

# In the Shade



NEWSLETTER OF THE  
ISA TEXAS CHAPTER  
AUGUST, 2019



# Wedgle® Direct-Inject™ TREE INJECTION SYSTEM

Our advanced technology  
for tree treatment  
allows you to

## INCREASE THE NUMBER OF TREES YOU TREAT IN A DAY!



- ◆ No drilling damage
- ◆ No mixing at job sites
- ◆ No guarding or return trips
- ◆ No waiting for uptake
- ◆ Treats most trees in five minutes or less!
- ◆ Successful and most profitable add-on service

Multiple injection tips designed for all types of trees, conifers and palms

Insecticides • Fungicides • PGRs • Antibiotics • MicroNutrients

Learn more! Call 800.698.4641 or visit  
ArborSystems.com for information and videos



## President's Letter

July 16, 2019



Greetings from Austin, where the skies are blue, the air is hot, and the leaves on the trees are nodding in the wind. Summertime in Texas is here, and the Texas Chapter has wrapped up spring and summer workshops and is getting ready for our annual Texas Tree Conference. Now is the time that we put into motion the tasks that will carry us through the rest of the year.

The Texas Chapter has covered a lot of ground in 2019! We have welcomed Gene Gehring as the new Educational Program Manager, and now I am so glad to also welcome Misti Perez into her new role as Member Services Specialist. Misti transitions out of her role as Certification Liaison, a title she held for 7 years, and into her new position this summer. Daniel Cottier of Preservation Tree is taking over where Misti left off as our newest Certification Liaison. Welcome to the team!

In preparation for the upcoming Texas Tree Conference I ask that readers consider donating to the silent auction. The many fabulous volunteers that have dedicated their time to the silent auction over the years have built it up into an impressive addition to the conference. Proceeds support scholarships, and it really is easy to donate. No item is too big or too small - some of my favorites from last year were hand-made tree themed notecards. Let Ginny Sills know if you plan to donate (ginny.sills@gmail.com).

Stay cool, Emily  
Emily King President - Texas Chapter ISA

## IN THE SHADE

is published six times a year by the Texas Chapter,  
International Society of Arboriculture.

Editor: Rebecca Johnson  
Rebecca@Arborholic.com • 512-730-1274

Interim Associate Editor: Joan Ivy  
joanivy@sbcglobal.net

Advertising Representative: John Giedraitis  
JPG@ISATexas.com • 979-324-1929 • fax 979-680-9420

## NEW MEMBERS

Pedro Zamarron Herrera, Corpus Christi  
Donald Steingrubey, Midland  
Domingo Robledo, Buda  
Charles Sadler, Hastings On Hudson  
Zach Fisher, Temple  
Michael Garner, Dallas  
Deedra Raiford, Sour Lake  
Juan Aguilar, Caddo Mills  
Eduardo Gorostieta-Maldonado, Austin  
Jessie Atwell, Las Cruces  
Brandon Fisher, Temple  
Eric Wettengel, Arlington  
Juan Mendez Madrigal, Houston  
Michael Bong, Austin  
Micah Montgomery, Nacogdoches  
William Johnston, Austin  
Joshua Emerson, Dallas  
Kenneth Uptain, Weatherford  
Daniel Mejia, Cedar Park  
Kelly Hildebrant, Lubbock  
Christopher Pettit, Cibolo  
Claire Eddleman, Austin  
Nicholas Burtner, Irving  
Bryson Mack, Lubbock  
Neil Myers, Manor  
Marjorie Webb, Mckinney  
Jonathan David, Muenster  
Kyle Anderson, Austin

## ON THE COVER

Congrats to our 2019 Tree Climbing  
Champions, Miguel Pastenes and Cindy  
Abbot, shown here with long time TTCC  
judge, Steve Houser. For the full story of  
the TTCC, check out page 8.

*"The tree which moves some  
to tears of joy is in the eyes of  
others only a green thing that  
stands in the way. Some see  
nature all ridicule and  
deformity... and some scarce  
see nature at all. But to the  
eyes of the man of imagination,  
nature is imagination itself."*  
—William Blake

# Nominations open for Texas Tree Awards

Paul Johnson, Texas A&M Forest Service

It's awards season in Texas – help us out by nominating a person, project, or organization for one of our Texas Tree Awards. There are five award categories this year. Four of them are cosponsored by ISA Texas and Texas A&M Forest Service. We've changed the process a little this year and you no longer have to deal with a pdf form. Everything is online and available on the website at [isatexas.com/members/awards](http://isatexas.com/members/awards).

**Arborist of the Year:** Nominations for individual awards are evaluated for leadership, commitment, innovation, impact and sustainability.

**The Gold Leaf Award – Landscape Improvement:** An award to recognize individuals, organizations, or municipalities that have made significant contributions through tree planting and landscaping which enhances environmental protection, conservation, beautification, energy conservation, or wildlife protection. Projects should show significant impact over several years.

**Arboricultural Project of the Year:** Recognition of a specific tree care, protection, or planting project that exemplifies modern arboricultural practices and customer service. Nominees may include arborists, tree care companies, landscape contractors, etc.

**Outstanding Arbor Day Activities:** An award to recognize individuals, organizations, or municipalities that have promoted Arbor Day through special projects, ceremonies, news articles or observations with an Arbor Day theme.

In addition the Texas Chapter recognizes a volunteer that has made a difference this year.

**Texas Chapter ISA Volunteer of the Year Award:** This award recognizes an individual who has made significant contributions as a Texas Chapter ISA volunteer.



Don't delay, the deadline to apply is August 16th, 2019. Visit [isatexas.com/members/awards](http://isatexas.com/members/awards) to learn more and find the links to the nomination forms at the end of each award description.

## Editor's Note



Rebecca Johnson

Wow, August already! This month I'll be attending the ISA International Conference. It's something I look forward to every year, it's an opportunity to reconnect with old friends, meet new friends, learn new things and basically get my spirit revived. And coming hot on the heels of that is the Texas Tree Conference in September. Conferences are an investment of time and money, but they are so worth it. I always come away absolutely exhausted, but pumped to go out and improve the work I do and teach others what I learned.

Some of y'all might have noticed that this issue looks a bit different than past issues. Our long-time Associate Editor, Jeannette Ivy has decided to retire and we have a fill-in Associate Editor, Joan Ivy, for this issue, and maybe future issues. We'll be putting out an RFP for a new Associate Editor, so I encourage any interested folks to send in a proposal - tell us what you'd like to see changed or improved and how you'll accomplish that.

We'll miss Jeannette horribly. I hope you'll all join me in wishing her a very happy retirement.



**Ultra easy.  
Ultra effective.  
Ultra defense.**

**Fire Blight**

**Bacterial Leaf Scorch**

Protect your trees and the value of your property with Mycoject® Ultra antibiotic. Mauget's® ready-to-use formulation provides 4 months protection from Fire Blight and Bacterial Leaf Scorch, reducing both bloom and twig infection.

Now available in Liter bottles for Liquid Loadable application.

 **TREE CLINIC PHARMACY 512-385-5639**  
Call and speak with our entomologist or consulting arborists for expert diagnostic advice, PHC therapies and applicator training in the use of the tree injection technologies.

**Serving ALL of Texas!  
Order today and  
get it tomorrow!**

Fire Blight Photo: William Jacobi, Colorado State University, Bugwood.org  
Bacterial Leaf Scorch Photo: William M. Ciesla, Forest Health Management International, Bugwood.org



May 14, 2019  
 Mr. John Giedraitas  
 Texas Chapter, International Society of Arboriculture  
 2014 Oakwood Trail  
 College Station, TX 77845

Dear Mr. Giedraitas,

Thank you International Society of Arboriculture, Texas State Chapter for donating a scholarship so I can continue my education in Urban Forestry at Stephen F. Austin State University. I was very honored to be selected as one of the recipients of the ISA scholarships. ISA has meant a lot to me in my schooling. I have had the wonderful opportunity of attending the Texas Tree conference in years past and I look forward to attending it again this year. I have made wonderful connections with various professionals and learned a lot about commercial and municipal urban forestry.

I have just finished my junior year of college and I will be graduating May 2020 with an undergraduate degree in urban forestry and a minor in geographic information systems. I am originally from the DFW area in Arlington, Texas. I have had the opportunity to work for the City of Arlington as an Urban Forestry Intern and I will be completing an internship with Sam Hill Tree Care this Summer. I enjoy being involved on campus as an officer in the Society of American Foresters, Student Association of Arboriculture and the Student Association of Spatial Scientists.

I have always known that I've wanted to work with trees and your scholarship gives me an opportunity to further my education and pursue my passion. Through my forestry education, I have learned valuable skills that I look forward to using as I enter the workforce next year. Your funding has helped make this possible.

Thank you,  
*Rachel Murray*  
 Rachel W. Murray  
 Stephen F. Austin  
 Urban Forestry

May 14, 2019  
 Dear Mr. John Giedraitas:

I would like to thank you for your kind and generous investment toward my future. I am an Eagle Scout from Corpus Christi, Texas who loves the natural world. I grew up fishing, camping, and hunting in south Texas, which has fueled my desire to conserve the outdoors as much as I can. I originally came to Stephen F. Austin State University to pursue a Forest Wildlife Management degree but fell in love with the trees the moment I arrived on campus. Being from South Texas, there aren't many large trees to captivate the imagination, mostly just palm trees and small oaks. In the future I plan to use my college degree to become an arborist and help people in cities make the most of their limited encounters with nature. I see many people from the inner city of Corpus Christi who are either unable to travel to or aren't aware of the natural world that lies just beyond the concrete and asphalt. Receiving the International Society of Arboriculture, Texas Chapter Scholarship is an honor and will further encourage me to do well in school. The money will offset the financial burden of paying for college that has been stressful for my family and I. Being from a low-income family has taught me to truly appreciate the help of generous people such as yourself.

Sincerely,  
*Dale Mann*  
 Dale Mann  
 Sophomore Forestry major, Urban Forestry concentration

May 9, 2019  
 Texas Chapter International Society of Arboriculture  
 2013 Oakwood Trail  
 College Station, TX 77845

Thanks so much!

Thank you for your recent donation of \$3,000 to the Arthur Temple College of Forestry and Agriculture. Private donations such as yours allows Stephen F. Austin State University to provide superior educational opportunities for our students.

We are grateful for your thoughtful contribution to SFA. Your gift strengthens SFA's ability to achieve the goals and aspirations of our students and campus community.

Axe 'em, Jacks!  
*April Smith*  
 April Smith '02  
 Associate Director  
 Office of Development

Thank You!




**PROTECTING THE REPUTATION OF THE UTILITIES WE SERVE FOR 100 YEARS**

IT'S PART OF OUR JOB

10 YEARS  
 Nelson  
 1919 2019  
 TREE SERVICE, LLC

Vegetation Management Specialists

See the videos  
  
 800-522-4311  
 www.nelsontree.com

©2019 Nelson Tree Service, LLC. All rights reserved.



# EDUCATION



# EQUIPMENT

# ENGAGEMENT

REGISTER TODAY NOV 7-9 PRE-CONFERENCE NOV 6

PITTSBURGH, PA 2019  
**tciexpo**

PRESENTED BY THE TREE CARE INDUSTRY ASSOCIATION

800.733.2622 EXPO.TCIA.ORG

# A Tree Climbing Championship for the Record Books

Jim Dossett Division  
Safety & Training Coordinator,  
Bartlett Tree Experts

For those of us out there on the front lines of this industry, Spring is a busy time—temperatures (and sometimes tempers) are rising, our workload is growing daily with the growth throughout our state, new employees need to be trained, equipment needs to be maintained and repaired, and clients seem to be calling non-stop. But as is the case towards the end of May, nearly 100 of the state's finest arborists gathered at San Gabriel Park in Georgetown, Texas, for the Texas Tree Climbing Championship.

For four days in May, the client calls go largely unreturned, work grinds to a halt, chippers and chainsaws go silent, and the state's best climbers give everything they have—not for money, but for the pleasure of their craft and the chance to be crowned the Texas Tree Climbing Champion. This year's was truly a championship effort. From our amazing sponsors, to the competitors, and of course our amazing team of volunteers, we had an awesome location among beautiful live oaks on the banks of the San Gabriel River that topped our past efforts in many important ways.

This year saw the most sponsors of the event—a recognition of the value placed on the attention of the best in our industry. We had the most volunteers we have ever had—a tribute to the dedication of our colleagues and the selflessness that is so often a hallmark of the event.

We also had the most female competitors—a welcome sign of the changing face of our industry and a fierce reminder of the determination, competitiveness and sheer athleticism of this growing cadre of amazing climbers.

A crane! That's right, our Premier Sponsor, Manitex, brought out one of their cranes to raise above the event. But, as in the years and championships that have preceded this one, the real standout was the competition. A mix of familiar faces and exciting new competitors, we once again witnessed the raising of the bar for



climbers to come. New techniques, new equipment, new events, but the same grit and determination we have come to expect from the state's best. Add to that mix of competitors a course that was challenging in its complexity, and, at times, deceptive in its appearance. As those of us who are all too familiar with our beloved Live Oaks, the climb is often far more challenging once aloft than it appears from below.

Climb, Brennon Magee on Work Climb, and the host of technicians and climbers that made it happen. But the event isn't just ropes and trees. None of it would happen without our amazing scoring group led by Kirby Houser and Kirsten Schneider. Those two are amazing—the brains behind the knuckle draggers (that's me and Markus) and the organizational force without whom the event would literally

“ This one had it all—photo finishes, athleticism, skill, and a vibrant crowd to cheer the competitors on. ”

This year was a first for me as well. For the first time, I was unable to be there for the lion's share of the setup. I had to trust my volunteers to do what they do best, and they delivered in spades. It was a relief to know that we had such an experienced and dedicated team out here working to get things ready as I flew back in to town. Thursday morning for me wasn't a time of anxiousness or worry, but one of relief and pride in the team. Often, the events seem simple to set up to the untrained eye, but the attention to detail it takes to make the course the right balance of challenge, speed, and safety is a daunting task and the teams that made that happen deserve special attention. AJ Thibodeaux and Guy LeBlanc on Ascent; Curtis Schoesaw on Throwline, Nevic Donnelly on Aerial Rescue, Chris Brewer on Belayed Speed

not happen.

The championship started early Friday morning, with preliminary events finishing up late in the afternoon and a slate of competitors set to run the Masters Challenge on Saturday morning including perennial favorites Jimmy Pritchard and Miguel Pastenes along with two exciting climbers that we have been seeing more and more of on Saturdays in May—Keith Cooper and Andrew Machuca. On the women's side, Star Quintero and Cindy Abbot were poised to fight it out for the title in a monster live oak.

As Friday drew to a close and we looked at the forecast for Saturday morning, things looked grim. Heavy rain and thunderstorms were predicted for the area from the early morning throughout the day. We made the call to push forward

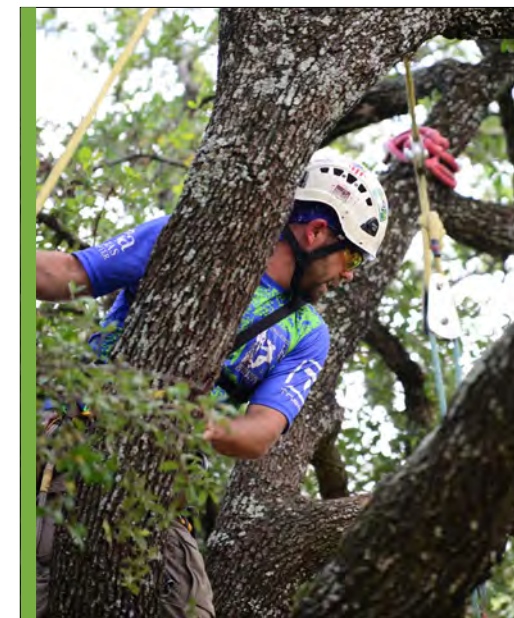
with the event and make the best out of it. To that end, a core group of volunteers were there early Saturday morning to prepare the Masters tree. Among them were our head technician, Jackson MacIntosh, Jesse Johnson and Jessie Taylor, who did the climbing this year and set up a course to challenge the competitors. Light rain greeted us at 6:30, but we moved ahead, getting the course set up and starting the event on time at 10am. This one had it all—photo finishes, athleticism, skill, and a vibrant crowd to cheer the competitors on. In the end, it was Miguel Pastenes who walked away with the men's title and newcomer Cindy Abbot who captured the women's title.

We followed the event with the awards ceremony for the prelims and the masters as well as my favorite awards, Volunteer of the Year and the Spirit of the Competition Award. This year's volunteer award went to Mariah Menzie who traveled from Norman, Oklahoma and whose enthusiasm and willingness to do what needed to get done kept us moving and buoyed our spirits throughout the day. The Spirit of the Competition award was given to Dustin Goodman whose energy and passion were contagious. Dustin's encouragements could be heard across the event, and maybe across the city, and were an awesome addition and left no doubt who embodied the spirit of the competition.

And almost as it was preordained, the wind kicked up, the lightning and thunder started, and the skies opened up just as the final bits of equipment were stowed and the competitors, volunteers and spectators wrapped up another Texas Tree Climbing Championship.

***Congratulations to them and to all of the competitors who fought it out in the Masters and in the Prelims.***

More scenes from the TTCC on page 15.



Photos by Blake Hampton

# Basic First Aid and Aerial Rescue for Tree Workers

Mariah Menzie, Certified Arborist  
Norman, Oklahoma

The “Advance Trauma Response: Beyond Basic First Aid and Aerial Rescue for Tree Workers” workshop was offered at the 2019 Texas Tree Climbing Championship, held this year in Georgetown, Texas. The class had about 35 participants.

The aerial rescue portion was taught by the always enthusiastic North American Training Solutions instructors, John and Tyler. Their professionalism and friendliness made absorbing information easy. Filling out the Job Site Assessment (JSA) seemed to take an exorbitant amount of time to the arborists excited to climb and practice techniques. Despite this, the instructors still managed to instill the importance of having a JSA. The JSA is essentially a form you fill out when you arrive at the job, together with your crew. They emphasized using your JSA to clarify who is responsible for calling 911, who would be their backup, who will run to meet EMT (and their backup), knowing the nearest hospital, the address of your worksite, knowing if you will have trouble getting a cell phone signal at the site should you need to call 911, and much more.

The reason this is critical for safe work practices was made evident by the many stories told around the group-by participants and the instructors - where co-workers were unable to respond to an emergency.

Tyler gave an interesting explanation of how we “lose our marbles” throughout the day. Starting with exactly four, we lose one whenever something knocks us off our game. Someone cuts you off when you are driving the chipper truck and you are forced to slam on the brakes - that’s one marble gone. You are distracted by an argument with a co-worker, that’s two. Trying to finish the job in a hurry because it was under bid? You now have only one marble left, which makes it less likely you will respond well to an emergency and more likely you will create one. He then explained the importance of taking a couple minutes to be aware of your mental state, as well as that of your co-workers. This habit, apparently, can actually restore marbles.

The climbing portion of aerial rescue was tragically short, but realistically you can only hope to cover a fraction of needed information in such little time. He did have time to demonstrate an interesting way to ascend on the victim’s SRS line. While not allowed in competitions, this technique definitely caught my attention and I was able to make note of the weight considerations on different pieces of equipment in that situation. The definitive takeaway was that aerial rescue is something that should be practiced with stoic regularity and a dash of creativity. We will never be able to imagine every possible emergency situation. The best we hope for is to have habits instilled through practice which will allow us to take



proper action even when we have lost all our marbles earlier that day.

In Beyond First Aid instructor Jeff led us through the dark and gruesome realities of injuries in tree work. He points out that regular first aid classes fall drastically short of preparing us for field injuries in this profession. In fact, most first aid is based on the premise of stabilizing the person until first responders get there. In our profession, however, the risk of life-threatening wounds is higher and needs to be addressed and trained in greater detail. Jeff pointed out that as arborists with a vested interest in our own safety, we may need to be the ones who advocate for ourselves for more comprehensive first aid training that pertains to wounds and trauma we are likely to see. In some first aid classes I have attended, for example, the use of tourniquets is discouraged due to the likelihood of improper application. Yet having a functional knowledge of tourniquets is critical for a tree worker, and Jeff was enthusiastic in explaining and letting us try out several different types, sizes, and brands, detailing the pros and cons of each.

The folks I talked to about the class had generally very positive responses. Most appreciated the idea that tree workers need major trauma training more often and more in-depth. Some thought Jeff rambled a bit too much, or there wasn’t enough climb time in aerial rescue, but I did not hear anyone say they learned nothing. Some noted that they appreciated the step-by-step breakdown of what to do in an emergency with both the job site assessment and Jeff’s example of doing a head to toe body assessment of a wounded person.

Overall, I learned much and hope to continue training at the highest level of which I am capable. I am also very grateful that ISA Texas takes the initiative to offer classes dealing with such critical and challenging subject matter. I will make a confession now - I live in Oklahoma and regularly visit Texas for training just like this; so I sincerely hope ISA Texas will continue enticing me to cross the Red River for such delightful and informative events!

## Upcoming Exams:

**Certified Tree Worker Climber Specialist written & skills exam**

Thursday 9/5, Dallas, check in time 8:00 am

**Certified Arborist, Municipal, Utility exam**

Friday 9/6, Dallas, check in time 8:00 am

**Certified Arborist, Municipal, Utility exam**

Friday 9/27, Waco, check in 12:00 noon

**Certified Arborist, Municipal, Utility exam**

Friday 11/15, Fort Worth, check in 10:00 am

## Upcoming Events:

**Naturally in Nature-Forest Therapy Summer Sessions at W. Goodrich Jones State Forest**

8/3 8:00-12:00

Shinrin-Yoko-Forest Bathing-Forest Therapy-Nature Therapy. Whatever the name may be, the goal is to increase physiological relaxation. <http://bit.ly/2YzcZvu>

**[2019 ISA Annual International Conference and Trade Show](#)**

August 11-August 14, 2019 8:00 am to 5:00 pm

Knoxville, TN - The ISA Annual International Conference and Trade Show provides a forum for the exchange of information and opportunities to network with others in the arboricultural profession. The event provides a lineup of educational sessions led by industry leaders from around the globe, sharing their thoughts and views about the newest trends in equipment, practice, technology and research in arboriculture and urban forestry. It is the world’s premier gathering of arboricultural professionals, where practicing arborists and urban foresters come together with top researchers and educators.

**[Can We Vaccinate Trees to Protect Against Diseases?](#)**

8/29, 2019, 12:00-1:00

Join Dr. Glynn Percival, Bartlett Tree Experts Research Laboratory, UK, for a discussion about protecting trees

**[Tree Growth & Development in a Changing Climate](#)**

9/12 11:00 am to 12:00

How are researchers employing high and low-tech means to better understand factors like tree growth, root development and sap flow? Join Director Chuck Cannon, PhD, for an update from the Center for Tree Science at The Morton Arboretum.

**[2019 Texas Tree Conference](#)**

September 25-27, 2019

Don’t miss this opportunity to learn and network with other Texas arborists.

**ISA Certified Tree Worker Climber Specialist Exam and Skills Check**

June 27, 2019 Dallas, TX



Thanks to the hard work of several volunteers, ISA Texas was able to hold a Certified Tree Worker Climber Specialist Exam in the Dallas area on June 27, 2019. This was the very first time this Exam was offered in Dallas, TX. As a matter of fact, this was the first time ISA Texas has offered this Exam anywhere outside of Austin.

Earlier this year the ISA Texas Certification Liaison and Education Committee worked with volunteers to secure two new Certification Proctors and four new Tree Worker Climber Specialist Evaluators in the Dallas/Fort Worth Metroplex. Volunteers are the life blood of our great organization and their effort are the only reason why we can continue to grow and expand our reach to members across the state. Look forward to more opportunities in the Dallas/Fort Worth area in the near future.

**Oak Wilt Qualification Course and Assessment**

June 20-21, 2019  
Fredericksburg, TX



Most of you should be aware by now that ISA Texas discontinued recognizing the Texas Oak Wilt Certification program as of June 30, 2019. The program has been replaced with the new Texas Oak Wilt Qualification. On June 20-21, 2019 ISA Texas and the Texas

A&M Forest Service hosted the second Oak Wilt Qualification Course and Assessment class this year. The indoor instruction took place at the Hill Country University Center and the outdoor instruction were conducted on one of the many beautiful Vineyards in Fredericksburg Texas. Dr. David Appel, Texas A&M University, Mr. Robert Edmonson, Texas A&M Forest Service and our very own Mr. Gene Gehring, ISA Texas Education Program Manager did a fantastic job with the training and accommodations. For those of us that spend all our time caring for trees in urban environments, you truly cannot understand the devastating nature of Oak Wilt until you have had the opportunity to visit the Texas Hill Country, for an arborist, it is painful to see.



## Friday Fenomenal Connects Children with Urban Trees

Armando Cortez,  
Plans Examiner II,  
City of San Antonio

It is over-testing with high-stakes results that stress our children in education where the creative learning edge is lost, and connecting back to the outside environment becomes that much more important. Friday Fenomenal, introduced by Principal David Nungaray, and created by the teachers at Bonham Academy, a dual language school at S.A.I.S.D. in San Antonio, offered a successful Urban Tree Walk led by me, Armando Cortez - an ISA Certified Arborist and dad of a 4th grader. The Friday Fenomenal concept helps explore the outside world by showing how parents connect with other people to make it work, and how the children are part of that world. An urban tree walk made important connections between the function of an urban tree environment and parents whose friends and professional colleagues work together to maintain the health of trees and associated ecology, including avoiding conflict to minimize risk to the urban environment we live in.

The children were handed an oversized paper and a cool pencil they kept after their urban tree walk. At the end of the two hour walk they were to draw what they had experienced. The urban tree walk took them from their school through the King William Historic District and then down to the San Antonio River Walk. Almost every block was lined with mature and newly planted trees. We walked to the San Antonio River Authority Office and then back to Bonham Academy. The children walked on sidewalks looking up at trees in the neighborhoods and noticed the exposed roots along the San Antonio River and learned how trees help each other communicate and store energy. Trees

discovered included live oak, bur oak, red oak, chinquapin oak, Monterey oak, anacua, retama, olive, Mexican plum, Mexican buckeye, crapemyrtle, fig, Chinese plum, elm, Texas persimmon, box elder, pecan, sugarberry, and other tree species—even a bigtooth maple. The children were astonished to learn how and where trees grew. The children laughed when they learned how birds delivered our fence-line trees, as they began to note property lines and all the anacua trees imbedded in fences. Residents doing their yard work were so happy to see the children and shared their own perspective and love for their community trees as students listened to every word. It reminded me how it takes a community to raise a child, especially if we want them to grow up with trees.

While walking through the historic neighborhood, children stood next to mature pecan trees and expressed amazement as they now realized these giants had been living next to them. They touched leaves that had once used the anacua leaves as sandpaper, and a magnolia with beautiful white flowers like the small bouquet a little girl created as she plucked them along the walk, and proudly displayed up in the air next to the tree. A tree with its own bouquet now to be noticed and inspire each child as they go to school. This is all the interconnected ecology of an urban tree environment. The children had strong emotional feelings in a broader web of life, as squirrels, butterflies, and birds zoomed around them. They saw how shelter exists under the dead palm fronds and they began to guess who had planted a 7-inch

retama at a street corner with only one square foot surface soil volume between a telephone pole, cable utility box, sidewalk, and street curve. A thought that happens when they began to connect themselves with the outside world and realized how they are also part of it.

“It reminded me how it takes a community to raise a child, especially if we want them to grow up with trees.”

To have urban trees is to be purposeful in creating and maintaining them for proper health. Juan Guerra, Senior Horticulturist, works with just that purpose as a City Downtown Operations Supervisor, and explained that part of maintaining healthy trees is a healthy understory of plants and soils. A monarch waystation like the one at Bonham Academy also exists along the San Antonio River, and was one of the stopping points of the walk. Guerra reminded them that the monarch waystation plays an important role in the web of life, especially for the monarch itself, and trees co-exist with all life around them, as they interact and connect with trees. He concluded by reminding them to study science, and its importance as a career as the next generation of our environmental stewards to promote, and protect our living environment, especially our wildlands, including all our urban trees.

How urban trees are maintained to be healthy was on the last stage of our walk. As I finished explaining the conflict between overhead energy (OHE) lines and trees, and how bucket trucks are used for that purpose, a parent shouted out “Look there is one (bucket truck) coming down the street right now!” The chaperones didn’t know we’d planned it this way. The kids started to scream with excitement as the bucket truck slowly drove by. It was Mr. Robledo who waved back at them and slowly pulled up next to them as the students stood, astonished, not to mention the parents and teacher. How was this possible?!

With the kids screaming with excitement, Juan Robledo, Supervisor with McCoy’s Tree Service was a Rock Star. As such, he did not miss a beat with his performance to help educate us on the importance of keeping trees clear of high voltage lines. Realizing the children spoke both in Spanish and English he switched terms in a coded cultural way to help them understand the importance of working in a safe standard approach to maintain healthy trees. The aerial lift was the big show and many descriptive examples were given on how to maneuver a bucket carefully in and around a tree canopy. He also demonstrated his use of Personal Protective Equipment and procedures while working. Students were captivated by all the equipment needed to work safely, including all the specialized equipment as they asked him to open all his equipment boxes. Someone asked, “Who decides where and what type of tree(s) should we plant to avoid conflict with OHE?” He pointed at me, and said “Mr. Cortez is the one that tells us the rules, and we have to follow them, and he helps us all the time when we have questions about trees.” This was exactly one more example of a tree urban continuum of connections we wanted the kids to have. At the end of his talk, Mr. Robledo explained to the kids that his last name in English means oak tree. That really connected it all together for the kids. What a Friday Fenomenal!



Editor’s note - the use of the Spanish spelling of “phenomenal” is because Bonham is a dual language school, and was the first of its kind, and was so successful that it is now being replicated throughout San Antonio, and other places in the state.



Love Trees?  
Tell the world  
and support urban  
forestry across Texas

Revenue from the Texas Urban Forestry Council license plate helps fund the TUFC Micro-grant Program

[www.texasurbantrees.org](http://www.texasurbantrees.org)



• Helpful Industry Knowledge  
• Responsive Service  
• High Quality Gear  
SINCE 1950

Your Home For All Things Arborist



- Climbing Gear
- Rigging Gear
- Arborist Tools
- Chain Saws & Supplies
- Cabling & Bracing
- Lightning Protection
- Plant Health Supplies
- PPE
- Hand Saws
- Knowledge & Advice

(800) 441-8381  
[arborist.com](http://arborist.com)

FOLLOW US ON FACEBOOK OR VISIT OUR WEBSITE TO RECEIVE WEEKLY SPECIALS





# Long-Term Impact of Container Size on Tree Establishment

by Michael Arnold, Ph.D.



Some of the most intriguing and useful research projects originate from questions or observations provided by students and industry colleagues, and this project had such an origin. Among the Green Industry and academia, the conventional wisdom was that smaller stock would establish more rapidly than larger trees, but larger trees offered more immediate impact. Our students asked the next obvious question; do the smaller trees ever catch up and if so, how long does it take?

We tackled the challenge with a grant from TREE Fund and a student worker (now Dr. Lauren Garcia Chance). To eliminate as many production condition differences as possible, all trees were grown by us in a single nursery. Clonal materials were used for each of the three species to eliminate genetic variation among seedlings: *Acer rubrum* var. *drummondii* 'Maroon', *Taxodium distichum* 'TX8DD38', and *Vitex agnus-castus* (test clone). Five container sizes for each species were produced by rooting cuttings in common flats, then sequentially up-canning to produce marketable size trees in #1, 3, 7, 25, and 45 containers.

Once the finished stock of each species in the five sizes were available, we transplanted them to the field. To avoid systematically over or under-watering trees of different sizes, fifteen separate micro-sprinkler irrigation systems were constructed (one for each species/container size combination). Lauren

monitored photosynthetic gas exchange, transpiration, mid-day water stress and pre-dawn recovery for two seasons after transplant and we carried out longer term growth measures for five years post-transplant. Dr. Charlie Hall, Dr. Todd Watson, Dr. Andrew King, Dr. Leo Lombardini and Dr. Sean Carver all contributed to this research project, and certified arborist Mr. Jeff Lehde helped instruct us in safe air spade use.

“The kids may not want to wait five years to climb the tree or the clientele may wish to have the aesthetic benefits of a larger tree immediately.”

Thanks to Lauren and her dedicated team we were able to learn not only that smaller size stock did truly establish faster across all three species, but that for *Vitex* by the end of the third growing season there were no statistical differences between all five stock sizes. Even though the physiological measures indicated that all species and sizes were largely established in the landscape after the second growing season, there was little growth on the larger #25 and #45 stock until the third growing season after transplant; while smaller stock began growing during the season of transplant. For *Acer* and *Taxodium*, no difference in tree size among the trees from the four largest container sizes was present after four and five years, respectively. There

is a lesson, however, about the potential limitations of smaller size stock: the #1 *Acer* were eliminated from the study due to damage from deer predation, which was not apparent on any of the larger stock. Based on replacement costs for the size trees had obtained in the field by the end of the second growing season for all three species, smaller trees from #3 and #7 containers yielded greater economic values during the first two years in the landscape than did the #25 or #45 trees.

So, if we get a greater return on investment on smaller trees, why would we plant larger size stock? Does that mean it is unwise to plant larger stock? Of course not! For one thing, some of us would like to be able to sit in the shade now as we may not be around long enough for the smaller stock to catch up! The kids may not want to wait five years to climb the tree or the clientele may wish to have the aesthetic benefits of a larger tree immediately. The greater biomass of the larger stock may help it to survive anomalies in the climatic conditions such as unusually cold winters or exposure to mechanical injury or predation.

While in some locations on campus, our grounds folks are taking advantage of the opportunity to plant larger numbers of smaller trees for the cost of fewer larger stock, they still plant larger trees in some locations for aesthetic purposes as well as the challenges that an urbanized campus can place on young trees. Larger stock may help with urban heat island issues more rapidly through greater transpiration of the canopy and greater surface area shaded. Rowdy students, vehicles, and maintenance equipment are less likely to seriously injure

larger trees. As always, the decision of the size of plant materials to specify in our built environment is a function of aesthetics, relative advantages of the different size materials for a given site and use, growth rates of the genotypes involved, the economic costs and benefits associated with each size and genotype, and not least the clients' needs and wishes. Thanks to support from TREE Fund we now have additional information to support decisions among these trade-offs with container-grown trees! We gratefully acknowledge their support and yours through your contributions to industry-oriented research and educational organizations such as TREE Fund!

Dr. Michael A. Arnold is a Professor of Landscape Horticulture and Associate Head for Undergraduate Programs in the Texas A&M University Department of Horticultural Sciences where he has been engaged in research, teaching, service and administration for over 25 years.

Dr. Arnold's research has focused on container nursery production, landscape and tree establishment, and the development of new plants for the Green Industry. He is a Fellow of the American Society for Horticultural Science where he has served as their President and Chairman of the Board of Directors. Dr. Arnold has published three textbooks, over 90 referred scientific manuscripts, in excess of a 100 popular press or industry-oriented publications, raised over a million dollars in research and teaching support, and provided more than 250 talks or presentations at scientific or industry venues.



Read more about Dr. Arnold's TREE Fund supported research and watch his webinar at [www.treefund.org](http://www.treefund.org).

“Thanks to support from TREE Fund we now have additional information to support decisions among these trade-offs with container-grown trees!”

## You've Got a Friend in TREE Fund!

by Michael Arnold, Ph.D.

It has been my good fortune to have a long-term professional partner in the Tree Research and Education Endowment Fund. For the past 17 years this non-profit organization has been working tirelessly to support the efforts of scientists and educators engaged in researching issues impacting trees and providing educational opportunities to students and the general public in tree care and selection. Tree research is not like working with most other plants where results can be obtained in a few months or couple of years. Trees take time to grow and respond, particularly where long-term impacts are concerned. TREE Fund recognizes and response to this need for longer commitments to research projects. Additionally, in a research environment where basic molecular science rules many public granting efforts, organizations like TREE Fund are necessary to ensure that industry relevant applied research efforts continue to exist.

One of the best aspects of applying to TREE Fund for assistance is that they recognize that if researchers are spending

extraordinary amounts of time on paper work to obtain grant funds, this takes time directly away from accomplishing the research and spreading the word of its results. TREE Fund is an excellent example of reasonable requirements for detailing what is proposed and holding funded entities accountable for their efforts, without stifling the process with unnecessary paper-work. In short they are dedicated to supporting the efforts of scientists and educators working with urban trees and doing so with as few of impediments as possible. I stanchly appreciated their efforts on our behalf and urge other researchers and educators to get to know and experience the TREE Fund staff and supporters. My thanks to all who support this great organization. We all truly have a friend in TREE Fund!

Michael A. Arnold, Texas A&M University, Department of Horticultural Sciences, TAMU 2133, College Station, TX 77843-2133, [ma-arnold@tamu.edu](mailto:ma-arnold@tamu.edu)



## Texas Tree Conference

We have a great line up this year with a little bit of something for everyone!

This year we are including a third tree academy; an ISA Utility Specialist Certification Study Session, which will provide an overview of Utility Arboriculture and the Utility Specialist Certification Study Guide. As our membership continues to expand

we've had requests to include presentations geared towards non-profits and we've incorporated a few into this year's conference. We are also working to revive the former poker room and are continuing to work on logistics and gather some great prizes for you. Of course, we can't let you know all the details but feel confident in knowing there's a great conference ready for you in September.

As with each yearly conference, the committee has been working hard to bring you a top-notch lineup. We have some great speakers from across the country (and some outside the country) that include Dr. Ed Gilman, Dr. Jason Gordon, Skip Kincaid, Geoffrey Kempter, Carlos Llanos and many more! We

also have some great topics that range from EAB and assessing/mitigating soils, to making partnerships worth your while and lessons/experiences of thirty years of arboriculture in Colombia.

With only a few months until the Texas Tree Conference is in full swing, there is no better time to register and get your overnight accommodations secured. Your ISA Texas board looks forward to seeing you at the conference!

Work for a municipality or a treebased non-profit and want to attend our Texas Tree Conference in September? Texas A&M Forest Service has a scholarship that may help. We have scholarships to the Tree Academy, Conference, and Tree School. Don't delay the deadline for application is August 12th, 2019. Visit <http://bit.ly/TTCscholarship> to fill out the new online form. No more wrestling with a pdf and having to email it.



### FINANCING FOR ALL YOUR ARBOR MACHINES & MUCH MORE!

**\$200,000 SAME DAY FINANCING AVAILABLE!**

STUMP GRINDERS



CHIPPERS



AERIAL TRACKED LIFTS



ARBOR TRUCKS



### THE BENEFITS OF FINANCING WITH AP

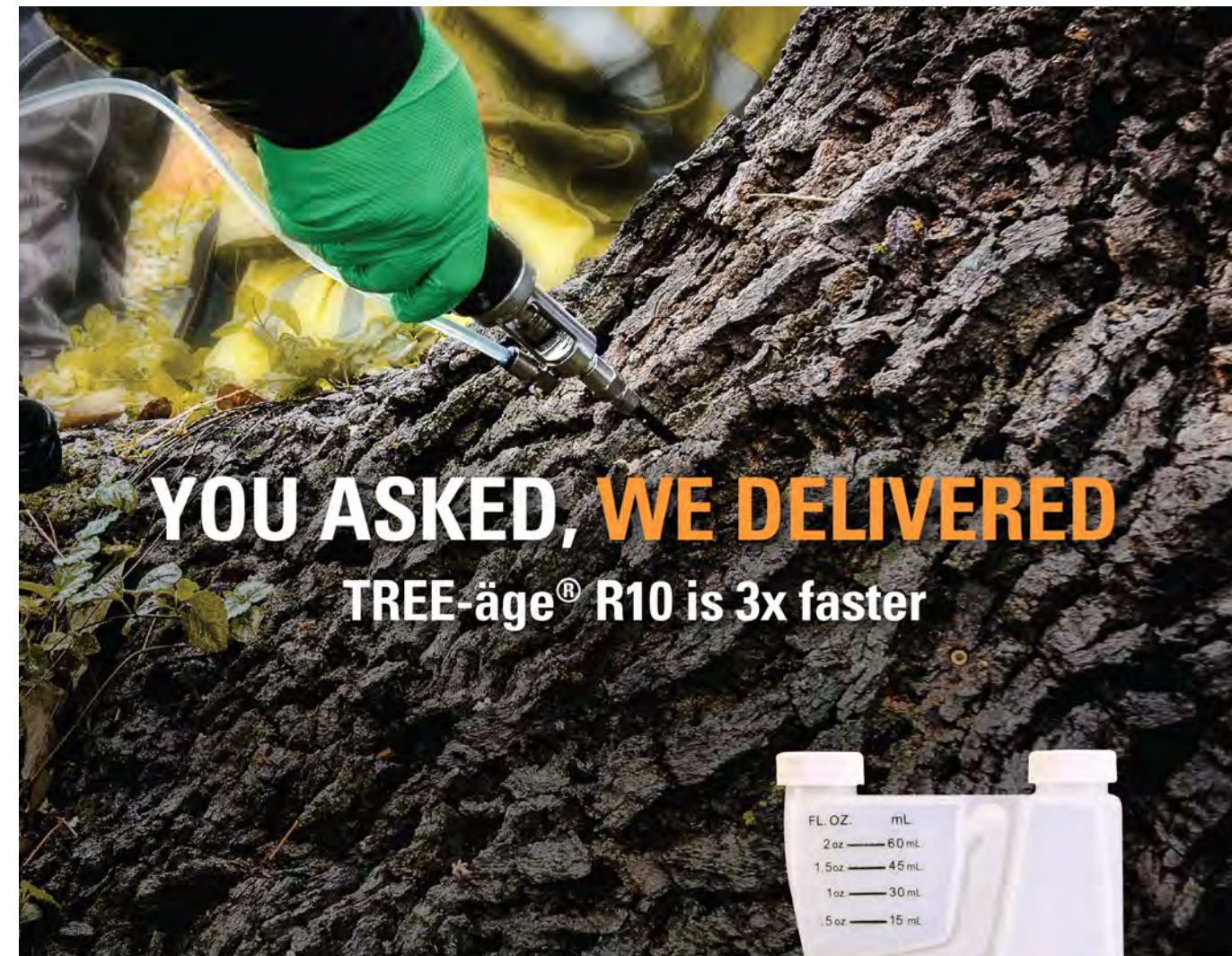
- New, Used, or Private Party - we can finance it!
- Same Day Approvals Available
- \$200,000 Application-Only Programs
- Seasonal Programs Available



AP Equipment Financing is proud to be a strategic partner with the TCIA through their PACT program. PACT supports many of TCIA's education efforts and programs furthering their mission to advance the tree care industry.

[WWW.APFINANCING.COM](http://WWW.APFINANCING.COM)

CONTACT US AT 888-257-1727 OR [TREECARE@APFINANCING.COM](mailto:TREECARE@APFINANCING.COM)



**YOU ASKED, WE DELIVERED**  
**TREE-äge® R10 is 3x faster**



## TREE-äge® R10

Continuing the TREE-äge® Legacy

- Treat up to 3x faster
- Less than half the dose needed
- Most productive formulation
- Scientifically verified results

To learn more visit [arborjet.com/r10](http://arborjet.com/r10)



©2019 Arborjet, Inc. Important: Always read and follow label instructions. Some crop protection products may not be registered for sale or use in all states or counties. Please check with your state or local extension service to ensure registration status. TREE-äge® Insecticide is a Restricted Use Pesticide and must only be sold to and used by a state certified applicator or by persons under their direct supervision. TREE-äge® is a registered trademark of Arborjet, Inc.

THE NEWSLETTER OF  
THE ISA TEXAS CHAPTER  
2013 Oakwood Trail  
College Station, TX 77845  
[www.isatexas.com](http://www.isatexas.com)

PRSRT STD  
U.S. Postage  
PAID  
AUSTIN, TX  
Permit No. 1560



## WHAT'S THE BIG IDEA?



### CAN YOU IDENTIFY THIS 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, using the full scientific name and one or more common names. If you don't know it, check the page for an answer in a few days. The winner gets bragging rights and the chance to submit a tree to stump fellow arborists in the next issue.

Hint: Don't let this shrub get you twisted, it can keep you upright.

### LAST ISSUE'S TREE ID



Last issue's winner was Brad Hamel, Regional Urban Forester, Texas A&M Forest Service. He correctly identified Chihuahua spruce, *Picea chihuahuana*. He also provided this issue's challenge.