

The Dogwood Times

A Publication of the Tyler County Forest Landowner Association

http://tcforest.org/

Tyler County Forest Landowner Association (TCFLOA)

> Volume 18 Issue 4 Winter 2016-2017

TCFLOA General Meeting Summary

At the Tyler County Forest Landowner Association meeting on Saturday, September 10, 2016, new officers were elected:

President – Brianne Parker Vice President & Program Chair – Ken Turner Secretary – Jeff Parker Treasurer – Charles Zimmerman Director – Jack Clark Director – Jay Fish Director – Betty Zimmerman Director – Sarah Reinemeyer (past President)

Jeff Parker introduced the speakers.

Dr. Neil Frank, Former director of the National Hurricane Center and former Chief Meteorologist at KHOU-TV in Houston, delivered a compelling presentation about climate change. His graphs showed how climate has been changing for tens of thousands of years due to natural causes. He began by stating that Antarctic ice has recently increased, Artic ice has been stable since 2007, and there has been a decrease in hurricanes, cyclones and typhoons. During the past 20 years, tornadoes have also decreased. Temperature occurs in cycles and Earth has been warming for over 150 years. It is his opinion that recent data has been distorted by the reduction in weather stations since the 2009 economic downturn. He is confident that there has been no global warming during the past 19 years.

Dr. Eric Taylor, AgriLife Extension Service, Texas A&M Forest Service, explained how to increase tree vigor and reduce loss of trees. His presentation is included here as a separate article titled "Improving Forest Health and Resiliency" - see Index.

Mike Oliver, State Forester, USDA—Natural Resource Conservation Service, discussed emulating natural disturbances in the management of forest ecosystems. A disturbance is a temporary change in environmental conditions that produces a pronounced change in the ecosystem. In East Texas, flooding is the hardest natural disturbance to emulate while fire is the easiest. Historically, Tyler County *(continued on page 2)*

CALENDAR

January 7, 2017 Saturday—TCFLOA Winter Board of Directors Meeting, 9:30AM in Woodville, Texas. See *tcforest.org* for location. Association members are encouraged to attend.

March 4, 2017, Saturday—TCFLOA Spring General Meeting, 9:30AM, Tyler County Extension Office, 201 Veterans Way, Woodville, Texas. Information on the program will be announced in our next newsletter.

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—Brush removal of unwanted species is easier in winter when most vegetation is dormant, and frees up young trees for both nutrients and additional sun when they are ready to make their spring growth spurt.

---Removing some of the shade alongside your woods roads will allow them to dry out more quickly after a rain and help keep them in great shape.

—Inspect your firelanes before the beginning of the spring prescribed burning season.



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Websites of Interest



Texas A&M Forest Service Information Portal http://www.texasforestinfo.com

National Timber Tax Website http://www.timbertax.org/

Southern Forest Health – Southern Regional Extension Forestry <u>www.southernforesthealth.net</u>

Texas Wildfire Risk Assessment Portal (TxWRAP) <u>www.texaswildfirerisk.com</u>

(TCFLOA General Meeting Summary-Continued from 1) forests experienced natural understory fires every 10 years or less. We can produce a similar effect with controlled burning.

The removal of trees from the forest is inevitable – whether by nature or humans. The effects of drought, disease, windstorms, blowdowns and ice storms can all be emulated by felling and cutting trees. A rotating drum shredder can be used to surgically remove trees and add mulch to the soil. Or, one can hack the trees and squirt them with herbicide, but this can create a hazard of falling trees as they die. It is important to remember that snags, cavities and downed woody material and tall, emergent hardwood trees are important for wildlife and natural nutrient cycling.

Improving Forest Health and Resiliency by Dr. Eric Taylor, Texas A&M Forest Service

Tree leaves use photosynthesis to make their own food from water, carbon and oxygen in the air, and nutrients from the soil, including nitrogen, phosphorus, potassium, iron, boron, copper, chlorine, manganese and other elements. These elements are all needed to build the food factories... the leaves; and leaves grow trees. A tree's health declines without sufficient number of leaves. Tiny mycorrhiza fungi help the tree's small roots absorb nutrients and water. The leaves absorb carbon and oxygen. *(continued)* If a tree has sufficient water, air and nutrients for producing new roots, trunk growth, new leaves, buds, and storage of excess carbohydrates, it will then allocate carbohydrates to make compounds used for protecting itself against environmental stressors. This will tend to make the trees healthier, vigorous and more resilient to stressors. Options for improving the availability of water and elements to trees include fertilizing, irrigating and regulating density. However, trees should not be fertilized while they are under stress. Irrigating trees can be cost prohibitive. A 16' pine tree requires approximately 11 gallons of water a day. Interestingly, 95% of the water evaporates as the tree captures carbon dioxide and cools itself; only 5% of the water is used to drive the numerous physiological processes. Trees can use more water if available. For example a large oak trees could transpire up to 300 gallons of water a day.

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Regulating density is the most effective option for landowners. There are a number of options for regulating density. For existing stands that are too thick, density can be reduced by thinning the trees and/or applying herbicides. Tree farmers should avoid thinning during droughts because the trees need time to recover from injuries inflicted during the thinning process. Consider thinning earlier than dogma might dictate (while the trees are younger) to lower the impact from density-induced stress before it occurs. The Thinning Scheduler app at <u>http://tfsfrd.tamu.edu/</u> <u>ThinningScheduler/index.aspx</u> enables you to explore the economic impact of different thinning scenarios.

Consider being more aggressive in reducing competitive plants and undesired species, while promoting ground covers. A prescribed burn can be used to remove understory and weak trees. If the understory is tall, with draped fuels the fire may climb into the crown of the trees. To inhibit this undesired event, consider applying mechanical treatments (mulching) and herbicide first. In general, the benefits of herbicides last longer than prescribed burns. Herbicides should be applied on targeted plants while they are actively growing – and not while they are under stress. Targeted plants will not effectively translocate herbicides throughout the plant while under stress.

* * *



The Importance of Forests to Water Resources (Part 2 of 4)—Hughes Simpson, Texas A&M Forest Service

Forests play an integral role in maintaining a continuous supply of clean drinking water for millions of people. While it may be surprising, this fundamental service has actually been recognized and well understood for many years. In 1903, Gifford Pinchot, the first Chief of the USDA Forest Service (USDAFS), wrote in a small *Primer of Forestry* "A forest, large or small, may render its service in many ways. It may reach its highest usefulness by standing as a safeguard against floods...moving sands, or especially against the dearth of water in streams."

Forests are very effective at capturing, storing, and steadily releasing water over time. Tree canopies intercept precipitation, controlling the amount that reaches the ground during intense rain events. Forest soils function like a sponge, absorbing large amounts of water that reaches the ground through a process called infiltration. As a result, the amount of surface runoff from forested watersheds is relatively low. Water that is absorbed into the soil either filters down into underground aquifers, or is slowly released over time into nearby creeks, streams, and rivers. The cumulative effects of these functions result in much more stable and consistent flows from forested watersheds.

With increasing population growth and ever increasing demands on the state's water supplies, particularly drinking water supplies for urban areas, greater pressure is exerted on forested watersheds. Increased urbanization stemming from population growth will likely lead to significant changes in land use, resulting in impacts to water quality and supply. As the population expands, urban areas will grow and begin to encroach on forests in the Wildland Urban Interface – a place where subdivisions, businesses, and transportation networks meet the surrounding forests and fields. The *Southern Forest Futures Project*, conducted by the USDAFS, forecasts that up to 22 million acres of forestland (almost the size of Indiana) throughout the South will be lost to development and urban sprawl over the next 50 years. In the absence of mitigating actions, this conversion of forest lands can have substantial impacts on water supply.

Urbanization results in increases in impervious areas (buildings and associated roads, sidewalks, parking lots, driveways, and rooftops). Development that removes forest vegetation, converts permeable forest soils to impermeable surfaces, grades and compacts the land surface, and constructs drainage networks, reduces the amount of water that infiltrates into the soil and greatly increases storm water runoff and peak flows (the maximum channel flow, or stage, reached during rain events). This results in a flashier hydrology for urban streams. Large volumes of runoff flowing quickly into nearby streams and rivers also increase the chance that flows will exceed local channel capacities and cause more frequent and intense flooding. While there are short term increases in streamflow, there is a reduction in the amount of water available for eventual utilization as potable water.

Research has shown that when impervious surface cover reaches approximately 20% of a watershed, stream quality begins to severely degrade and results in excessive deterioration of bank stability, water quality, and habitat availability. Some reports have noted significant impacts to water quality resulting from impervious surface levels as low as 5 percent or less. These studies demonstrate that care should be taken from the first stages of development to minimize impacts on water resources and the need for costly restoration projects.

Decreases in the amount of water that infiltrates into the soil as a result of urbanization can also reduce the recharge of groundwater aquifers and lower local water tables, resulting in property-damaging sinkholes in some areas. Water that runs off the landscape as surface flow, particularly if it is channeled through storm drains, never has a chance to recharge ground water.

This too is problematic, as a large amount of drinking water is provided from groundwater resources. Depleted or otherwise degraded groundwater aquifers necessitates increased reservoir development, resulting in significant expense and further loss of land resources.

Reduced groundwater recharge can also have a substantial impact on the hydrology of local streams. Baseflows (flow contributed by groundwater throughout the year) can be reduced and become so low that *(continued next page)*



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(The Importance of Forests to Water Resources—continued from previous page)

that formerly perennial streams become intermittent during periods of dry weather and can no longer provide the flows necessary to sustain healthy habitat conditions for fish and other aquatic species. Some researchers have found that for every 1 percent increase in impervious surface cover, baseflow is reduced by 2 percent.

Forest conversion, regardless of the type of new land use, results in substantial changes in watershed function. The complex interactions among natural hydrologic and ecological processes, land use, and water management underscore the need for conservation and integrated management of forestlands within the state. Partnerships between water managers and forest owners will be essential to meeting the future water needs of Texas.

Be Bear Aware—Texas Parks and Wildlife Department

Wildlife biologists are advising hunters, ranchers and rural residents in Northeast Texas of a handful of confirmed black bear sightings recently.

At least four sightings have been documented on game trail cameras between June and late August in Bowie, Red River and Smith counties. Wildlife biologists with the Texas Parks and Wildlife Department (TPWD) confirmed the sightings and speculate the bears, which appear to be young males, are looking to establish their own new home ranges and likely dispersed from Oklahoma or Arkansas where bear numbers have increased in recent years.

This is the first confirmed presence of black bears in East Texas since September 2011. Breeding black bear populations have been absent from this region for almost 100 years, but bears from Oklahoma, Arkansas and Louisiana occasionally wander into East Texas.

"Once these bears figure out there's no opportunity for companionship over here they will likely retreat," says Dave Holdermann, a non-game wildlife biologist with TPWD in Tyler.

Holdermann said as hunters in this area head to the field in preparation for deer season, some might see signs of bears attempting to enter camps where food is kept or wildlife feeders overturned. Bears eat mostly plant material and that's probably their greatest source of protein; for example, seeds, acorns, nuts and even herbage has protein.

According to Holdermann, bears are normally shy and not aggressive to humans. But if a bear regularly visits a ranch or deer stand, people should try to scare it with rocks, a slingshot or air horn.

"If people encounter a bear at close range, they should talk calmly while backing away slowly. Don't make direct eye contact, and don't run away," he advised. "If a bear approaches you, stand your ground and raise your arms, backpack or jacket to appear larger and yell at the bear to scare it off."

Hunters are encouraged to study their game carefully to avoid mistaking a bear for a feral hog or other legal game animal. It is against the law to kill a black bear in Texas, with penalties of up to \$10,000, added civil restitution fines, jail time and loss of all hunting privileges. The black bear, Ursus Americanus, is listed as threatened by the State of Texas.

More information about black bears in Texas, including safety tips, is available online at http://tpwd.texas.gov/. Anyone observing black bears in East Texas is urged to contact Holdermann at 903-566-1626 ext. 209 so wildlife experts can track trends in black bear populations and distributions.

* * *

Exploring the History of Arbor Day—Texas A&M Forest Service

Rather than look backward to events of the past, Arbor Day looks forward with promise for a future filled with trees. Arbor Day celebrates planting and nurturing trees and all the ways trees enrich our lives and stabilize our environment.

While the purpose of Arbor Day lies in the future, it has an interesting history to earn a spot on the calendar. Historians trace Arbor Day's origins back to the fifth century when Swiss villagers gathered to plant groves of oak trees. Adults turned the event into a festival and children were given treats as a reward for their help planting trees.

Arbor Day first appeared in the United States in 1872. J. Sterling Morton is credited with guiding this country's first Arbor Day resolution through the Nebraska state legislature in that year. Residents of the Great Plains recognized how much trees could do for them, and they enthusiastically embraced Morton's vision.

President Theodore Roosevelt was a strong supporter of Arbor Day. Early in the 20th century, it was becoming clear that the nation's forests were being exhausted by cut-out-and-get-out timber harvesting. The science of forest management was emerging, and the government was moving to suppress wildfire and plant trees. President Roosevelt sent a letter to the children of the United States in which he wrote, "A people without children would face a hopeless future; a country without trees is almost as hopeless."

In Texas, Arbor Day first appeared in Temple on February 22, 1889. W. Goodrich Jones led the citizens of Temple in a mass meeting to call for a tree planting campaign along the streets of the city. One year later, the first statewide observance of Arbor Day was held in Austin. Through the efforts of Senator George Tyler of Belton, February 22nd was set aside by law as Arbor Day to encourage the planting of trees in this state.

After the original Texas Arbor Day law expired, the state continued to observe Arbor Day by proclamation of the governor, usually on George Washington's birthday. In 1949, the state legislature adopted a resolution designating the third Friday in January as Texas Arbor Day. In 1989 the legislature passed a resolution moving Texas Arbor Day to the last Friday in April to align with the traditionally observed national Arbor Day. Today, Arbor Day is held on the first Friday in November.

In 1919, the state legislature officially designated the pecan as the State Tree of Texas. The pecan was chosen for its adaptability anywhere in Texas, and because Governor James Hogg requested a pecan tree to be planted near his grave. He said, I want no monument of stone or marble, but plant at my head a pecan tree and at my feet an old-fashioned walnut. And when these trees shall bear, let the pecans and walnuts be given out among the people of Texas so they may plant them and make Texas a land of trees.

Thanks to the diversity of this state, Arbor Day is celebrated in Texas communities anytime from throughout the fall and winter planting season. The official Arbor Day ceremony, complete with the Governor's proclamation declaring the day the official state Arbor Day, moves around from place to place to help reach audiences all over the state.

Today, above all, Arbor Day is for children, parents and grandparents to strengthen the bond between generations by planting trees together. It presents a tremendous opportunity to teach fundamental lessons about stewardship of our natural resources and caring for our environment. There is no more powerful demonstration than helping children plant and care for trees that their own children and grandchildren will enjoy.

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A Publication of the Tyler Co Landowner Associat	ounty Forest ion	Rainfall Totals (inches) —Tyler Co. Emergency Management Weather Division				
<u>http://tcforest.org/</u>			August	Sept.	October	November
<u>C/O Charles Zimmerr</u> 298 County Road 21	<u>nan</u> 52	Chester	6.08	4.82	0.10	2.95
Phone 409 200 145	<u>I</u> gmail.com	Colmesneil (4E)	10.02	0.21	0.59	2.22
merle.charles.zimmerman@g		Fred	9.51	2.75	0.18	3.22
		Spurger	9.86	0.75	0.10	2.59
OFFICERS & DIRECT 2017-2018	ORS	Warren (5SSE)	7.42	2.95	0.22	2.58
Pres: Brianne Parker		Woodville	8.37	0.73	0.32	2.03
Treas: Charles Zimmerman Dir: Betty Zimmerman Dir. Jack Clark Dir: Dr. Jay Fish Dir: Sarah Reinemeyer (past Presid	lent)	Note: When the official rain gauge is located outside the town, i.e., "(4E)" after Colmesneil, see above, means 4 miles east of town.				
Membership 2017		MEMBERSHIP FORM				
Be sure to check the two digit code on the mailing label.		For Calendar Year 2017 - TCFLOA Regular Membership: Private non-industrial owners of five (5) or more acres of land in Tyler Co. Dues: \$10 per calendar year per couple. One (1) vote per membership.				
It is time to renew memberships for 2017. Look at the address label on the envelope to check your membership status—if the year number after your name is not 17 or greater, then consider renewing your membership.		Associate Membership: Any individual <u>not</u> qualifying as a Regular Member who supports the objectives of TCFLOA. Dues: \$10 per calendar year per individual or organization. Associate Members are non-voting. USE THIS FORM TO JOIN TCFLOA OR TO MAKE CORRECTIONS				
Send your renewal check to the treasurer at the address on the membership form. Use the form to join TCELOA or undate your information		NAME				
Note that we are asking for your e	e-mail address.	ADDRESS CITY / STATE / ZIP				
information on programs, confere workshops, weather, or fire situat NOT give your address to any o	nces, ions. We will ther group.					
people, advertisers, etc. This information is for your board members and newsletter editor only .		PHONE		APPROX # TIM	BER ACRES IN TY	YLER CO.
The officers and directors of TCFLOA wish you and your family a Merry Christmas and Happy New year.		E-Mail Please make checks payable to TCFLOA, and mail to: Charles Zimmerman, Treasurer TCFLOA, 298 County Road 2152, Woodville. TX 75979				
Charles Zimmerman—editor				<u> </u>		