



# In the shade

NEWSLETTER OF THE ISA TEXAS CHAPTER

Vol. 37, No. 5  
January, 2014

**WHAT IF THEY  
CUT OFF  
THE WATER?**

**THINKING OUTSIDE THE PIPE  
PART 1, PAGE 4**





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## PRESIDENT'S LETTER by Michael Sultan



**A**t the recent Board of Directors' planning meeting and retreat, we took a close look at the year we had, asking ourselves where did we succeed and what can we improve. Overall, we had a very successful year. We saw an increase in membership, we increased the number of training and education opportunities, we gained 100 new certified arborists, and financially we will be able to reinvest in the chapter at an even greater level in 2014. A large part of our success can be attributed to early and thoughtful planning.

Along those lines, the process of planning seems like a simple idea to grasp, and conceptually it is. Planning is defined as "a set of actions that have been thought of as a way to do or achieve something." I have been involved in planning activities both as a municipal arborist and forester, and as a private contractor. Planning can take on many forms, and a recent event that is impacting our industry caught my attention. The discovery of emerald ash borer (EAB) in Boulder, Colorado has caused me to step back and think about planning and preparedness in a big picture way.

EAB has put Colorado on the map in an unfortunate way. The insect was discovered on September 23, 2013 during a routine inspection of a tree that was being marked for removal. Many of the Front Range communities in Colorado have been planning for the eventual arrival of EAB for the last couple of years. I attended a workshop this week where researchers and municipalities from the Midwest shared their knowledge and experiences with EAB over the last six or seven years. Clearly a serious and potentially devastating issue for urban and community foresters and electric utilities wherever ash trees exist. EAB has been detected in 22 states and two Canadian provinces, and is estimated to have killed tens of millions of ash trees already. So what about Texas? EAB was 'delivered' to Colorado, and has the potential to arrive in Texas the same way.

We talk about using tools like GIS and GPS-based tree inventories, i-Tree, and hyperspectral and satellite imagery to identify and better understand our urban and community forests. These management tools are important, but there are even greater benefits to having that information and learning how to use it as a powerful planning tool.

At this point, all North American ash species (*Fraxinus*) are considered susceptible. This is the type of issue that should catch everyone's attention, at least in north Texas. EAB is in Kansas and arrived in Colorado earlier than expected. Whether it is a devastating pest like EAB or even the recent ice storms that plagued north Texas, there are measures we can take as arborists and urban foresters to better prepare for how to manage what is likely to come our way.

## Nominations wanted for 2013 regional urban forestry awards

Do you know, or are you involved with someone or some organization that has done something noteworthy in urban forestry?

If so, nominate them for one of the regional urban forestry awards presented each year by the Cross Timbers Urban Forestry Council. Winners will be recognized at the upcoming North Central Texas Urban Forestry Conference in February.



There is no specific nomination category or long form to fill out. Simply e-mail a description of the worthy person or project to [cblevins@tfs.tamu.edu](mailto:cblevins@tfs.tamu.edu).

If you wish to include photographs, that would be great. — Courtney Blevins

## TNLA announces their newest certification

The Texas Nursery and Landscape Association has added a new certification, the Texas Certified Landscape Associate (TCLA).

The online exam covers, but is not limited to, landscape design, landscape equipment, safety and first aid, irrigation, pruning, pesticides, and plant identification. Details at <http://tnlaonline.org/>.

## ON THE COVER

Artist Konstantin Dimopoulos's temporary public art installation "The Blue Trees" came to Houston and Galveston last spring as part of an international conversation about deforestation and its global impact. Hundreds of volunteers, working with the artist, colored the trees with a biologically safe pigmented water that naturally degrades, usually within six to eight months.

Photo by Matt Weaver.





## Thinking outside the pipe, part 1:

by Vincent Debrock, Heritage Tree Care LLC

Water always comes up in conversations about tree care. Drainage... How much... Frequency... As always with natural (soft) sciences, answers can be vague and lengthy. As arborists we would like to have short, clear answers to water questions. Most of the time, it is really easy to refer to the tree care information section at [isatexas.com](http://isatexas.com).

But what if water restrictions become so severe that outdoor watering becomes illegal for long periods of time? This threat has been nagging me for a few years now. Let's face it, that threat is unlikely but possible. Lately, looking at the trends, I started to believe that it is becoming possible, and drought stress from turning off the watering system is very likely. (Did you notice? I am practicing the TRAQ terminology.) Case in point: several small communities have started enforcing the no-watering outdoors restrictions. Some homeowners associations even are enforcing the once-

every-two-week schedule instead of 2–3 times per week.

The purpose of this first chapter of what may become a series is to make us arborists think and act a lot more on the relationship between water, trees and urban forestry in general. This is not intended to be a scholarly paper, more of a thought provoking one.

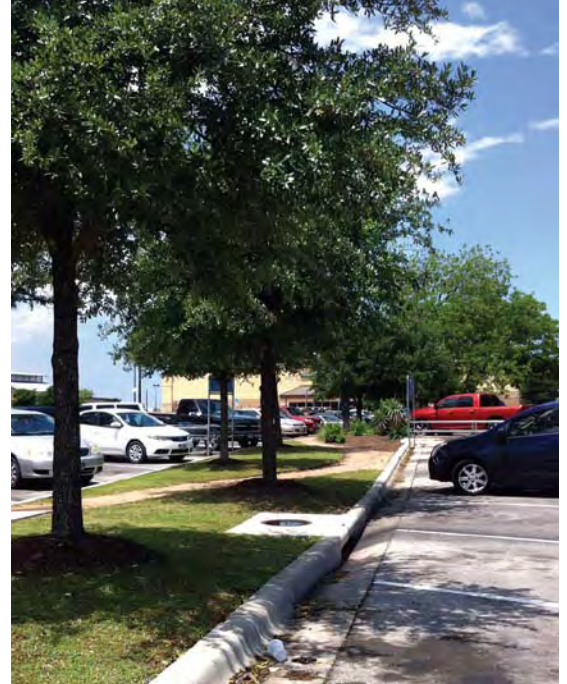
Looking at current practices in urban settings, we find that regular outdoor watering is more the norm than the exception. We start with transplants of large nursery grown trees that are watered every single day or at least once every 2–3 days. Then we move them into an exposed location, usually in full sun with a canopy raised high enough to expose the stem to a full sun, as opposed to shaded stems at the nursery. Most of the time, the transplanting act happens regardless of the season.

Then we attempt to lower the supplemental watering to establish the tree and hope it can become self sufficient.

We usually choose the location based mostly on the future shade the tree should be able to provide; rarely is it based on the amount of rainwater the tree can get. How many times have we seen bald cypress planted on top of a hill? If all planting standards are applied (that is a whole other story), this works pretty well. That is, if the grounds have a dedicated irrigation system, possibly even a bubbler for the tree itself.

Mature trees in urban landscaping more often than not also “benefit” from turf irrigation. Now picture all these urban trees, young transplants and mature trees alike, depending on a shallow

once-a-week or possibly more irrigation schedule. You know where I am going with this. What kind of impact on our urban forest will sudden drastic changes to their watering regimen have? Do the current policy makers even consider this ►



Storm drain gets all the water....



Woodland plantings encourage soil porosity compared to turf grasses and plain mulch.



◀ impact during water conservation talks? Can we as arborists have a role to play in that conversation? If so, which? These are questions that we should urgently ask ourselves and attempt to answer. Will suddenly cutting off watering or drastically reducing watering, kill even more trees? Will that, in turn, increase the problems that we are trying to fix with urban forestry?

I would argue that we need to lobby and educate to ensure that trees are not suddenly cut off from their usual water supply. I would even argue that we can turn this upside down. Given the benefits of urban forests, trees should be weaned from piped city water as much as possible but allowed to be irrigated in extreme drought. This has to be done not only at a property owner's level but more importantly at city and any government level. I hope to explore the "how" in future episodes.

And please, do chime in! Send comments and questions to [vincent@txheritagetrecare.com](mailto:vincent@txheritagetrecare.com) and please put "thinking outside the pipe" in the subject line. ■



Bald cypress without a flowing stream. Sustainable?

## In Memoriam:

# Former ISAT President Harold Wilder

Former ISAT president (1983-84) Harold Wilder died November 8, 2013, after a brief illness. Harold joined the ISA in 1974 – during the organization's early days.



He spent most of his career at Houston Lighting & Power (HL&P), serving as utility vegetation manager there from 1986 until his retirement in 2000.



Harold was liked and admired both personally and professionally, and he had a wide circle of friends. After his career he and his wife Ann settled into retirement in Marble Falls, an area loaded with things Harold appreciated: lakes, golf courses and good barbeque.

## TRAQ finishes up for the year in Texas

by Oscar Mestas, Regional Urban Forester

The third and final TRAQ (Tree Risk Assessment Qualification) class for 2013 finished up on a cold November 13th morning at the Lady Bird Johnson Wildflower Center in Austin.



This was a great class and really opened my eyes in how I look at older mature trees and risk. My old "When in doubt cut it out" mantra is now, "Is it very likely, likely, somewhat likely, or unlikely?" and "Is it imminent, probable, possible or improbable?" I have a whole new vocabulary and a new way of evaluating risk.

I am also happy to report that I now have a Certificate saying:

Having successfully completed the requirements established by the Certification Board of the International Society of Arboriculture,™ the above named is hereby recognized as ISA Tree Risk Assessment Qualified.

I have a strong feeling that the rest of the class also has by now received their very own certificate. I'm pretty sure my boss is happy that I passed and it was money well spent. Keep your eyes open for future TRAQ training opportunities in 2014.



## TIP Tips . . .

The common use of throwlines has allowed modern climbers to make their initial climbing line installations at much greater heights than before, even allowing the initial installation to often be the only one necessary for the climb. With this ability comes greater risk however, and not adequately assessing that risk can cost a climber his life. I know personally because it almost happened to me.

Several years back I installed a line in a live oak using a throwline. Although the height of the tie in point (TIP) was far lower than the 70 or 80 feet that can be routinely achieved with a throwline, it was high enough that properly inspecting the roughly four-inch diameter lateral my rope was over would have been more difficult than usual, particularly due to the density of the canopy. I installed

my prusik, and after an all too perfunctory tug on my line, I began my footlock ascent.

There wasn't even much of a crackling noise when the branch failed, and it wasn't at all gradual. The failure was fast and complete, and my feet were at about 20 feet high at the time. I hit with all the force of a free fall.

My two mistakes here were huge and elementary. First and foremost we must always, *always* inspect our TIPs prior to ascent, regardless of their height. Again, this is one of the problems exacerbated by throwline use. The increased distance obviously makes the branch or union harder to inspect, particularly the upper part of it, where the two branches meet.

In this case, upon inspection of the failed part, there was considerable included bark. Also the angle of attachment was so narrow that I don't know how my climbing even passed through. And the nearly equal size of the limb meant it was probably a codominant stem, not a branch. These are all things we need to look for when doing our TIP inspections, along with more obvious things like cavities, or consideration of species wood strength or branch size.

In 2008 Dr. Brian Kane came to our Texas chapter conference and spoke about the importance of all these things. He is regarded as one of the leading authori-

ties on the relevance of wood strength and structure as it pertains to climbing safety, and he frequently writes about the importance of considering exactly what you are tying into. Regarding codominants, Brian says we need to be particularly careful about tying into them. He defines a codominant as a trunk that is at least 70% the diameter of the one it is attached with, and he says that such stems are only *half as strong* as a similar-sized stem that is clearly subordinate to what it is attached to; in other words, is a branch. (Brian also differentiates between "branch-to-branch attachments" and codominants, but I am ignoring that for my purposes here.)

Aside from inspecting the TIP itself, it's a good idea not to forget about what is below that TIP. Sounds obvious, but more knowledgeable arborists than I have died from making that mistake. In the photo of the failed stem (*at left*), notice that the decay at the failure could have easily been overlooked upon inspection from the ground. Tying in above this area could have resulted in a fall.

Brian also talks about the importance of understanding the different forces at work on wood, including bending, shearing and compression. When an ascent line is right in a branch union, the forces working against the wood are mostly shearing forces (depending on the orientation of the union). Wood is stronger in this regard than it is with bending, which would occur if a line is installed just a short distance away from the union on the same branch, which is why it is best to keep the line close to the union. Compression strength is even greater in most instances. This is the tree's resistance to failure when force is applied to the ends of a bole, such as with gravity on an upright trunk. ►





◀ This is why it is recommended that we tie in around the parent stem (*below, left*) rather than over a lateral limb (*below, right*).

The other big mistake I made that day was not adequately pre-testing the TIP. I have gotten so confident about depending largely on my knowledge of species wood strength vs. branch size that I didn't perform much of an online test at all. If you have ever been to a climbing competition, in the Masters you will see contestants perform this test, often even asking a judge to pull down on the line with them. This is a great way to ensure that you will make

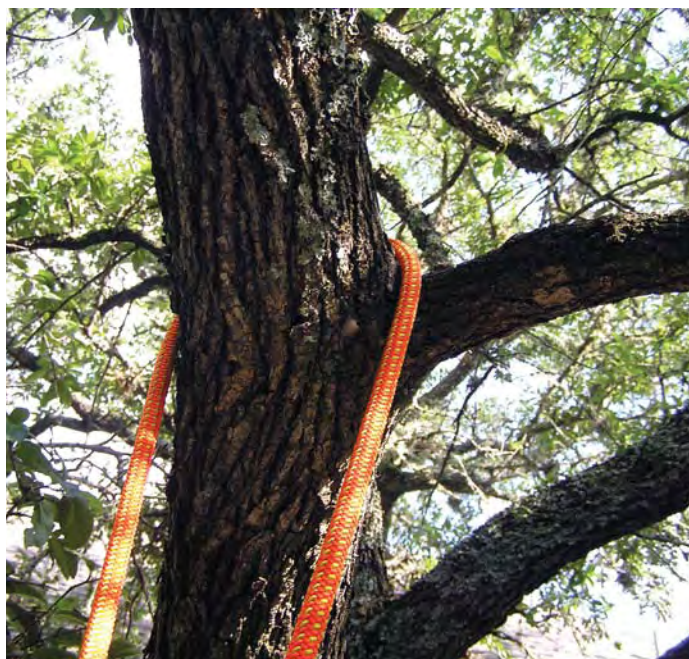
it to the top (and back again) safely.

Another tip that I often teach students is keeping some kind of viewing device on hand. A lot of guys use binoculars. I have a small monocular that is very compact and works perfectly. It was in my rope bag that day. Hint: they don't work if left in storage.

I got lucky that day. When I hit the ground in a deep bed of ivy, I had enough time to prepare my landing, which was feet first, collapsing my knees and then falling onto my back, dissipating the energy enough to avoid serious injury. But when I rolled onto my belly to try to

stand, I put my hand on an old landscape edging spike sticking about four inches out of the ground, hidden by the ivy. Had I landed on that, I would have ended up with a lot worse than the badly bruised heel bone that took weeks to fully heal. As I tell my students, I hope my examples of stupidity will teach you to not rely on luck to stay alive. ■

*The author has somehow managed to stay alive for over 35 years in the tree care industry. He owns and operates Arbor Vitae Tree Care in Austin and also offers instruction in proper tree care and believe it or not, tree worker safety. He may be reached at 512-301-8700.*



## In the Shade

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Editor: Oscar S. Mestas  
Regional Urban Forester,  
Texas A&M Forest Service  
omestas@tfs.tamu.edu  
915-834-5610

Associate Editor:  
Jeannette Ivy  
jkivy@austin.rr.com  
512-292-4402

Advertising Representative:  
Duane Pancoast  
duane@thepancoastconcern.com  
585-924-4570





# Thumbs up for fun climbing ...

It's "thumbs up" to tree climbing from the Scottish Rite Hospital for Children climbers.

## A new twist to a long-time tradition

by Steve Houser

Undoubtedly, the most popular event at last year's Earth Day Dallas was the *Fun Climb*. Three stately live oak trees provided the shade and structural rigging that made this new event for the Dallas area a unique experience for kids and adults who may never look at a tree in the same way again.

Large crowds gathered around the orange fencing that separated the climbers from the spectators. The sight of children in climbing saddles, supported by brightly colored ropes in the trees, was a natural magnet. The basic idea is to go safely climb a tree with your family to reduce your stress level, increase your health and reconnect with nature.

The good folks at Earth Day Dallas hired the professional tree climbers of Tree Climbers International to conduct the event. Their expertise in tree climbing methods and techniques and their years of experience in conducting these types

of climbs as part of the International Tree Climbing Competitions was evident. After 30 years of teaching the public how to climb a tree safely, their safety record is still impeccable. Over the two-day event, 325 children and adults were able to climb up a rope and safely descend back to the ground. Most without getting wedgies!

The first Earth Day Dallas Fun Climb climbing event Saturday morning was developed specifically for the children from Texas Scottish Rite Hospital for Children. The purpose of this unique tree climb was to show that children can overcome anything when they think positively and stay determined to succeed. The young climbers were able to connect with nature and successfully face the physical and mental challenges that go with tree climbing.

Ten children took on the challenge. All of them had a reasonable level of upper

and lower body strength. Upon seeing the trees and the climbing equipment, most of the children expressed some skepticism and concerns about the heights, the crowd, and the climbing saddles. The fact that they were greeted by Patty Jenkins, who walks on crutches due to being post-polio, offered some level of comfort. Patty explained to them that she is a climber, and if she can do it, they can as well.

Peter and Patty Jenkins are the founders and owners of Tree Climbers International. In addition to Peter and Patty, there were six professional climbers in saddles to help provide hands-on instruction. Peter offered training in a humorous way that helped to increase the new climbers' comfort level. For those with less physical capacity to climb, a special climbing system was employed that included one or two pulleys to gain a mechanical advantage and multiply the kids' personal strength. ►



◀ The professional climbers provided personal training for each young climber to get them started up the rope. Although it takes time for an adult to learn how to climb the rope, several children caught on quickly and ascended to the top of the rope. The girls were quick to realize they could climb as well as or even better than the guys! The boys learned that it does not take great strength, but rather a focused determination and a strong will to succeed.

One mother, with a small cheering section in tow, watched as her daughter quickly reached the top of the rope and immediately asked to climb again! During the second climb, the girl and three friends decided to hold hands at 18 feet above the ground, laughing and giggling the entire time. (See photo at right.)

The Charitree event included the Dallas Mavericks' "Mavs Man" as well as their "Street Team" that set up an inflatable basketball court for children to shoot baskets and earn cool Mavs bracelets, posters, and much more ([www.mavs.com](http://www.mavs.com)). Although it was not required, the Mavs Man graciously agreed to climb with us. A number of staff members from NBC/KXAS-TV (Channel 5 News) joined in the fun ([www.nbcdfw.com](http://www.nbcdfw.com)).

Officials from both groups benefiting from the fundraising portion of the event were on hand. Mary Graves, President of the Dallas Historic Tree Coalition, spoke to the crowd about the group's 18-year effort to find, recognize, and celebrate our most significant trees ([www.dhtc.org](http://www.dhtc.org)). Lawrence Hochberg, Vice Chair of the City of Dallas Urban Forest Advisory Committee, spoke about their seven-year effort in public outreach as well as encouraging sound urban forest management practices ([www.dallastrees.org](http://www.dallastrees.org)).

The Earth Day Dallas officials will continue to support this event in 2014 and will consider including an event for those that faithfully serve our country—our veterans, our police, and our fire officials.

To be gently rocking in the breeze in unison with the branches of a tree restores the mind, spirit, and body. ■



Giggling girls celebrate their climb to the top of the ropes by holding hands.

Peter Jenkins shows a young climber "the ropes."







# Partners In Community Forestry National Conference Pittsburgh, PA

by Vincent Debrock, Manager, Heritage Tree Care LLC

The Texas A&M Forest Service kindly sponsored me to participate in the Partners in Community Forestry conference in Pittsburgh this past November. Usually a tree care contractor, I also moonlight as an activist for tree and watershed preservation in central Texas, therefore earning the sponsorship. Trees need water, and watersheds and water quality are better off with lots of trees, so this is a natural marriage of interests for me.

This conference was a first for me, as it would be for most commercial arborists. I was pleasantly surprised that the crowd was at least as geeky about trees as I am, if not more so.

The conference proceedings covered many facets of the tree industry. Countless nonprofit representatives and government arborists and foresters were attending. Presentations ranged from urban ecosystem surveys in the Southwest (*see article*

*on next page*), by our newsletter editor and El Paso-based TFS forester Oscar Mestas, to how to communicate tree care information to the public, by our own Texan Gretchen Riley. The conference was very informative and could rekindle anyone's fire to get excited about trees.

The most exciting part for me was the stream restoration project we got to visit during one of the three outdoor trips – trees and watershed work coming together for the benefit of urban ecology. The second most exciting was the quality of the hangouts downtown: who knew Pittsburgh was now a clean city with bars stocking a wide selection of Belgian brews?

Take a look at what you missed and maybe plan to attend next year: <http://www.arborday.org/shopping/pcf/2013/agenda.cfm>  
Thank you, TFS, for this great learning experience!

Conference attendees on an oak wilt tour.



Oscar Mestas delivering a project overview. Photo by Pete Smith.





# Southwestern Urban Forests – Air Quality & Beyond

Alix Rogstad, Oscar Mestas, Richard Adkins and Vince Mikulanis presented an overview of a case study of the “Southwestern Forests–Air Quality and

Beyond” urban forestry ecosystems services assessment project, a multi-state, multi-region collaboration of the New Mexico, Texas and Arizona State urban

forestry programs. This project utilized i-Tree Eco to capture baseline data that would be used to assist communities to develop municipal and regional

planning goals and implement strategies that address regional attainment of federal air quality standards. The matrix to the left shows preliminary findings of the four study cities.

*Note: An introduction to this project appeared in our July, 2013 issue.*

Key Findings	Phoenix, AZ	El Paso, TX	Las Cruces, NM	Albuquerque, NM
Number of Trees	3,357,000	1,504,000	320,000	1,846,000
Tree Cover	9.70%	5.90%	4.50%	14.30%
Most Common Species	Velvet mesquite California palm Sweet acacia	Italian cypress Afghan pine Mexican fan palm	Italian cypress Desert willow Afghan pine	Siberian elm Desert olive Desert willow
Percentage of trees less than 6"DBH	44.10%	53.40%	65.10%	56.20%
Pollution Removal	1,880 tons/year (\$7.89 Million/year)	403 tons/year (\$294 thousand/year)	126 tons/year (\$339 thousand/year)	493 tons/year (\$1.44 million/year)
Carbon Storage	339,000 tons (\$24.1 Million)	105,000 tons (\$7.46 million)	\$21,700 tons (\$1.55 million)	302,000 tons (\$21.5 million)
Carbon Sequestration	36,300 tons/year (\$2.59 million/year)	8,460 tons/year (\$602 thousand/year)	1,800 tons/year (\$128 thousand/year)	12,900 tons/year (\$921 thousand/year)
Oxygen Production	90,100 tons/year (\$0 /year)	16,300 tons/year (\$0/year)	3,690 tons/year (\$0/year)	28,400 tons/year (\$0/year)
Building Energy Savings	\$22.2 million/year	\$3.02 million/year	\$651 thousand/year	\$4.35 million/year
Avoided Carbon Emissions	\$2.87 million/year	\$431 thousand/year	\$87.3 thousand/year	\$589 thousand/year
Structural Values	\$4.23 billion	\$1.7 billion	\$280 million	\$2.62 billion

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# ISAT Board of Directors Retreat December 2013

by *Lara Schuman*

This year the Board returned to the beautiful Tonkaway Ranch in College Station for its annual retreat. As a first-time Board member, I was not sure what to expect. What I learned was “retreat” is a nice way of saying getting to know your fellow Board members and getting down to business. This year we have four new members including myself. So the first day was mainly spent catching us up on what the Board does and how much work it takes to provide ISAT members with so many benefits.

It turns out that 2013 was a very busy year for the Texas Chapter of ISA. I knew that ISAT sponsored several events; after all I attended some of them, including the Woody Decay Identification and Assessment workshop with Dr. Chris Luley. I didn’t realize that ISAT also held seven ISA Certified Arborist exams plus a Certified Tree Worker Climber Specialist exam. We also sponsored three sessions of the new TRAQ training. We sponsored many other events and activities, had another successful Texas Tree

Conference, and cosponsored not one but two Texas State Arbor Days in order to move Texas’ official Arbor Day to a more appropriate time of year for planting.

After several hours discussing business, shotguns and warm clothing were pulled out and we all loaded up to go to the skeet shooting range. This was my first time to ever shoot a shotgun. I was a little intimidated, but our guides and two fellow Board members, Markus Smith and Lee Evans, managed to teach me how to hit some of the clays. I felt a lot closer to everyone after spending that time learning something new, and had only a slightly sore shoulder to show for it. Later we continued our discussions over an amazing home cooked dinner. We also celebrated new Director Nevic Donnelly’s birthday, which he was generous enough to spend working with us.

The next day began early with a cowboy breakfast around the campfire. We then got to work. Our returning Directors have been working hard to increase awareness of ISAT and improve member benefits.

Vincent Debrock, Vice-President, has started outreach to other professional organizations to improve communication and increase their understanding of trees. Our Past-President, Susan Henson, has been putting together new member packets and a survey to find out what our members want from the organization. Paul Johnson from Texas A&M Forest Service and an ISA Board member, presented an idea about a possible new Fire-wise Qualification for our state. Markus Smith, President-elect, has been working to develop a new climber training program, and the board agreed that this is a great idea. As a result we will begin offering new climbing training classes early in the year. Of course the Board began work on the 2014 Texas Tree Conference.

We all left with many assignments for the upcoming year. Keep an eye out for our member survey and let us know what you need from your Texas Chapter. Don’t forget to spread the word about the benefits of becoming a member. Let’s all work together to make 2014 the best year yet for arboriculture in Texas. ■



Back Row: Markus Smith, Lee Evans, Jim Dossett, Matt Churches, John Giedraitis

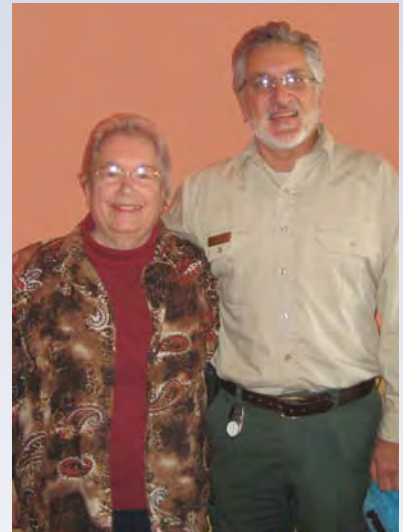
Middle row: Lara Schuman, Ed Dolphin, Oscar Mestas, Margaret Hall Spencer, Terry Kirkland, Susan Henson, Misti Perez, Orlando De La Garza  
Kneeling: Nevic Donnelly, Vincent Debrock, Michael Sultan



## EDITOR'S NOTE by Oscar Mestas

Once again, ISAT pulled off another great year of events, trainings and workshops for our members . . . as well as another six great issues of *In the Shade*. Of course that was a self-proclaimed statement from me, your editor. As many of you know, I could not do this all by myself. The number one person, my sidekick and my go-to person is Jeannette Ivy, our associate editor. I found out Jeannette was hired by our former editor Courtney Blevins, and Paul adopted Jeannette as did I. I once asked Paul and Courtney what is Jeannette like? To my surprise they both said they had never seen or met her. Like me they also only had a professional email and phone correspondence and association with her.

So I decided to make an effort to meet Jeannette since I do know that she lives near Austin and I travel that way quite often. While attending the TRAQ training this past November in Austin, I made arrangements to meet my wonderful associate editor. We had a lunch rendezvous at an eatery off Slaughter Lane near the Lady Bird Johnson Wildflower Center. I was a little nervous not knowing what to expect, but I found this lady with a great smile and great sense of humor. She laughed at most of my corny jokes and at one time I thought she was going to choke on her sandwich and I was going to have to do the Heimlich on her. *(Those weren't corny jokes; they were entertaining stories. –JI.)* I would now like all of you to meet the lady who does wonders with the articles and photos that you provide, and she turns them into what I think is pretty good looking publication. Thank you, Jeannette, for all that you do. *(Thank you right back. Y'all are a great bunch to work for. –JI.)*



Before I sign off, I want to remind everyone that you the members make this publication what it is. I really need your ideas, articles and input to better serve all our members; we need information from the municipal, utility, & commercial arborists. In addition we need current and timely events, from all over the state, not just the Golden Triangle of Texas, I know there are others out there. Mark your calendars. Articles are due February 15<sup>th</sup>, April 15<sup>th</sup>, June 15<sup>th</sup>, August 15<sup>th</sup>, October 15<sup>th</sup>, & December 15<sup>th</sup>. Do you see the pattern here? As always please send submissions to me at [omestas@tfs.tamu.edu](mailto:omestas@tfs.tamu.edu). Thank you and keep it coming!

### Volunteers Wanted for NATCC

ISA are now accepting volunteers for the 2014 North American Tree Climbing Championship to be held April 5-6 in Pasadena, CA. Sign up by March 1.

See [www.itcc-isa.com/](http://www.itcc-isa.com/).

### Arboriculture 101 Returns

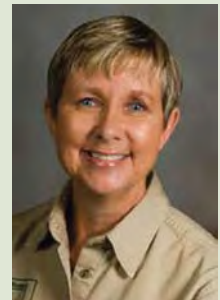
Dr. Todd Watson's popular Arboriculture 101 course is being held January 16 through 24 at the Brazos Center in Bryan. Arboriculture 101 is a four-day short course designed to provide practitioners with an in-depth knowledge of how to care for urban trees. More at [isatexas.com/](http://isatexas.com/).

### The Bonnie Appleton Memorial Fund

The Bonnie Appleton Memorial Fund was recently established at the TREE Fund to honor Dr. Appleton's passion and advocacy for horticulture and arboriculture education and research.

For more information and a link to donate:

<http://www.urbanforestrysouth.org/resources/library/ttresources/bonnie-appleton-memorial-fund>





# Far West Texas news

by Oscar Mestas, Secretary, West Texas Urban Forestry Council (WTUFC)

October 30<sup>th</sup> thru November 1<sup>st</sup> were a busy three days for the West Texas Urban Forestry Council a.k.a. Los Tree Amigos. We sponsored and held a tree care and pruning workshop which was presented by Tim Johnson, owner of Artistic Arborist, Inc.



Tim Johnson

Some of you may recognize his name. Tim has been an industry leader for years. He is Past Chairman of the Board for TCIA and Past President of ASCA, and spent 20 years on the ASC A300 committee. Tim gave a great presentation to 42 local municipal and landscape professionals from El Paso and Las Cruces to start off our series of events.

On Halloween, WTUFC sponsored its Sun Country Landscape Conference (SCLC) with the theme

Tree O Ween – A Scary Thought – No Trees! We had some catchy presentation titles like Nightmares with Urban Trees,

Boo-tiful Bugs in Your Landscape, and Notions and Potions for Trees. Board members were supposed to come in costume but I was the only one who apparently got the memo.

We had 3 tracks, 19 presentations and 19 speakers; our attendance was only 65 but not bad for a regional event. SCLC was cosponsored by El Paso Water Utilities and Eco El Paso with help from Texas A&M Forest Service and AgriLife Extension. We held the event at the Tech H2O Center, a great facility for education and training.



Sun Country Landscape Conference session

Los Tree Amigos rounded out the last day by celebrating the new Fall Arbor Day at Keystone Park, where I gave planting demonstrations for a boxed tree and what ended up being two small trees after I root washed a container grown, root bound acacia. This event attracted around 20 people—students, locals and generally interested folks. So WTUFC was able to educate, inform and bring new technology to about 130 folks in our region.

Special guests for the Arbor Day Ceremony were Richard Adkins, City of Phoenix Forestry Supervisor, and Alix Rogstad, Program Manager, Urban & Community Forestry, Arizona State Forestry.

New fall Arbor Day at Keystone Park, El Paso



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# Impact of Roadside Tree Lines on Indoor Concentrations of Traffic-Derived Particulate Matter

## Abstract:

Exposure to airborne particulate pollution is associated with premature mortality and a range of inflammatory illnesses, linked to toxic components within the particulate matter (PM) assemblage. The effectiveness of trees in reducing urban PM<sub>10</sub> concentrations is intensely debated. Modelling studies indicate PM<sub>10</sub> reductions from as little as 1% to as high as ~60%. Empirical data, especially at the local scale, are rare. Here we use conventional PM<sub>10</sub> monitoring, and novel, inexpensive magnetic measurements of television screen swabs, to measure changes in PM<sub>10</sub> concentrations inside a row of roadside houses, after temporarily installing a kerbside line of young birch trees. Independently, the two approaches identify > 50% reduction in measured PM inside those houses screened by the temporary tree line. Electron microscopy analyses show that leaf-captured PM is concentrated in agglomerations around leaf hairs and within the leaf micro-topography. Iron-rich, ultrafine, spherical particles, probably combustion-derived, are abundant, form a particular hazard to health, and likely contribute much of the measured magnetic remanences. Leaf magnetic measurements show that PM capture occurs on both the road-proximal and -distal sides of the trees. The efficacy of roadside trees for mitigation of PM health hazard may be seriously under-estimated in some current atmospheric models.



Temporarily placed boxed birch trees

This study was conducted by Prof. Barbara A. Maher (<http://www.lancs.ac.uk/staff/maherb/>) and colleagues at the Lancaster Environment Centre, University of Lancaster, UK. An article about this work is at: <http://cen.acs.org/articles/91/web/2013/11/Trees-Capture-Particulate-Matter-Road.html>



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# 2013: another good year for saltcedar leaf beetles in Texas – Part 1

by Allen Knutson, Entomologist, Texas A&M AgriLife Extension

Reprinted with permission from Beetle-Mania newsletter published by Texas Agri-Life Extension

Saltcedar leaf beetles returned again in large numbers in many areas of west Texas in 2013, further weakening trees defoliated in 2012. The year did not start off well as several late spring freezes, the last in early May, raised concern that beetle and larvae would be killed by the frost. Although these cold temperatures may have delayed beetle reproduction, populations in most areas increased

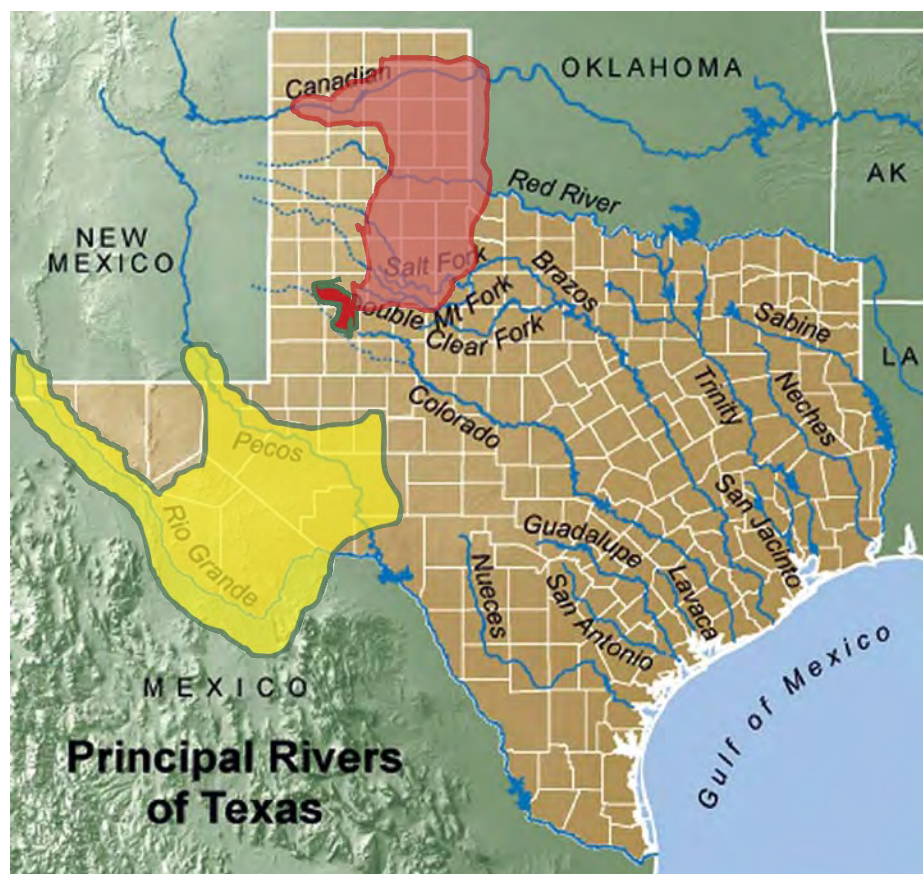
by early summer and again defoliated large areas of saltcedar. There are now three species of saltcedar leaf beetles established in Texas.

**Rio Grande, Pecos Rivers.** The subtropical tamarisk beetles defoliated large areas of saltcedar on the Pecos and Rio Grande Rivers. Saltcedar trees in this area have been defoliated for three consecutive years, and many trees now have large dead limbs with only a few green branches. In 2013, beetles dispersed through El Paso and into New Mexico following saltcedar along the Rio Grande and by late August were found about 17 miles south of Las

Cruces, NM. Beetles also dispersed along the Pecos River into New Mexico and by late summer were found near Artesia, NM. A small population of Mediterranean leaf beetle was found at Artesia, apparently a remnant population of earlier releases made at that site several years ago.

**Upper Colorado River.** The Mediterranean leaf beetle is found in this region and again defoliated stands of saltcedar stretching along Sulphur Springs Draw and at some sites on Mustang Draw in Howard and Martin Counties and at Lake Thomas. However, this species has been slow to recover following the February 2011 freeze. Overall, the Mediterranean has not increased or dispersed as rapidly as has the two other species in Texas. This species was released at Lake Spence and Lake Ivie but did not establish. In 2012 and 2013, large numbers of the subtropical and larger tamarisk beetle were released at Lake Ivie but there is no evidence to date that any of these populations have established on these reservoirs. Red imported fire ants are common at Lake Ivie and Lake Spence and may be feeding on the beetle larvae and pupae.

**Brazos River and Tributaries.** The larger tamarisk beetle, originally collected from Uzbekistan, defoliated saltcedar trees on many of the tributaries of the upper Brazos River that drain the Rolling Plains Region in 2013. Areas defoliated by leaf beetles increased again in Garza County and beetles dispersed into the Lake Allen Henry area in 2013. Widespread defoliation was also seen for the first time in southeastern Lynn County and a few beetles were found in adjacent Terry County. It is not yet known if the beetles in Lynn County are Mediterranean leaf beetles from the populations to the south or are the larger



Approximate distribution of the Subtropical leaf beetle in the Trans Pecos region, the Mediterranean leaf beetle in the upper Colorado River (red area), and the Larger leaf beetle in the Rolling Plains and Panhandle of Texas. Beetles are not present throughout the shaded regions, but if not present, are likely to disperse in the future to new sites within the shaded region.



◀ species that moved along the Double Mountain Fork of the Brazos from Garza County.

**Canadian River, Red River and its Tributaries.** The larger tamarisk beetle and tree defoliation were again widespread in the Lake Meredith area and east along the Canadian River. Beetles also returned again and defoliated much of the saltcedar along the tributaries of the Red River throughout the eastern Texas Panhandle and adjacent counties in western Oklahoma. Beetles gain defoliated saltcedar along the Pease River in Motely and Cottle Counties and along the South Wichita in King County. Beetles moved south into northern and western Stonewall County and tree defoliation was widespread here for the first time in 2013.

**Beetles Arrive in Kansas.** Saltcedar leaf beetles were found for the first time in October, 2013 in three counties in southwest Kansas. Beetles are believed to have moved north from beetle populations along the Texas/Oklahoma border, crossed the Oklahoma Panhandle and entered Kansas this past summer. Saltcedar is considered a quarantine pest by the Kansas Department of Agriculture.

Thanks to Chris Ritzi, Sul Ross Univ., J. Michels, E. Jones, M. Muegge and J. Tracy, Texas A&M, T. Royer, OSU, and C. Sutherland, New Mexico for information on beetle activity in their areas. ■

The saltcedar leaf beetle feeds only on saltcedar and athel. Athel is a closely related species that grows along the Rio Grande River in Texas. If saltcedar or athel trees are not present, the larvae starve to death. Saltcedar beetles were first established in Texas in 2004 at Big Spring. Since then, there have been no reports of beetles or larvae feeding on any other plant, except saltcedar and its close relative athel (*Tamarix aphylla*).

## Champion Cottonwood: Down but not out

In the desert, rain is always a blessing. However, rainwater adds weight, and that added weight may have been the final straw that broke the cottonwood's back. Last summer we lost about half of the Texas Champion Cottonwood. A 7' co-dominant branch that branched at about 16' height, fell. The tree was cabled to lessen the risk, but that was not enough to offset the weight nor overcome the decay.

This tree is a little over 10' diameter and is part of the historic grove on Fort Davis. About 10 years ago, the ISA Texas Chapter authorized and funded a consultation by Pat Wentworth and Kevin Bassett to assess the trees in the grove and present a report to ISAT and the National Park Service recommending actions the NPS should take to preserve these trees. At that time, there were 12 trees larger than 4' diameter.



Pat and Kevin recommended pruning, cabling and lightning protection. By the time the work was put out to bid, two of the trees had fallen. No one bid on the original work. A year later, the project was put out to bid again and Tree Loving Care was awarded the contract in the spring of 2007. This contract *did not* include cabling or lightning protection. The trees were only pruned. At that time all deadwood larger than 2" was removed.

Tree Loving Care was contracted again in the spring of 2012 to prune the trees again and install cabling in five of the remaining seven trees. At that time, more than 10 dead branches over 8" were removed from the declining largest tree, which was by then the Texas Champion (the previous state and national champion cottonwood had been lost in the Rock House fire the year before).

They say that records are to be broken, and that championships can only be defended so long, but it is still sad to watch the decline of this specimen. The encouraging part is that there is another tree in the grove that is over 7' diameter and seemingly very healthy, probably the new state champion at some point.

Another encouraging part of this project has been that the NPS has also allowed Tree Loving Care to properly prune the small trees that will be the future Historic Grove, including removal of some co-dominant branches. These trees are 8"–24" caliper and have some proper cuts that the original grove didn't get until they were in advanced age. Hopefully, we will have less of the catastrophic failures that we have had in the past. Perhaps, someday, people will be allowed to again walk and picnic in the grove.

—James Tuttle, President, Tree Loving Care

## Forester Gretchen Riley publishes first novel

ISAT member Gretchen Riley, a forester and geospatial specialist with Texas A&M Forest Service, has published her first novel, *Fourteen Miles of Chance*.

A brief version of the jacket blurb: Molecular biologist John Everman's latest scientific paper is critically acclaimed. When suggestions arise that the project may be falsified, he heads to South America to duplicate the project and salvage his professional reputation. Stalked by extremists through Chile and the Atacama Desert, Everman has the gnawing realization that it is really something else that he fears.

The book is available in digital or paperback on Amazon, Barnes & Noble and other major online retailers.



# BAJO LA SOMBRA

por Nicolas Martinez, Gerente de Producción, Arborilogical Services, Inc. –  
Campeón de Trepa de Árboles de Texas 1996, 2000, 2003 y 2005

La importancia de participar en la competencia de Escala de árboles se nota cuando los participantes aprenden técnicas nuevas - técnicas que ayudan en el desempeño diario de trabajo, por ejemplo; la presa de pie asegurada (footlock) y cómo utilizar los diferentes nudos, cómo usar los lazos de diferentes modos y distintos amarres, o cómo diferenciar una herramienta buena que está en malas condiciones. Pero lo más importante es que te enseña cómo hacer tu trabajo más fácil y más eficiente, y sobre todo, más seguro.



La mayoría de la gente que se dedica al cuidado de los árboles no invierte el tiempo necesario, ni el dinero en aprendizaje. Por ejemplo, cada año en Texas se lleva a cabo la competencia de escala de árboles, donde se dan talleres gratis. Sin embargo, muy poca gente asiste. Es una competencia donde uno puede aprender nuevas técnicas de cómo subir al árbol sin usar mucha energía. ¿O tal vez podrá ser que pensamos que ya sabemos lo suficiente? ¿A mí que me pueden enseñar? Cuando yo tuve la oportunidad de competir, siempre traté de aprender lo más que podía, y así, hacer mi trabajo más fácil y más eficiente - por ejemplo, la técnica de la presa de pie asegurada (footlock) es muy efectiva. También aprendes cuales son los mejores lazos, cuerdas o mecates (ropes).

Por más de 20 años he trabajado como podador de árboles, y en muchas ocasiones, he visto cómo nuestros competidores en el cuidado de árboles no tomaron la



molestia de hacer una poda apropiada. Por ejemplo, ¿Porque no remover todos los nuevos retoños, y no fijar el porcentaje adecuado de cuanto se debe podar, o que tipo de especie se puede podar en invierno, y porque?

Los clientes tal vez no les interesa en informarse de quien les podara sus árboles y solo ven cuánto dinero van a ahorrar en el momento. Después viene el problema cuando los árboles mal-podados muestran el impacto de la mala poda.



## Spanish Language Tree Worker Safety Program January 9 in Houston

Achieve a safe and healthy work environment. Learn about climbing and equipment safety, electrical hazards, tree pruning and care, and tree biology.

Eduardo Medina, Davey Trees, and Salvador Alemany and Mark Duff, Texas A&M Forest Service will present this workshop in **Spanish only** January 9 at the Houston Arboretum and Nature Center, 4501 Woodway Drive, Houston.

Information & registration in English and Spanish at [isatexas.com](http://isatexas.com).



## Workshop Jan. 10 in Conroe for Hispanic Tree Care Workers

A landscape, horticulture, and arboriculture services workshop for Spanish-speaking tree care workers will be held Friday January 10 at the Texas AgriLife Extension Education Building in Conroe.

The workshop will be conducted in **Spanish only** by Salvador Alemany and Mark Duff of the Texas A&M Forest Service. It will cover tree biology, planting, pruning, watering, fertilization, mulching, selection, and staking.

For more information contact John R. Warner, 936-273-2261. Registration is \$35 per individual or employee or \$25 each for three or more employees. Fee includes lunch, materials and handouts.



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## What's the Big IDea?

Can you identify this native Texas tree?



If you know this tree, look for the photo on our facebook page and correctly identify it in the comment section under the photo. If you don't know it, check the page for the answer in a few days

*Hint:* Should you mark location to identify species?

### November winner

Mike FitzGerald was the first to come up with the correct answer last time. The November Big IDea tree was black walnut, *Juglans nigra*.

