



In the Shade

Vol. 31, No.5
January 2008

*Happy
New Year!*



*Have a Happy
and Prosperous
2008*

Certification Tests

Certification information and an application form can be obtained at http://www.isatexas.com/Members/Certification_Information.htm
As with all Certification Examinations, the application must be in the ISA office 12 working days prior to the Exam.

| Test date | Registration deadline | Location |
|--------------|-----------------------|-----------------|
| March 13 | February 26 | Round Rock |
| April 18 | April 2 | San Antonio |
| June 5 | May 20 | Ft. Worth |
| August 14 | July 29 | Round Rock |
| September 26 | Sept. 10 | College Station |

UAA to Host First Regional Meeting in Texas

The Utility Arborist Association (UAA), over the past three years, has been conducting regional training meetings throughout the United States. Many of these meetings are held in cooperation with the ISA Chapter in that region. The purpose of the meeting is to provide high quality education and training to field personnel of utilities, consultants and line clearance contractors who, for a variety of reasons, cannot attend other types of educational meetings like the ISA Chapter meetings.

David Wall, Xcel Energy; James Koenig, CPS Energy; Ray Henning, Austin Energy; and Pat Wentworth,

UAA member and past president of the ISAT, along with John Giedraitis, will be working with the UAA to determine the location and dates for the meeting. This group will also work with UAA to develop the program.

More details will soon follow but currently the meeting is scheduled for the first week in March near Austin. The program will offer up to eight CEUs and focus on topics most critical for utility arborists in their day-to-day operations. The UAA has had over 600 people attend the meetings in more than eight cities in the last two years.

Topics have included customer relations; safety; pruning standards; hazard tree assessment; motivating, recruiting and retaining employees; work prioritization; project management; job briefing; and much more. "The key is to tailor the topics to the region and bring in top speakers from around the country and still keep the meeting affordable," according to Derek Vannice, UAA Executive Director.

GET A JOB!

Check out the job postings on the ISAT website. Go to: http://www.isatexas.com/Members/Jobs_Page.htm.

To post your help wanted or job wanted notice, email your announcement to jpg@tfs.tamu.edu.

There is no charge for these job postings.

ISA Goes Way South of the Border

On November 26 and 27, 2007, ISA Hispanic Committee members gave presentations at the 2nd International Conference on Arboriculture in Bogotá, Colombia. The conference was a big success according to the reactions of some of the more than 250 attendees. Topics presented included: Urban Forestry Planning in Mexico City; Traditional and Modern Arboriculture in Buenos Aires; Urban Tree Management in Europe; The State of Arboriculture in Medellin; Technical Aspects of the

Bogotá Tree Census; Urban Trees of the World; Biology, Physiology and Pathology of Street Trees; Nursery Production Techniques of Urban Trees; Tree Selection; Mature Tree Pruning; Transplanting Large Trees; Hazard Tree Recognition; and Tree Inventories in Mexico City. All presentations were given in Spanish and are available in PowerPoint. For a PowerPoint of the presentations and the Bogotá census results, email Mark Duff, mduff@tfs.tamu.edu.

—Mark Duff

ISA Hispanic Committee presenters and Colombia conference organizers.



Of all man's works
of art, a cathedral
is greatest. A vast
and majestic tree is
greater than that.

—Henry Ward
Beecher

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The latest old concept about planting: Tree Groves

By Walter Passmore,
Urban Forest Program Manager, City of Austin

Looking for a way to pioneer an innovative concept of planting trees which will result in increased health and lower long-term maintenance? Look no further than the latest concept that was established by nature long before the advent of man planting trees: tree groves.

Trees in a natural setting grow in groves of compatible species. These grove communities provide many benefits to the trees growing in them, including:

- Different species naturally are adapted to different light, water and soil conditions and do best when conditions match their optimal requirements. Certain species are often grouped together to mutually benefit each other such as sun-loving oaks and pecans providing the needed shade for cherry laurels, blackhaw viburnum, and roughleaf dogwood. In addition root grafts between trees of the same species can provide mutual benefit
- Trees growing in groves buffer each other from wind, temperature, and other weather extremes
- Multiple layers of tree canopy create increasing levels of shade, resulting in little competing vegetation on the ground and building up layers of decomposing leaf litter which acts as mulch
- Small openings provide a space for younger trees to become established to wait until older trees die or otherwise yield their space

Tree groves, when properly designed, should enhance function of a property and not interfere with current uses. Groves can be used to frame spaces, outdoor “rooms,” pathways, destinations, and more.

Simulating natural groves by planting groups of compatible species can save money and reduce maintenance for the area of the grove. Groves can provide a physical and visual barrier to separate incompatible uses (such as roads from recreational space), define spaces (such as trails and picnic areas), and restrict access to natural areas, creek beds, or unplanned park entrance points. Grove plantings can save water by utilizing native species that do not need supplemental watering after establishment. Groves can serve as an on-site depository for chipped woody debris that would otherwise have to be transported to a drop site.

Benefits of Mulch

Currently there is a lack of mulch for many trees in urban settings. Mulching is one of the most beneficial and economical practices to maintain or improve tree health. The tree care profession should set an example of good environmental stewardship for city departments

Continued on next page

Below is an example of a current park site and adjacent to it is a digitally modified image of what the same site might look like with a tree grove. Notice that the simulated grove replaces the man-made barriers and creates a colorful long-lived flowering presence. Never underestimate the power of trees!

Note: The original photo was taken at Kiest Park in the south part of Dallas. The second image was modified using CanVis, a digital image manipulation program.



Planting Tree Groves *Continued from previous page*

and the community at large. In addition, application of mulch will improve tree health and extend tree life, resulting in fewer removals, lower maintenance costs, and lower woody debris disposal cost. A supplemental financial benefit can be derived from reduced mowing, fewer replacement tree purchases, less infrastructure damage from surface rooting, and retention of trees on construction sites. Many of the financial benefits are estimated from avoidance of costs or increase in standing value of the tree resource and would not necessarily equate to budget dollars. These values could equate to refocusing work into more proactive tree care measures and better utilization of manpower and equipment.

Mulch benefits trees in the following ways:

- Conserves water by limiting evaporation from the soil and moderating soil temperature
- Provides improved habitat for micro-organisms, earth worms, and tree roots through addition of organic matter and nutrient leaching
- Prevents erosion of fertile top soil
- Prohibits weed growth, thereby reducing competition between tree roots and other plants for water and nutrients

- Improves soil structure and drainage characteristics
- Protects the tree trunk and surface roots from mechanical damage
- Protects the soil from compaction

Applying mulch onto grove planting areas can greatly reduce or even eliminate transportation, and can allow processing and application of woody debris on site. Established groves could also serve as local depositories when vegetative debris is generated and processed (chipped) during work on parkways, medians, and city facilities.

An adequate supply of proper equipment (chippers in particular) and staff time commitment for mulch creation and application will be challenges for successful implementation. Tracking the source and amount of material may also be difficult.

Partnership with city departments and volunteer groups multiplies the benefit of the mulching and composting operation and creates enhanced economies of scale. A compounding effect is possible if citizens and businesses are inspired to mulch their own trees.

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TFS Trains Big Bend Trails Crew

by Oscar S. Mestas, TFS El Paso

For those of you who love to hike national park trails and enjoy not being poked in the face or getting your pack stuck on a low hanging branch, you can thank the hard work of the trails crew. Most national parks have crews who hike up and down trails, sometimes on a daily basis, or who stay out on the trail for several days depending on the task and the distance back to base camp. But what does this have to do with arboriculture?

The Big Bend trail crew has been trained by the Texas Forest Service Urban Forestry team since 1998. The members of the trail crew move from park to park, spending summers in places like

Yellowstone, Glacier, and Yosemite, and head south for the winter to Big Bend, much like geese and duck. So you're still asking yourself what does this have to do with arboriculture?

Don Sharlow, currently Road and Trails supervisor at Zion NP, started this training in Big Bend after listening to one of my great presentations on managing and assessing trees for risk, looking at tree health and how the simple act of pruning – if not done properly – may lead to decay and decline and affect the health of trees and other woody plants.

The first year I did the training by myself. The training is a two-day event and includes four hours of

classroom instruction. The topics of dendrology, botany, young and mature tree pruning, ANSI standards, tools, terminology, and big tree measurement are taught the first day. The second day we spend all day out in the field at a campground or on a trail practicing what was preached the day before. I split the crew up into teams of two to three and let them evaluate and discuss what they want to prune and why before they make a cut. I was literally being run ragged the first time I did this training because I was constantly being called by the teams asking me for suggestions or just to affirm their decisions. The crew walked about five miles; I think I doubled that going back and forth between the teams.

Since that first time I have requested the help of other TFS foresters over the years. Jim Rooni, Jim Carse, Robert Edmonson, Pete Smith, Eric Copeland, Mickey Merritt, Jan Davis, Mark Peterson, Mark Duff, Nick Harrison, Matt Grubisich, Courtney Blevins and Clay Bales have all been part of the team and experienced the weather extremes, the spiny plants, rough trails and higher elevation of the Chisos.

Next time you see Rooni ask him how dark is dark. Duff can tell you how hot a pay phone can get or how to sleep through braying donkeys. Jim Carse and Clay Bales can give a detailed account of a type A personality, Mickey can tell you how absorbent a camp towel is. Eric has a great story of hot springs and sprouts. Matt can tell you about the hidden dangers of traversing a talus slope. Pete and Robert will attest to

Continued on next page

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Training the Trails Crew *Continued from previous page*

the difficulties of back county roads and gratitude for a well maintained trail. Jan Davis has experienced the ritual of sending a spider spirit on its way to a better place. Courtney is thankful for spare tires. Mark Peterson and Nick Harrison are probably the only two who have had a “normal” experience.

Bottom line is the crews get

professional training on proper pruning, looking out for safety concerns, keeping in mind that what they do will impact the health of the trees, and trying to keep the vegetation along the trails looking natural so that the hiking experience is not spoiled by hacked and whacked work. These crews take this training with them to other parks all across our great nation.



The first trail crew at the South Rim of the Chisos Mountains. This crew trained in February, 1998.



AmeriCorps kids flexing their muscles on the way to using their newly gained knowledge. AmeriCorps is a program of the Corporation for National and Community Service.

TFS HAS A NEW FOUR-LEGGED ARSON DETECTOR



The Texas Forest Service has a new “employee” to track down and find arsonists in the state. Little Arson Annie – a nine month old AKC bloodhound donated by Mike Harmon from Bastrop – is being trained to find those who intentionally start fires.

“With Annie, you’re in deep trouble if you’re an arsonist in Texas,” said James Hull, Director and State Forester. “She is already tracking and will soon be ready to start pursuing those who set fires in order to harm the public and their property.”

Annie is stationed in Lufkin along with her handler, Kevin Pierce. She will be available to work arson cases, and she will also visit schools and attend functions to promote fire and arson prevention awareness.

“Annie is a quick study, and we believe she will be ready to go soon,” said Gary Bennett, Chief Law Enforcement Officer for Texas Forest Service. “With the current fire danger situation, she is a welcome addition to our arson fighting team.”

To request a visit from Annie, call TFS Law Enforcement at 936-639-8113. Or visit <http://texasforestservice.tamu.edu>, select Fire and Emergency Response, then Law Enforcement.

Calendar of Events

January 11-12 and January 18-19 Arboriculture 101 Course, College Station

Get ready to take the Certified Arborist Exam or just brush up on your tree skills. Arboriculture 101 is a four-day short course designed to provide practitioners with an in-depth knowledge of how to care for urban trees. Dr. Todd Watson, an ISA Board-Certified Master Arborist integrates research and practical experience in his teaching style. The course is built around the 12 domains of the Certified Arborist Exam. Former students say the “quality of teaching was excellent” and the course was “very informative” and appreciated the “attention to real world



TFS forester Oscar Mestas at 8,400-foot elevation . . . in Texas! Oscar and Pete Smith were finishing a 14-mile hike in the Guadalupe Mountains near the New Mexico border, locating and re-measuring champion trees. To see more pictures from Guadalupe Mountains National Park and other big tree hunting trips, check out the new photo galleries at <http://texaschampiontrees.snapfish.com>. Type in the user name “bigtrees@tfs.tamu.edu” and the password “champion” to gain access to the site, or create your own account to get automatic updates when new trips are added.

issues.” Attendees routinely score significantly higher than the national average on the Certified Arborist Exam. For more information and online registration go to <http://www.isatexas.com/Members/Arb101.htm>. Or contact Dr. Watson at 979-218-0783. Sponsored by ISAT.

January 25 Grounds Maintenance and Safety Workshop, Houston Garden Center, 1500 Hermann Dr., Houston

A one-day workshop for grounds keepers, park and public works personnel, tree care personnel, landscapers, nurserymen, and others who maintain grounds with trees. Covers vehicle safety, job planning, work site assessment and safety, brush chipper operation and maintenance, chainsaw safety and field maintenance, tree planting, small tree pruning, and orientation to arboriculture. For more information call 713-688-8931 or mmerritt@tfs.tamu.edu.

February 8 North Central Texas Urban Forestry Workshop, Dallas

Spend a day with national, state and local experts. For more information contact Matt Grubisich, mgrubisich@tfs.tamu.edu or Courtney Blevins, cblevins@tfs.tamu.edu.

February 29 Deadline for Presentation Proposals, Society of Municipal Arborists (SMA) 44th Annual Conference

To submit a proposal for a conference presentation, contact Paul Ries, pries@odf.state.or.us. Or call 503-945-7391. Proposals must be submitted electronically on the form provided by SMA. The conference will be held October 12–15 in San Diego, CA.

March (Details TBA) ISA Utility Arborist Association Regional Meeting, Austin/Round Rock

The Utility Arborist Association in association with the ISA is having a regional meeting in the Austin/Round Rock area in March. This meeting is for everyone involved in the utility vegetation management industry in Texas and surrounding states. For more information contact David Wall, David.P.Wall@xcelenergy.com.

April 25 118th Official State of Texas Arbor Day, El Paso

Join local and statewide friends of trees to celebrate trees in Texas. Co-sponsored by ISAT, TFS, the West Texas

Continued on next page

Calendar of Events

Continued from previous page

Urban Forestry Council and the City of El Paso. The pre-ceremony reception is at 9:30 am and the Arbor Day Ceremony will begin at 10 am. For information, contact jpg@tfs.tamu.edu.

May (Details TBA)

Tree Worker Certification Workshop and Test, Ft. Worth

This pre-Tree Climbing Championship competition workshop will cover aerial rescue skills needed to pass the ISA Tree Worker Certification exam. Go to <http://www.isatexas.com/Members/TTCC/TTCC.htm> to find out about last year's event. For more information contact Keith Brown, Keith@AustinTreeExperts.com

May (Details TBA)

Texas Tree Climbing Championship, Fort Worth

Come to Fort Worth and compete with the best in Texas. For more information contact James Tuttle, TCC Chair, at 806-785-8733 or james@treelovingcare.com

Spring (Details TBA)

Identification and Management of Oak Wilt Workshop, Austin

The Texas Forest Service and the Texas Chapter ISA are hosting a fourth workshop for ISA Certified Arborists on how to identify and manage oak wilt. Each participant that successfully completes the training will be awarded a Certificate of Training Completion. This training will be noted on the www.texasoakwilt.org website as well as on handouts and other material referencing qualified individuals. Registration is limited. Contact jhouser@tfs.tamu.edu.

July 26-30

84th Annual ISA Conference and Trade Show, St. Louis, MO

Visit www.isa-arbor.com for conference updates.

September 24-26 (Details TBA)

The 29th Annual Texas Tree Conference, "Trees for the Future," The College Station Hilton, College Station

OTHER EVENTS OF INTEREST

Free Monthly Trainings from The Alliance for Community Trees

The Alliance for Community Trees offers a FREE monthly training (webcast) for anyone interested in issues pertaining to preserving and planting their urban canopy. The series is geared for volunteer organizers, community groups, and others who work with the public. Registration

is required. More information, including the list of topics that will be covered through March, can be found at <http://actrees.org>

THE TEXAS TREE LICENSE PLATE

Wondering how you can support Texas trees and improve the looks of your car or truck? Texans that purchase the Texas Trees plate pay an additional \$30.00: \$8.00 for TXDOT fees and \$22.00 for a special Texas Trees account at the Texas Forest Service. Your \$22 can only be granted to a Texas non-profit group and only for tree education, preservation, and planting. It's great looking and tax deductible! Go to http://www.isatexas.com/Members/Tree_License_Plate.htm, download the form and fill it out. Be sure to check the "Urban Forestry" checkbox on the right side of the form.

Mail it with a check for \$30 to TxDOT, Vehicle Titles and Registration Division (SPB), Austin, Texas 78779-0001. Contact your local Tax Assessor's Office in two weeks to find out if your urban forestry license plate has arrived.

The website listed above has a picture of the plate and gives more details.

There was a handsome male
mockingbird that sang his heart
out every morning during the
nesting season from the top of
a tall Norfolk Pine tree. Last
week the tree was cut down. The
mockingbird and his song are
gone. I can't put a dollar value on
the tree nor on the mockingbird
nor on his song. But I know that
I - and our whole neighborhood
- have suffered a loss. I wouldn't
know how to count it in dollars.

—Jacquelyn Hiller

Personal Observations by Pat Wentworth

Several issues ago, I made the observation that when you cover the trunk or root collar of a live oak, it caused an excessive amount of root sprouts to form. I made this comment several years ago during an oak wilt tour and Dr. Dave Appel commented on that being “an interesting observation.”

Now, Dr. Genhua Niu and Dr. Yin-Tung Wang, both of Texas A&M, have come to the same conclusion. As a clonal species, live oaks will readily develop root sprouts when the trunk or root flare is buried. It also turns out that these root sprouts, more correctly called “rhizomic shoots,” may be the best way to propagate live oaks. Rooted cuttings of established trees failed 75% of the time, but when the rhizomic shoots were collected and properly treated, they had a 100% success rate at rooting. The researchers also found that the wide variations of leaf morphology, tree form and growth rate experienced when growing oaks from fall-collected acorns could be entirely eliminated by using rhizomic shoots.

When comparing seedlings grown from acorns with starts from the rhizomic shoots, they found no significant difference in size or growth rate. They did find that seedlings (all from acorns collected from the same tree as were the rhizomic shoots) did exhibit a tremendous variability while all of the root cuttings were exactly the same. *And* the rhizomic shoots did not produce any rhizomic shoots of their own when planted at the correct depth.

Lesson learned? Do not over-mulch or bury the root flares of a live oak

(or any tree). Experience among many is beginning to show that most trees should be planted an inch or two “too high.”

When you encounter a live oak with hundreds (or thousands) of root sprouts near the trunk, they can be eliminated if you lower the soil back to the original grade. It takes an air spade, a lot of patience, and frequently a good deal of money if your client wants to eliminate the root sprouts around the base of their live oak trees. If not, some folks will treat the sprouts like a ground cover. Trim the rhizomic sprouts back to the ground only during the heat of the summer and/or during the dead of winter to minimize the possibility of getting oak wilt. For long-term tree health, encourage either less mulch or the removal of the offending fill soil.

Each generation
takes the earth
as trustees. We
ought to bequeath
to posterity as
many forests and
orchards as we
have exhausted
and consumed.

— J. Sterling
Morton

For its 2008 National Register of Big Trees, *American Forests* magazine asked each state coordinator to find and remeasure champion trees that hadn't been visited since 1998. Here, TFS Big Tree Coordinator Pete Smith stands by a big (but not the biggest) Douglas fir.



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Photo ©Tony Collings-FOTOLIA



Pathologist's Corner by Russell N. Peters

COMPONENTS OF DIAGNOSIS, PART 3: THE TRUNK

We have discussed to this point: 1) the foliage and how different maladies, both living and non-living, may appear, and 2) limbs and twigs, how different problems can occur here, and symptom expression in the leaf. Part of the last discussion included problems that are expressed directly on the limb or twig, what to look for, and how they appear. This time we enter the trunk or transport system of the plant.

The trunk serves numerous functions. Two basic ones are 1) upright support, and 2) the transport of raw materials up to the “food factory” or leaf, and the movement downward of manufactured materials such as proteins, carbohydrates, and many other compounds necessary for a tree’s growth and development.

Along the trunk, problems can develop that originate from both insects and disease. Many times it is difficult to differentiate between the two. Regardless of which pest is responsible, the symptoms are usually expressed in the foliage or limbs of the plant. There may be a discoloration in the foliage at the onset, progressing to necrosis or browning of leaves or entire twigs and limbs. Symptoms may appear in both the leaf and trunk tissue from one specific pest. Specific leaf symptoms are rarely used to determine which pest it is. However, the pattern or rapidity with which limbs die can be significant in determining how quickly a pest is colonizing a plant, and, with experience, can narrow the possibilities of the causal agent.

Insects are the larger of the two organisms and will often leave larger physical evidence. This evidence can be entry or exit points such as holes that may weep or exude liquid from the sap stream. It can be fine wood shavings or dust, as with powder post

beetles, or it can be frass, which is the waste material of the insect. The finer the frass, the smaller the insect you are looking for.

Another type of material may be evident, and that would be what a tree produces in response to the physical entry of the insect. Pines are species that produce some of the largest amount of material in the form of sap or “pitch” as it is termed. The pitch can run down the trunk or accumulate in various shapes at the outer edge of the damage, often surrounding the entry point. The pitch tube moth produces a specific accumulation of pitch that surrounds the entry point in the shape of a small tube about $\frac{1}{2}$ to $\frac{3}{4}$ inch in length.

The enormous number of different insect pests usually makes it difficult if not impossible to determine a specific species of insect pest. This is where a qualified entomologist becomes invaluable. Understanding the basic life cycle of the guilty insect is necessary to determine which stage of the pest is actually colonizing the tree and what to be looking for. Entomologists will almost always need an actual stage of the pest in order to identify. In my experience, the adult seems to be the necessary stage for accurate determination. Many of the quality references on insect pests will show the various stages of the insect along with the damage they cause.

Determining you have a disease problem once insects are eliminated poses unique challenges, becoming much easier with every year of experience. Most of the pathogens that infect the trunk of a tree are not considered primary pathogens. They are present as a result of stress a tree has sustained. Unfortunately, there is little that can be done to treat these

pathogens with the exception of eliminating the conditions causing the stress.

These organisms often live in a benign condition on or in bark tissue. This is why these types of organisms seem to quickly colonize the trunk of a tree. This is true of a common secondary organism causing hypoxylon canker. This is found on all healthy oaks. Hypoxylon canker seems to replace the outer bark rapidly as a tree declines in health and vigor or as a tree is dying or dead.

One difference that often makes disease organisms more difficult to identify than insect pests is the evidence of their presence. They often produce a smaller amount of physical evidence and are difficult to see with the unaided eye. A hand lens or dissection of the area to see a small part under a dissecting scope will often be necessary as you learn how to ID these types of organisms.

In cases where larger physical evidence is present when a pathogenic organism is colonizing a tree, it is usually due to the tree’s response to the presence of the organism. That is wonderfully evident when less aggressive organisms, such as the perennial canker called *Nectria* sp., attack a tree. This is a fungal pathogen that is moderately aggressive in the fact that its activity increases, or seems to, when the tree’s growth is slowed. A tree will often produce callus at the margins of the stem canker in an attempt to fight it off, then the pathogen colonizes that new callus and kills it during the fall and winter. This action is repeated annually and produces a layered effect of live and dead callus at the margins of the colonized area. Eventually

Continued on next page

Pathologist's Corner *continued from previous page*

the tree loses out, too much of the transport system is damaged, and the tree does not have enough live tissue at the infection point to deliver adequate materials and moisture to the top of the tree.

The type of pathogenic organism can sometimes be determined by the simple response a tree has to its invasion. Some organisms will cause a tree to produce copious amounts of tree fluids that are usually fermented or processed by the pathogen in some manner. Many times learning just what to expect in a tree's response can narrow the possible causal agents.

Differences between tree responses to colonization vary between genera. For example, the pines nearly always produce a very visible response to invasion in the form of tree fluids that when exposed to the atmosphere will thicken and take on a whitish

appearance. This material, called 'pitch' in pine species, is often used as a part of the common descriptive term of the pest. For example: pitch tube moth, pitch canker.

Broadleaf trees often produce a response to invasion that is much less visible, and this makes determination from a tree's response much more difficult and less accurate. The response of this group of trees is often clear and less prolific but still visible to the unaided eye, as it is usually a thick material often composed of sugar water or sap stream constituents. These may weep from a tiny entry hole as in the case of flat headed borer larvae.

In general, insect larval entry points will be individualized in that they appear more distinct when present. Fungal or bacterial type organisms that invade the trunk will often cause a more generalized weeping to a

suspected area of colonization.

The response in a tree's canopy to a trunk or main stem problem is usually a more uniform expression within the canopy or collective leaf area. A generalized yellowing with areas progressing to necrosis or browning is not unusual. This is due to a decreased flow of nutrients and moisture arriving in the canopy area. Determining the causal agent from the type of response in the canopy area will not be an accurate method of diagnosis, other than determining that it must be of trunk or root origin.

That will pretty much wrap up this part of the series. The next and final installment, Part 4, will look at the last major division of the tree—the roots—and will hopefully provide some useful tips in diagnosing problems in this area. For many, this is likely the most difficult area to accurately diagnose.

Applications, Toolkits & Workshops for Keep Texas Beautiful Awards

Thinking about nominating your community for the Governors Community Achievement Awards? Or nominating an outstanding, school, civic organization, business, or individual for a Keep Texas Beautiful Award?

Applications for the GCAA and KTB awards are now posted online at www.ktb.org/awards. In order to assist with your preparations, the website now includes Awards Toolkits with hints, sample forms, and project worksheets.

Due dates and reporting deadlines have changed for 2008. Carefully review the executive summary and supplemental guidelines as there are some minor changes. Contact Anne at anne@ktb.org or 1-800-CLEAN-TX with questions, to receive the training toolkit on CD, or to receive printed applications.

In addition, KTB will be offering a new series of awards training workshops in January to help you plan and organize your awards application as well as to help applicants understand the judging process.

Workshop schedule

Katy: Wed., Jan. 9, 9 am – 12 noon

Irving: Wed., Jan. 17, 9 am – 12 noon & 1 – 4 pm (*Morning and afternoon workshop will cover the same material*)

Brazos Valley (College Station): Fri., Jan. 18, 9 am – 12 noon

East Texas: date TBA

West Texas: date TBA

Exact dates, locations, and registration forms are posted at www.ktb.org/awards. Call 1-800-CLEAN-TX for more info. **New application deadlines: GCAA awards applications are due February 12; KTB Non-Youth Awards applications are due February 19; KTB Youth Awards applications are due May 13.**

Davey Resource Group provides a full range of arboricultural and horticultural planning and consulting services:

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- Natural resource consulting services
 - Urban forest inventories
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Davey Resource Group, A Division of the Davey Tree Expert Company

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www.davey.com



http://www.na.fs.fed.us/spfo/pubs/howtos/ht_non/non_all.htm

A great site to help to identify non-infectious diseases in trees.

<http://www.treeandneighborlaw.com/main/>

A site to look up common problems dealing with trees and neighbor conflicts.

<http://hort.ifas.ufl.edu/woody/compartmentalization.html>

Dr. Ed Gilman has put together one of the best sites on the web for trees and tree care. It contains a wealth of information including several PowerPoint presentations.

<http://people.eku.edu/pedersonn/oldlisteast/>

This site lists some of the oldest trees in the US.

<http://www.na.fs.fed.us/spfo/pubs/uf/utrm/index.htm>

This site helps with urban tree risk assessment and management.

<http://www.greenlaws.lsu.edu/>

LSU site for a collection of laws affecting trees. Outlines for tree ordinances are suggested.

<http://www.nahb.org/generic.aspx?genericContentID=19086>

A good article on tree preservation ordinances as seen through the eyes of the developer.

<http://websoilsurvey.nrcs.usda.gov/app/>

Just hit the green button, then type in an address to see your soil survey.

http://actrees.org/site/stories/2007_annual_meeting_conference_proceedings.php?tag=news

Download the proceedings of the Alliance for Community Trees 2007 annual conference from this website, or download just the sessions that interest you, for example, the Forest Service Budget & Future of State & Private Forestry.

<http://texasforests.tamu.edu/main/article.aspx?id=1336>

Click on *The Big News* Fall 2007 to download the latest information on champion trees in Texas, plus a link to Guadalupe Mountains photos by Pete Smith.

<http://www.cbsnews.com/stories/2007/11/09/national/main3478135.shtml>

A chilling story about a chipper accident.

http://www.chicagotribune.com/services/newspaper/printedition/tuesday/chi-treeman_tuedec04,0,1588229.story

Trees blocked his view of the Strip, so a Las Vegas man wiped out 500 of them. He faces up to 35 years in prison.

<http://www.ktb.org/awards>

Do you know an individual or group that deserves an environmental award? Check out the 2008 Keep Texas Beautiful awards and the Governor's Community Achievement Award.

<http://biopact.com/2007/11/scientists-publish-genomes-of-termite.html>

It takes guts to invest in bio-fuels.

The true meaning of life is
to plant trees, under whose
shade you do not expect to
sit.

—Nelson Henderson

**THE NEWSLETTER OF
THE ISA TEXAS CHAPTER**

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