The Newsletter of the ISA Texas Chapter

# In the Shade

Vol. 34, No 1
May, 2010

## Don't Miss It!

**Texas Tree Climbing Competition 2010**
**Bob Woodruff Park, Plano, TX**
**Friday May 21 – Saturday May 22**

Pre-Competition Workshop
Thursday May 20, 8:30am – 4:30pm
Includes presentation, lunch, and advanced tree climbing demonstration by Guy LeBlanc

More information, including map, available at
http://texastreeworker.com/competition

## Check it Out: July in Chicago!

**ISA Annual Conference & Trade Show**
**July 23-28, 2010, Chicago, IL**

- International Tree Climbing Championship
- Public Education Arbor Fair
- Educational Sessions
- Indoor Trade Show
- Tree Academy Workshops

http://www.isa-arbor.com/conference/default.aspx

## Inside This Issue:

## *President's Corner* *by Jim Carse*

# Want to Host the 2016 ISA Conference . . .

A few weeks ago I received an email from ISA asking if we were interested in submitting a bid to host the 2016 ISA Conference in Texas. I was very impressed that anyone could plan that far ahead. And once I looked over the conference policies and manual, I understood why they start that early – it's a huge event and it takes a ton of planning.

The first ISA Conference was held in Stamford, Connecticut in 1924. Back then it was called The National Shade Tree Conference, and it kept that name until 1976 when the International Society of Arboriculture was created. That was also the first year of the International Tree Climbing Jamboree during the conference in St. Louis, Missouri.


In case you were wondering, the next six conference locations are:
Chicago, IL – 2010
Sydney, Australia – 2011
Portland, OR – 2012
Toronto, Canada – 2013
Milwaukee, WI – 2014
Orlando, FL – 2015 (pending final inspection for the ITCC)

We will be competing with other chapters in the Western US (Rocky Mountain, Pacific NW, Western, etc.) to be the host chapter for the event.

I know we can put together an exciting bid and get the conference to Texas in 2016. There are so many excellent places to choose from across the state to host the conference. Speaking from my own experiences, San Antonio was an excellent site for the 2003 National Urban Forestry Conference. And Fort Worth worked out great for the 2005 Society of American Foresters Conference. ISA had over 2200 attendees at the 2008 conference, so a large venue with indoor trade show space is mandatory.

In addition to the right location, one of the most important parts of a successful conference is the local volunteers. The host chapter needs to find a location with a large volunteer network, and a long list of great events to choose from. Texas has a lot to offer, and an awesome array of tree care professionals to host a great event like this.

The Expression of Interest (bid) form needs to be submitted by September 1, 2010. Then the ISA Conference and Events Committee select the location and inform the host chapter in March 2011. If we are selected we get about five years to plan before things start heating up 12 months before the conference date.

The Board of Directors will discuss this at our April 23 meeting. But in order to pull this off we need to hear from you! Where do you want to have it and why? Email me (jcarse74@yahoo.com) or call me (512-922-4494) with any ideas, so we can submit a bid they can't turn down. Stay tuned to the newsletter and website for more information.

# ArborMaster®

Announcing the 2010 ArborMaster Climbing Prize Package for the ISAT Tree Climbing Championship event! This climbing kit is being offered to each chapter champion to help equip him or her for the International Tree Climbing Championship (ITCC) Competition.

Each prize package will include:

- Petzel Vertex Helmet with Professional Hearing Protection provided by Husqvarna
- 150′ ArborMaster® Climbing Line with eye splice from Samson
- Steel Portawrap rigging tool & RopeBoss Folding Throwline Cube from SherrillTree ($200 value)
- Buckingham $50 Gift Certificate
- Silky ZUBAT 330mm hand saw
- Oregon® 91VXL Saw Chain (25′)
- 50% savings on an ArborMaster® 2-Day Hands-On Training Module

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## Certification Corner

Upcoming test dates:

| | |
|---|---|
| May 20 | San Antonio |
| June 7 | Fort Worth (new date!) |
| August 19 | Round Rock |
| September 24 | College Station |

Certification information and an application form can be obtained from http://www.isatexas.com/Members/Certification_Information.htm. Your application must be in the ISA office no later than 16 calendar days prior to the exam.

Exams are also available at computer testing centers for an additional fee, and may be taken at the candidate's convenience.

To view computer-based testing locations, go to http://www.isa-arbor.com/certification/exams.aspx.
To schedule a computer-based exam, you must submit your application and/or retake form to ISA. The testing vendor will not allow you to schedule an exam directly through them.

*–Pat Wentworth*

## Primeras Jornadas para Trabajadores de Árboles

A Spanish language workshop on tree care, with indoor class and outdoor demonstrations, is scheduled for June 4 in San Antonio. Learn about tree care, safety, chainsaws, climbing and pruning. Speakers include Eduardo Medina of Davey Tree, Mark Duff of the Texas Forest Service and Armando Cortez from the City of San Antonio.

More information in English and Spanish at http://www.isatexas.com/. Register online at http://www.shop.isatexas.com/.

## *Climbing Lines* *by Guy LeBlanc, CA, CTSP*

# SRT: Part Two

In this part of my article on single rope technique (SRT), I'll discuss the gear used, and some of the pros and cons of using SRT for ascent versus the *doubled* rope technique (DdRT). In the third (final!) part, I'll cover anchoring the line, and the use of SRT in work mode and descent.

I spoke with several longtime SRT users to get their input. **Tom Dunlap** is regarded as one of the original promoters of the SRT, and has been on the forefront of innovative climbing techniques for years. He has over 25 years experience as a climber in several states and is currently based in Austin. I also spoke with **Dorian Davey** of Austin. Dorian is a very experienced climber and full-time SRT user. And I spoke with **Jimmy Pritchard** and **Abram Zies,** both from the DFW area and well known perennial finalists at the Texas Tree Climbing Championship. They both use SRT part time.

I like simplicity. I install my rope, attach my prusik, footlock up, lanyard off, and convert to my climbing system. Lightweight, no mechanical devices, easy to inspect, mostly idiot-proof. My opinion of SRT is that it is at least a bit more complicated, and depending on how you employ it, *quite* a bit more. You don't need to be a rocket scientist, but there can be a lot more parts one needs to keep track of. Let's start by looking at the necessary equipment.

Most saddles will work for SRT, although the ergonomics involved make those designed for it preferable. Tom climbs on the TreeFlex. Dorian and Jimmy both love the TreeMotion. I climb on a regular Sequoia and can see where the SRT version of this model would be preferable.

Most folks climbing SRT use smaller diameter ropes than the 1/2-inch (12.7mm) lines typically used in DdRT. The reason is most folks using SRT use ascenders, descenders, or other mechanical devices. Although some of these can work with 1/2-inch lines, nearly all really work best on smaller ones. Most popular with the guys I talked to is Tachyon (same as Lava), which is 11.5mm. Also popular is Poison Ivy (11.7mm), and Velocity (11mm), the skinniest, lightest of the bunch. These are

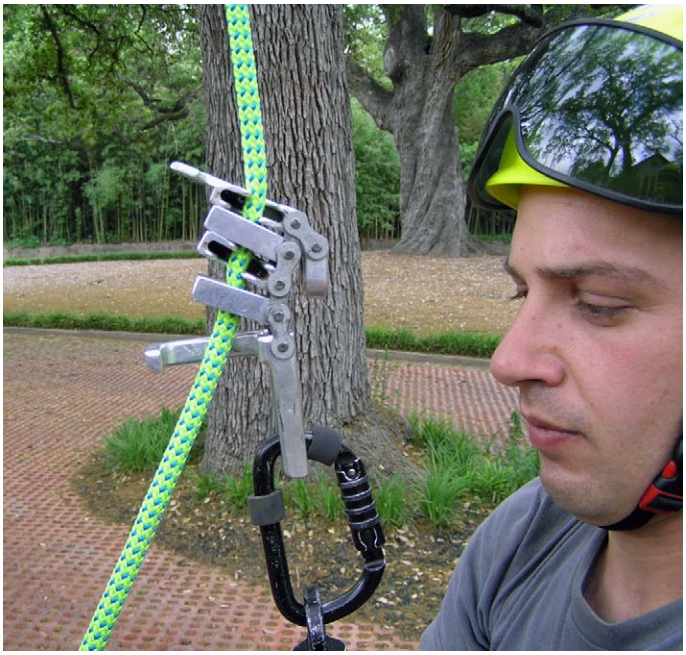
all dynamic lines, meaning they have a bit of stretch in them, very roughly 2%. Static lines are more often used for super long ascents. They have even lower elongation rates and are usually 10mm. Some of the most popular are Snakebite and KM3.

Although it is possible to use 1/2-inch lines and hitch cords for SRT, there are significant drawbacks to that approach. First, remember that with SRT, 100% of your body weight is on one part of line, compared to 50% with DdRT. This means there is twice as much friction on your hitch. While this can be overcome on ascent, once you set your weight in the line, every hitch I've tried on 1/2-inch line with SRT becomes very, *very* hard to descend on. Think of descending on a 1/2-inch taut line hitch after you've bounced on your line for 15 minutes. You also lose the benefit of having a much lighter rope – more than 25% in some cases.

A new technique called the "fate revolver" (or figure 8 revolver) uses only hitch cords and pulleys. It is sort of like having two hitches on the line, and this distributes the friction. Jimmy Pritchard uses this technique with Tachyon. It can even be done on Poison Ivy, but I've tried it on 1/2-inch, and it doesn't work well. Even on Tachyon it takes a lot of getting used to, and it offers no advantages for ascent. I'll describe this technique more in Part 3.

This is why SRT commonly becomes gear intensive, at least for people who are used to only using hitch cords and the DdRT. For an ascent of any respectable distance on a single strand of 11mm line, you're really gonna want an ascender. Or two. Or three. For even accomplished footlockers, a single sub-half-inch line is very hard to grip with hands or feet, although there are SRT users out there who do it. But one of the supposed benefits of SRT is a more energy efficient ascent. To accomplish that, you'll want a combination of ascenders that allow your legs to do almost all of the lifting, which means using a system like the "rope walker" or the "sit-stand." The Sherrill catalog has excellent diagrams and descriptions of both these set-ups (which they call the "tree frog" and the "Texas"). The sit-stand is the more basic of the two, and requires less gear, but is also slower. The rope walker utilizes a much more efficient motion similar to walking up a ladder. Although some using this system, including Jimmy Pritchard, often use a chest ascender (like the Croll), others like Dorian Davey prefer not to. I also have found rope walking without one is quite easy for ascents up to 60 feet.

The rope walker technique also utilizes a foot ascender. Most folks use the Pantin, although CMI makes a less expensive one. Dorian says the Pantin is so light and



The Unicender.

comfortable that he always forgets he has it on. I find the Pantin works fine on 1/2 line, unlike many other mechanical devices, but works even better on 11.5mm. This is also a great tool for body thrusting doubled rope.

There are still other ascent techniques. Abram Zies ascends his KM3 in a doubled rope footlock style, except he has one end of the line anchored, and his "prusik" is a hitch cord with rings on the ends attached to the other half of the line. He threads another climbing line through the rings and attaches it to his saddle in the traditional DdRT. This line trails him as he footlocks. Once aloft he simply lets go of the doubled KM3, backs up his "prusik," and away he goes! This is actually a combination of DdRT and SRT, with the SRT being just a highly adjustable floating false crotch.

Another ascent called the rope ascent and descent system (RADS) is efficient but requires the use of a descending device. Many different ones have been experimented with, but the most popular for this application seems to be the I'D, although the buzz on TreeBuzz is that a "pro" version of the I'D, the Rig, is also becoming popular. Others used include the Gri-gri and the Eddy. These are attached to the saddle, and the falling end of the line is run through the device and then back up to a pulley attached to an ascender that is attached on the line above the descender. Again, see the Sherrill catalog for an excellent diagram. Although those using this technique often employ a footloop, I have found that unnecessary, as the 3-to-1 advantage makes for the easiest bodythrust you'll ever do. More on this technique in Part 3. These

*Continued on next page*

## *Climbing Lines* *Continued from previous page*

devices all have levers that are used to disengage the cams for descent. On some of these devices the levers can lock off if pressed too hard. On others, not. They could be considered bulky, and three parts of rope are in front of you.

But all of this gear is a lot to keep track of. Remembering what's connected, when to disconnect it, inspecting it every day (right??), etc. And then you have to convert from ascent mode to work mode. Definitely more complicated. Enter the Unicender. *(See photo on previous page.)*

Tom Dunlap is also regarded as one of the earliest (and most fanatical) of its proponents. Part of the beauty of this device is its simplicity. Anyone could intuitively understand how to put it on a line and use it. Although it lends itself to both DdRT and SRT, it is primarily employed for SRT.

Perhaps its greatest advantage is the ability to go from ascent to work mode to descent without having to switch over or modify one's climbing system. In fact for short ascents, Tom will often ascend using only his Unicender and Pantin. He has a quite clever set-up on his saddle, which has a rope bridge similar to the TreeMotion. One end of the bridge has a climbing hitch on it, kind of like the way some folks set up their lanyard, which allows him to adjust it extensively. With his Unicender attached, he extends it out to footlock up (or use a Pantin), and once aloft, he just draws the bridge back to working length and he's ready to go. Nothing to connect or disconnect. Pure and simple. But at a price. For years the Unicender was only available from its inventor, Morgan Thompson, who milled each one, at a cost of about $450. Now licensed to a bigger producer, it's still over $300. A big investment for a climbing hitch. And as with all mechanical devices depending on smooth cams or clutches, these parts need replacing, typically within a couple years. More on the Unicender in Part 3.

Before your ascent, you will obviously need to anchor one end of your line. That's where I will resume in Part 3. Remember, this is only an introduction to this advanced climbing skill. Do not attempt it based solely on the information here. And as always, ***go low and slow until you know!***

*The author is the owner and operator of Arbor Vitae Tree Care in Austin. He has over 30 years experience and is available for worker safety and tree care workshops. He may be reached at 512-301-8700.*

# Cedar-Apple Rust Strikes Junipers

An unusual "Christmas tree effect" suddenly appeared on an 80-acre estate in Grayson County in April, when thousands of mature junipers began displaying the bright orange galls of cedar-apple rust. Never in the 23 years they owned the property had the owners seen this phenomenon, so they took photos and sent them to Pete Smith at Texas Forest Service.

Cedar-apple rust is one of several similar fungal diseases broadly classified as juniper-rosaceous rusts. Each species of rust spends part of its life cycle on a juniper host and part on one or more hosts in the rose family, and require both hosts to complete their life cycles. All of these rust diseases are caused by fungi in the genus Gymnosporangium.

More information on this disease is available at: http://plantclinic.cornell.edu/FactSheets/cedar-applerust/cedar-applerust.htm.

In the spring, typically during the rainy season, cedar-apple rust galls produce bright orange soft tendrils. Above is a closeup of these gelatinous tendrils.

Overnight, junipers were "decorated" with the mature cedar-apple rust galls.

## ATTENTION, JOB HUNTERS

If you're looking for a job,
don't forget to check the ISAT website.
Jobs are regularly posted at
http://www.isatexas.com/Members/Jobs_Page.htm.
Positions wanted can also be posted on that page.

To post your job offered or a job wanted, email jpg@tfs.tamu.edu. There is no cost for posting.

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# WEB WORM

*by Patrick Wentworth*

http://niemann.blogs.nytimes.com/2009/11/17/bio-diversity/?em
tree art (see sample below)


www.pressdemocrat.com/article/20091116/ARTICLES/911169936
crane accident

http://www.noob.us/miscellaneous/tree-death-by-electrocution/
burning tree

http://sca.isa-arbor.com/
knots

http://www.ces.ncsu.edu/depts/hort/hil/grafting.html
grafting of trees – how to do it.

http://doubledogstudios.com/apps/idwood/index.html
ID wood with your iPhone

http://www.perviouspavement.org/
porous concrete

http://www.techdigest.tv/2007/07/iphone_camera_a.html
iPhone as a microscope

http://www.nrmca.org/GreenConcrete/PerviousConcretePavement.asp
video of porous concrete

http://www.Ascendingthegiants.com/
climbing big trees

http://www.wallowacountychieftain.info/main.asp?SectionID=9&SubSectionID=61&ArticleID=20666
world's oldest pine (?)

http://ascendingthegiants.org/media/articles/OnTheTrail.pdf
looking for the world's biggest spruce

## READ *IN THE SHADE* IN PRINT, ONLINE, OR BOTH

*In the Shade* comes in a print edition, delivered right to your mailbox but unfortunately not in color, and a downloadable pdf edition that's *in color* and *has clickable links* to all the websites in each article. Download it at: **http://www.isatexas.com/Members/Newsletter.htm.**

## *From the Editor's Desk*

*by Paul Johnson*

# Find Partners

Wow, I hope everyone is as busy as I am. This time of year it is easy to get distracted from the ideas that you had during the winter. One idea that we need to hold onto and continue to work towards is selling trees and ourselves. One of the best ways we can do this is to find our partners. ISAT is working on several partnerships – Habitat for Humanity, San Antonio Arborist Association, and Texas Nursery and Landscape Association. ISAT and SAAA are working together on a Spanish language Tree Worker training on June 4.

How many of you are a Rotarian or a Lion? Do you belong to the Chamber? How about the local Urban Forestry Council? An arborist asked me if I thought it was a good idea to be a member of the UF Council. (Someone else told him that it wasn't a good use of his time.) If your only concern is making money right now… then no, it isn't worth your time. But, if you care about the industry and want to help, then you must be there. Who else can best represent the professionals that touch more mature trees than anyone else? You need to get involved. Volunteer, Serve, Help – Make a Difference!

Please contact me if you would like to help us at the TNLA Expo in San Antonio from August 19 – 22. Who else can we partner with?

# Up by Roots Up Close

*By Betty Cleffman Hager*

Sponsored by ISAT and hosted by member Patrick Brewer, the April 8 Up by Roots Workshop at the Lady Bird Johnson Wildflower Center drew about 68 participants who got to hear the man behind the book that has attracted much attention in our industry. James Urban, landscape architect and author of *Up By Roots: Healthy Soils and Trees in the Built Environment*, presented the full-day event that addressed some of the key points in his book – a grand effort to better inform urban design professionals and others regarding a tree's needs below ground.

Emphasizing adequate soil as the "missing piece," Urban drew a distinction for the audience between the geotechnical and agricultural soil scientist and their competing goals: The former wants compacted soil to accommodate the hard products of construction, and the latter wants fit soil into which tree roots can grow and thrive. He devoted much of the morning session to the basics of soil structure and texture, water movement, and tree biology, and addressed some misconceptions about trees and carbon sequestration.

James Urban discusses the use of the Dutch auger while Heather Brewer demonstrates.

Participants got fresh air and dirty hands in the afternoon at four field presentations conducted by Urban, Dr. Todd Watson, Patrick Brewer, and graduate student Katrina Wilke, who covered (respectively) soil horizons and soil collection tools, rooting issues traced to nursery stock, tree protection irregularities posed by the urban environment, and soil types.

Urban ended the day by presenting ten design principles divided into three strategies based on the soil, the tree, and solid management practices. Centered on respecting the tree's base, these principles include preserving and reusing existing soil, making space for roots, and creating detailed tree and soil construction plans with realistic budgets. He presented examples of construction methods that capture these principles and urged participants to consider these choices as they apply to various construction scenarios. You can read more about these tree-planting options (and collect CEU credit) in the April issue of *Arborist News*.

## Pests Online

For the story on invasive plants (including the giant Asian dodder that's killing trees in Houston) plus other diseases that may cause you grief, check out the Pest Alerts section of the ISAT homepage, www.isatexas.com.

*Thousand Cankers Disease of Black Walnut:*

# A New Pest May Threaten Texas Walnut Trees

*by H. A. (Joe) Pase III, Texas Forest Service*

A new pest complex could pose a major threat to walnut trees (*Juglans* spp.) in Texas. The black walnut twig beetle (*Pityophthorus juglandis*) and a *Penicillium*-like fungus (*Geosmithia*) team together to cause what is termed "thousand cankers disease." This disease complex, although not yet detected in Texas, is killing large numbers of eastern black walnuts in various western states. The beetles will feed on walnut trees and in the process transmit spores of the fungus to the tree, initiating infection. At each location where a beetle feeds on the tree, the fungus will form a canker. After literally thousands of beetle attacks, the cankers will become so numerous that the tree will decline and die. The cankers rather than the beetles kill the tree. Cankers are not evident on the exterior bark of the tree and initial attacks by the beetle are extremely difficult to detect. Trees that have been infected will exhibit signs of decline, dieback, thinning, chlorosis, and mortality. By the time the tree expresses visible symptoms, it has probably been under attack for some time. This "decline-to-mortality" process may be rapid or take several years.

There are at least three species of native walnuts in Texas (http://aggie-horticulture.tamu.edu/ornamentals/natives/tamuhort.html, *Benny Simpson's Native Texas Trees*). They include eastern black walnut (*Juglans nigra*), one of the most valued trees in North America for high quality furniture and veneer. Eastern black walnut also has been planted in many areas of Texas (and other states) outside its native range.

The walnut twig beetle is native to North America, being originally described in 1928 based on specimens collected in Grant County, New Mexico. The primary range of the beetle has been listed as New Mexico, Arizona, and Chihuahua, Mexico, and this range coincides roughly with the distribution of Arizona walnut (*Juglans major*). During the past 10 years, an unusual decline of eastern black walnut (*Juglans nigra*) has been observed in several western states. These eastern black walnuts are planted, occurring mostly in urban areas and rural farmsteads and other plantings and have generally grown very well. Interestingly, the insect-fungus complex has been associated with Arizona walnut for many years, but it causes very little damage to this tree.


**Figure 1.** Distribution of the walnut twig beetle. Arizona, New Mexico, Los Angeles County in California, and Chihuahua, Mexico, recorded the presence of the beetle prior to 1992. Gray states recorded the beetle's presence after 1998.

The first published record of eastern black walnut mortality associated with the walnut twig beetle was in northern New Mexico where large numbers of mature eastern black walnut died in 2001. However, eastern black walnut mortality from undetermined cause occurred in the early 1990s in Utah, and records of the beetle from Utah date to 1988. Similar widespread decline of eastern black walnut has been reported in Idaho, Oregon, Washington, and Colorado during the past 10-15 years *(Figure 1)*. In those communities where the insect has been detected, the majority of eastern black walnut has since died. Prior to these recent reports, walnut twig beetle was not associated with any significant *Juglans* mortality.

Eastern black walnut is apparently highly susceptible to the beetle/fungus complex, and attacked trees almost always succumb and die. Trees in some Colorado cities, including Boulder, Colorado Springs and Denver, seem to have been hit particularly hard. Experts surmise that every eastern black walnut tree in these cities will eventually be eliminated.

There appears to be a range in susceptibility of *Juglans* species to the *Geosmithia* fungus. As mentioned, eastern black walnut is very susceptible, while Arizona walnut and little walnut (*J. microcarpa*) develop more restricted cankers. The susceptibility of *Juglans* and related hosts (e.g., *Carya* spp.–pecan and hickory) to thousand cankers disease will be evaluated in future studies.

The walnut twig beetle is a minute (1.5-1.9 mm, about $^{1}/_{16}$ in.), yellowish-brown bark beetle. It can be readily distinguished from other members of the genus *Pityophthorus* by the 4 to 6 concentric rows of asperities (dot-like "bumps") on the prothorax (left end of the beetle in the figure below), usually broken and overlapping at the median line *(Figure 2)*.

Despite the twig beetle's common name, attacks by adult *P. juglandis* and

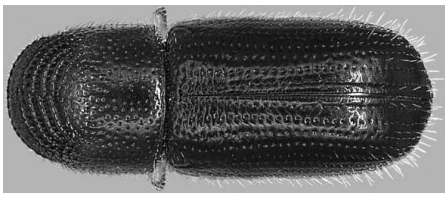

**Figure 2.** Walnut twig beetle, top view. Note the concentric rows of asperites (dot-like bumps) on the prothorax (white oval), which distinguish this bark beetle from other species of Pityophthorus. Photograph by Jim LaBonte, Oregon Department of Agriculture.

larval development in eastern black walnut rarely occur in twigs. Instead, the beetles prefer to attack and lay eggs in branches about 1 inch diameter or larger. Very large branches and even the trunk can be colonized during advanced stages of thousand cankers disease.

The beetles spend the winter as adults sheltered within cavities excavated in the bark of the trunk. Adults resume activity by late April, and most fly to branches to mate and initiate new tunnels for egg galleries. During tunneling, the *Geosmithia* fungus is introduced. Larvae feed for 4-6 weeks under the bark in meandering tunnels that run perpendicular to the egg gallery *(Figure 3)* and pupate at the end of the tunnel.

Two different types of cankers have been observed on declining walnut trees. Initially, small, diffuse, dark brown to black cankers will form where

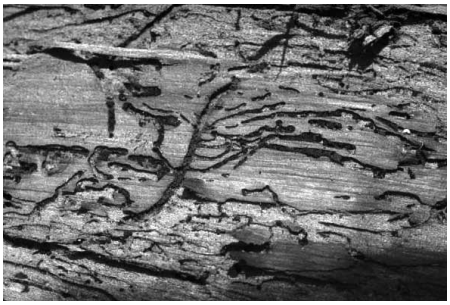

**Figure 3.** Walnut twig beetle adult and larval galleries under the bark of a large branch. Adults emerge to produce a second generation in early summer. Peak flight activity of adults occurs from mid-July through late August and declines in the fall as temperatures cool.

beetles attack. These multiple cankers eventually coalesce to produce girdling, resulting in branch dieback *(Figure 4)*. The number of cankers that are formed on branches and the trunk is enormous; hence the name thousand cankers to describe the disease.

A second canker type may occur on black walnut trees in advanced stages of decline. These cankers are much larger than branch cankers and often extend more than 6 feet from the ground and into the lower branches. They may encompass more than half the circumference of the trunk. Trunk cankers are not visible unless some bark is removed, but a dark brown to black stain on the bark surface or in bark cracks often indicates the presence of a canker. The inner bark and cambium below the bark surface on the canker face will be macerated, water-soaked, and stained dark brown to black. The walnut twig beetle and the fungus are often found in the macerated bark.

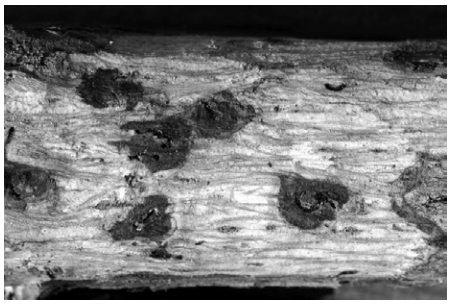

**Figure 4.** Attacks by the walnut twig beetle and the resulting canker (dark areas) caused by *Geosmithia* fungus. Photo provided by Whitney Cranshaw, Colorado State University.

Effective controls for thousand cankers disease have not yet been developed. Control methods await a better understanding of the biology of the walnut twig beetle and the canker-producing fungus. Control is also made difficult since it appears that most, if not all, walnut twig beetles carry the *Geosmithia* fungus.

Likely pathways for this beetle-fungus complex to enter Texas are through

*Continued on next page*

## *Historical Flashback* *by Heather Brewer*

# 2004 Climbing Championship

Keith Babberney competing in the belayed speed climb at the 2004 Texas Tree Climbing Championship (TTCC) held in Fort Worth at Pioneer Park. Steve Houser is tending Keith's line. The 2010 TTCC is coming up on May 21-22 in Bob Woodruff Park, Plano.

# *Cool Tools* *by Patrick Wentworth*
# ActSafe® Ascender

Another power ascender has shown up. This one is also battery powered. The ActSafe® ascender has the capability of lifting up to 441 pounds at a rate of up to 65 feet per minute. It can handle ropes from 10 to 13 mm in size.


Utilizing a lithium battery, it recharges in less than 4 hours and can be recharged 800 to 1000 times. Fully charged, the battery is capable of 1200 to 1800 feet of ascent before needing to be recharged.

The device was invented for ascending tall objects such as wind generators and radio towers but has been found useful in aerial rescue by EMS. Currently, it is only available through distributors in Europe. To check out the movies of the device, visit http://www.actsafe.se/products/.

## New Pest Threatens Walnuts

*Continued from previous page*

the movement of infected logs, wood, firewood, and wood packing material. Natural spread is possible through planted and natural populations of eastern black walnut. To keep this potential pest at bay, Texas should consider restricting the importation of black walnut wood that has the bark attached from states where thousand cankers disease has been documented.

**If anyone finds dying walnut trees anywhere in Texas and suspects that this insect-fungus complex may be involved, please contact Joe Pase (jpase@tfs.tamu.edu, 936-639-8170) or Ron Billings (rbillings@tfs.tamu.edu, 979-458-6650) with the Texas Forest Service in Lufkin and College Station, respectively.**

*Adapted from information provided by Colorado State University (http://www.ext.colostate.edu/pubs/insect/0812_alert.pdf). and Dale Starkey, USDA Forest Service, Forest Health Protection, Pineville, LA.*

HAP/February 2010

# News from Dallas

The Dallas Urban Forest Advisory Committee's 2009 annual report is now available online at www.DallasTrees.org/lisfiles.asp. (Choose *Annual Report and Strategic Plan 2009.pdf* from the list.)

The report, directed to the Dallas mayor and city council, includes the state of our urban forest as well as our one- and five- year strategic plans. The plans correlate directly to the outstanding Vision North Texas 2050 plan regarding the future of our regional forest as well as our ecosystems: www.visionnorthtexas.org.

The Friends of Reverchon Park (www.reverchonparkfriends.com/) recently released a very professional video on the history of Julian Reverchon (the earliest botanist in the area, who collected over 20,000 species of plants), the historic park, and the twelve-year effort to remove the illicit activity and return it to public use:
Reverchon Park: A Rich History; A Bright Future, Part 1
http://www.youtube.com/watch?v=tbJvtBbJh8k
Reverchon Park: A Rich History; A Bright Future, Part 2
http://www.youtube.com/watch?v=rxry4HRIXkw

Dallas Mavericks players DeShawn Stevenson and Eduardo Najera joined city officials, Friends of Reverchon Park members and others last month to plant 50 trees as part of the Mavs' "Trees for Wins" campaign. The Mavs have committed to plant one tree in Reverchon Park for every Mavs win this season, at home and on the road.

The trees– oaks, elms, red buds and maples–were paid for through a city reforestation fund and will be cared for by the Dallas Parks and Recreation Department and Arborilogical Services. Also taking part in the planting were Dallas students and patients from nearby Scottish Rite Hospital for Children. *–Steve Houser*

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## *From the Stump* *by Astrid Volder*

# Global Warming: Opinions Should Be Based on Facts

In response to Patrick Wentworth's article "Global Warming: A Solution in Search of a Problem" (page 10, January 2010) I feel the need to set the record straight. The article is a perfect example of a common misconception where people are confused about the natural greenhouse effect (+33 $^{o}$C) and the enhanced greenhouse effect (~1.5 $^{o}$C to 6 $^{o}$C by 2100 based upon current IPCC estimates). Unfortunately this time it was published in the newsletter, where people may accept this misinformation as a reliable fact. The information below can be found in any textbook that deals with issues related to carbon cycling and the earth's atmosphere:

Yes, water vapor is responsible for about 70% of the natural greenhouse effect, which is a good thing, because without the natural greenhouse effect the average global temperature would be a very cold and inhospitable -15 $^{o}$C (5 F) instead of +17 $^{o}$C (63 F). However, besides the natural greenhouse effect caused by greenhouse gases from natural sources (70% due to water vapor, and the rest due to $CO_2$, $CH_4$ and ozone), we (as the human race) have been adding additional, very potent, greenhouse gases to the atmosphere, mostly in the form of $CO_2$, methane and $N_2O$. Records show an exponential rise in $CO_2$, methane and $N_2O$ levels in the atmosphere since the start of the industrial revolution. In the case of $CO_2$ this has led to an increase in atmospheric $CO_2$ levels from 290 ppm (0.028% of atmospheric gases) in 1850 to 388 ppm (0.039%) currently. What may be the consequence of this rise in greenhouse gases? Best scientific estimates suggest that this will lead to a 1.1 – 6.3 $^{o}$C rise in global average temperature above 1980-1999 average temperatures. The average expected increase (+3.1 $^{o}$C) is only ~10% of the natural greenhouse effect, but still biologically very significant.

Trees can do their part by absorbing $CO_2$ and sequestering it as plant biomass but, as Patrick pointed out in the opinion piece, they can only do this on a very limited scale (drop in the bucket, really) and the sequestered carbon is eventually released back to the atmosphere as the wood decomposes (albeit on a timescale of sometimes centuries). I agree with Patrick there; $CO_2$ released from decomposing pruning material will not have any measurable effect on atmospheric $CO_2$ concentrations and thus pruning practices should be aimed at plant health not $CO_2$ emission reduction.

By the way, it is important to get the numbers right: 380 ppm = 0.038% and there are ~3000 Gt of $CO_2$ in the atmosphere and about 27 Gt of $CO_2$ are released due to human activity each year. Some of this is counteracted by additional $CO_2$ uptake by vegetation and oceans, but it is not buffered completely. The rate of increase in atmospheric $CO_2$ levels between 1960-2005 has been about 1.4 ppm per year, but in the last 10 year has been higher, at 1.9 ppm per year to our current level of 388 ppm (an increase of 38.6% since 1850). If you do not trust the Mauna Loa data, there are plenty of other weather stations that will confirm the same trend.

*Dr. Volder is Assistant Professor of Horticultural Sciences at Texas A&M University.*



# Midland TreeKeepers

Midland TreeKeepers will hold a workday and mini class May 22. After a short class on the benefits and how-tos of mulching, the group will mulch the trees they planted at City Hall. For details contact Randy Myers, Urban Forester, City Of Midland, rmyers@midlandtexas.gov.

## Trees Felled by Hurricane Get New Life as Sculptures

Ever wonder what happened to all those dead trees in Galveston following the deadly storm surge from Hurricane Ike? Rather than simply cut them all down, some local citizens led the effort to turn a handful of dead trees into standing sculptures, many of which now grace the streets and yards of the historic district.
See many of them at:
http://www.galvestonislandtreeconservancy.org/tree_sculptures.html
or read more at
http://www.chron.com/disp/story.mpl/nb/bay/news/6912212.html.

The sculpture shown above is "Angel Holding Bunny" by Jim Phillips, located at 17th and Postoffice.

*– Pete Smith*



# Basic Concepts Training?

*by Steve White, Davey Tree, Austin*

I stumbled across something today that I hadn't considered at all: "Basic Concepts" training! While working with a supervisor who has great experience in pruning trees away from dangerous high voltage situations and teaching other workers to do the same, I realized that person was really not exposed to some basic concepts of:

- Power systems infrastructure;
- The meaning of poison, toxicity and dose importance;
- Fate of chemicals after application;
- How to train others that have also not been exposed to basic concepts;
- and more.

This person is a wonderful person with incredible talents for technical tree work in storm and maintenance situations. He just has not been taught by anybody about simple things that are so important. I spent several hours teaching some of those simple things and he absolutely lit up with his new knowledge and how it fit into his job and how it suddenly made other tasks he had been doing for years so very clear. He was smiling so wide and tomorrow could not get here fast enough. He wants to start teaching and explaining in his own words.

For the second time in less than half a year I have realized that our young "up and coming" supervisors really need a boost in understanding the terms and jargon of our industry. For us managers it is important to spend some time with our supervisors and ask some probing questions in order to find out just what they really do understand! Here are some of the questions I asked today:

- What happens to pesticides after they are applied and do their job?
- How much of a substance or liquid does it take to become poison?
- What is a weed? To whom is it called a weed, and why?
- How do you train a tree worker to learn and ask questions every day when it seems all he wants to do is work and stay quiet?
- What does documentation of an accident or breach of safety rules really do for you? Does the guy who made the error really understand why you document?

I am somewhat in a dreamy state thinking about all this, but what I am sure of is . . . I can go tomorrow and ask the same questions of almost all of the new supervision and I will get almost the same answers. And those answers will tell me they do not really understand. When I teach them to understand then I will have a good candidate to replace me, and that is what I need.

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