ISA FLORIDA CHAPTER

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Florida Arborist

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Summer 2008
In This Issue:

Storm Damage Assessment Protocol for Florida Hurricanes

by Francisco Escobedo
UF-School of Forest Resources and Conservation

Past hurricane seasons in Florida demonstrated the need for information and tools for effective pre-hurricane planning and post-hurricane assessment and response. Following the 2004-05 hurricanes, street trees were severely damaged and downed trees and branches accounted for a substantial part of post-hurricane debris. Several communities in Florida are still trying to assess damage, account for debris removal costs, and initiate street tree restoration activities.

The Storm Damage Assessment Protocol (SDAP) from the i-Tree suite of software was developed for communities as a low-cost and easily accessible tool for managing damage to the urban forest following ice storms -

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i-Tree: Tools For Assessing and Managing Community Forests

What is i-Tree?

i-Tree was developed by USDA Forest Service researchers. It is a state-of-the-art, peer-reviewed computer software suite containing inventory, analysis, and forecasting tools to help communities assess, manage, and care for their trees and forests. The tools help measure the ecosystem services provided by urban forests that improve human health and the environment.

What does i-Tree include?

Four main programs are included in the i-Tree software suite:

- STRATUM (Street Tree Resource Analysis Tool for Urban forest Managers) – software to help communities better understand the structure and function of the urban forest, determine the environmental and aesthetic benefits trees are providing, and place a dollar value on those benefits
- UFORE (Urban Forest Effects Model) – a program to model the structure, environmental benefits and value of the entire urban forests.
- MCTI (Mobile Community Tree Inventory) – a basic inventory system to allow communities to conduct sample or full tree inventories and analyses.
- SDAP (Storm Damage Assessment Protocol) – a utility for handheld

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A Message From the President

It has only been a few months since assuming my new position for the Florida Chapter ISA. My first letter asked everyone to always do the "right thing" when it comes to our industry. With increasing water restrictions and damage to areas from drought and fires it is our duty as professionals to find new ways to promote tree health and educate the public on proper tree care. In addition, causes for decline in trees such as insect and disease are becoming much more of a regular pattern. We are dealing with many more tree and palm problems than ever. We have to look beyond the canopy and discover what the real problems are.

With the diverse tree canopy in the state of Florida we are constantly challenged to find species that fair well under adverse climate conditions. Water is becoming a real issue with most municipalities in our state. This is a problem that is here to stay and everyone must do their part to comply. There are things we can suggest to our clients when faced with water restrictions limiting them to a maximum 1-2 days to water a week. Homeowner can make sure their irrigation systems are working at an optimum level which requires regular inspections of their system. Such periodic inspections can identify broken or damaged heads, inadequate coverage and over grown plant material blocking heads. We can also educate our clients about watering for longer periods of time to provide a deeper level of moisture promoting strong root systems.

It is also our responsibility to constantly increase our own knowledge and education. "Green" is in and the sustainability of our urban forest has finally hit front page news. Let's use this to our advantage to increase public awareness and promote professional tree care.

Thank you, Mary Edwards,
President

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In the News

U.S. plant screening doesn't stack up

The U.S. government's approach to invasive plant screening is less effective than systems set up in Australia and New Zealand, according to a study released in February by the Nature Conservancy and Univ. of Florida. Researchers looked at the regulatory weed risk assessment (WRA) system in Australia and New Zealand. "The WRA system can be used to test all new plants proposed for import and determine whether or not a plant should be allowed entry into a country in under 24 hours," said Doria Gordon, assoc. dir. of science for the Nature Conservancy's Florida chapter and lead author of the research paper. "Under the current U.S. law, few species are tested and the process can take up to 8 weeks." NMPRO

Tree heartwood fights Phytophthora ramorum

USDA research found extracts of tree heartwood limits the growth of P. ramorum, the fungus that causes sudden oak death. Plant physiologist Daniel Manter exposed P. ramorum spores to compounds, wood chips and essential oils extracted from heartwood. Extracts from incense cedar, western red cedar, Alaskan yellow cedar, western juniper and Port Orford cedar destroyed the spores and inhibited fungal cell growth. Heartwood could be processed into shavings, sawdust, wood chips or liquid extracts as environmentally friendly tools against the disease.

Gladiolus rust discovered in Florida

Gladiolus rust (Uromyces transversalis) was discovered in March at a Hendry County, Fla., nursery. It's the 1st detection of gladiolus rust (GR) in Florida in 2008. GR was found in 2006 and 2007 at this same site. Fla. Dept. of Ag.'s Div. of Plant Industry and USDA-APHIS will conduct surveys to determine spread of the disease. GR primarily attacks hybrid gladiolus cultivars and could have significant impact if it became established or was transported into greenhouses or nurseries. APHIS considers GR a "plant disease of quarantine significance." .

Illinois declares state free of Asian longhorn beetle

The Asian longhorn beetle (ALB) has been officially eradicated in Illinois, according to the state's department of Agriculture and the USDA. The pest was found almost 10 years ago in Chicago's Ravenswood neighborhood. Illinois is the first state to make such a declaration. With at least 4 years of active surveys and no signs of insects or infestation, USDA and its partners now can declare ALB eradication in Illinois. Between 1998 and 2006, approximately 1,771 host trees were removed to destroy the invasive insect. NMPRO.

Asian longhorned beetle
Photo by Dennis Haugen, USDA, Forest Service

Asian longhorn beetle declared eradicated in N.J. county

State and federal officials declared a 5-year cooperative effort to rid Jersey City and Hoboken, N.J., of Asian longhorn beetle a success. "By working together aggressively, the Asian longhorn beetle has been eradicated in the Hudson County quarantine zone, a true success story of partnerships between governments and private citizens," N.J. Secretary of Agriculture Charles M. Kuperus said. The beetle was discovered in Jersey City in October 2002. Surveys found 113 infested trees in the city's Newport section. The New Jersey Deparment of Agriculture quarantined that area and the surrounding area. The 113 infested trees and 348 at-risk host trees were removed, many of which were on the property of the Lefrak Organization, a developer in the area. NMPRO

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ArborMAX Expansion

ArborMAX, a trusted name in arborist insurance, announces an expansion into additional states and coverage offerings. ArborMAX has expanded their territory to include 31 states and their commercial coverage to include Property and Inland Marine (equipment). They have also improved the Workmanship Error endorsement that includes a broader scope of coverage.

Underwritten by Alternative Insurance Exchange (AIX) and insured by Nova Casualty (AM Best rating A- VII), the program is available through exclusive ArborMAX agents.

"We are very excited to expand the ArborMAX territory and be able to offer more coverages to our valued clients" says Mike Rook, Vice President of ArborMAX. "Our expertise, competitive rates, and superior coverages, have led to tremendous growth since the ArborMAX began in 2005. We expect the new program will prove equally popular."

ArborMAX provides the coverages that tree and landscape contractors need every day such as Workmanship Error coverage and Pesticide & Herbicide Applicator coverage. The Workmanship Error coverage has been improved to include specific wording for both errors & emissions and consulting**.**

Minimum Wage Increase

Are you prepared for the next step up in the federal minimum wage? Last May the wage increased to $5.85 an hour, the first increase since 1997. The wage also increases on July 24, 2008, to $6.55, and to $7.25 on July 24, 2009. Sen. Ted Kennedy, D-Mass., and Rep. George Miller , D-Calif., have pledged to introduce legislation that would increase the wage to $9.50 an hour by 2011 and also index it to inflation. ■

Planting Trees

Dr. Ed Gilman, Professor, University of Florida

I am fortunate to have had the opportunity to travel to many parts of this great country during the last 30 years and have seen quite a number of trees planted in many soil types. I dug up more than 2000 trees in many different states to study root system response to planting. I've planted thousands of trees in more than 40 tree planting research projects, all of which are published in peer reviewed scientific journals. Combining this experience with that of many green industry professionals, we developed the following guidelines for planting trees in landscapes.

Several years ago I was conducting a training session in the Montreal Municipal Nursery in Canada. We excavated several 3-inch caliper trees in the field. What did we find? Trees planted 6 to 10 inches too deep in the field. When these trees were dug in the nursery, they were already 6 to 10 inches too deep in the root ball. And if they are planted with the top of the root ball even with the landscape soil they will be 6 to 10 inches too deep in the landscape. In many soil types, this can kill the tree. Some of the 30 professionals in the class remarked that they regularly see worse. I too have seen much worse, but fortunately not in Florida. Florida continues to produce some of the best nursery stock in the country. We are spoiled. It wasn't always that way.

Roots growing up toward soil surface and around the trunk on magnolia planted 12 inches too deeply 6 years ago.

I begin planting when the tree is sitting in the holding area at the job site. I find the point where the top-most root in the root ball emerges from the trunk. It should be within two inches of the top surface of the root ball. This zone is often called the root collar, root crown, or root flare. Not all nursery trees have a prominent swollen root flare, especially young trees and those from cuttings. This is normal and no cause for concern since it will develop later.

There should be no big roots circling or crossing over the top-most main roots growing out from the trunk. You have to displace soil above the top-most main roots during the planting process in order to check for and treat these root defects. This should be part of the planting process for all trees. Its not the end of the world if there is more than 2 inches of soil over the top-most root; but, you have to do more work at planting to remove this soil along with the roots growing in it. This is especially difficult for maples, elms, birches and other trees with dense root balls. Purchase nursery trees planted correctly in the root ball. Dig the hole shallower than the root ball to account for any soil that will need to be removed once the tree is in the hole.

Cut the circling roots at the point just before they make a turn. That way, new roots will grow away from the trunk and stabilize the tree better than the circling root. If these cut roots are large, the tree might shock and could die. Its OK if the point where the top-most roots emerge from the trunk is exposed and visible. We have found at the Great Southern Tree Conference demonstration site that this is usually not a problem, at least on live oaks and magnolias.

Dig a shallow planting hole as wide as possible. Shallow is better than deep! Many people plant trees too deep. A hole three times the width of the root ball is often recommended but about one-and-one-half the diameter is more common. Wider holes should be used for compacted soil, rocky sites, and wet sites. A wider hole might help roots from becoming deformed in these tough situations. Deformed roots make trees less stabile in wind. The depth of the hole should almost always be LESS than the height of the root ball, especially in

Planting *continued on page 15*

Arborist Licensure, A Mixed Legislative Success

The Florida Chapter ISA was ultimately unsuccessful this past legislative session in getting voluntary arborist licensure approved in Florida. However, a great deal of progress was made, and it was very close. Our bill passed through several House and Senate Committees and the full House by a unanimous vote, thanks largely to our good friend Representative Ellen Bogdanoff of Ft. Lauderdale. Unfortunately, it stalled in the Senate when Senators ran out of time. There were more than 2000 bills introduced this year, but only a few hundred were approved. Arborist Licensure Chair Mr. Joe Samnik said, "It was a disappointing loss after having gotten so close, but if the Board is willing, my committee is determined to see this through". Within the near future The Florida Chapter ISA Board of Directors will ultimately decide if the Chapter will continue to press the effort again in 2009. ■

News from ISA Headquarters

from ISA Today, April 2008 issue

And the International Awards go to...

ISA is pleased to announce the following winners of the annual ISA awards which will be presented at the summer ISA Conference and Trade Show held in St. Louis this summer. Congratulations to all.

This year's recipient of the Award of Merit, the highest honor ISA can bestow, is Allan West, president of the TREE Fund. The award recognizes outstanding meritorious service in advancing the principles, ideals, and practices of arboriculture.

Sharon Lilly, ISA's Educational Goods and Services director, is this year's recipient of the Alex L. Shigo Award for Excellence in Arboricultural Education recognizing the important role that all forms of education play to enhancing the quality and professionalism of the arboriculture industry.

The Award of Achievement recipient is Derek Vannice, ISA Certification director, and is granted in recognition of sustained outstanding effort or contribution to the advancement of ISA.

Dr. Harvey Holt, Purdue University, is the recipient of the R. W. Harris Author's Citation which is granted to authors of outstanding publications for sustained excellence in the publication of timely information pertaining to the field of arboriculture.

ISA's Honorary Membership award recipient is Chuck Leavell, Charlane Plantation. This award recognizes individuals who are not members of ISA who have continued interest and outstanding service in promoting arboriculture.

Honorary Life Membership is granted to Ken Finch who contributed materially and substantially to the progress of arboriculture and gave unselfishly to support arboriculture.

Dr. George Ware of The Morton Arboretum is this year's recipient of The L.C. Chadwick Award for Arboricultural Research which is granted to recognize research that has contributed valuable information to arboriculture.

Headquarters *continued next page*

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Certification Highlight: Computer Based Testing

ISA Certification Department signed the Computer Based Testing (CBT) contract in February and is pleased to be able to offer this service for all five credentials. Paper and pencil exams will still be offered for Certified Arborist exams, but you will find the convenience of testing close to home to be a great alternative. Testing locations will be available all over the world and this means no seat limits.

In the meantime, conference calls are taking place between ISA and Pearson-Vue (the testing vendor) to discuss implementation and we are hoping that we will be up and running within about 90 days.

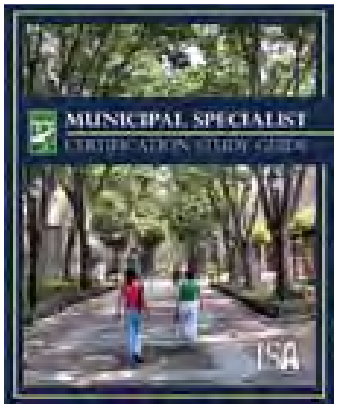
Computer based testing will also take some of the burden off of the chapter volunteers. Each chapter will still receive their 40 percent and ISA hopes CBT will help with proctor burnout.

ISA Releases Municipal Arborist Certification Study Guide

If you are planning to obtain your Municipal Specialist credential, this study guide will be an invaluable source of information as you prepare for the exam. The format is similar to that of ISA's Arborists' Certification Study Guide. Each chapter consists of several sections: narrative, references, a workbook page, and challenge questions. Each chapter also contains a list of objectives and key terms. A glossary, answers to workbook questions, list of additional resources, and useful index complete the book.

Eight chapters cover the following topics:

- Municipal Arboriculture and Urban Forestry
- Planning the Urban Forest
- Assessing and Quantifying the Urban Forest
- Planting the Urban Forest
- Maintaining the Urban Forest
- Managing Risk in the Urban Forest
- Protecting the Urban Forest
- Administrative Duties of the Municipal Arborist ■



Member Price: $60.00
Non Member Price: $70.00

Membership Committee Report

by David Reilly, Vice President

In the Winter 2007 issue of the Florida Arborist, Mike Robinson, President Elect and past Chair of the Membership Committee, reported on the results of the 2007 Membership Survey. At the end of the article he challenged the committees to find four things to improve upon or take action on.

I would like to mention a few of the actions that are already taking place. Two areas of concern were the web site and the newsletter. First, the website has been updated. The new look has more of a Florida feel with a link to the TreesAreCool website. This is definitely an improvement and a step in the right direction. Another improvement is the ability to read past newsletters. Currently there are issues from spring of '05. There were comments about regional topics and tree research. Again, in the Winter, 2007 issue, the feature article was a research paper Trees Make Roads Safer not Deadlier, by Robert Steuteville and an article on Laurel Wilt Disease of Red Bay Trees in Florida's Urban Forest by J.A. Smith, A.E. Mayfield III, Henry Mayer and Francisco Escobedo. Not only is this a topic of regional importance but it is also available in Spanish. And finally, you can register for the many fine educational opportunities on line.

The education committee has addressed a few of the survey comments as well. First they have more classes spread throughout the state ranging from Pensacola and Tallahassee to Key West. They are aggressively targeting the climber constituent's of our membership with six Arborist Safety and Climbing seminars during 2008.

There are two new committees pertaining to the license plate. One is for marketing the plate, while the other is for allocation of revenues generated from sales of the plate. Both committees can use ideas. A third committee may be on the horizon when the State Licensure initiative is passed this Legislative Session. That program will also have to be marketed.

These are a few examples of the Board responding to membership. Although we have not addressed every concern of our members we continue to strive for excellence in working for and educating our members. But our level of success is related to the participation of our members. Hope to see everybody at the Trees Florida Conference and Trade Show June 7th- 10th in Weston, Florida. ■

Planting Depth in Containers Affects Root Form and Tree Quality

by: Edward F. Gilman and Chris Harchick
Environmental Horticulture Department
University of Florida

The following is the data derived from 40 months of research done by Gilman and Harchick on planting depth.

Abstract: After 40 months in air root pruning containers, Quercus virginiana 'SDLN' Cathedral Oak® live oak planted 3.8 cm (1.5 in) and 8.9 cm (3.5 in) deep from rooted cuttings had greater caliper than trees planted at 1.3 cm (0.5 in) below substrate surface. Trees in the 1.3 cm (0.5 in) deep treatment grew taller than all other trees except for those in the 3.8 cm (1.5 in) deep. Most (80%) trees were graded as culls according to root evaluations in the Florida Grades and Standards for Nursery Stock. This resulted mostly from roots circling in the #3 and/or #15 container sizes. Trees planted 6.4 cm (2.5 in) deep in #3s, then 6.4 (2.5 in) cm deep in #15s, and 6.4 cm [19 cm (7.5 in) total depth] in #45s had fewer, smaller diameter, and deeper primary roots than trees planted at all other depths. The presence of a trunk flare and surface roots decreased with increasing planting depth indicating that these could be used as an indicator of primary root depth. Cathedral Oak® demonstrated the capacity to generate new roots above the primary flare roots only when rooted cuttings were planted into #3 containers. Trees adjusted their root systems by generating a new set of roots along the buried stem up to the substrate surface. Roots did not grow from the buried portion of the stem when trees in #3 containers were planted 6.4 cm (2.5 in) deep into #15 containers. In other words 75% or more of the primary structural roots were deflected by either the #3 or #15 container wall, or both indicating that most primary roots that emerged from the trunk did so when the tree was in the # 3 or #15 container within 22 months of planting from rooted cuttings. Roots often grafted when crossed or laid against other roots.

Significance to the Industry: Rooted cuttings of Quercus virginiana 'SDLN' Cathedral Oak® live oak in [5.7 cm (2.25 in)] liner pots planted deeply into #3 containers generated roots from the stem near the substrate surface regardless of planting depth. However, older trees planted deeply did not develop roots from the stem resulting in severe root defects including buried root flare, circling roots, and stem girdling roots. Trees planted deeply into #3, into #15, and again into #45 containers had the most severe defects. Despite growing in air root pruning containers, most trees were graded as culls according to root evaluations in the Florida Grades and Standards for Nursery Stock. In most cases this was a result of circling roots at the #3 or #15 container sizes. ■

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Send your request to Norm Easey
at floridaisa@comcast.net

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

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(http://www.itreetools.org/applications/sdap.shtm). This program establishes a standard method to plan for and assess widespread damage before and after an ice storm in a simple and efficient manner providing information on storm impacts, time, resources, and funds needed to mitigate storm damage.

The SDAP application and field methods were designed to be used for pre– and post- storm estimates from ice damage events in the northeastern United States. Unfortunately, the protocol is not applicable for assessing hurricane wind effects in the southeastern
United States. To address this need, Francisco Escobedo and Christina Staudhammer, with the School of Forest Resources and Conservation at the University of Florida—IFAS Extension through a grant from the Florida Division of Forestry are working with Christopher Luley and Jerry Bond from Urban Forestry LLC to develop a Florida Hurricane Adaptation of the SDAP.

The new SDAP Florida Hurricane Adaptation will allow hurricane-prone Florida communities to plan for, assess, and respond to hurricanes and their effects on urban forests. The protocol is being developed based on existing hurricane related woody debris, tree density, wind speeds, and right-of-way debris data. This data is then being used to develop statistical relationships to FEMA debris data, street segment information, and disposal costs from communities throughout Florida that experienced the 2004—2005 Florida Hurricane season. Post-hurricane tree removal and pruning rate and cost data were also collected and integrated into the protocol. Once complete, this protocol should have the potential to increase the reliability of hurricane tree debris and cost estimates and provide useful information for FEMA reimbursement requirements.
This project will also increase the use of SDAP and i-Tree in Florida and in doing so promote and advocate proactive management of the urban forest resource.

The Florida Hurricane SDAP Adaptation can soon be downloaded for use by communities in Florida and throughout the southeastern coastal United States. An announcement of availability will be posted on our web site at http://sfrc.ufl.edu/urbanforestry. ■

***i-TREE** continued from page 1*

computers that provides a standardized sampling method for assessing widespread storm damage in a simple, credible and efficient manner

Who should use i-Tree?
i-Tree has tools to meet the needs of communities of all sizes, from large cities like New York to small towns like Nebraska City. It can be used by state forestry agencies, municipalities, nonprofit organizations, and everyone else interested in learning more about, and better caring for, their community forests.

Who is behind i-Tree?
i-Tree is a cooperative partnership of the USDA Forest Service, Davey Resource Group, The National Arbor Day Foundation and the Society of Municipal Arborists. The public-private partnership is dedicated to continuously testing and improving i-Tree based on customer feedback and to providing excellent technical support and training.

How can I use i-Tree in my community?
Because i-Tree has been developed with public funds, the software is available to everyone just by visiting www.itreetools.org.

Why is i-Tree important?
i-Tree was designed to provide cities and towns with the capacity not only to better manage their trees and forests, but also to show decision makers and residents alike that trees and forests are an important and essential part of healthy, well-balanced communities. Reports and information generated by i-Tree can be used to help raise awareness about the benefits of trees and forests, not just as an aesthetic resource, but as a potential solution to many of today's most pressing environmental, social and economic problems.

To make the most of our urban forests and protect them as they should be protected, first we must understand their structure, function and value. I-Tree provides us with the tools to do just that.

***i-TREE** continued on page 12*

***i-TREE** cont. from page 10*

Storm Damage Assessment Protocol - SDAP

The i-Tree Storm Damage Assessment Protocol Utility establishes a standard method to assess widespread damage immediately after a severe storm in a simple, credible, and efficient manner. This assessment method is adaptable to various community types and sizes, and it provides information on the time and funds needed to mitigate storm damage.

Using the i-Tree Sample Inventory Generator, sample street segments are randomly chosen in a community, a survey is performed, and time and cost estimates are made. Data collection applications for use on personal digital assistants (PDAs) facilitate data collection and entry. Paper forms are available for those choosing or needing to do this work manually.

The protocol includes an optional pre-storm stage that evaluates a community's street-side and adjacent trees, and estimates the amount of cleanup that might be needed after a severe storm. The advantages of this pre-storm work are to create the critical random sample before an emergency, and to provide reliable cleanup numbers that are useful in persuading community officials of the seriousness of the potential event.

Once a storm has passed with community-wide damage, the same sample plots are re-surveyed; if pre-storm work was not done, random sample plots are created and surveyed. A qualified damage assessor evaluates the amount of debris and tree damage in each plot.

A template developed in Microsoft's Excel allows all computations to be carried out automatically as soon as the field data are uploaded or manually entered. It estimates the initial resources necessary for hazard mitigation and debris cleanup for the entire community.

Natural Disaster Damage

Each community has differing capabilities to deal with storm-related emergencies. Because of this, FEMA recommends that each community have an Emergency Operation Plan and, since debris removal is reported as the most significant storm-related problem, a Debris Management Plan. Examples of plans can be found on the FEMA website, and the Forest Service has recently developed a useful Tree Emergency Plan Worksheet for setting up a plan to deal with natural disasters to the urban forest.

In this Protocol, methods are provided to estimate the following:

- The potential (pre-storm) and actual (post-storm) amount of tree debris in cubic yards generated from a natural disaster, and costs for its removal.
- The potential and actual man-hours and costs required for approved tree removals.
- The potential and actual man-hours and costs for hazard pruning.

The Storm Damage Assessment Protocol is intended to provide this information in a timely fashion immediately after a storm. It is important to keep in mind that the Protocol is not a replacement for the more extensive full-scale surveys or estimates of damage to trees that would typically occur in the days and weeks after a storm emergency. Full-scale surveys are needed to estimate damage more accurately and direct cleanup work after a storm.

The Storm Damage Assessment Protocol Utility was cooperatively developed by the USDA Forest Service, Northeastern Area, the Northeast Center for Urban and Community Forestry, and the Davey Resource Group. This Utility is in the public domain and available at no cost to all interested individuals and organizations through www.iTreetools.org. ■

***Planting**, continued from page 5*

compacted or wet soil. The only exception I can think of would be if the top-most roots in the root ball are RIGHT AT the top surface of the root ball with no root defects to treat. But even then I would plant an inch or two high if they were my trees. If the hole was inadvertently dug too deep, add soil and compact it firmly with your foot. Root balls on some container trees have sunk deeper into the soil as much as 2.5 inches in the two years after planting from root ball decomposition; we have not recorded sinking on field grown trees. Position trees accordingly.

Place the point where the top-most root emerges from the trunk slightly above (like 2 inches) the surface of the landscape soil. If the roots are a bit deep in the root ball then the top of the root ball will be more than 2 inches above the landscape soil.

If the tree is a little deep in the hole, the tree must be lifted and reset after adding soil to the bottom of the hole. Continue this until it is set at the appropriate depth; it is always better to plant too high than too deep. Once it is at the appropriate depth, place a small amount of soil around the root ball to stabilize it. Soil amendments

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are usually of no benefit. The soil removed from the hole makes the best backfill unless the soil is terrible or contaminated.

Straighten the tree in the hole. The top of the root ball might be sticking out above the backfill soil. Cover the sides of the root ball with mulch or loose soil and apply mulch to as large of an area as possible around the root ball to at least an 8 foot diameter circle around the tree. Mulch placed on the root ball can cut off water, and encourage formation of stem girdling roots during establishment. Construct a berm out of mulch or soil at the edge of the root ball only if the tree will be watered with a hose, bucket, or other high volume means. Constructing a berm in other situations will not provide more water to the root system. If soil is used to construct a berm, plans should be made to rake the soil away from the root ball later in establishment; don't push it toward the trunk as this can encourage formation of stem girdling roots.

Consult the University of Florida web site (http://hort.ifas.ufl.edu/woody/planting.html) for more detailed information. ■

Florida Chapter Board Updates

Florida Chapter Members to Participate in Annual Tour des Trees

The annual Tour des Trees is the signature event of the non-profit Tree Research and Education Endowment Fund (TREE Fund). The Florida Chapter is proud of its two members who have signed up to ride in the annual event that is held every year prior to the ISA conference. Veteran rider Andy Kittsley and newcomer Tammy Kovar have been putting in some extra training time for the ride that will cover approximately 500 miles over six days. This year the tour begins in Indianapolis on July 21st, will traverse southern Indiana and Illinois, and finish in St. Louis, the site of this year's annual ISA conference. In order to participate in the Tour, each rider commits to collecting donation pledges for the TREE Fund. You can make a difference in the life of our urban trees by supporting a TREE Fund Tour des Trees rider. Pledge your support through your donation on behalf of a Tour des Trees participant and ensure that our urban trees and community forests remain healthy and beautiful for generations to come! You can donate online on any rider's donation web page; links are found through the Tree Fund website www.treefund.org. Good luck to both riders… see you in St. Louis!

TREE Fund Tour des Trees

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One Step Closer to a Florida TCC Trailer

Bids have now been collected for the purchase of a new box trailer and the purchase should happen in time for the June Trees Florida conference. The purchase of our own trailer and equipment will give the Florida climbers more flexibility for all their training activities and competitions.

Silent Auction Items Needed

The Florida Chapter and the TREE Fund welcome any item to place in the annual silent auction held during the Trees Florida conference. As you know, all monies collected from the purchases of the silent auction items go to the TREE Fund for the research and educational programs that it supports. In the past, items have included artwork, photographs and handcrafted items, small climbing equipment and entertainment tickets, as well as fine dining certificates and fishing trips. Put on your thinking caps and come up with an item to donate. You can contact Tree Fund LiaisonTammy Kovar of Biological Tree Services at 941-706-1414 or tkovar@biologicaltreeservices.com with your auction item. ■

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To order your plate by mail, please print and complete the form below. Return it with your vehicle registration renewal notice and check for an additional $25. If your renewal indicates you must replace your license plate, you do not need to include the $10 new plate fee.

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City: _____ Zip Code: _____
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☐ By providing my email address I would like more information on TreesAreCool.com programs and updates.

The TreesAreCool program is administered by the Florida Chapter of the International Society of Arboriculture (ISA), a Florida non-profit organization.

ISA FLORIDA CHAPTER

Welcome!

New Florida Chapter Members

Here are the individuals that joined the Florida Chapter during the first quarter of 2008. If you see a name from your area of the state, look up their phone number online* and give them a call. Introduce yourself and find out what aspect of arboriculture the new member is involved in. Let's make the Florida Chapter friendlier. We're all working in different ways for the same goals. Get to know other chapter members. You might make some helpful connections for the future.

First Name	Last Name	City	State	First Name	Last Name	City	State
Fernando	Ascanio	FT LAUDERDALE	FL	Tom	Hargraves	LAKE WALES	FL
Carey	Barlow	SORRENTO	FL	Amanda	Hester	DELAND	FL
Rose Marie	Bechard-Butman	PLANTATION	FL	Benjamin	Hester	DELAND	FL
Gladyvette	Benarroch	MARCO ISLAND	FL	Lamar	Hester	DE LEON SPRINGS	FL
Adam	Benigni	NAPLES	FL	Jonathan	Hult	DELRAY BEACH	FL
Mariellen	Calabro	DELAND	FL	James	Huth	ST PETERSBURG	FL
City of Key West/Tree Comm		KEY WEST	FL	John	Jablansky	PLANTATION	FL
Osvaldo-Cotte	Lopez	LAJAS	PR	Don	Jacobs	HOLIDAY	FL
John	Cross	WESTON	FL	Fred	Lake	KISSIMMEE	FL
Carlucio	Da Rocha	POMPANO BEACH	FL	William	Lambert	KISSIMMEE	FL
Arthur	Davidson	ROYAL PALM BCH	FL	Mark	Lerch	VENICE	FL
Jib	Davidson	GAINESVILLE	FL	Todd	Luikart	ST PETERSBURG	FL
Elvis	Diaz	KISSIMMEE	FL	Eric	Marlowe	MERRITT ISLAND	FL
David	Dore-Smith	BONITA SPRINGS	FL	John	Meade	RIVERVIEW	FL
Marc	Ebling	BRADENTON	FL	Mark	Merritt	COCONUT CREEK	FL
Eric	Engstrom	KISSIMMEE	FL	Mark	Miller	SARASOTA	FL
Benjamin	Essig	MIAMI	FL	Patrick	Miller	GROVELAND	FL
Manny	Fernandez	MIAMI	FL	Alberto	Mitrani	HOLLYWOOD	FL
John	Gillette	DADE CITY	FL	Debra	Northsea-Prior	JUPITER	FL
Gerson	Giron-Xeloh	JUPITER	FL	Donald	Robinson	NEW PT RICHEY	FL
Daniel	Gonzalez	BRADENTON	FL	Tony	Rollins	MIRAMAR	FL
Laredo	Gonzalez	GUAYNABO	PR	Ted	Scovitch	VENICE	FL
Erica	Goodwin	NAPLES	FL	Craig	Smith	ORLANDO	FL
Yoram	Gozlan	PEMBROKE PINES	FL	Joseph	Webb	VERO BEACH	FL
Kevin	Greene	SARASOTA	FL	Gordon	Wolfe	DUNEDIN	FL
DJ	Hall	SPRING HILL	FL				

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

Up-coming 2008
Board Meeting
Dates & Locations
July 10, 2008 - Sarasota
Sept 11, 2008 - Gainesville

Come see what your Chapter is up to by attending a
Board of Directors Meeting!

This invitation is open to all members.

2008 Certification Exam Schedule

The **FLORIDA CHAPTER of ISA** is pleased to announce our revised 2008 schedule of Certification exams and Study Guide review sessions. See the chart below for the site nearest you.

Date	Exam/ Class	Location	Time	Proctor or Instructors	Last Date to Register	Cost Member/ Nonmem
June7 2008	Cert. **Review Session**	Hyatt Bonaventure Conference Center 250 Racquet Club Drive Weston, FL 33326	9:00 AM to 4:30 PM	Dr. Ed Gilman Way Hoyt Norm Easey	See ISA Website	$155/ $185
June 8 2008	Certified Arborist **Exam**	Hyatt Bonaventure Conference Center 250 Racquet Club Drive Weston, FL 33326	7:30 AM to Noon	Norm Easey	See ISA Website	$125/ $225
Oct. 4 2008	Certified Arborist **Exam**	Duval County Extension 1010 N. Mc Duff Avenue Jacksonville, FL 32254	7:30 AM to Noon	Larry Figart Becky Jordi	See ISA Website	$125/ $225

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

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

The ISA Illinois must receive your application & exam fees **TWELVE WORKING DAYS** prior to the exam date. NO EXCEPTIONS! (ISA Illinois is closed New Year's Day, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and the day after, and Christmas Day) *****PREPAYMENT IS REQUIRED*****
VISA/MC/AMEX accepted. US FUNDS ONLY

The following article is provided in English and Spanish

How Much Urban Forest and Where? And So What?

Francisco Escobedo, School of Forest Resources and Conservation, University of Florida, Gainesville

and Henry Mayer, Miami Dade IFAS Extension Agent and ISA Hispanic Committee

Many communities determine the amount of their urban forests by the total tree canopy covering their community. With greater urban forest cover, trees would reduce more air pollution, filter more urban noise, reduce energy use due to shading as well as provide more pleasant living conditions. Communities use this number, usually expressed as a % of the community covered by trees, to develop policies and ordinances regarding the urban forest. While a tree canopy percent is useful in letting you how much urban forest you have it does not really tell you what kind of tree cover and how it changes over time. Often communities need to know what kind of urban forest they have and where do they have more, or fewer, trees. Other questions that are not answered by this percent are what portion of my canopy is made up of non-native trees or how much of this canopy is located in certain neighborhoods?

At the University of Florida we looked at this question. Using a Geographic Information System (GIS) and digital aerial photos, were able to determine Gainesville's tree cover over the past 12 years. We found that in 1995, urban forest (trees and tall shrubs) cover was 66% and remained virtually unchanged to 2000. However, in 2004 cover had decreased to 60% and then to 55% in 2005! Although tree cover in 2005, following Hurricane season of 2004, decreased, tree cover eventually recovered in 2007 to 59% (+/-2%) after two years to pre-hurricane levels. So, as you can see tree cover is variable and changes through time.

Urban Forest *continued next page*

***Urben Forest** continued from previous page*

Along with the USDA Forest Service Southern Research Station we also looked at what kind of urban forest Gainesville has by visiting and measuring in the field 93 random sites across the city. These areas we studied included people's backyards, parks, streets, commercial, and industrial areas as well as forested areas. Crown measurements, tree species, land use, shrub characteristics, and surface cover information was then used to determine urban forest characteristics in Gainesville. Trees crowns covered about 51 (+/-3%) percent of Gainesville and shrub cover, often growing under trees, was 16 percent of the city and buildings covered 9.3 % of the surface. Our results also indicate that the top 4 trees in terms of numbers were Slash Pine, Pinus elliottii (14%), Laurel Oak, Quercus laurifolia (12%), Water oak, Quercus nigra (6%), and Loblolly Pine, Pinus taeda (6%). Live oaks, Quercus virginiana were only 2% of all trees sampled, but accounted for 8% of Gainesville's canopy whereas laurel oak accounted for 18% of the canopy. Over half of Gainesville trees and shrubs are found in residential, transportation, parks, forest, and vacant areas. As expected, concrete, asphalt, and other impervious surfaces are mostly found in industrial and commercial areas.

In a separate on-going study in Miami-Dade County with the UF Department of Geomatics we are using Satellite imagery, US Census data, and a technique called Normalized Difference Vegetation Index (NDVI) to determine the amount of urban forests across Miami-Dade's neighborhoods. Initial results show us that amounts of urban forest vary according to race/ethnicity and economic condition. These data suggest that those census tracts with higher percentage of non-Hispanic White neighborhoods are more likely to have greater NDVI value, which means more vegetation, more urban forest. We are also determining whether age plays a factor in determining tree cover.

As you have just read, urban forests are living systems and the trees - and people - that comprise them are dynamic and changing as well. It is important to realize that urban forest cover over time will change and varies according to land uses, weather events, neighborhoods, budgets, etc. We should realize that trees are not static numbers or percents rather, just like us, they are living and grow, change, and die and we should account for these realities when we think of caring for our urban forests. ■

El siguiente articulo esta escrito en Ingles y en Español.

¿Cuanto bosque urbano tiene su comunidad y en donde esta situado? ¿Es importante conocer eso?

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

and Henry Mayer, Miami Dade IFAS Extension Agent and ISA Hispanic Committee.

Una forma de determinar la cantidad de bosque urbano que tiene una comunidad es mediante el porcentaje de cobertura de arbolado que presenta. Con mayor cobertura, los árboles reducirían más la contaminación atmosférica, producen una mayor filtración del ruido urbano, reducen el uso de energía debido a la sombra que proveen y proporcionan condiciones de vida más agradables. Las comunidades utilizan este número, expresado generalmente como porcentaje para desarrollar políticas y ordenanzas con respecto al bosque urbano. Mientras que el porcentaje de cobertura arbórea es útil para conocer el porcentaje de árboles que la comunidad tiene, realmente no dice qué clase de árboles tiene y cómo cambian con el tiempo. A menudo las comunidades necesitan saber qué clase de árboles tienen y cuales vecindarios tienen más, o menos árboles. Otras preguntas que no son contestadas por este porcentaje son ¿qué proporción de la cobertura vegetal está compuesta por árboles no-nativos o invasivos, y cuánta cobertura vegetal existe en ciertos vecindarios?

La Universidad de la Florida tomó en cuenta esas preguntas. Usando el Sistema de Información Geográfico (GIS) y fotos aéreas digitales, se determino la cubierta vegetal de Gainesville de los últimos 12 años. Encontramos que en 1995, la cubierta arbórea urbana (árboles y arbustos altos) era del 66% y permaneció sin cambiar hasta el 2000. ¡Sin embargo, en el 2004 la cubierta disminuyó hasta un 60% y más tarde el 55% en el 2005! Aunque la cubierta vegetal disminuyó hasta su nivel más bajo en el 2005 por efecto de la estación de huracanes del 2004, eventualmente la cobertura vegetal se recuperó en el 2007 hasta alcanzar un 59% (+-2%).

***Bosque Urbano** continued on page 23*

Bosque Urbano *continued from page 21*

Así pues, como se puede ver la cubierta vegetal es variable, cambia a través del tiempo.

Junto con el USDA Forest Service Southern Research Station también medimos qué clase de bosque urbano Gainesville tiene. Se eligieron al azar 93 parcelas a través de la ciudad. Muchas de estas áreas estaban situadas en los patios traseros de las casas, en parques, en las calles, áreas industriales y comerciales así como en bosques. Se midió la copa del árbol, se identificaron las especies, tipos de uso de suelos así como las características de los arbustos. Mediante toda esta información se determinaron las características del bosque urbano en la ciudad de Gainesville. Las copas de los árboles cubren cerca de un 51 por ciento (+-3%), los arbustos, frecuentemente ubicados de bajo de la copa de arboles, cubren un 16 por ciento y los edificios cubren un 9.3 % de la superficie. Los resultados también indican que los 4 árboles mas frecuentes son: Slash pine, Pinus elliottii (14%), Laurel oak, Quercus laurifolia (12%), Water oak, Quercus nigra (6%) y Loblolly pine, Pinus taeda (6%). Solamente un 2% de los árboles muestrados son Live oak, Quercus virginiana pero constituyen el 8% de la cobertura vegetal de Gainesville mientras que el Laurel oak constituye el 18% de la cobertura. La mitad de los árboles y arbustos se encuentran en áreas residenciales, calles, parques, bosques y áreas vacantes. Como podría esperarse, las áreas de concreto, asfalto y otros materiales impermeables se encuentran fundamentalmente en las áreas comerciales e industriales.

En un estudio diferente que se estamos llevando a cabo en el condado de Miami-Dade con el departamento Geomatics de la UF estamos utilizando imágenes satelitales, datos del censo de los E.E.U.U. y una técnica llamada el índice normalizado de diferencia en vegetación (NDVI) para determinar la cantidad de bosques urbanos a través de las vecindades de Miami-Dade. Los resultados iniciales nos demuestran que las cantidades de bosque urbano varían según las razas, origen étnico, o condición económica. Estos datos sugieren que las zonas del censo con un porcentaje más alto de vecindades blancas no Hispanas son más probables de tener mayor valor de NDVI, lo cual significa más vegetación, o sea mayor cantidad de bosque urbano. También estamos tratando de investigar si la edad de los residentes es un factor en la determinación de la cubertura vegetal.

Como acaban de leer, los bosques urbanos son sistemas vivos y que tanto los árboles, así como las personas, que los componen están en una relación dinámica y cambiante. Es importante entender que la cubierta de bosques urbanos es temporalmente variable de acuerdo a factores tales como la utilización de los suelos, eventos climáticos, vecindades, presupuestos, etc. Es importante tomar en cuenta que los árboles no son números o porcentajes estáticos, ellos, al igual que nosotros, son seres vivos, crecen y mueren y debemos tomar en cuenta estos cambios cuando pensamos en nuestros bosques urbanos. ■

Pruning Method Affects Flowering and Sprouting on Crape Myrtle

Edward F. Gilman, Gary W. Knox and Patricia Gomez-Zlatar

The following is the data derived from 4 years of research done by Gilman, Knox and Gomez on Crape Myrtle pruning.

Abstract: 'Natchez' (Lagerstroemia indica × fauriei) and 'Carolina Beauty' (Lagerstroemia indica L.) crapemyrtle were pruned in three manners including topping, pollarding, and pencil-pruning plus a non-pruned control for four years to determine influence on flowering and sprouting. The topping and pollarding of 'Natchez' delayed appearance of the first flower up to one month compared to non-pruned trees for the first two years following initial pruning. In contrast, topping and pollarding 'Carolina Beauty' induced flowering by as much as one week sooner one and three years following initial pruning with no effect in years two and four. Topping both cultivars delayed peak flowering date compared to non-pruned trees. Topping 'Natchez' the first and second year following initial pruning and pollarding in the second year reduced duration of flowering period compared to the non-pruned trees. Flower effect (panicle number x panicle volume) was not influenced by pruning method on 'Carolina Beauty' for any year. Flower effect for topped 'Natchez' was significantly smaller than for pollarded and pencil-pruned trees the first year after pruning; flower effect on non-pruned 'Natchez' was no different from any of the pruning treatments. Pruning cut diameter was inversely correlated with number of days 'Natchez' trees were in flower, number of flower panicles, and date of flowering; however, cut diameter influence on flower effect was not predictable for 'Carolina Beauty'. Sprouting along the trunk and from the roots increased with diameter of the pruning cut. Topping took less time to complete than other pruning methods in all but the last year which probably accounts for its popularity. Topped trees grew in height following pruning faster than pollarded trees, which grew faster than pencil-pruned trees, which grew faster than non-pruned trees for both cultivars.

Significance to the Industry: This work helps guide pruning programs for crapemyrtle trees in landscapes. Topping delayed peak flowering for both cultivars. Topped 'Natchez' produced fewer panicles and flowered for a shorter period than trees pruned in other manners. Topped trees produced the longest spouts the following year. Sprouting increased along with pruning severity for both cultivars so that topped and pollarded trees sprouted more than pencil-pruned and trees not pruned. Removing about half the length of current year shoots (pencil-pruning) did not consistently influence sprouting or flowering and resulted in trees with a neat appearance. ■

Florida Chapter ISA - 2008 Education Schedule

Date	Seminar/Class	Location (s)
June 7, 2008	Arborist Certification Exam Review	Weston
June 7 - 10, 2008	Trees Florida 2008	Weston
August 14, 2008	Arborist Safety & Climbing	Orlando
August 15, 2008	Arborist Safety & Climbing	Tampa
October 23, 2008	Arborist Safety & Climbing	Pensacola
October 24, 2008	Arborist Safety & Climbing	Tallahassee

Rainbow Treecare Scientific's Solution Center covers you from A to Z

Rainbow Treecare Scientific is designed to serve arborists. Our new **Solution Center** is staffed with specialists who provide training and sales support for tree health care products. Our company was founded in arboriculture, so we can also help with your questions about adding services, profitability, and marketing to clients.

A — Aphids — 1 **2** 3 — Xytect®
Fall application provides control next season.

B — Bronze Birch Borer — 1 **2** 3 — Xytect® and/or Bifenthrin
Attacks weak, stressed trees. Mulch, irrigate, and promote health to prevent this pest.

C — Chlorosis — 3 — VERDUR®
Macro-infuse in fall for multi-year green up. Combine with soil decompaction, fertilization.

D — Dutch Elm Disease — 3 — Arbotect® 20-S
Macro-infuse to protect for 2 to 3 seasons. Does not stop root graft infection.

E — Emerald Ash Borer — 1 **2** 3 — Xytect® and/or Bifenthrin
Annual preventive applications work best. Highly infested trees may be difficult to save.

F — Fireblight — 1 — Copper hydroxide
Prune below infected tissue in winter. Spray in dormant season and at full bloom.

G — Gypsy Moth — **1** 3 — Spinosad, Acephate
Spray at early instar stage. Broad programs often use *Bacillus thuringiensis*.

H — Hemlock Woolly Adelgid — 1 **2** 3 — Xytect®
Apply soil applications >60 days prior to fall feeding. Re-treat when suppression falters.

I — Injured Roots — 2 — Cambistat® Prevention Air Tools
Air tools decompact soil. Blend in organic matter and mulch over the top.

J — Japanese Beetle — 1 **2** 3 — Xytect® and/or Bifenthrin
Adults feed midsummer, grubs feed on roots until October.

K — K Deficiency — 2 — Fertilizer
Essential element and macronutrient.

L — Lepidoptera — **1** 3 — Spinosad, Acephate
Foliar spray works best for early instar caterpillar stages.

M — Mites — **1** 3 — Aracinate® LUCID™
Micro-infusion with M3 Infuser, or foliar applications combined with horticultural oil.

N — Needlecast — 1 — Chlorothalonil
Requires two applications; one at 1/2 candle extension and one at full extension.

O — Oak Wilt — 3 — Alamo®
Protect healthy oaks within root graft distance of infected trees. Save infected white and bur oaks.

P — Pine Wilt Nematode — 3 — Pinetect™
Treat preventively every other year prior to May 1.

Q — Quercus Decline — Cultural Practices
Caused by a complex interaction of biotic and abiotic stresses.

R — Rhizosphaera — 1 — Chlorothalonil
Requires multiple years of treatment and cultural practices.

S — Sycamore Anthracnose — 3 — Arbotect® 20-S
Macro-infusion suppresses symptoms for 3 seasons.

T — Two-Lined Chestnut Borer — 1 **2** 3 — Xytect® and/or Bifenthrin
Attacks weak, stressed trees. Mulch, irrigate, and promote health to prevent this pest.

U — Urban Stress — 2 — Cambistat® ISA Arborist
Everyone should call an arborist to care for their ailing urban trees.

V — Verticillium Wilt — No Known Cure
Delay symptoms by proper pruning, watering, and fertilization. Rainbow is testing treatments.

W — Weevils — 1 **2** 3 — Xytect®
Fall application provides control next season.

X — *Xylella fastidiosa* — 3 — BACASTAT®
Annual application of Bacastat suppresses symptoms of bacterial leaf scorch.

Y — Yellows — No Known Cure
Difficult to identify. Set low expectations with homeowner.

Z — Zimmerman Pine Moth — 1 — Bifenthrin
Apply to trunk and main branches in spring and again midsummer.

Application Method
1 Foliar Spray
2 Soil Applied
3 Tree Injection

highlighted number represents recommended method

Pest / Tree Health Problem

Product Solution

Additional Information

Looking for things to do while in St. Louis at the conference? Visit
http://www.explorestlouis.com/clients/home/isa/index.asp
for an interactive **tour of St. Louis** and an electronic **visitor's guide**

Arborist Certification Committee Report

By Norm Easey, Florida Certification Liaison

Arborist Certification is booming worldwide; there are now 21,883 ISA Certified Arborists, 767 ISA Certified Tree Worker /Climber Specialists, 1,279 Utility Specialists, 190 Municipal Specialists and 221 Board Certified Master Arborists.

The Florida Chapter would like to congratulate the following 22 Florida individuals for earning their Arborist Certification, Certified Tree Worker, or Utility Arborist Certification during the first quarter of 2008: :

Utility Arborist
Kim Nicholson, Tallahassee, FL
John Sauls, Tallahassee, FL

Certified Tree Worker
Michael Cross, Tallahassee, FL
Colin Kelly, Orlando, FL
Ron Price, Crawfordville, FL
Timothy Walters, Tallahassee, FL

Certified Arborist
Scottie Barnes, Andersonville, GA
Dennis Deming, Chiefland, FL
Marsha Drew, Yankeetown, FL
Robert Farley, Tallahassee, FL
Bryan Hillard, Branford, FL

Richard Hilliard, Hawthorne, FL
Timothy Gensler, Crystal River, FL
Jason Kendall, Tampa, FL
Kenneth Morgan, Brooksville, FL
William Needham, Ocala, FL
John Porter, Tallahassee, FL
Martin Rozens, Altamonte Springs, FL
Mark Siburt, Gainesville, FL
William Smith, Gainesville, FL
Nathaniel Stone, Inverness, FL
Stephen Willis, Jacksonville, FL

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International Society of Arboriculture
Florida Chapter

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

Arborist Code of Ethics

Strive for continuous self-development by increasing their qualifications and technical proficiency by staying abreast of technological and scientific developments affecting the profession.

Not misuse or omit material facts in promoting technical information, products or services if the effect would be to mislead or misrepresent.

Hold paramount the safety and health of all people, and endeavor to protect property and the environment in the performances of professional responsibilities.

Accurately and fairly represent their capabilities, qualifications and experience and those of their employees and/or agents.

Subscribe to fair and honest business practices in dealing with clients, suppliers, employees and other professionals.

Support the improvement of professional services and products through encouraging research and development.

Observe the standards and promote adherence to the ethics embodied in this code.