What to say when a customer asks:

“What is the stinky ooze coming out of my tree?”

by Chuck Lippi, Consulting Arborist

Do you know of a tree that seems to be leaking a smelly liquid? Arborists call that smelly liquid slime flux, which is usually seen in the heat of summer on the trunk, large limbs or basal roots of oaks, maples and elms. Slime flux is most common on large, older trees and in spite of its smell it is to some extent beneficial to the tree.

Slime flux is caused by a condition inside the tree called wetwood, which is caused when bacteria invade a wound or injury. The bacteria cause fermentation and produce methane gas, not unlike the process that follows when you eat a bean burrito for lunch. The methane gas creates pressure and pushes the bacteria-laden liquid out openings such as the old wound or a narrow crotch with embedded bark. The liquid is odorless inside the tree but takes on a foul smell when it reaches the air outside and is colonized by yeast-like fungi and other organisms. Wasps and hornets often are found feeding on the fermenting slime.

Slime flux will not kill a tree but is merely a sign that there has been an earlier injury. In some cases as the outer wound calluses over and the internal methane production decreases, the slime flux may stop in a year or two. In other cases slime flux may reoccur year after year.

Curiously, wetwood and the associated slime flux help protect the infected tree. The bacterial growth creates conditions in the wood and slime that inhibit wood decay organisms. Furthermore, if the slime flux continues to

PART II

Avoiding Excessive Soil Over the Root Systems of Trees:

A Best Management Practice

by Dr. Gary Watson

An industry wide working group1 was formed in 2003 to develop consensus on a complex national issue: tree decline and death in the landscape resulting from excessive amounts of soil over the root system. The following is the second of a two-part article on planting depth by Dr. Gary Watson of the Morton Arboretum. Part I of this article appeared in the Fall 2005 Edition of the Florida Arborist Newsletter. It can be found on the Florida Chapter ISA website at www.floridaisa.org.

When structural roots are too deep below the soil surface, lack of oxygen can kill roots and lead to decline and death of the tree, especially in urban soils. In some species, prolonged moisture at the base of the trunk may increase root and collar rot diseases.

Applicability of this BMP

These best management practice guidelines are intended to assist growers, landscape professionals, and arborists learn to recognize, prevent, and take action to correct root sys-
A Message From the President

As I sit here in front of my computer contemplating the words for this, my final president’s message, I think back on the events that brought me here. First and foremost, that I became an arborist twenty-eight years ago, learning the trade along with my older brother. Soon striking out on my own, I worked alone for a few long years until I became tired of working alone all day. Then there was the challenge of hiring and firing employees, making friends of some and enemies of others.

One thing that has remained constant, is my need to learn as much about my profession as possible. At the urging of my wife and business partner Lita, I took the certified arborist exam eleven years ago and passed. This set me on a lifelong path of learning. Lita also convinced me to become further involved in my profession/industry like my participation in the Florida Chapter Tree Climbing Championship and the International Tree Climbing Championship. This lead to a position with ArborMaster as a safety instructor, involvement as an International Safety Committee member, and the ISA representation to the American National Standards Institute’s Z-133 committee. And all of this, has led to speaking engagements at various conferences and seminars.

Along this journey my colleagues poked and prodded until I ran for the Florida ISA board of directors as the Board Secretary. Although I didn’t win, my colleagues persisted in my Chapter involvement and I ran for the Commercial Arborist position, and won. As my three year term was ending, I was asked to consider the Vice President position which ultimately transitions to the president. I was quite honored to be asked and even more so to have been chosen by my peers to represent them on the board. These past six years on the Board have been a learning experience of their own. Its amazing the amount of passion there is among these volunteers. What I have found to be most interesting is the difference in perspective among the Board members based on their particular walk through this world called arboriculture. It is these differences that keep this Chapter growing and moving forward. I still have a little more than one year as an elected official on the Board, but I can assure you that I will be making myself available to committee work far into the future. Who knows I may even take another turn at politics and run for an elected seat?

With all this said I encourage you as members of the Florida Chapter of ISA to become involved and share your unique perspective so the Chapter will continue to grow.

Thank you,
Bruce
In the News

Ash borer quarantine grows in 3 states
USDA announced it’s enlarging its emerald ash borer quarantine, adding locations in Michigan, Ohio and Indiana. Surveys indicated presence of the pest outside existing quarantine areas in Michigan’s Grand Traverse and Montcalm counties, Ohio’s Auglaize, Fulton, Hancock, Henry, Lucas, Ottawa, Sandusky and Wood counties and Indiana’s LaGrange County. The quarantine restricts movement of ash nursery stock, ash lumber and ash firewood. The new quarantine boundaries became effective Oct. 25.

Michigan studies reveal landscape value
Mich. St. Univ. research provides perspective on which landscape attributes people value most. Landscape design sophistication was the most important factor, followed by plant size and plant type. The study indicates that landscapers should indicate the types of plants used in a design, but realize that potential clients will not likely value this as much as design sophistication and plant size. “From a consumer’s perspective, a good landscape can improve perceived home value by 12%,” said MSU professor Bridget Behe. “What we see in design sophistication is that a curved bed costs about the same as a straight line bed to install, but can enhance home value by 1%-2% by itself. Simply curving bed lines could add $2,500 to $5,000 to the perceived value of a $250,000 home.”

Skinner Nurseries adds Texas location
Skinner Nurseries, a chain of landscape distribution centers headquartered in Jacksonville, Fla., acquired a facility in Fort Worth, Texas, formerly owned by Southwest Color. The 6-acre yard stocks 4-inch color up to 300-gallon trees. This is the third Skinner facility in North Texas, with other locations in Lewisville and Carrollton. Skinner Nurseries now operates 22 landscape distribution centers across the South.

Arizona targets sharpshooter pest
Arizona Dept. of Ag. set traps for glassy-winged sharpshooter this fall, after the discovery of a pair in August at a Sierra Vista nursery. Besides threatening Arizona’s $18 million wine industry, the pest also may harm oleander production, one of the state’s key landscaping ornamentals. The insect is the primary carrier of Pierce’s disease, an infection that has no viable remedy. The insect overwinters as an adult. It lays eggs February to May. The year’s first generation matures as adults from May to August. The year’s second generation begins as egg masses laid from June through September.

Florida announces 2006 plants
Florida Nursery, Growers and Landscape Assoc. announced its Plants of the Year selections for 2006: *Aspidistra ‘Milky Way,’ Bulbine frutescens, Calliandra emarginata, Ocimum x ‘Purpurascens,’ Phalaenopsis Baldan’s Kaleidoscope (‘Golden Treasure’), Phoenix sylvestris, Thrinax radiate and Wisteria frutescens ‘Amethyst Falls.’ This program promotes underused, but proven, Florida landscape plant material.

Hurricane Wilma rocks Florida nurseries
More than 2,600 production nurseries were in the path of Hurricane Wilma as it slammed into South Florida last week, according to a report from Florida Nursery, Growers & Landscape Assoc. Among the counties hardest hit were Miami-Dade, Broward, Palm Beach, Martin, St. Lucie, Hendry, Glades, Lee and Collier. Nursery damage is believed to be extensive and widespread. “Nursery shade houses and greenhouses are literally flattened, exposing many sensitive foliage plants,” said Ben Bolusky, FNGLA exec. v.p. “Many nurseries are also without power, rendering needed irrigation systems inoperable.” Widespread power outages and downed communication lines are making it difficult to assess the full scope of crop loss, structural damage and business interruption caused by Hurricane Wilma.

USDA announces $800 million in disaster funds
Ag. Secretary Mike Johanns announced a proposal to dedicate $800 million in hurricane relief funds for ag. and timber producers in Gulf Coast states. The money will be available through grants and loans. This proposal includes $15 million to clean up and salvage the USDA Southern Horticulture Laboratory in Poplarville, Miss., and another USDA research station in New Orleans.
Using Stone Dust for Low Cost Sidewalk Repairs

By Scott Wheeler
Trees and Parks Supervisor, City of Newport, RI

The reality of municipal arboriculture is that the maintenance practices are dictated by budgets constraints. This is the case in Newport, RI where, despite the presence of Gilded Age Mansions, the backlog for sidewalk replacements is measured in years, including far too many necessitated by tree roots.

Given the limited resources, it is difficult to justify replacing lifted concrete sidewalks around trees when it is inevitable that in a short time the new panels will be in the same state. Minimal budgets also exclude the use of innovative hazard mitigation options such as ramping, rubberized pavers, concrete grinding and slap jacking.

In Newport narrow streets laid out for horses and carts limit the use of meandering sidewalks or enlarging existing tree wells. An unfortunate experience with a downtown tree that fell following excessive root loss during sidewalk replacement convinced me that root pruning is an option with limited applications.

A mitigation option deemed sufficiently effective and within the means of Newport’s Forestry Division budget is compacted stone dust. With a material cost of $17 per ton, the required labor is the only significant cost for installing stone dust.

In a typical installation, raised concrete panels are removed with a jack hammer or backhoe, with care taken to avoid any injuries to the trunk and root flare. All tree roots are left intact provided that they are reasonably close to the finished grade of the adjoining panels. In a typical 3-4” deep sidewalk, the stone dust is put down in two layers with the material compacted utilizing a lightweight vibratory compactor. Water can be added to the process to improve compaction and to reduce the dust during the installation process.

Depending on the degree of compaction achieved and the volume of traffic over the sidewalk, it may be necessary to add an additional layer of stone dust in six months to a year after installation. Properly installed, stone dust walkways can have a long, serviceable life. One of the initial trial locations has not required additional material after 13 years.

Compacted stone dust has been approved and widely used as a handicapped accessible walking surface. Its application is not limited to low traffic sidewalks. When the Rhode Island Department of Transportation ordered the removal of two large plane trees to meet sidewalk accessibility requirements for the tourist-packed America’s Cup Avenue, the city convinced them to try stone dust. Three years after installation the stone dust is still intact and the sidewalk is level.

Additional applications for stone dust have been tested. A common quandary with deep tree wells with grates is what to do when the grates must be removed to accommodate trunk growth. The resulting deep depression is not acceptable because of the potential for personal injury and liability. Filling the depression with soil or mulch could lead to oxygen deprivation, girdling roots and compression trunk damage. Drainage stone or pea stone is too loose to walk on and does not stay in place. In the absence of a good choice, stone dust has been used under the premise that the drainage qualities of stone dust will reduce moisture held against the trunk and allow sufficient oxygen exchange while staying in place. The evidence is anecdotal, but the early results are promising.

Stone dust has also been utilized in high traffic areas as a replacement for mulch that is constantly displaced by pedestrians or in locations where foot traffic has repeatedly eroded loam from tree wells.

There are some significant limitations for stone dust. Periodic maintenance is needed to insure erosion has not occurred. It is not appropriate on steep grades where run off is likely to result in erosion. When utilized in close proximity to residents doorways, strong concern is often expressed about the potential to track the material indoors. Once fully compacted, this complaint rarely persists. Potentially these limitations could be overcome if the material is combined with stabilizer products widely marketed to improve the adhesion properties of infield clay used in raised pitching mounds.
Help Us Give Away Money!

By Ruth Stein, TREE Fund Board Member

How often do you hear that?! It may seem like this season of giving is more about taking. Everyone you hear from has a cause and wants a donation. With all the natural disasters of 2005, contribution fatigue is setting in. Let us try to break out of that mold and get you to think about who needs our help.

The TREE Fund Board of Directors recently approved the creation of the Bob Skiera Memorial Fund, to honor our dear, old friend and we’re working on details of how that will be administered. But in the meantime, of course, our current grant and scholarship programs are active. It is most definitely not too early to be thinking about the Hyland R. Johns grants and the Robert Felix Memorial Fund scholarships.

Johns grants provide awards of up to $25,000 to qualified researchers working in areas of critical needs. Our research priorities include:

- Root and soil management
- Planting and establishment
- Plant health care
- Risk assessment and worker safety

Every year Felix scholarships provide $3,000 each to four students who are planning to pursue careers in commercial arboriculture.

Applications for both the Felix and Johns programs are due in the spring. If you are interested or if you know about a worthy project or student we should be funding, please speak up! As we update our website, applications will be available online. But you can find information and guidelines for these programs at www.treefund.org now. Or contact us at the TREE Fund: treefund@treefund.org or 711 E. Roosevelt Rd., Wheaton, IL 60187 or (630) 221-8127.

Florida Chapter

Board of Directors Update

John P. White Memorial Scholarship Created
The Board has decided to commemorate their colleague and friend John White, who passed away unexpectedly this past summer, by establishing a scholarship in his name. The John P. White Memorial Scholarship has been created to encourage students to pursue careers in Florida’s arboriculture industry or a related field by providing financial assistance in the sum of $1000 on an annual basis. The inaugural year is 2006, and as such all application materials will be available on the Chapter’s website (www.floridaisa.org) within the next few months.

The Board Gets a Face-Lift
Change swept through the Board this season as President Bruce Smith appointed Michael Marshall as the new Education Committee Chair, Henry King as the new Florida Chapter Liaison to the Tree Fund, and Joe Samnik as the new Arborist Licensing Committee Chair. In accepting his new position, Joe Samnik stepped down as Education Committee Chair. Accordingly, the Board would like to extend its heartfelt gratitude to Joe for 2 years of exceptional service and dedication that no doubt paved the way towards the Chapter’s first-rate educational program.

Florida Chapter Remains a Candidate for 2011 International Conference
The Board voted to keep the Florida Chapter in the running for the 2011 International ISA Conference host. If the Florida Chapter’s bid should win, the Gaylord Palms Resort and Convention Center in Kissimmee would be the site of the Conference. The final decision will be announced this upcoming March.

The Board Becomes Bilingual
The Board has decided to create an ad-hoc Spanish Translation Committee whose purpose will be to access translation funds in order to translate key arboriculture written material. Becky Jordi has been appointed to act as Chair to this new Committee. Stay tuned for updates on this Committee’s progress.
There are good reasons why the ASCA Consulting Academy is considered an absolute requirement for consulting arborists:

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There’s a New Sheriff in Town!

By Joseph R. Samnik, Consulting Arborist

As I travel the State of Florida, I am hearing very positive response to what may be the newest effective tool in sustainable Urban Forestry Management – ANSI A300, (part 5): Tree, Shrub and other Woody Plant Maintenance – Standard Practices (Management of Trees and Shrubs During Site Planning, Site Development and Construction).

While tree ordinances vary in degree of intensity from one jurisdiction to another, they typically speak to the after situation mitigation of trees damaged or removed by construction activities. Efforts to provide better tree protection measures equate into the necessary knowledge of tree preservation, the laborious effort to write proposed protection specificity to (revised) tree ordinances, and the greatest obstacle to meaningful tree preservation - the politics of trees themselves.

People, especially those who are elected to represent us, tend to gravitate towards national standards as a safe way to implement necessary or perceived controls for the safety and welfare of the citizenry.

Many tree ordinances, codes and Florida State’s Statutes have national standards included in them by reference; ANSI A300, (part 1), The ‘Pruning Standard’ is one example.

Like its five (5) counterparts, ANSI-A300, (part 5) is strictly voluntary – until it is mentioned by reference in an ordinance, code or bid – it then becomes part of a binding contact when signed by a prospective bidder or agreed upon by an applicant.

ANSI A300, (part 5), like its counterparts, also requires the author to supply the necessary specificity to meet defined goals. This is an excellent opportunity for the consulting arborist to meet with his client (whether city, county officials or developer) to discover, in a cooperative atmosphere, how best to preserve trees.

If you are a municipal or other governmental arborist tasked with the responsibility of tree preservation you may want to consider ANSI A300, (part 5) as an inclusion into your tree codes and ordinances.

A copy of ANSI A300, (part 5) should be in your professional library. You may order a copy from the Florida Chapter by e-mail at FloridaISA@aol.com, or telephone at 941-342-0153.

I do wish you and your families a joyous holiday season and a successful new year.

Membership Committee Report

By David Reilly

The board would like to take this opportunity to thank Jeremy Chancey and Becky Jordi for volunteering to serve on the Membership Committee. With the addition of these two excellent professionals, we are truly a Committee. I would like to welcome new and returning members and hope to have some of you join us on the Membership Committee.

One area the board felt was a priority was to encourage more membership participation on the committees. So let me list the standing committees: Membership, Education, Publication, Certification, Nominating and Trees Florida. There are also the following Ad-Hoc committees; Arborist Licensing, ISA-FL and FUFC Public Service Announcements and Workday.

You can see that there is plenty of opportunity to serve on a committee and make a difference. Success for an organization such as ISA-FL can be measured by membership participation. Even though we are one of the leading chapters, with stronger membership participation, we could be the best in the world!

I sat on the sidelines for a few years, content to let others determine the fate of the Chapter. I eventually attended a board meeting and quickly realized I could not be a passive member any longer. It takes a lot of work to keep this Chapter strong. The past and present board members have gone above and beyond in service to the membership.

We need your help. Contact ISA-FL for more information on the committees and board meetings. The next time the ISA-FL Chapter has a board meeting in your region, take the time to attend. I am confident that you will see how your volunteerism can make a difference.
The Unusual Mortality of Red Bay

by Albert E. Mayfield III, Forest Entomologist, Florida Department of Agriculture & Consumer Services, Division of Forestry

Introduction: In 2003, an unusually high incidence of red bay (*Persea borbonia* (L.) Spreng.) mortality was reported on Hilton Head Island, South Carolina. Since then, a similar phenomenon has been observed in coastal counties of Georgia and South Carolina, and most recently (spring 2005) on the Timucuan Ecological and Historic Preserve in northern Duval County, Florida. Dying trees are characterized by wilted foliage, attacks by ambrosia beetles, and discolored sapwood from which an unidentified fungus (*Ophiostoma* sp.) is routinely isolated (Fraedrich 2005). A new exotic ambrosia beetle, *Xyleborus glabratus* (Eichhoff), is associated with the mortality in South Carolina and Georgia and may be detected in Florida eventually (Thomas 2005). Other species of native and previously-established exotic ambrosia beetles are also associated with the dying trees. The reasons behind the geographic location of this phenomenon, the possible predisposing factors, the means of transmission of the fungus, and the exact roles of certain ambrosia beetle species in the mortality scenario are currently not known.

Symptoms: Dying trees exhibit wilted foliage with a reddish or purplish discoloration. Foliar discoloration may occur first within a section of the crown (e.g., major branch) or simultaneously throughout the entire crown. The foliage eventually turns brown and tends to remain on the branches (Fig. 1). This wilt scenario is more extensive than the isolated branch “flagging” caused by the black twig borer (*Xylosandrus compactus* (Eichhoff)), which commonly kills twigs and outer portions of small-diameter branches of red bay (Dixon and Woodruff 1982). Dying or recently-killed trees may also exhibit sawdust strings (“toothpicks”) protruding from ambrosia beetle entrance holes on the main stem or branches (Fig. 2). Sawdust strings are easily disintegrated by wind, rain or other disturbance, but sawdust collecting at the base of the trunk may still be visible. In some cases, evidence of ambrosia beetle attack is difficult to find. Stem cross sections and/or removal of bark usually reveal dark stains or streaks in the sapwood, often characteristic of a vascular wilt disease (Figs. 3, 4). Symptomatic trees may be interspersed with non-symptomatic trees. In the field, trees may progress from non-symptomatic to dead in as little as 2-3 months.
flow over a number of years, the liquid that is toxic to other organisms can discolor the bark, kill moss and lichens on the bark and even kill grass at the base of the tree. The stain on the bark can be either light or dark color.

There is no treatment for slime flux but that fact may not stop insistent garden center sales clerks from selling homeowners “a cure” anyway. In the past arborists would insert a tube in the tree to allow the slime flux to flow more freely and drip onto the ground. But this technique is no longer recommended because it doesn’t improve the problem and the hole for the tube is just one more injury to the tree.

If the smell becomes annoying because a slime fluxing tree is near a door, window or patio, a homeowner can hose off the slime from time to time with water or even occasionally spray a dilute solution of bleach on the slime to temporarily inhibit the congregating insects and reduce the smell.

What is the stinky ooze coming out of my tree?, continued from page 1

Unusual Mortality of Red Bay, continued from page 8

Additional hosts of potential susceptibility: Laboratory tests have revealed that certain other plants in the family Lauraceae, including *Sassafras albidum* (Nutt.) Nees, *Lindera benzoin* (L.) Blume, and *Persea palustris* (Raf.) Sarg., are killed when artificially inoculated with the suspect *Ophiostoma* sp. (Stephen Fraedrich, USDA Forest Service, pers. comm., 2005). In the field, mortality of *S. albidum* has also been discovered in areas where the red bay mortality is occurring (James Johnson, Georgia Forestry Commission, pers. comm., 2005). Concern exists that economically important species such as avocado (*Persea americana* Mill.) could be affected if the factors contributing to this scenario spread to southern Florida.

Reporting: If you discover red bays exhibiting the symptoms described above, please contact the Florida Department of Agriculture and Consumer Services, Division of Forestry, Forest Health Section at (352) 372-3505 ex. 119.

References


Photography credits: Albert E. Mayfield III, Florida Division of Forestry
# Florida Chapter ISA - 2006 Tentative Education Schedule

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John White inspires new Tree Fund liaison

by Henry King, III

First, I wish Florida Chapter ISA didn’t have to find a new chapter liaison for the Tree Fund. This would mean that John White would still be a father, soon-to-be husband, son, brother, great friend, and an accomplished arborist. Shortly after his passing, I made a conscious decision to pursue the appointment of Tree Fund liaison to honor one of his true passions – raising money for tree research. My pursuit resulted in me, Henry King III, as your new Tree Fund liaison.

Ironically enough, I met John White during my first Tour des Trees in 2000 while I was finishing my graduate studies at Clemson University. The group traveled from colonial Williamsburg to Baltimore Maryland – about 600 miles in just over 6 days. This was my first experience I shared with him. About 1 year later, I found myself working along side John as a ValleyCrest Tree Care Business Developer in the Orlando office. I contribute my success as an arborist in Orlando to John’s direction and sincere friendship.

One of my passions is community service, especially if it relates to educating people about trees and their countless benefits. John knew I liked giving back to the community so I accompanied him at Flowering Tree Society community tree planting events, arbor days at Give Kids the World in Kissimmee, and we collaborated on educational functions for clients.

Today, I am a husband, father, brother, son, friend to many, and an arborist for Davey Resource Group. Being the new Tree Fund liaison for the Florida Chapter of ISA brings excitement and a real sense of responsibility to me. Representing the Chapter at national meetings is something to be proud of, particularly when you are walking a path a good friend used to travel.

I was unable to make the Tree Fund liaison meeting, held in Chicago in October, due to the timing of the appointment and other professional responsibilities. The update below was kindly sent to me by Jim Barborinas, Pacific Northwest Chapter Tree Fund liaison:

“First, let me tell you about some of the great things that are happening at the TREE Fund. We have just completed a successful move of our staff offices to Wheaton, IL, a suburb of Chicago. We have a new executive director, Janet Bornancin, a special events coordinator, Lynn Day, and our office manager is Kristen Spatafora. They are all top notch, energetic people. The working space for us to use (and expand into) is greater in Wheaton and our rent is considerably less than in Champaign.”

The next gathering is in February and will focus on updating the TREE Fund’s Strategic Plan. We were all pleased to hear that our Tour des Trees income-to-cost ratio has improved significantly and our Gala Auction in Nashville was one of our most successful. Most exciting of all was the preview of a 10-minute DVD designed for the young adult audience, promoting careers in arboriculture. Funded by a NUCFAC grant and three corporate donors, the TREE Fund is pushing to complete the trial distribution this spring - many thanks to the very hard work of board member Dave McMaster. After seeing the video in Chicago, I promise you that you will want many copies. This video and accompanying information has more potential to excite, invigorate, stimulate, and recruit future arborists for our industry than anything produced to date.

The TREE Fund also just provided four $3,000 Robert Felix Memorial scholarships for arboricultural students and last but not the least, through our main program, we provided $150,737 in research funds through the Hyland Johns Grant Program and $99,987 under the John Duling Grant Program. And that is just this year’s highlights! 

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Strategic Planning
Session a Success

The Florida Chapter Board of Directors and invited guests Jeremy Chancey, Greg Charles and Henry King convened for two days this past September to develop a two to three year strategic plan for the Chapter. The planning session proved to be a success as the group developed an ambitious strategic plan that is wide in scope and that will no doubt keep the Chapter on its toes.

The key points of the strategic plan include:

1. Enhance educational programs by providing advanced and/or focused regional programs and by increasing student participation.
2. Create arborist licensing by establishing enabling state legislation.
3. Increase membership and involvement by increasing communication with members, and by increasing the leadership pool.
4. Create strong partnerships with policy makers and non-arborist organizations.
5. Broaden research participation and funding by increasing arboricultural research in Florida.
6. Determine the best use of uncommitted funds for the long term.

The complete version of the strategic plan will be available at the Florida ISA website (www.floridaisa.org) as of January 2006. The Board invites all members to peruse the strategic plan and to share their thoughts on it. All comments can be directed to floridaisa@aol.com. ☏

Arborist Certification
Continues to Grow

Arborist Certification in Florida is continuing its rapid growth. Florida now has 1126 Certified Arborists and its first Board Certified Master Arborist. And we are adding more and more with every exam. Last quarter there were two exams held in Florida – one in Jacksonville and another in Clearwater.

The Florida Chapter would like to congratulate the following 28 Florida individuals for earning their: Board Certified Master Arborist (BCMA), Arborist Certification (AC), Utility Certification (UC), or Municipal Certification (MC), through mid-November, 2005:

Richard Balik – Inglis AC
Joel Bass – Groveland AC
Mitchell Colson - Winter Springs AC
Lawrence Dowd – Clearwater AC
Robert Gause – Palmetto AC
Chaug Hammell – North Port AC
Kraig Hankins – Cape Coral AC
Larry Heffley – Enterprise (Lake Mary) AC, UC
Ray Jarrett – New Smyrna Beach AC
Dennis Jenkins – Ocala AC
Lonnie Jones – Ruskin AC
Stanley Kamys – St. Augustine AC
Donn Lasswell – Bradenton AC
Barry LeClair – Tampa AC
Thomas Lindsey – Jupiter AC
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tems that are too deep. This BMP focuses on trees being planted and managed in urban and suburban landscapes, generally 2-inch caliper and larger. It is not intended to apply directly to lining-out stock sold in nurseries that will be grown in the field or in containers, though practices used during such production can ultimately affect trees in the landscape. Trees with root balls can be produced by several methods. These guidelines apply to all.

Nursery Stock Selection and Handling
It is possible for trees to leave the nursery with structural roots too far below the surface of the root ball. Depth of structural roots can increase at several stages of nursery production, including planting, cultivating, transplanting, and harvesting, and possible changes in root architecture can occur during the production process. It is always preferable to avoid trees with roots too deep below the soil surface rather than trying to make corrections later.

The American Standard for Nursery Stock (ANSI Z60.1, 2004) states that, for B&B trees, “soil above the root flare … shall not be included in the ball depth measurement and should be removed.” If the resulting depth measurement of the root ball does not meet the minimum provided in the standard, the ball is not deep enough to encompass a sufficient mass of roots for the vigor of the tree in the landscape, and the tree can be rejected. Be sure growers and suppliers understand what is expected. It can be difficult and time consuming to evaluate and adjust root balls on site or to reject nursery stock with root balls of insufficient depth.

Mulching
Mulching is an excellent way to conserve soil moisture, reduce competition from other plants, and prevent lawn mower injury. Two inches of mulch is the appropriate depth for 2- to 3-inch-caliber trees. Later applications to “refresh” the mulch should not increase the depth. Keep the mulch away from the trunk. Avoid thick layers of mulch around the base of the tree (often called “volcano mulching”), as far too often seen in landscapes. Do not pile the extra soil around the base of tree and use mulch to hide it—excess soil should be removed from the planting site. Avoid organic material that can mat down and create a hydrophobic layer.

Remediation
There are many trees already planted in the landscape with the structural roots too deep. These trees are likely to have reduced vigor and shorter life spans if no remedial action is taken.

For recently planted trees (less than two to three months of warm soil for root growth), the greatest long-term benefit will be achieved by replanting the tree at the proper depth.

For partially established trees, the best remedial treatment may depend on several factors. Replanting a partially established tree will cause additional stress; therefore, the benefits of replanting such a tree must outweigh the risks. If the tree is in good health and growing vigorously, it may be best to do nothing. A tree that appears to be struggling may need to be replanted at the proper depth, as long as the tree is in good enough health to survive the additional stress of replanting. Do not waste money replanting trees that already show signs of serious decline. Trees on low-quality, poorly drained soils are more likely to need to be replanted than those on high-quality sites.

For larger, fully established trees, a practice being used regularly by arborists is a root collar excavation to remove the excess soil in contact with the trunk. Removal of this soil reduces the possibility of basal and collar rot diseases, and it improves aeration to the structural roots at lower depths. Roots regenerated after planting originate mostly at the perimeter of the root ball and usually grow up to their natural depth closer to the surface. Do not expose these roots. When the structural roots moved with the tree are too deep, the newly generated roots sometimes have been observed to grow toward the trunk rather than away from the trunk, as is normal. Removing the soil near the trunk can expose these “misdirected” roots and allow their removal so that they do not become girding roots. The excavated soil is sometimes replaced with well-aerated mulch or gravel.
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New Florida Chapter Members since Sept. 1, 2005

If you see a name from your area of the state, look up their phone number on line (Go to http://www.isa-arbor.com, then go to “Members Only” and log in*. Then go to ISA membership directory) 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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* 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.

What Next?
A much deeper understanding of the causes and effects of deep root systems is needed. Studies have been initiated by researchers around the country. As more information becomes available through both research and practical experience, these best management practice guidelines will be updated.

Summary
· Generally, uppermost structural roots should be within 1 to 3 inches of the soil surface, measured 3 to 4 inches from the trunk, but there may be exceptions.
· If roots are at the proper depth and the root flare is well-developed, the root flare may be visible. If not, probe the root ball for structural roots with a surveyor’s chaining pin, or similar tool, to check for structural root depth.
· “Soil above the root flare shall not be included in the root ball depth measurement” (ANSI Z60.1, 2004). If the resulting depth measurement of the root ball does not meet the minimum, the tree can be rejected.
· Trees recently planted with too much soil over the structural roots may require replanting.
· If the structural roots are more than 1 to 3 inches deep, planting depth will have to be adjusted accordingly.
· If soil is removed from the base of the trunk, the newly exposed tissue may be more susceptible to cold and sunscald damage. Exercise caution until more information is known.
· Mulch should be no more than 2 inches deep over the root ball.
· For fully established trees, remove excess soil around the base of the trunk without injuring the bark.
· This BMP will be revised as additional information from research becomes available.

(Endnotes)
1 This effort was coordinated by The Morton Arboretum in Chicago, with Gary Watson as chair of the group. The working group currently includes representatives of the American Nursery and Landscape Association (ANLA), the International Society of Arboriculture (ISA), the American Society of Landscape Architects (ASLA), the Associated Landscape Contractors of America (ALCA), Tree Care Industry Association (TCIA), and the American Society of Consulting Arborists (ASCA). The working group has completed these best management practice (BMP) guidelines based on the practical experience of many professionals and the relevant scientific research available at this time.
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The FLORIDA CHAPTER of ISA is pleased to announce our revised 2006 schedule of Certification exams and Study Guide review sessions. See the chart below for the site nearest you. This schedule is subject to change as additional tests and review sessions may be added.

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For an application to any of the exams, call the ISA Office in Champaign, IL at 888-472-8733. To register for the review class call the Florida Chapter ISA at 941-342-0153. To purchase an ISA Certification Study Guide, call the Florida Chapter ISA at 941-342-0153.
International Society of Arboriculture-Florida Chapter

Our Mission: “To Promote and Improve the Scientifically Based Practice of Professional Arboriculture”

Arborist Code of Ethics

 INSERT CODE OF ETHICS TEXT HERE