje tiene demasiada agua buscando malezas como dollar weed y la pudrición de raíz. También, a veces se puede ver hongos creciendo en la cobertura vegetal o en el suelo.

Es nuestra responsabilidad como arboristas y paisajistas en educar a nuestros clientes en cómo conservar y ahorrar agua ejecutando un horario apropiado de irrigación. Dado las dificultades que estamos enfrentando hoy, esto es una oportunidad de pensar fuera de la caja. Ya que en fin de cuentas usted le interesa tener más negocios al fin del día.

Lethal Yellowing
Texas Phoenix Palm Decline

These two fatal Phytoplasma Diseases are thriving in Florida and they are preventable.

36 species of palm trees are susceptible and many are common in our Florida landscape: Coconut Palm, Adonidia Palm, Sylvester Date Palm, Dactylifera Date Palm, Canary Island Date Palm, Sabal Palm and many more...

Saving palms is easy and inexpensive. Replacing dead palms is not.

For more information please call, go online or visit our booth at this year’s Trees Florida Conference in Key West.

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cause vascular bundles in the petiole connecting the leaf to similar bundles in the trunk are unusually fibrous and strong, the sheer weight of a large and heavy leaf might cause it to break partially or fall prior to the petiole being cut completely. The vascular bundles within the uncut portion of the petiole, pulled by the weight of the leaf, would then strip and tear downward, damaging or wounding the remaining leaf base and the trunk. Thus, on large, heavy leaves, such as those of Phoenix canariensis, use the same three-step method one would employ for pruning large branches to prevent ripping and tearing of trunk tissue. First partially undercut the base and sides of the petiole about six inches out from the trunk. Then make a second cut all the way through the petiole about six inches out beyond the first cut. The third and final cut removes the remaining twelve-inch petiole stub at the trunk. Sometimes highly skilled workers can make one quick initial cut completely through the petiole about two feet out from the trunk and then remove the remaining two-foot stub with a second cut at the trunk.

Portions of the petiole and/or leaf base frequently remain even after close and neat cutting because they are not yet ready to abscise, and closer cutting to remove them is too difficult and/or could damage the trunk (Fig. 9). The tendency might be to tear off these remnants, but refrain from doing so because this practice might damage the trunk, especially those species with smooth pseudobark like Archontophoenix cunninghamiana, Howea forsteriana, and Syagrus romanzoffiana, leaving unsightly permanent scars or wounds where insects and diseases can gain entry. A sensible and practical approach is to remove only those leaf bases and/or petiole remnants if they fall or pull away easily when only a slight amount of pressure is applied. Do not apply force to tear or pull them off; let them remain on the trunk.

However, “peeling” or “skinning” of the trunks of Washingtonia filifera and W. robusta to remove persistent leaf bases and portions of attached petiole is a common and perhaps not too detrimental practice for these species. Sharp, specially modified carpet knives or box cutters are typically used by drawing or pushing them horizontally along the lower edge of the leaf base completely around the trunk at its point of attachment (Fig. 10). These cuts are generally one-half to three-quarters inch apart but can be even farther apart depending on the internode length (distance between points of two adjacent leaf base attachments). If done properly the leaf base then can be pulled off easily or even sloughs off on its own, leaving a fine, not too conspicuous scar (Fig. 11).
A few palms, such as Butia capitata, Livistona spp., and Sabal spp., have persistent, rigid, woody, stub- or slat-like petiole bases, which, if allowed to remain on the trunk and are neatly cut to a few inches long, make intriguing and handsome patterns (Fig. 12). However, keep these petiole stubs less than four inches long because their woody, rigid nature makes them hazardous to the unwary passerby. Some palms, like Phoenix dactylifera, have such persistent, woody leaf bases that they might never fall away completely. These can be pruned neatly and artistically into more or less smooth, rounded mounds or knobs (Fig. 13).

Phoenix canariensis is well known for the mass of persistent leaf bases just below the crown of leaves, which is commonly referred to as the “ball” or “pineapple.” These pineapples are typically shaped or sculpted during leaf pruning and removal, sometimes artistically or otherwise severely, and primarily with a chainsaw. Like trunk “skinning,” overzealous pruning and sculpting of pineapples are discouraged, and it is especially critical to avoid the use of chainsaws because of the potential to spread disease.

Modified short-handled spades, used extensively in the 1950s and 1960s, and other innovative devices have recently gained favor for pruning palms in some instances, mostly for removal or shaping of persistent leaf bases and the pineapples they form to enhance the appearance of Phoenix canariensis and P. dactylifera (Fig. 14). Less frequently they are used to...

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### Florida Chapter ISA - 2010 Education Schedule

See what is in store for educational opportunities in 2010...

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Seminar/Class</th>
<th>Location(s)</th>
<th>Open for Registration</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 17, 2010</td>
<td>Plant Health Care</td>
<td>Sarasota,</td>
<td>Click here to register</td>
</tr>
<tr>
<td>March 23, 2010</td>
<td>Plant Health Care</td>
<td>Ft. Lauderdale</td>
<td>Click here to register</td>
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<tr>
<td>March 31, 2010</td>
<td>Plant Health Care</td>
<td>Orlando</td>
<td>Click here to register</td>
</tr>
<tr>
<td>April 22, 2010</td>
<td>Roots Plus Growers</td>
<td>Arcadia</td>
<td>Click here to register</td>
</tr>
<tr>
<td>April, 2010</td>
<td>Safety and Climbing</td>
<td>Tampa</td>
<td>Click here to register</td>
</tr>
<tr>
<td>June 13-15, 2010</td>
<td>Trees Florida</td>
<td>Key West</td>
<td></td>
</tr>
<tr>
<td>July, 2010</td>
<td>Safety and Climbing</td>
<td>Ft. Lauderdale</td>
<td></td>
</tr>
<tr>
<td>August, 2010</td>
<td>Pest Management</td>
<td>Jacksonville, West Palm Beach, Naples</td>
<td></td>
</tr>
<tr>
<td>September, 2010</td>
<td>Tree Risk Assessment</td>
<td>Ft. Lauderdale, Tampa</td>
<td></td>
</tr>
<tr>
<td>October, 2010</td>
<td>Safety and Climbing</td>
<td>Orlando</td>
<td></td>
</tr>
<tr>
<td>October, 2010</td>
<td>Grades &amp; Standards</td>
<td>Homestead, Clermont</td>
<td></td>
</tr>
<tr>
<td>November, 2010</td>
<td>Coast Series</td>
<td>West Palm Beach, Orlando, Miami</td>
<td></td>
</tr>
</tbody>
</table>
Pruning Palms continued from page 28

remove leaves. Although their use is more physically taxing on the worker, the chances of spreading disease are less than with a chain saw because they can be thoroughly disinfected. An innovative flange-like device, creatively mounted on the end of the hydraulic boom of a tower bucket truck and maneuvered by a skilled operator, has also been effective in pushing off and shaping pineapples on Phoenix canariensis (Fig. 15). Use of these tools poses less of a risk of wounding the trunk than would a chain saw, and, like straight- or curved-edged manual saws and clippers, spades and similar tools can be thoroughly cleaned and disinfected, procedures impossible with a chain saw.

Effects of leaf removal

While less severe leaf removal may actually increase leaf production temporarily for one or two years, the long-term effects of frequent, excessive leaf removal on the health of landscape palms are largely undocumented.

Indigenous peoples around the world have long relied on palm leaves as thatch and for other uses. This long history of leaf harvesting suggests that, in many instances, long-term removal of leaves might not be detrimental to the health of palms if it is done in a judicious manner because palms might temporarily rely on reserves in the trunk to compensate for reduced leaf area. Balick and Beck (1990) listed 194 literature references just for use of palm leaves for thatch by indigenous peoples, many of which refer to the use on a sustainable basis. May et al. (1985) noted that leaf harvesting did not impede growth of Orbignya martiana (= Attalea speciosa) as long as it occurred at sufficiently wide intervals, primarily no more frequently than every two years. Heinzman and Reininger (1988) reported that removing leaves of Chamaedorea elegans (parlor palm) for the international floricultural trade was likely a sustainable practice but that more work was needed. Endress et al. (2004) found that leaf removal on Chamaedorea radicalis, also for the floricultural trade, initially increased leaf production slightly but decreased leaf length, and eventually reduced yields. In short-term studies, Oyama and Mendoza (1990) found that leaf removal significantly increased leaf production in Chamaedorea tepejilote and Mendoza et al. (1987) reported the same results for Astrocaryum mexicanum.

In cultivated palms, Bailey et al. (1977) reported a significant decline in leaf production of Cocos nucifera (coconut palm) nine months after a 70 percent leaf area reduction. In studies on Elaeis guineensis (African oil palm) Calvez (1976) found that removal all but the 17 youngest leaves reduced the length of new leaves produced in subsequent months. Jimenez (2004) reported that leaf removal on Phoenix roebelinii (pygmy date palm) reduced leaf production and length of new leaves. In soon to be published studies conducted with my highly esteemed colleagues Jim Downer and Maren Mochizuki, we found that complete leaf removal four times per year for several years significantly reduced growth (leaf size and trunk height) of Washingtonia filifera and W. robusta, and, in some cases, even resulted in death of Trachycarpus fortunei (windmill palm). However, equally frequent but less severe pruning that was equivalent to the standard industry practice (no leaves removed between the
10 o’clock and 2 o’clock positions) did not result in any reduction of growth (Fig. 16).

Studies of the long-term effects (up to 10 years or more) of leaf removal on the health of palms are sorely needed.

Meerow (1992) and Broschat and Meerow (2000) suggested that removal of green leaves, especially those in palms with naturally fewer than 12 leaves in the crown, reduces carbohydrate production, resulting in an abnormally narrow trunk, and might make palms more susceptible to cold damage. James et al. (2006) reported that the leaves of Washingtonia robusta tend to reduce harmonic sway and mitigate potential trunk damage due to strong winds. Because of the manner in which leaves are produced in a palm, with the newest leaves emerging from the center of the crown and surrounded by older leaves that offer some mechanical support or protection (Tomlinsom 1990), excessive removal of older leaves may expose juvenile leaves to wind failure or damage. In studies on Elaeis guineensis, Calvez (1976) found that the highest levels of leaf removal resulted in the highest incidences of wind related crown damage. Also on E. guineensis, Chan and Duckett (1978) surmised that older leaves provide structural support of the crown because only palms with removed leaves suffered crown damage when subjected to strong winds.

Leaf removal can also expose a trunk to potential damage from the sun. Kentia palms (Howea forsteriana) are prized for their handsome, smooth, green trunks attractively ringed with white leaf scars. Trunks formerly shaded by leaves can severely burn and turn black when freshly exposed to full sun, detracting immensely from the esthetic value of the palm.

2. Inflorescence and Infructescence Removal

Inflorescences and infructescences, which often are attractive ornamental features, can be removed once they have completed their natural life span and are dead, if fallen flower and fruit litter do not pose a nuisance or hazard (Figs. 17).

Figure 17. Inflorescences of Phoenix dactylifera, heavily laden with colorful fruit, can be showy and attractive ornamental features.

Figure 18. Like fruits of many palms, those of Phoenix dactylifera can stain hard-scape and pose a hazard to pedestrians.

Figure 19. (Below) If unwanted, remove palm inflorescences after they have elongated fully but before flowers or fruits form, as here on Phoenix dactylifera.
summer and become laden with fruits in late summer, fall, and even the winter. Leaf removal can coincide with removal of inflorescences and infructescences, thus saving time and money (Fig. 20). Remove unwanted inflorescences and infructescences as described above for leaf removal.

3. Trunk Removal

When left to grow naturally, many clustering or multitrunked species, such as Acoelorrhaphe wrightii, Chamaerops humilis, Phoenix dactylifera, P. reclinata, and Serenoa repens, will form a solid, dense, impenetrable, mound-like mass of foliage lacking character (Fig. 21). Selective removal of some trunks will open up the clump, giving it character and revealing trunks attractively clothed with persistent leaf bases or other handsome features (Fig. 22). Of course, one might desire a solid, dense mass of foliage to screen out noise, wind, dust, and unwanted pedestrian traffic or to block an unsightly view.

With multi-trunked palms, trunks can be removed that have grown too tall, pose a hazard, or have died after flowering and fruiting, like those of Caryota mitis. Remove trunks as close to the base as possible, taking care not to damage remaining desired trunks.

Broschat and Meerow (2000) recommended against trunk removal when the fungus Ganoderma zonatum, which causes butt rot on palms and is more common in warm humid areas, is present because it will readily colonize the cut stumps and invade remaining trunks, damaging or killing them.

Fortunately Ganoderma butt rot is not a serious problem on palms in more arid California, Arizona, and Nevada, and trunks of clustering palms have long been selectively removed there without disease problems. While Ganoderma butt rot is not a serious problem on palms in Hawaii, it should be considered when removing trunks there because the warm, humid climate facilitates development of this disease.

Acknowledgements: Richard W. Magargal and Jose Mercado critically reviewed this article and offered helpful suggestions.

Author Donald R. Hodel is Environmental Horticulturist for the University of California Cooperative Extension in Los Angeles, a position he has held for 26 years. Don develops and implements applied research and educational programs for the professional tree management and landscape industries. A world-recognized leader in the horticulture and taxonomy of palms, Don has authored four books and over 250 articles about the selection and management of landscape palms, a group of plants with which he has worked for over 35 years. <drhodel@ucdavis.edu>.

References listed on page 32

Pruning Palms (Part 2) will appear in the Summer 2010 Florida Arborist.
Trees4Florida Public Service Announcements
Available at www.treesarecool.com

With the devastation to trees in Florida by hurricanes, storms and fires, millions of dollars in valuable tree resources have been lost, particularly within the past several years. Jointly, the Florida Urban Forestry Council (FUFC) and the Florida Chapter of the International Society of Arboriculture (FC-ISA) developed the Trees4Florida program which focuses on making the public more aware of the need to be vigilant in safeguarding our trees and preserving Florida’s greatest green resource.

The Trees 4 Florida program has produced a variety of Public Service Announcements (PSAs) available for anyone to free of charge. Included in the campaign are English and Spanish print-quality and broadcast-quality PSA ads and spots. Include them on your website, flyers or any promotional material.

Access these FREE PSAs by visiting www.treesarecool.com; hover on ‘Trees4Florida’ in the menu box to the left to make your choice of ad style.

References - Pruning Palms
Position Paper on Florida Grades and Standards

At the February 12, 2010 Florida Chapter Board Meeting, the board approved the position paper on the Florida Nursery Grades and Standards as presented below.

Issue: Florida Grades and Standards for Nursery Plants and Trees

Position: FNGLA embraces the use of the Florida Grades and Standards for Nursery Plants to help ensure high quality trees with good structure and greater longevity are used in Florida landscapes. Use of the Grades and Standards must be accompanied with the understanding that applying terms and standards to live trees is a subjective process, application must be practical and reasonable, and training or knowledge of tree biology, maintenance and production practices is needed. Trees should be graded based on any updated Grades and Standards as published by the Florida Department of Agriculture & Consumer Services’ Division of Plant Industry (DPI). Any specifications beyond the Grades and Standards must be communicated to all parties in written form prior to delivery of the trees and plants.

Background: Florida tree nurseries have experienced significant changes in production demands during the last decade. One of these major positive factors was the 1998 publication of the 2nd edition of the Florida Grades and Standards for Nursery Plants. Its impetus was to improve communication between buyers and sellers on what constitutes tree quality. Due to the 2nd edition’s popularity and acceptance among landscape architects and municipalities, the Grades and Standards have become the universal tree specification throughout Florida. This has led to a significant increase in the quality of trees produced by Florida
nurseries.

One of the greatest benefits to the Grades and Standards is the nursery and landscape industry now enjoys universal specification and shares common terminology. This common terminology has proven to be a tremendous benefit since it now fosters better communication between buyers and sellers and offers confidence when discussing similar products and their quality. Nonetheless this benefit of common terminology or a “tree glossary” can sometimes become a disadvantage because words and illustrations are used to describe a living tree which, inherently may cause some subjectivity. The challenge facing the nursery and landscape industry is communicating and clarifying the subjective aspects of the Grades and Standards. Education and training will make grading less subjective, which, in turn, results in consistency of grading from job to job. This grading consistency only happens when buyers and sellers embrace a working knowledge of the Grades and Standards.

While the Grades and Standards have increased tree quality, it has also sometimes led to unrealistic and unwritten expectations. For example, a buyer might specify Florida #1 trees expecting such to have near perfect straight trunks to the top of the trees. This is a misapplication of the Grades and Standards. In some cases, buyers or inspectors have added requirements that are not found in the Grades and Standards and not written in the planting plans or other bid documents. The addition of such nonexistent criteria leads to confusion at job sites as well as great expense to the growers and landscape contractors when such trees are rejected erroneously. Proper use of the Grades and Standards must be employed to ensure it continues to function as a beneficial communication tool and as a means for ensuring plant and tree quality. If ad hoc criteria are imposed on the Grades and Standards beyond its scope, then the universal specification now benefitting buyers and sellers alike will be jeopardized. This could lead to a fragmented understanding of tree quality where each locality or area has differing understandings and erroneous definitions, resulting in exactly the opposite intent of the objectives of the Grades and Standards 2nd edition.

Both buyers and sellers must work together to recognize it is possible to grow, buy, install and maintain great trees and plants for Florida’s landscapes and urban forests. Buyers’ expectations for high quality trees have increased dramatically over the past decade. The industry must embrace these quality gains, while realizing continuous unwritten practices and changes to the Grades and Standards create a difficult, if not impossible, marketplace for buying and selling plants and trees.

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**How to Order Your TreesAreCool Specialty Plate**

In person: You can see and pay for your TreesAreCool specialty license plate in person at your county tax collector office.

By mail: Complete and return this form with your vehicle registration renewal notice and a check for an additional $58 ($25 annual donation, $5 annual state fee and a one-time new plate fee of $28). If your renewal notice indicates that it is time to replace your license plate, do not include the $26 new plate fee.

Name: __________________________ Address: __________________________

City: __________________________ Zip Code: __________________________

The TreesAreCool program is administered by the Florida Chapter of the International Society of Arboriculture (ISA).
Florida Chapter ISA
Edward W. Bok Award Application

The Florida Chapter ISA is currently accepting nominations for the 2010 Edward W. Bok Award. The Bok Award is given in recognition of career-long distinguished service and dedication to the advancement of Arboriculture.

Entry Guidelines

• Enter yourself or a colleague.
• Each application must be typed and presented in a standard three-ring binder (no larger than ½ inch capacity). The completed awards entry form must be the first page of the application. Following the entry form should be a summary of not more than three typewritten pages that describe the individual’s contribution to arboriculture or urban and community forestry.
• Support documentation such as photographs, press clippings, printed pieces, and letters of commendation are encouraged, but shall be limited to 12 additional pages. All supporting documents must be attached or secured inside the application.

Name of individual ________________________________________________________________

Address__________________________________________________________________________

City _________________________________________State ______ Zip______________________

Phone__________________________________ Fax _____________________________________

E-mail___________________________________________________________________________

Nominated by (if different)___________________________________________________________

Address__________________________________________________________________________

City _________________________________________State ______ Zip______________________

Phone__________________________________ Fax _____________________________________

E-mail___________________________________________________________________________

Number of duplicate certificates if needed____________________________________________

Send all entries to: Florida Chapter ISA - 7853 S Leewynn Court - Sarasota, FL 34240
DEADLINE May 15, 2010

All submitted materials become property of the Florida Chapter ISA.
### 2009 Certification Exam Schedule

The **FLORIDA CHAPTER of ISA** is pleased to announce our revised 2009 schedule of Certification exams. See the chart below for the site nearest you.

<table>
<thead>
<tr>
<th>Date</th>
<th>Exam/Class</th>
<th>Location</th>
<th>Time</th>
<th>Proctor or Instructors</th>
<th>Last Date to Register</th>
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<tr>
<td>April 24, 2010</td>
<td>Certified Arborist Exam</td>
<td>Broward County Ext 3245 College Ave. Davie, FL 33314</td>
<td>7:30 AM to Noon</td>
<td>Mr. Way Hoyt</td>
<td>Minimum 12 business days prior</td>
<td>$150/ $250</td>
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<td>May 15, 2010</td>
<td>Certified Arborist Exam</td>
<td>Duval County Ext 1010 N McDuff Ave. Jacksonville, FL 32254</td>
<td>7:30 AM to Noon</td>
<td>Mr. Larry Figart</td>
<td>Minimum 12 business days prior</td>
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<td>June 13, 2010</td>
<td>Certified Arborist Exam</td>
<td>Casa Marina Resort 1500 Reynolds Key West, FL 33040</td>
<td>7:30 AM to Noon</td>
<td>Mr. Norm Easey</td>
<td>Minimum 12 business days prior</td>
<td>$150/ $250</td>
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This schedule is subject to change as additional tests and review sessions may be added. Visit www.floridaisa.org for updates.

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

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

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

New Florida Chapter Members

Here are the individuals that joined the Florida Chapter during the fourth quarter of 2009. 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.

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

Letters to the Editor

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

Email your letters to:
floridaisa@comcast.net

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

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

An invitation to all members
to attend a
Board of Directors Meeting!
Call 941-342-0153
for specific times and locations

Up-coming
2010 Board Meeting
Dates & Locations

April 9, 2010 - Orlando
July 16, 2010 - Orlando
September 10, 2010 - Orlando
November 5, 2010 - Orlando
Arborist Certification Committee Report
By Norm Easey, Florida Certification Liaison

Arborist Certification is still moving ahead worldwide; there are now 24,096 ISA Certified Arborists, 903 ISA Certified Tree Workers, 1532 Utility Specialists, 365 Municipal Specialists and 297 Board Certified Master Arborists. The Florida Chapter currently has 1561 Certified Arborists.

The Florida Chapter would like to congratulate the following 65 Florida individuals for earning their Arborist Certification and Municipal Arborist Certification during the fourth quarter of 2009:

Certified Arborist
Brey Abreu, Homestead, FL
Jennifer Brown, Stuart, FL
Jason Agosto, Dade City, FL
Matthew Anderson, Clearwater, FL
Mark Amuso, Sarasota, FL
Steven Bishop, Tallahassee, FL
William Broome, Orlando, FL
Meghan Brown, Tierra Verde, FL
Larrie Busloff, Key West, FL
Josh Campbell, St. Augustine, FL
Dennis Carnahan, Kissimmee, FL
Spence Conrad, Tallahassee, FL
John Crawford, Valrico, FL
Steve Demello, Lan O Lakes, FL
John Dunn, Clearwater, FL
Paul Ebersold, Greenacres, FL
Eric Fleites, Coral Gables, FL
Hampton Gardner, Weston, FL
Marion Garion, Tampa, FL
Erin Givens, San Antonio, FL
Robert Goodson, Gotha, FL
Travis Hansen, Northdale, FL
Matthew Harding, Clearwater, FL
Robert Hawter, Rotonda West, FL
Timothy Hodgins, Miami, FL
James House, Bradenton, FL
Alfredo Infante, Miami, FL
Jesus Inigo, Miami, FL
Lisa Johnston, North Miami Beach, FL
Carl Kallicharan, Lauderhill, FL
Tedd Kenny, Loxahatchee, FL
Dina Kessaris, Pompano Beach, FL
John King, Lakeland, FL

Municipal Arborist
Paul Klens, Naples, FL
Omar Leon, Pembroke Pines, FL
Daniel Lippi, St. Augustine, FL
Vincent Lombardi, Brandon
Michael Marciniak, Tampa, FL
Michael Mongeon, Tallahassee, FL
Jesse Morrison, Bushnell, FL
Maria Muhlhahn, Venice, FL
George Murphy, Venice, FL
Justo Naranjo, Lake Park, FL
Virginia Overstreet, Tampa, FL
Jason Perryman, Port Charlotte, FL
James Peterson, Winter Springs, FL
Douglas Powers, Orlando, FL
Austin Price, Ft. Myers, FL
Edwin Rice, Panama City, FL
Kevin Rose, Homestead, FL
Deborah Rothwell, St. Petersburg, FL
Rainer Schael, Miami, FL
Keith Sabisch, St. Cloud, FL
Brian Schatz, Tampa, FL
Christopher Smerling, Tallahassee, FL
Andrew Sponseller, Naples, FL
Mark Stevens, Winter Haven, FL
Robert Sunshine, Miami, FL
Lucinda Utter, Tampa, FL
Anthony Valido, Land O Lakes, FL
Jeffrey Varn, Madison, FL
Elena Viamontes, Miami, FL
James Wier, Greenacres, FL
Jonathan Winters, Valrico, FL

Are you thinking about becoming certified?
Visit the International ISA website
to access the certification application handbook with further information.
Do You Know a True Professional?

ISA is searching for the 2010 True Professionals of Arboriculture:

People who reach out and find ways to make the importance of the arborist profession known to everyone they meet.

Here’s how individuals chosen as True Professionals will be spotlighted throughout the year:

- **Increased Media Exposure**
  Announced as a winner in a press release sent worldwide, including to their hometown

- **Recognized as an Example**
  Featured in case studies in Arborist News, the ISA website, & Planting Seeds quarterly electronic newsletter

- **Honored Before Peers**
  Receive complimentary registration and invitation to a special announcement ceremony at the ISA Annual Conference in July

- **Becoming an Ambassador**
  May speak at chapter conferences and meetings, give workshops or presentations for public education, and use their status as an ISA True Professional in their own professional marketing

Go online today to nominate a True Professional of Arboriculture

Deadline to submit nominations - April 30, 2010
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.