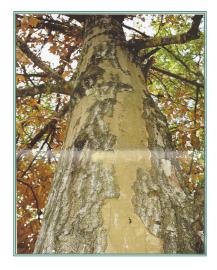
Voted 'Best DFW Green Industry Newsletter' ISA (Society of Arboriculture, Texas Chapter)



Although 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

Drought Is Only Part of the Story

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, 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.

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

"Extreme temperatures, not only during the day but also 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

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Marriage One-Liners

- ~You know what I did before I married? Anything I wanted to. (Henny Youngman)
- ~Any husband who says 'My wife and I are completely equal partners' is talking about either a law firm or a hand of bridge. (Bill Cosby)
- ~Keep your eyes wide open before marriage, half shut afterwards. (Benjamin Franklin)
- ~My wife dresses to kill. She cooks the same way. (Henny Youngman)
- ~My wife and I were happy for twenty years. Then we met. (Rodney Dangerfield)
- ~A good wife always forgives her husband when she's wrong. (Milton Berle)
- ~I was married by a judge. I should have asked for a jury. (George Burns)
- ~I bought my wife a new car. She called and said, 'There's water in the carburetor.' I said, 'Where's the car?' She said, 'In the lake.' (Henny Youngman)
- ~Never go to bed mad. Stay up and fight. (Phyllis Diller)
- ~The secret of a happy marriage remains a secret. (Henny Youngman)



Call TODAY to schedule your FALL TREE Fertilization 817-274-(TREE) 8733

Drought Is Only Part of the Story...continued from page 1

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.

There's more than just water involved in maintaining healthy trees.

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 underneath the bark, it causes the bark to pop loose and slough off, exposing a mat of grey, tan, olive green or reddish-brown powdery spores," he said. "By the time the spores become visible, the tree is dead," Taylor said.

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

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.

~Robert Burns, Texas AgriLife Extension



"A thousand word report? How many words is that in text message?"

Recipe Corner: Pumpkin Poppers

from Domestically Speaking



Preheat oven to 350 F and spray mini muffin tins with non-stick cooking spray.

Combine flour, baking powder, salt, and spices in a bowl and whisk until combined. In another bowl, mix oil, brown sugar, egg, vanilla, pumpkin, and milk. Pour into flour mixture and mix until just combined. Fill mini muffin tins until almost full and bake 10-12 minutes.

Melt butter in small bowl. Mix sugar and cinnamon in a separate small bowl. After poppers cool for a few minutes, dip them in the butter and roll them in the sugar mixture.

1 3/4 cup all-purpose flour

2 tsp. baking powder

1/2 tsp. salt

1/2 tsp. cinnamon

1/2 tsp. nutmeg

1/2 tsp. allspice

1/8 tsp. ground cloves

1/3 cup vegetable oil

1/2 cup brown sugar

1 egg

1 tsp. vanilla extract

3/4 cup pumpkin

1/2 cup milk

For Coating:

1 stick unsalted butter, melted

2/3 cup sugar

2 tbsp. cinnamon

Fall Fertilization: 6 Reasons to Feed Your Trees NOW!



- **1. Appearance** proper feeding produces up to 30% more growth and far more color and brilliance. PLUS healthy trees can increase home value by up to 20%.
- **2. Tree Health** most trees die from lack of oxygen and nutrients due to soil compaction, competition with lawns and shrubs, drout, and depleted or poor soil.
- **3. Family Health** Healthy trees produce more oxygen, which removes significantly more pollutants from the air around your home keeping your family breathing fresh air!
- **4. Safety** Undernourished trees become brittle and can break off, causing injury to our home or family members. Last year hundreds of homes were damaged & numerous people injured.
- **5. Noise Reduction** Healthy, full trees can reduce road noise (neighbors?) by 10-30%.
- **6. Much Longer Life Span** According to the United States Forest Service, the average city tree lives only 32 years and **inner city trees only 7 years!** As a result, a large portion of our urban trees die well before maturity and never provide the aesthetic, economic and functional benefits for which they were intended due to lack of proper nourishment.

Call **TODAY** to schedule the feeding of your trees. Your family and your trees will thank you!

Ask about our money savings fertilization programs! 817-274-(TREE) 8733



Sudoku (difficulty level: medium)

	8							
1	3	9			5	8		6
	7		2				3	1
			8	6	4			5
8			9	2	7			
7	6				2		5	
5		4	1			7	6	9
							8	

To solve a sudoku puzzle, you only need logic and patience. No math is required. Simply make sure each 3x3 square region has a number 1 through 9 with only one occurrence of each number. Each column and row of the large grid must have only one instance of the numbers 1 through 9.

Here's a tip. We call the 3x3 squares "regions." With a highlighter, color in all the rows and columns in the large grid that have an 8 in them. We chose 8 because there are several of them in the puzzle. Now observe. In the bottom left and the middle right region, what is the only possible location for the 8? This technique is called scanning, and you usually do it with your eyes.



Thanks to YOU the word is spreading!

Thanks to all of our wonderful clients and friends who graciously referred us to their friends and neighbors last month!

Our business runs on the positive comments and referrals from people just like you! We couldn't do it without you!

A special thanks to these fine folks...

The work you did looks great! Thank you for doing such a good job and leaving it so neat and tidy and lovely. You guys were friendly and it was such a comfort knowing that you knew what you were doing and doing it safely. We'll enjoy it every day now.

~ Margaret and Glenn Ford, Bedford

We were very pleased with the tree removal work done in our backyard this morning. Jose, Otoniel and Eddie were all friendly and hardworking and the work was done safely and efficiently. They also did a nice job trimming our two schumard red oak trees in front. The entire job, including a thorough clean up, was completed in about two hours. We are glad we chose J. Davis Tree Company and will certainly recommend your company to family and friends. Thank you very much for a job well done. May God continue to bless you and make you prosper.

~ Margaret and John Beacon, N Richland Hills



"Honestly, do you really think anyone will be interested in what you write every day, Blog?"

Important!!

See inside for special
information on the best way
information trees, health
to boost your trees, the best way
this Fall!

The Best Mulch... at a Great Price! IT'S <u>LIVE</u> MULCH!

Not dead like "store bought" Demis Color-Enhanced Mulch

JDavis shredded wood mulch is guaranteed to contain no nitrogen-stealing recycled pallet wood. Our nitrogen-rich mulch enhances soil fertility as it decomposes, reducing the need for fertilizer applications.

Once you put our mulch down, it stays in place – even during high winds and heavy rains. JDavis Shredded Wood Mulch decomposes 30% slower than shredded bark, so you won't have to replace it as often.

Our premium decorative mulch is available in three colors: Cedar (Red), Brown and Natural (not colored).

We guarantee the colors of our mulch will stay rich and vibrant for 1-year. If it doesn't, we'll replace it for free or give you a full refund of your money!

Save over 60% when compared to garden center bagged mulch!

Colored Landscape Mulch	\$26 yd.
Natural Reground Mulch	\$14 vd

Perfect for all your fall gardening projects! Vegetables and flowers thrive with our mulch!

MEGA TRIVIA!

Who Wants to Win \$20 Restaurant Certificates?

Take our Trivia Challenge and you could win, too!

This is one of our favorite parts of the newsletter! Each month we'll give you a new trivia question. We will draw from the people who submit the correct answer. Three names will win two \$20 restaurant certificates. Enjoy a night out on us with someone special in your life! Remember, your chances of winning are better than you think!

This month's MegaTrivia Question is...

Elvis Presley made only one television commercial. For what company and what year did it run?

Email answers to cindyvorhees12@gmail.com or call us at 817-831-TREE (8733)

Last Newsletter's Trivia Answer was: Waco, Texas.

Last Month's Trivia Winners enjoyed a night out on us! You could be next!

Marietta Long, Richland Hills
Pat Jones, Hurst
Chris Wander, Azle