

Mike, thanks for everything!



MIKE WALTERSCHEIDT has been a member of ISA-Texas since the chapter was founded in 1978. That's 34 years of chairing committees, managing projects, holding important offices at both the chapter and international level, and most recently (1997 to the present) serving as Executive Director.

Mike is retiring as Executive Director at the end of the year. This time, when they say it's the end of an era, they really mean it. Mike was there for ISAT's first conference, first

MICHAEL J. WALTERS

newsletter, first tree climbing event, first educational workshops, and first certification exam. He played a leadership role in all the important milestones of the chapter and has seen the chapter grow from 114 (in December, 1978) to about 700 members today.

Soon after the chapter was launched, Mike agreed to serve as editor, a position he held until 1986. He was also elected to co-chair the program committee for the first conference. The year 1979 marked the first newsletter and the first conference.

In 1980 ISAT formed a workshop committee, with Mike as chair. The earliest goal was to hold at least one workshop a year. That goal was soon met and exceeded. Over the years Mike was a frequent moderator and speaker at workshops and conferences, and a consistent booster of the chapter's educational and outreach activities. If you look at the chapter's history, many years you'll find Mike's name on at least one committee, and often two or more. He even did a repeat stint as editor in the early 90s.

Certification was a controversial issue during the 80s and early 90s. Eventually the chapter decided to participate in the national program developed and administered by ISA. Mike was a member of ISA's international certification board, and was the test magistrate at Texas' first certification exam June 22, 1992, when 17 people became certified arborists. Continued on page 9



Since 1983 **TREE CLINIC PHARMACY**, a Mauget Products Distributor for South Texas has offered expert diagnostic advice, PHC therapies and applicator training in the use of tree injection technologies.

We are proud to announce that we now serve all of Texas and offer overnight shipping to the major metropolitan areas.

Call us. Speak with our entomologist or consulting & diagnostic arborist today. (512) 385 - 6604



Proven chemistry for ALL injection systems

And We're Not Just Capsules Anymore

Whichever method you prefer, inject the best. Mycoject Ultra Hp, Imicide Hp, Abacide 2 Hp, Inject-a-Min Manganese, Inject-a-Min Iron and Zinc, Stemix Plus, and Arborfos Hp. Ready-touse and concentrated for lower-pressure injection in 1 L bottles. Round-bottom bottles are available upon request.

PRESIDENT'S LETTER by Keith Brown



This will be the last President's Letter you read from me.

Changing of the guards will take place at the conference, and Susan Henson will be your new fearless leader. Congratulations, Susan! My tenure with ISAT has been very rewarding; I refer to my efforts as a labour of love. The experience has afforded me some new professional colleagues and many new friends. Technically, I still have one more year to serve the board as past president. After seven years of dedication to ISAT, it will be time to make room for new, fresh blood.

Over these past years, I've seen the organization grow profoundly in members, number of certified credential holders and conference attendance. The ISAT scope of services has progressed to include an upgraded website, improved newsletter, peer reviewed technical articles, research sponsorship, annual master series workshops, a certified tree worker program and more. There is a growing need for arboriculture education in Texas, and ISAT is the best platform for meeting those needs. There will be a couple of announcements at the conference of more new things coming down the pipe you won't want to miss.

I highly recommend to anyone to get involved with ISAT. You will receive great personal and professional fulfillment. You can start by volunteering for an existing committee; check out the list of standing committees at **isatexas.com**. As always, if you have any complaints or suggestions, please let me know. All my contact info is on the website.

Sincerely, Keith Brown

Reminder: Texas Tree Conference Sept. 26–28

Don't forget TTC! We anticipate over 500 attendees at the Texas Tree Conference in Waco September 26–28. Outstanding programs will feature nationally and internationally known speakers, the latest in tree research and arboriculture, an awards luncheon, a reception with exhibitors and many networking opportunities.

Keynote Speakers: Dr. Ed Gilman, professor, Environmental Horticulture Department, University of Florida; Bryant Scharenbroch, soil scientist, The Morton Arboretum; Anne Beard, manager, system forester, PNM/TNMP.

Tree Academy: Combined municipal & commercial academy. Session I – Managing Urban Soils; Session II – How to Talk Trees. Requires a separate registration from the conference. Includes lunch.

Texas Tree Schools: Track 1 – An Introduction to Arboriculture; Pista 2– Jornadas para Trabajadores de Arboles, Spanish language workshop. Workshops not part of the main conference; require separate registration. Lunch included.

More information at isatexas.com .

Dallas Introduces Reforestation Program

The City of Dallas is encouraging the growth of the urban forest by supplying trees and guidance to the citizens of Dallas. Created by ordinance for the mitigation of trees removed for city growth, the Dallas Urban Reforestation Fund provides a resource to purchase new trees that can be planted on public property, from parkways to parks.

In order for projects to qualify for assistance by this program, the project must be sponsored wholly or in part by a planting group such as community groups or city departments. All trees requested through this program must be planted on public property which includes City of Dallas parks, recreation centers, and approved medians and parkways.

Requests for plantings are due by October 1 prior to the fall-winter planting season (Nov 1–March 31).

For more information and to download a brochure, go to dallascityhall.com/arborist/Fund.html

SMA Conference & Trade Show Nov. 12-13 in Sacramento, CA

Join us in Sacramento, CA on Monday afternoon for workshops, followed by the conference on Tuesday. Special registration rates will be available to encourage you to stay for the Partners in Community Forestry Conference on Wednesday and Thursday.

More details coming soon at **www.urban-forestry.com**/



TreeKeepers Give Custom Workshop for City Workers

by Jeff Floyd, County Extension Agent-Horticulture, Ector and Midland counties

City parks employees of Midland and Big Spring received a special training workshop August 10, custom designed and presented by Midland TreeKeepers.

With the protracted drought, West Texas residents have demonstrated a renewed interest in finding ways of saving drought-stricken landscape trees. No more common question reaches the ears of arborists in Midland than "What can I do to save my trees?" TreeKeepers, a committee of Keep Midland Beautiful, has been providing community education to residents on issues such as proper tree selection, planting methods and maintenance practices appropriate for the arid climate.

The City of Midland Parks Department, in a move that shows solidarity with residents, has rolled back their irrigation clocks to water common areas less frequently than the current restrictions homeowners are asked to obey. The reduced irrigation time results in substantial water conservation but comes with the unintentional consequence of increased drought pressure on park trees. Parks and Recreation manager Michele James recognized the need to mitigate the potentially devastating loss of high value trees, and in a conference with TreeKeepers, requested the special training session.

The three and one-half hour workshop consisted of a classroom presentation followed by a hands-on demonstration in a city park. The sit-down component of the workshop focused on describing the form and function of the root system and how to moderate water loss from the soil. Once the class moved outside, parks employees were shown how to identify trees with the potential for long term value. The crew learned how to calculate minimal watering requirements, apply organic mulch and recognize water stress. The group discussed some innovative watering solutions that would not impose hardships on the city's current irrigation resources.



TreeKeeper volunteer Mark Walter demonstrates how to apply mulch.

The material taught in the class employed a recent street tree inventory report performed by the Texas Forest Service for the City of Midland. The report estimates that Midland is responsible for maintaining trees valued at more than 32 million dollars at 20 percent stocking with more than 65,000 planting opportunities identified.

The trainees in attendance were key players in their respective departments and they'll take the information back to their crews. At the session were two Midland Parks



Executive Director of Keep Midland Beautiful, Doreen Womack discusses Midland's current water situation.

and Recreation administrators, five crew leaders and one athletic complex crew member. Also at the session were the parks superintendent and one crew member from Big Spring. The training was provided by the executive director and one staff from Keep Midland Beautiful with six volunteers from TreeKeepers.





The Founders' Oak in Landa Park, New Braunfels, was designated as a Famous Tree of Texas August 4 by the Texas Forest Service. The tree is one of Landa Park's oldest, dating from around the 1700s. About 200 people turned out for the celebration event.

Founders' Oak is a community icon for the City of New Braunfels. This majestic tree transcends Native American, Spanish and German heritages.

The purpose of the award is to memorialize trees which have been witness to exciting periods and events in Texas' frontier history. Founders' Oak is one of only four trees that have been added to the registry in the last forty years.

"The people of New Braunfels have long recognized Founders' Oak as a legendary tree within the community. It is now going to be famous throughout Texas," said Kelly Eby, City of New Braunfels Urban Forester.

The award showcases hard work by citizens, garden clubs and Parks and Recreation Department staff. For additional information see http://famoustreesoftexas.tamu.edu . A variety of entertainment was featured at the Founders' Oak celebration.

Welcome, New Texas ISA Members

From the August issue, Arborist News

Anthony Wade Casey, Lewisville Duane Alden Walsh, Leander Jamie L. Hendrixson, Houston Joe S. Nye, Corpus Christi John M. Wier, Abilene Luis Galvan, Odessa Maria C. Gonzalez, Johnson City Mark E. Tietz, Flint Mike A. Ayala, Johnson City Nicholas G. Muir, Lufkin Nina K. Walther , Johnson City Russel E. McMillan, Livingston

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

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

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

Advertising Representative: Brian Pancoast brian@thepancoastconcern.com 585-924-4570

Memorial to Bonnie Appleton

Dr. Bonnie Appleton, professor emerita of horticulture in the College of Agriculture and Life Sciences at Virginia Tech, died suddenly on Saturday, July 21. The following notice was sent out announcing her untimely death:

She was an amazing woman; friend, mentor, colleague, author and teacher. She had a passion for horticulture, especially trees, and an enthusiasm and determination for sharing that



passion and inspiring others. She touched our lives in many ways and will be deeply missed.

Bonnie's family is honoring her wishes. There will be no memorial service and her ashes will be scattered over the Chesapeake Bay. Her Virginia Tech Hampton Roads Agricultural Research and Extension Center family will plant a tree in her honor at the AREC this fall. Correspondence can be addressed to her parents, Fred and Bobbie Appleton, 100 O'Brien Ct., Suffolk, VA 23434. Donations in her memory can be made to the Master Gardener Coordinator Endowment (www.vmga.net/) or a charity of your choice.

Many of us remember her last visit to Texas when she gave a presentation at the 2009 Texas Tree Conference. Dr. Appleton, in her humorous way, shared her story of visiting Australia and planting bare root trees. She had T-shirts made up touting that bare root is better. Apparently the term bare root has a very different connotation down under. You know the story, right? It has to do with a method of birth control. . . . Down under, bare root means without protection! It was such a funny story, and so after that she always asked if there were any Aussies in the audience before she pulled the T-shirts out. Dr. Appleton was a great lady and researcher. She will be sorely missed.

- Oscar Mestas





EDITOR'S NOTE by Oscar Mestas

Wow! The Texas Tree Conference is just a few weeks away and fall is around the corner. Last year's drought has brought on new challenges for tree managers across the state. Pests and diseases are popping up and taking advantage of the stressed trees. Many West Texas towns are still in water conservation mode, limiting the amount and times residents are allowed to apply water to their landscape. One of the unfortunate results of all this is the millions of dead trees in our towns and cities. An unfortunate burden for the elderly and those on low incomes is when they realize they own that dead tree and it their responsibility for paying to have it removed. I'm getting calls and being asked if there are any cost-share programs or assistance for tree removal and I have to say sorry but as far as I know there are not any such programs.

What frightens me is this is the time when the door knockers and anyone with a truck and chainsaw suddenly find a new weekend opportunity to make a quick dollar. I was at an estate sale recently and overheard an older couple who were looking at a length of rope saying, "We should buy this for (name of a friend). He could use it since he started cutting down trees on weekends." The rope was nothing I recognized, no markings, no way to know the breaking strength, or the manufacturer. I spoke up and warned the couple that it could be dangerous for the person using that rope not knowing that information. This brings me back to the Texas Tree Conference and ISAT, ISA and you. We need to continue training and educating ourselves and fellow arborists and encouraging and promoting professionalism within our industry. Trees are a great asset to our communities, and professional and Certified Arborists are even a greater asset in helping keep our communities green and safe.



Texas Forest Service urban foresters and ISA certified arborists John Warner and Jared Goodman staffed the ISA Texas booth at the Texas Nursery and Landscape Association EXPO in Houston recently. Proper tree care and maintenance were at the forefront, with information and one-on-one discussion at the expo.

Special thanks to other Houston region arborists: Ed Dolphin, Margaret Hall Spencer, Mickey Merritt, Matt Weaver, John Ross, Jack Hill, Rustin Stephens, Joe Keefe, and David Hintz for helping staff the ISAT booth.

COOL TOOLS by Patrick Wentworth

o you drive a truck? Or pull a trailer? Of course you do. You're in the tree business. As such, you have locks to keep your tools and equipment safe. This used to require a variety of locks and an assortment of keys or combinations to keep it all secure. Not any more. Today, there is a company with a breakthrough in lock technology. Their locks actually "learn" your key. You simply insert your ignition key into the padlock, receiver lock, cable lock or even tool box or tailgate lock, turn it once, and the lock will remember your key.

One key then will unlock all of your toolboxes and equipment, minimizing the bundle of keys you carry around in your pocket everyday.

The company is called Bolt.



SUPERSONIC AIR KNIFE Air Knife with

Liquid Injection Capability Patent Pending





Using compressed air alone, the Supersonic Air Knife is able to pulverize soil for easy removal by hand or by using the Supersonic Air Vac. By introducing low-pressure liquid into the air stream, the liquid is carried along as a fine mist, penetrating with the air into the fractured soil. This allows for more even and efficient delivery of soluble materials and other applied liquids to a target area, more efficient digging in dry, hard soils, and excellent dust control. Turn off the liquid inlet to use like a standard air knife.

* Deep Hydration	* Fungicides
* Dust Control	* Pesticides
* Bare Root Transplanting	* Fertilizers

* Bare Root Transplanting



Supersonic Air Knife Supersonic Air Vac Supersonic Air Knife with Liquid Injection

For information of the Liquid Injection tools, or any of the other Supersonic Air Knife family of tools, contact us:

info@dlarborist.com 859-252-2529

They can provide locks that will match virtually any make of car or truck. Utility bed manufacturers can deliver your next utility bed or toolbox complete with Bolt locks or you can even replace the existing paddle locks on your toolboxes today.

The locks come with a lifetime warranty and claim to be virtually impossible to pick. To find out more, go to: http://www.boltlock.com/



Mike, thanks for everything!

Continued from page 1

Mike held all the leading offices in the Texas chapter, and at the international level he served as vice president and president. In 1982 he won the Award of Merit, the highest honor given by ISA.

Mike's activism at ISA and ISAT overlapped a distinguished career at Texas A&M. As professor of forestry from 1978 to 1994, Mike started A&M's urban forestry program and also served as forestry project coordinator for the Texas Agricultural Extension Service (now called AgriLife Extension). During his A&M years he also worked with the highly regarded environmental program Project Learning Tree, and became PLT's first state coordinator.

*** * ***

Mike was born in Hermann, Missouri in 1945. He received a B.S. in forestry and an M.S. in plant pathology from the University of Missouri. He served in the Air Force for four years, including a tour in Vietnam and Thailand. In 1975 he earned a Ph.D. in plant pathology from Texas A&M and began his teaching career at Michigan State University. He returned to Texas in 1978 to join the faculty at Texas A&M.

Together with his wife Beth, Mike launched a Christmas tree farm in Bryan and later opened one in Elgin. Evergreen Farms (http://www.evergreen-farms.com) is a popular place that hosts group tours and an annual Pumpkin Hunt.

The Walterscheidts relocated to Elgin in 2000 because they liked the area and the small town atmosphere that is welcoming to newcomers. Mike and Beth both worked on the successful campaign to bring an ACC campus to Elgin. Beth, a retired teacher, runs a summer reading program at the local library and Mike is president of the Parks Board. He also does consulting and is an expert witness in tree-related legal matters.

Mike may be retiring from ISAT, but he probably won't be sitting on the sidelines.

See the next two pages for thank-you notes and reminiscences from Mike's colleagues and former students.

Mike was editor

newsletter in 1979.

of the first ISAT



TEXAS CHAPTER



1979–1980 officers (I to r): Sandy Rose, Vice-President; Bob Dewers, President; Frank Cannon, President-Elect; Sam Colburn, Secretary-Treasurer; Mike Walterscheidt, Editor.



Mike, president-elect of ISA, addresses the 1989 ISAT conference.

Mike presents a cowboy hat to ISA president Claude Desjardins of Canada in 1989.





1994-95 Executive Committee. Mike is the tall one in the back.

Mike, thanks ...

Continued

I remember in 1992 when Mike handed over the task of being the ISAT newsletter editor and all I could think of was "Man, he's a big time college professor. How can I possibly follow him in doing this?"

Courtney Blevins Staff Forester Texas Forest Service

Mike is my hero. When I was ISAT President, Mike always sat next to me at the board meetings. So long as he was there, I never needed to keep track of the time. If things slowed down or the directors got too chatty, Mike would point to his watch and remind me to keep things moving. He knew that meetings are where you take minutes but waste hours. Thanks, Mike!

John Giedraitis Urban Forestry Coordinator Texas Forest Service

Mike was my advisor at A&M when I changed my major from business to forestry. He helped me navigate my way to a career I never expected but am delighted that I found. He taught my dendrology class and the special project urban forestry class where we completed a street tree inventory for Round Rock and made a presentation to the city council. I also sprayed Christmas trees at his farm one year - ate lunch in the barn with the goats running around.

Now here we are and I'm lucky enough to have a role on the ISAT board and to help continue building on what Mike was instrumental in creating and supporting for so long.

Michael Sultan Project Developer Davey Resource Group

Before I got to know him, I always thought of Dr. Walterscheidt as that gruff old

professor scrutinizing everything with red pen in hand. The best part of being ISAT president was getting to know Mike. I discovered then how hard he worked for the chapter and how supportive and friendly he was. My success as president was as important to him as it was to me, and he kept me from feeling overwhelmed. Thank you, Mike. I'll never forget it.

Melinda Adams City Forester City of Fort Worth Many people don't know that Mike spent several years in the armed service. He told me stories of jumping under his bunk at night to escape the bullets and bombs, and I never thought of Mike in this light. As he shared his stories it struck home that Mike has always worked to make things better-from his service to our nation to his service to ISAT. He has influenced and changed lives on an international levelsomething not many people can say!

One quote from Mike I heard repeated by our ISA president: "When you are president you can do it your way but, I am president now!" LOL Thanks, Mike, for changing so many lives and making mine better by helping in so many ways!

Susan Henson Parks and Recreation Grand Prairie

I don't remember when I first met Dr. Walterscheidt, I think it was the late 80s or early 90s, but I know it had to do with Project Learning Tree (PLT). Mike was heavily involved with PLT and was the state coordinator for many years. It was just one of the many hats that he wore. When beginning a PLT presentation, Mike used to say to the crowd (I'm paraphrasing), "If you came here thinking this was a church revival this is PLT not PTL, but you're welcome to stay and learn about trees and the environment."

Thanks, Mike, for all your years of service to Texas and your leadership.

Oscar S. Mestas Regional Urban Forester Texas Forest Service

Mike Walterscheidt was invaluable during my tenure as ISAT president and I know every president would agree with me. A volunteer-oriented organization must have someone like Mike to ensure everything is done.

Mark A. Peterson Project Coordinator San Antonio Water System

Continued



Board meeting 2010.

for everything!

Continued

I always greatly appreciated Mike's organizational skills. Traveling 350 miles for everything has some built-in difficulties in trying to do all that needs to be done to manage an organization such as ISA-Texas. Mike, thanks for all you've done. It took me becoming more dependent on you to realize how much I needed you. You've always done your job with grace.

James Tuttle Tree Loving Care Lubbock

Mike, Thanks for all the help you have given me through the years as an Extension Agent in El Paso. You were one of the friendly voices I spoke with about forestry problems when I started in El Paso in 1980. Even though I was calling from over 700 miles and one time zone away, in a place with not too many trees, you still took the time to help answer my questions and give me some tips on extension work. Thanks for all you have done. Best wishes in the future!

John M. White Garden Curator, Chihuahuan Desert Gardens University of Texas at El Paso

Dr. Mike Walterscheidt was the first person to serve as the state Project Learning Tree coordinator for Texas. Dr. Walterscheidt laid the foundation for the Texas Project Learning Tree program, and through his leadership the Texas PLT program has grown over the years and is recognized by the national PLT office as one of the leading programs in workshops and teachers trained annually.

Ron Hufford Executive Vice President Texas Forestry Association

Mike has been a constant in the changing and growth of the ISAT since the chapter was formed in 1979. All of us who enjoy our ISAT owe Mike a huge debt of gratitude for all of the years of work he has done for the chapter. A steady hand with the chapter's best interest at heart for over three decades performing numerous jobs, most without acclaim or recognition. Well done Mike! I appreciate your commitment to all of us in the ISA-Texas. Thanks for everything!

Kevin Bassett Vice President & Arborist Arborilogical Services

Mike is a great guy. I worked with him when I was on the board. He may be the most organized guy I've met. I always felt sorry for him at the conferences; he couldn't walk to the bathroom without people stopping him with questions or just to visit. Somehow he managed to keep it all straight and to take care of everything.

Jeff Quinters Program Manager-Forester Oncor

After the first couple of times meeting Mike, I wondered if he ever smiled. When I got to know him a little I found out that he did - just not that much. I admire Mike for all the work he put into the Texas chapter ISA. We have a very successful chapter these days because of him and also his wife Beth. Many thanks to you both!

I remember a board meeting at his house one year. He was telling a few of us before the meeting about the contractor that laid the pecan wood floors in his living room. He said he had to get after the workers for throwing out all the misshapen and odd colored boards. He wanted to use all the ones with great character and

design – these were most important to him. I thought that was very cool.

Dr. Waltersheidt is a true lover of trees and I wish him all the best.

Jim Carse Landscape Services The University of Texas at Austin

Beth and Mike at an ISAT event.

Mike handling conference registration, 2009.



at an ISAT event.

Drought Is Only Part of the Story

A lthough drought is often the cause, trees can die for other reasons besides lack of soil moisture, said Dr. Eric Taylor, Texas AgriLife Extension Service forestry specialist, Overton.

"Drought is the primary contributor to tree kill, but it may not be exactly the way you might be thinking," Taylor said. "You may find this hard to believe, but relatively few trees likely died directly from dehydration in 2011. Instead, the 2011 drought severely weakened mature trees, making them

susceptible to opportunistic pathogens like hypoxylon canker and insects like pine bark engraver beetles."

He said that in most instances, the trees that died in 2011 were already stressed from a number of pre-existing environmental factors such as overcrowding, growing on the wrong site, age, soil compaction, trenching or inappropriate use of herbicides. If not for these factors, a large proportion of the trees that died might have recovered from the drought.

"This is an important concept to remember because our best defense against drought is to promote a tree's health and vigor through proper care and management," Taylor said.

This is not to play down the importance of water to tree health, he said. Water, particularly soil moisture, is critical for all a tree's physiological processes. Trees require water to make and transport food, take in and release carbon dioxide,



Hypoxylon is a fungus that is usually considered a weak pathogen — not aggressive enough to take over healthy, unstressed trees, according to a Texas AgriLife Extension Service forestry specialist. Once the signs of the fungus infection are obvious, as here, the tree is already dead. *Texas Forest Service photo by Joe Pase.*

in the early evenings and night, have negative impacts to tree physiological processes."

Taylor said although it is the lack of water that's at the root of tree death by heat stroke, there's more to it than the tree being thirsty. As do humans, trees sweat to cool themselves off. Only with trees, the process is called transpiration, and it's water evaporating primarily from leaves that dissipates heat.

Inadequate soil moisture coupled with hot air temperatures

means a tree's ability to transpire is limited. "As a result, the cells in leaves and small branches can 'cook' to death," Taylor said. This "cooking" results in cell and protein breakdown, the generation and/or buildup of toxins, lesions and eventually death of the tree, he said.

As for tree deaths from macro fungi on hardwoods such as hypoxylon canker, it's stress brought on by drought and heat that creates opportunity for the disease, not the direct effects of moisture shortage, Taylor said. Hypoxylon is a white-rot fungus that is usually considered a weak pathogen – not aggressive enough to take over healthy trees.

"It is only of consequence when the trees are under severe stress and wood moisture drops significantly," he said. "Often, the first symptom that may be observed is the dying back or thinning of the crown."

As the fungus develops

conduct biochemical reactions, build tissue and more.

"You name it, the tree needs water to do it," Taylor said.

Though moisture stress may be the trigger, many trees likely died from insect damage, invasion of fungi and other diseases, and even heat stroke, according to Taylor. "Much of the recent tree deaths and general decline might also be attributed to the extreme and prolonged heat of 2011," he said. "Extreme temperatures, not only during the day but also underneath the bark, it causes the bark to pop loose and slough off, exposing a mat of grey, tan, olive green or reddishbrown powdery spores," he said. "By the time the spores become visible, the tree is dead," Taylor said.

For more information about the identification and prevention of hypoxylon canker, go to http://txforestservice.tamu.edu.

Another odd sign occurring this year is the dropping of seemingly healthy, green leaves, according to Taylor. One *Continued*

Include the story Continued

explanation for green leaf dropping is that the tree lost part of its root system during the 2011 drought. "When spring came, there was enough food reserves for the trees to leaf out, but the root system was no longer sufficient to provide enough water to all of the leaves that developed," Taylor said. "Now the trees are compensating by dropping some of the leaves in order to provide adequate moisture to the residual leaves."

But don't start your chainsaw yet, he said. If this is the first year that a tree's dropped leaves, it may eventually recover, according to Taylor. If the drought continues or intensifies, homeowners can reduce tree stress by paying attention to over-crowding, proper pruning, minimizing damage to the stem and roots, and proper watering.

Our best defense against drought is to promote a tree's health and vigor through proper care and management.

For existing landscapes, proper watering during a drought is the best way to reduce water stress. "A rule of thumb is to begin supplemental watering if significant rainfall has not occurred in the past seven to 10 days," he said. "Begin sooner if it's extremely hot and humidity is low."

Taylor recommended using a soaker hose or trickle or drip irrigation, and water just outside the drip line of the tree's crown. (The drip line is the area on the ground directly under the farthest-reaching branches.) "It is not necessary to encircle the entire tree, especially if a very large tree" he said. "A good watering on half or one quarter of the root system can be very beneficial. Do not concentrate the water at the base of the tree. Doing so can lead to root diseases."

The water should soak into the soil without runoff. If the water runs off or puddles, reduce the flow rate. Water until the moisture has soaked in to the soil to a depth of at least 8 to 10 inches.

The best time to water is during the early evening and at night, Taylor said. This is the time when trees normally catch up and replenish the water they lose during daytime activities like photosynthesis.

During the drought, plan on watering trees once a week. Be forewarned though. Large trees drink from a big bucket, Taylor said. There's more than just water involved in maintaining healthy trees. Taylor is currently conducting a four-part course on woodland management with urban landowners in mind. For more information see http://today.agrilife.org/2012/07/10/private-woodlands – Robert Burns, Texas AgriLife Extension

What's the Big **ID**ea?

Can you identify this native Texas shade tree?



If you know this tree, correctly identify it on our facebook page. If you don't know it, check the page for the answer in a few days!

Hint: Its common name is nearly as variable as its leaf shape. Texas has the national champion of this species.

\diamond \diamond \diamond

How to enter: Log onto our facebook page and type in both the common and scientific name. We will check the page daily until the tree has been correctly identified, comfirming the correct answer.

Last month's winner

Priscilla Files of Galveston correctly identified the July Big IDea tree as Arizona Cypress, *Cupressus arizonica*.



From: Pete's Mailbox To: Pete Smith (home) Subject: Tour des Trees Daily Blog

TDT Day 1: Banks to Seaside



Wow, what a spectacular first day of riding! High temp in the 80s, not much wind, clear and sunny the whole day. 95 miles, mostly uphill, including an 8-mile climb up a river valley through the Coast Range. Then into the touristy Seaside community for the night, with cloud banks rolling onto the headlands from the Pacific, and beach bonfires to take the chill off the night air. :]

TDT Day 2: Seaside to Grande Ronde



A much tougher day 2 on the Tour.... Starting out from Seaside on a cool, damp morning, we made three tough hill climbs before the break, each with long, fast descents. I'm doing fine on the climbs, passing many, then watching them scream past me on the downhills! The Oregon coast is very scenic, with quaint-but-touristy beach towns every few miles along highway 101. Wind in our faces for 80 of the 106 miles today. :/ Then it was back across the Coast Range and a final descent to our hotel (casino!) for the evening. I already feel like a big winner. :]

TDT Day 3: Grand Ronde to Wilsonville



Started off with a tribal ceremony and tree planting, then a pastoral ride through the Willamette Valley during the wheat harvest. They grow an amazing variety of crops, from filbert orchards to fields of buckwheat, oats and corn. Blueberries, blackberries, and lots and lots of vineyards. Here's a picture of the one we stopped at for lunch. :)

They told us today was a "recovery" ride of a mere 81 miles, but they forgot to mention the many steep hill climbs in the afternoon, some over 15% grade! Lots of sore muscles tonight, and tomorrow we have something like 84 miles of climbing to the slopes of Mount Hood. Sounds fun, right?! :)

TDT Day 4: Wilsonville to Government Camp



The word for the day (and week) is 'hills'.... Lots of long climbs today, up the Clackamas Valley and another through the Mount Hood National Forest, up a quiet, paved one-lane road for four miles or so. Spectacular forest scenes, plus a half-mile portage across a creek when the road ran out. ;)

Then it was on to highway scenes of Mount Hood (above) and up to the historic Timberline Lodge (6,000 ft. elevation), where they

filmed some scenes in The Shining, for the night! But don't get too excited...we're in the bunkhouse, eight guys to a room. :/ Eighty-four miles today and a long day planned for tomorrow. Hope I get some sleep!

TDT Day 5: Government Camp to Hood River



Another spectacular day of riding! Started with temps in the low 50s at 6,000 ft. (above treeline) and ended 101 miles later at the Columbia River–which means LOTS of big descents! Several drops that lasted miles, with a few big climbs, too. Up and over the Cascades around Mount Hood and down into the high desert country that really looks like parts of West Texas. One sixmile climb through a grassland pass really tested tired legs... but not mine.;)

Then down, down to the river and along the north shore on a scenic byway that had us climbing up once again for 1,500 ft. to the overlook where I'm pictured above. One more long descent to the hotel in Hood River for the night and a quiet room to myself for a good night's sleep!

TDT Day 6: Hood River to Portland



It's hard to believe that the week is over, with just tomorrow's ceremonial Ride For Research here in Portland left. What an incredible tour of Oregon!

Today we dove headfirst into a 25-30 mph wind on the shoulder of I-84 for the first 12 miles, by far the most challenging stretch of road of the week. A 'designated bike route' nonetheless! Then it was up along the historic Columbia River road for scenes like the famous Multnomah Falls... later a long switchback climb up to the Vista House lookout over the river. And finally some urban biking in the biking capital of the U.S.!

TDT Day 7: Ride For Research

The final day of the Tour Des Trees is the mostly ceremonial ride into the International Tree Climbing Championship competition, held at a local Portland park. What started as a leisurely ride along some of the city's many bike trails turned into an urban adventure when our local guide got "misplaced" and about 20 of us took the long way round to the park. Oh well, they told us at the beginning that there would be hills and we would probably get lost somewhere along the way, so I got the full



tour experience! With 28 miles today, that brings my week long tally to 570 miles of beautiful Oregon scenery and about 100 new friends!

So what will stick with me about this week? Certainly the hills; the incredible views (the Cascades, the Coast Range, the ocean, the desert, the Columbia Gorge waterfalls) along the route; the really good roads; the great Tour support staff and volunteers; and a bunch of new friends who love both biking and trees – a great combination! I'll also remember all of you who supported me by donating to the cause on my behalf.... I really couldn't have done this without you!

I've also heard this week that riding the Tour for the first time is like a "gateway drug" and that I'll surely come back for more.... It definitely feels that way today. Next year is Ontario, Canada, so who else wants to get hooked? :]

Tree plantings and droughts: the two DO mix; San Antonio forester shares lessons learned

by Kelly Irvin, Public Relations Manager San Antonio Parks and Recreation Department

Texans are no strangers to drought. We all know how important trees are to combating the effects of a long term drought. That's why the city of San Antonio has continued in its quest to raise its tree canopy despite an on-going historic drought that blankets the entire state.

Based on a survey conducted by the American Forests Association in 2007, the Parks and Recreation Department

staff knew a tree planting campaign couldn't wait for better conditions. The survey recommended that 454,600 trees be planted to offset the creeping effects of urban living.

In a first step, the City mounted a massive campaign in 2010 that saw 9,000 trees planted in City parks and another 1,000 in the downtown central business district. While the long term survival rate remains to be seen, early signs were positive. At the end of the first year, 83 percent of the trees were still alive.

San Antonio City Forester Michael Nentwich recently took stock of the effort and shared a number of best practices and lessons learned from the experience of not only planting this large number of trees in drought conditions, but

fighting to keep them alive while observing water restrictions intended to protect the city's sole source of drinking water, the Edwards Aquifer.

Best practices started with the basics.

1. Water efficiently and effectively. New trees were watered with water trucks on a 7-day, 10-day, or 30-day cycle, depending on when they were installed. The trees were fitted with 20-gallon TreeGator slow release irrigation bags. The bags drain in about 6 to 8 hours.

"Coupling the bags with mulch allowed us to water less frequently and more effectively," Nentwich explains. "The water penetrates much deeper into the soil and keeps the root ball moist for a longer period of time. The system is extremely efficient and effective."

2. Be creative. Use recycled water where possible. When available, the department uses recycled water to maintain trees. A new practice employed over the past year



Courtesy San Antonio Parks and Recreation Dept.

involves reusing city swimming pool water when the pools are drained at the end of the summer pool season. Sixthousand trees received 320,000 gallons of pool water the first summer.

Another unusual source of recycled water is water captured when the local water company has to flush pipes in order to improve water quality in some of its storage tanks. Normally the water would flow into the streets from the fire hydrants. Instead that water has flowed into the department's watering trucks. The San Antonio Water System (SAWS) has made

available 64,000 gallons of water, which has provided water for more than 3,200 trees as of mid-July.

Since completion of the plantings in 2010, a regular watering schedule has been maintained. Trees are watered by hand from watering trucks or from quick couplers available in the parks. Trees were watered weekly for the first month. Months two through four, they were watered every 15 days. For the following two to three years, depending on the weather, they will be watered once a month.

3. Plant the appropriate trees for the existing conditions The majority of the trees were 15-gallon, or 1 to $1\frac{1}{2}$ -inch in caliper. Small, medium and large species were planted, depending on factors such

as park location, soil type, shade that the species can provide, their height, and sometimes their fruit.

Large species included live oak, red oak, burr oak, chinquapin, oak, cedar elm, Mexican sycamore, pecan, walnut, and Mexican white oak, among others. Medium species include Lacey oak, thornless retama, and anaqua. Small species included Mexican and Texas redbud, Mexican plum, Mexican-buckeye, crepe myrtle, possumhaw holly, Texas mountain-laurel, and desert willow.

4. If possible, have a funding mechanism in place that doesn't affect the general fund bottom line or draw the ire of the average taxpayer. The \$1.4 million campaign was funded from a tree mitigation fund and tree canopy fund, monies that are collected from developers who pay development fees and possibly fines for violation of the city's Tree Preservation Ordinance. The average cost per planted tree was \$158, varying depending on tree species and container size. The trees were planted through use of an annual contract with an outside vendor.

Continued

Plantings & droughts DO mix Continued

As an offshoot of the park planting initiative, the department also planted 1,000 trees to beautify the central business district. Trees were planted along major thoroughfares, boulevards and sidewalks, as well as open space within the downtown area.

This initiative, for which \$500,000 was allocated, was funded from the general fund for site preparation and the tree mitigation fund for purchase and installation of the trees. Nentwich notes that the biggest expense in planting trees in an urban center or downtown business district is creating the space for the trees. "We had to create tree planting wells in the sidewalks, cement medians and parking lots," Nentwich

explains. "The trees were the least expensive part of this process. These are the same areas where we get the greatest benefit from new trees—direct filtration of car exhaust, cooler temperatures and combating the heat island effect."

5. Look at ways to involve the community in planting trees so that citizens have buy-in and investment in the process. It's less expensive and in the long run, creates a

community ground swell of support.

The city collaborated with the local electric company, City Public Service Energy (CPS Energy), the Texas Forest Service, and SAWS, to develop a community-planting rebate program known as Green Shade, funded by the American Recovery & Reinvestment Act. Both commercial and singlefamily residential customers of CPS Energy are able to purchase up to three trees and receive a \$50 rebate for each tree.

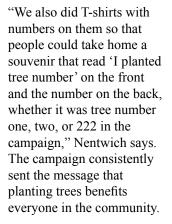
In a related program, citizens apply for and receive 25 trees to be planted in their neighborhoods as part of the Tree Planting Challenge. Up to 100 trees are available in each of 10 City Council Districts.

In addition to the lessons learned regarding planting techniques and water conservation, Nentwich says the city has garnered important information on how to best continue to increase the city's tree canopy. "Partnering with the community through tree adoptions and tree rebates is less expensive and therefore more cost effective than long term care and establishment of large numbers of trees," he explains. "Community forestry programs also help build public understanding of the importance of trees to the quality of life."

6. Communicate the benefits and keep communicating

them. Communicating the effects of a tree canopy on citizens' quality of life is critical to any tree planting campaign's success, particularly in a severe drought. When citizens aren't being allowed to water their own lawns as much as they might like due to water restrictions, it's important to educate them on how planting and watering trees in their community now will benefit them later.

To do this, the department created a public relations campaign that included a logo and two position lines: 'Great Parks are Rooted in Trees' and 'Great Communities Are Rooted in Trees.' Signage was developed along with T-shirts that included tree planting instructions on the back.



"The benefits of trees are all the things municipalities are looking for, and it's important to stay on message in that regard," Nentwich explains. "Continue to remind

Photo courtesy of San Antonio Parks and Recreation Dept.

citizens and elected officials that we are saving water by planting trees. Trees reduce ambient temperatures. They combat the heat island effect. They improve air quality and reduce pollution. They improve commerce because businesses want to locate in attractive, green communities. All things that municipalities and their citizens want and need."

Nentwich goes as far as to assert that planting trees encourages people to spend money in their communities. "The more beautiful a community is, the more aesthetically pleasing it is, the more people are liking to get out and shop and attend special events and sporting events, creating commerce and invigorating the economy."

It's also good for their health. "When there's more shade, people are more liking to get outside and engage in active, healthy lifestyles – a benefit to them and a benefit to the community that sees fewer missed days, more productivity at work and lowered health costs."

All these points need to be communicated to the public during a tree planting campaign, especially when it's occurring during a drought complete with watering restrictions. And in South Texas, that's pretty much all the time. ■

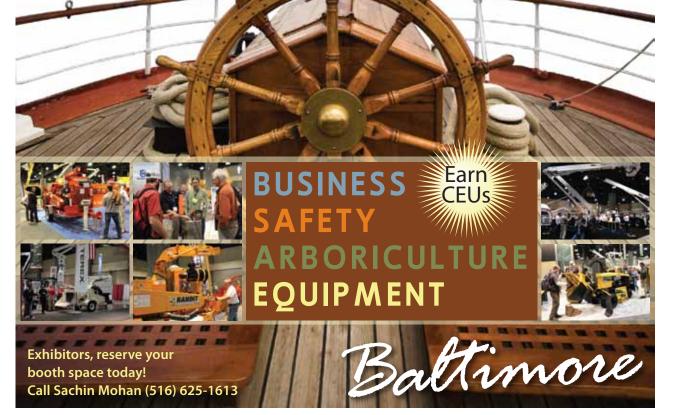


Take the Helm! Navigate your way to higher profits,

Navigate your way to higher profits, bigger savings and more education at

World's Largest Tree Care Trade Show and Conference **November 8-10**

Pre-conference November 7





Register today! 1-800-733-2622 expo.tcia.org

Bajo la Sombra

La Identificación de los Árboles – Parte 2 por Micah Pace

Introducción:

Bienvenidos de nuevo a la sección hispana de Bajo la Sombra (Under the Shade), el fuente de información de arboricultura en español! En esta edición yo les ofrezco la segunda parte de un serie sobre la identificación de árboles. La nomenclatura es el proceso de nombrar con nombres científicos los árboles (las plantas). Es importante saber y usar los nombres correctos para comunicarse como profesional y para recomendar cualquier tratamiento apropiado.

Objetivos:

Los objetivos de esta lección son:

- Explicar qué es la nomenclatura y como usamos para la identificación de los árboles.
- Explicar qué son los nombres científicos y por qué se usan y cómo se escriben.

La Nomenclatura de las Plantas

La nomenclatura de las plantas es la asignación de nombres a las plantas. A menudo los arbolistas están familiarizados con los nombres comunes de los árboles, porque han aprendido a identificarlos a través de los años de experiencia en el campo. Sin embargo, es importante saber que el usar solamente nombres comunes puede causar confusión y malentendidos.

Un solo árbol puede tener varios nombres comunes. El *Sapindus drummondii* se conoce como amole, amolillo, palo blanco y jaboncillo.

Es posible que varias especies de árboles tengan el mismo nombre común. Por ejemplo, la Magnolia x soulangiana, la Spathodea campanulata y el Liriodendron tulipifera se conocen como tulipero en diferentes partes del mundo. Los nombres comunes incluso pueden ser engañosos. Por ejemplo, el ciprés de los pantanos (bald cypress) no es un verdadero ciprés, y el fresno de la montaña (mountain ash) no es una especie de fresno.

Cada planta tiene un nombre científico único que es el mismo en todo el mundo. Los nombres científicos de las plantas se basan en un sistema de clasificación de especies, y cada nombre científico tiene al menos dos partes. La primera parte de un nombre científico es el género, el cual se escribe con la primera letra en mayúscula. Las plantas del mismo género están estrechamente relacionadas y muestran características similares, particularmente en sus flores y frutos. La segunda parte identifica el epíteto específico y no se escribe con mayúscula. El nombre científico se compone del género y epíteto específico.

Los híbridos son el resultado de cruzar dos especies diferentes, normalmente del mismo género. Los nombres científicos de plantas híbridas se escriben con una "x" entre el género y el epíteto específico.

Algunas especies se dividen todavía más en variedades y/o cultivares. Una variedad es una subdivisión de una especie que tiene un rasgo y que naturalmente se reproduce según ese rasgo. Los nombres de variedades no se escriben con mayúsculas.

Los cultivares son variedades cultivadas que requieren la intervención humana para reproducir un rasgo. La gran mayoría son clones. Los nombres de los cultivares se escriben con comillas simples y con la primera letra de cada palabra en mayúscula.

Los nombres comunes no se deben poner en mayúsculas, a menos que incluyan un nombre propio. Por ejemplo American elm o olmo americano. Los nombres científicos pueden escribirse ya sea con texto subrayado o en cursiva. Ejemplos de nombres científicos escritos apropiadamente son:

Genus/ Genera	Species/ Especie	Common Name (English)	Nombre Común (Espanol)
Quercus	virginiana	live oak	encino
Celtis	laevigata	sugarberry	palo blanco
Ulmus	crassifolia	cedar elm	olmo
Juniperus	ashei	ashe juniper	cedro

Hoy en día, la nomenclatura de las plantas cultivadas se complica aún más por los nombres de marcas comerciales. Un ejemplo de esto es el primer cultivar de encino conocido por su nombre de marca comercial de Encino Highrise™ (*Quercus virginiana* Highrise[™]). A los nombres de los cultivares no se les pueden poner nombres comerciales, pero a los nombres comunes sí. Los nombres de marcas comerciales nunca se escriben con comillas sencillas (i.e., *Quercus virginiana* 'Highrise' es incorrecto).

En la próxima tapa vamos a hablar a cerca de los principios básicos de la identificación, los términos de las partes de hojas, la variabilidad en las formas de hojas, los diferentes tipos de disposición de las hojas y ramas de los árboles y como saber de ellas mismas pueden ayudar identificar los arboles correctamente a los arbolistas.

A continuación . . .

THE NEWSLETTER OF THE ISA TEXAS CHAPTER

242 Monkey Road Elgin, TX 78621

www.isatexas.com



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

THE SMARTER WAY TO TREAT TREES

Protect trees from drilling damage.

The Wedgle[®] Direct-Inject[™] System is the first and only no-drill trunk injection method. Direct-Inject places chemical where trees can best use it.

- Prevent permanent drilling damage.
- Improve control time.
- Treat most trees in five minutes or less.

With eight Injection Tip options, you can treat more types of trees more effectively.

- Wedgle[®] Tips and new WedglePlus[™] Tips are ideal for most hardwoods.
- Portle[®] Tips effectively treat conifers and hard-to-treat hardwoods.
- Palm Tips penetrate thick husks and deliver chemical to inner active layers.

Why drill when you don't have to? Direct-Inject instead!

ArborSystems The No-Drill Injection Solution Wedgle, Direct-Inject... TREE INJECTION SYSTEM



SHEPHERD® FUNGICIDE

Stop Oak Wilt, Dutch Elm

- A single trunk-injected application provides full-year prevention of Oak Wilt, Dutch Elm disease.
- Now also labeled for conifer blights such as Diplodia Tip Blight, as well as Powdery Mildew, and more.

Photo courtesy ForestryImages.org, Joseph O'Brian,

PINSCHER® PGR

End messy fruit, seeds

- Greatly reduces fruit/seed set without compromising tree health.
- Reduces cleanup costs and hassles.
- Ideal for Walnut, Gingko, Locust, Sweet Gum, Olive and other trees
- with undesirable fruit/seed production.

INSECTICIDES – FUNGICIDES – PGRS – NUTRIENTS ArborSystems.com | 800-698-4641