



The Dogwood Times

A Publication of the Tyler County Forest Landowner Association

<http://tcforest.org/>

Tyler County Forest
Landowner Association

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Plans for OSB plant in East Texas

Roy O. Martin has announced that the Alexandria, Louisiana company is looking to build an oriented strand board plant in Polk County. Martin said that 165 people would be employed and the project would be valued at \$235 million. The construction phase would employ more than 1,000 construction workers over a 20-month period. The plant would be located near US 59 and State Highway 287.

Advice to Landowners Regarding Timber Theft Prevention – TFS News Release, May 28, 2014

Timber theft is a crime that potentially affects everyone. Timber owners incur monetary loss and the the removal of natural resources without reforestation methods to ensure new forests for the future.

To help property owners avoid timber theft tactics, the Texas A&M Forest Service advises:

- Have someone you know and trust report any cutting on your land immediately.
- Never sign a contract without checking several references of the buyer.
- For the best price insist on getting bids for your timber.
- Mark all property lines to assure cutting on adjacent property does not encroach on yours.
- If you are unfamiliar with selling timber, you are urged to contact your local TFS office. Our field staff will assist you with securing the assistance of a professional resource manager to help determine trees for harvest, estimated values, and potential buyers.

To report suspected timber theft activity call the Timber Theft Hotline **1-800-364-3470** or contact Texas A&M Forest Service at (936) 639-8113.

CALENDAR— 2015

February 20, 2015—TCARA Board of Directors Meeting. Time and place to be announced. Members are welcome and your input is requested.

April 11 or 18, 2015—TCFLOA Spring Meeting.

August 2014—TCARA Board of Directors Meeting and tour. Members are welcome for the meeting and tour.

September 12 or 19—TCARA Fall General Meeting.

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The **Texas Forestry Museum**, a private non-profit organization, is located at 1905 Atkinson Dr. in Lufkin. We are open from 10 a.m. to 5:00 p.m., Monday through Saturday, except major holidays. For more information on the Texas Forestry Museum and its scheduled events, please call 936-632-9535.



Websites of Interest –



Pine trees without the pine cones - http://www.walb.com/story/25714890/pine-trees-without-the-pine-cones?utm_source=WIT061314&utm_medium=Email&utm_campaign=WeekInTrees

Feral hog abatement programs - <https://www.texasagriculture.gov/GrantsServices/TradeandBusinessDevelopment/FeralHogGrantProgram>

Biochar used to treat fracking water - <http://www.eaem.co.uk/news/biochar-used-successfully-treat-fracking-water>

My Land Plan – American Forest Foundation, how to get more out of your woods – <http://www.MyHuntingLandPlan.org>.

Discover the Forest’s Potential (to affect climate change) - <https://www.forestfoundation.org/discover-forest-potential>

As forests are cleared and species vanish, there’s one other loss: a world of languages - http://www.theguardian.com/environment/2014/jun/08/why-we-are-losing-a-world-of-languages?utm_source=WIT061314&utm_medium=Email&utm_campaign=WeekInTrees

Belgian fairytale forest carpeted in bluebells - http://www.explosion.com/59962/this-amazing-forest-in-belgium-will-restore-your-love-for-nature-absolutely-amazing/?utm_source=WIT061314&utm_medium=Email&utm_campaign=WeekInTrees

Long-term study: **Global Change: Trees Continue to Grow at a Faster Rate** - <http://phys.org/news/2014-09-global-trees-faster.html>

Ancientwood’s Ancient Kauri Woodworking (New Zealand) - <http://www.ancientwood.com/>

Report Cites Value of Wood Products to Mitigate Climate Change – *USFS, Forest Products Laboratory, Newsline, Vol. 13, Issue 3, page 11, James T. Spartz.*

Some key climate change mitigation benefits from the use of wood have been cited by the Intergovernmental Panel on Climate Change (IPCC) 5th Assessment report on Mitigation of Climate Change.

One key measure related to slowing down, or mitigating, the rate of climate change impacts is greenhouse gas (GHG)

emissions. In general the report finds that “Provision of products with low GHG emissions can replace products with higher GHG emissions for delivering the same service (e.g., replacement of concrete and steel in buildings with wood, [and] some bioenergy options).”

According to economist Ken Skog, supervisory research forester and leader of the Economics, Statistics and Life Cycle Analysis Research group at the Forest Products Laboratory, the report “confirms findings that efforts to expand use of wood in long-lived applications such as multistory buildings are a key means to hold down GHG emissions and mitigate climate change.”

Specifically, the report cites research indicating wood-based wall systems use 10–20% less embodied energy than traditional concrete wall systems. Concrete-framed buildings, in turn, use less embodied energy than their steel-framed counterparts.

The report states that “increased wood use does not reduce GHG emissions under all circumstances.” Wood harvest “reduces the amount of carbon stored in the forest, at least temporarily, and increases in wood harvest levels may result in reduced long-term carbon storage in forests.”

However, research shows that reducing wood consumption through paper recycling, for example, can reduce GHG emissions, and using wood grown in sustainable forestry systems, rather than “emission intensive materials such as concrete, steel, or aluminum” can further reduce emissions, mitigating the long-term effects of climate change.

Using wood from sustainably managed forests rather than non-wood materials in the construction sector (concrete, steel, etc.), research shows, reduces GHG emissions in most cases throughout the construction process for single-family homes, apartment houses, and industrial buildings. Most emission reductions in this process result from reduced production emissions rather than carbon sequestration in products, which “is relatively small.”

Greenhouse gas benefits are highest, the report states, “when wood is primarily used for long-lived products, the lifetime of products is maximized, and energy use of woody biomass is focused on by-products, wood wastes, and end-of lifecycle use of long-lived wood products.”

See <http://mitigation2014.org/report> for more info.



New Report - Vines Hamper a Forest's Ability to Capture Carbon – Smithsonian Tropical Research Institute, May 27, 2014, <http://www.stri.org>

Tropical forests are a sometimes-underappreciated asset in the battle against climate change. They cover seven percent of land surface yet hold more than 30 percent of Earth's terrestrial carbon. As abandoned agricultural land in the tropics is taken over by forests, scientists expect these new forests to mop up industrial quantities of atmospheric carbon. New research by Smithsonian scientists show increasingly abundant vines could hamper this potential and may even cause tropical forests to lose carbon.

In the first study to experimentally demonstrate that competition between plants can result in ecosystem-wide losses of forest carbon, scientists working in Panama showed that lianas, or woody vines (Editor's note: such as *Clematis* or grape vines), can reduce net forest biomass accumulation by nearly 20 percent. Researchers called this estimate "conservative" in findings published this month in *Ecology*.

"This paper represents the first experimental quantification of the effects of lianas on biomass," said lead author Stefan Schnitzer, a research associate at the Smithsonian Tropical Research Institute and professor at the University of Wisconsin-Milwaukee. "As lianas increase in tropical forests, they will lower the capacity for tropical forests to accumulate carbon."

Previous research by Schnitzer and others demonstrated that lianas are increasing in tropical forests around the globe. No one knows why. Decreased rainfall is one suspect, but lianas, which are generally more drought-tolerant than trees, are increasing in abundance even in rainforests that have not experienced apparent changes in weather patterns.

Lianas climb trees to reach the forest canopy where their leaves blot out the sunlight required for tree growth. They account for up to 25 percent of the woody plants in a typical tropical forest, but only a few percent of its carbon. They do not compensate for displaced carbon due to relatively low wood volume, low wood density and a high rate of turnover.

Machetes in hand, Schnitzer and colleagues chopped lianas out of forest plots for this study. After collecting eight years of data comparing liana-free plots with naturally liana-filled plots in the same forest, they quantified the extent to which lianas limited tree growth, hence carbon uptake. In gaps created by fallen trees, lianas were shown to reduce tree biomass accumulation by nearly 300 percent. Findings by Schnitzer and colleagues, also published this year in *Ecology*, showed that liana distribution and diversity are largely determined by forest gaps, which is not the case for tropical trees.

Arid conditions in gaps are similar to recently reforested areas. "The ability of lianas to rapidly invade open areas and young forests may dramatically reduce tropical tree regeneration — and nearly all of the aboveground carbon is stored in trees," said Schnitzer. Lianas have been shown to consistently hinder the recruitment of small trees, and limit the growth, fecundity and survival of established trees.

"Scientists have assumed that the battle for carbon is a zero-sum game, in which the loss of carbon from one plant is balanced by the gain of carbon by another. This assumption, however, is now being challenged because lianas prevent trees from accumulating vast amounts of carbon, but lianas cannot compensate in terms of carbon accumulation," said Schnitzer. "If lianas continue to increase in tropical forests, they will reduce the capacity for tropical forests to uptake carbon, which will accelerate the rate of increase of atmospheric carbon worldwide."

The Smithsonian Tropical Research Institute, headquartered in Panama City, Panama, is a unit of the Smithsonian Institution. The Institute furthers the understanding of tropical nature and its importance to human welfare, trains students to conduct research in the tropics and promotes conservation by increasing public awareness of the beauty and importance of tropical ecosystems. Website: <http://www.stri.si.edu>.



Fall Webworms – Texas A&M Forest Service, <http://texasforests.tamu.edu/main/popup.aspx?id=1200>

The fall webworm, a common pest of many shade and ornamental trees in Texas, is native to North America and occurs throughout the United States and southern Canada. Its hosts include more than 100 species of broadleaf trees including pecan, persimmon, black walnut, sweetgum, elms, hickory, maple and cherry. This insect pest mainly affects the appearance of the host tree and is more a nuisance than a threat to the tree's health. The larvae, which cause the damage, are of two types - the blackheaded form and the redheaded form.

The food habits, biology, and markings on the larvae and adults are different for the two forms. In Texas, adults of the blackheaded form generally appear about one month earlier than the redheaded form.

Young larvae of the blackheaded form are yellowish green to pale yellow with two rows of dark bumps along the back. The head is black and covered with fine hair. The mature larvae of the blackheaded form is yellowish or greenish with a broad dark stripe along its back. The redheaded variety is tawny or yellowish tan with orange to reddish bumps. The larvae of the blackheaded form construct a flimsy web; that of the redheaded form is larger and more compact. Full-grown larvae of both varieties are about 1 inch (25mm) long.

The eggs hatch about two weeks after they are laid and the young larvae immediately begin to spin a silken web over the foliage on which they feed. As they grow they enlarge the web to cover more and more foliage. On large trees, complete branches may be covered, while on smaller trees, the entire plant may be encased in webbing. Young larvae skeletonize the upper leaf surface while older larvae devour the entire leaf except for the large veins and midrib. Larvae usually require 4-8 weeks to develop. As they approach maturity, the larvae leave the webs and wander and feed as they search for suitable pupation sites. Pupation generally occurs in thin silken cocoons spun in the duff or just beneath the surface of the soil.

The adult moths of the first generation usually appear by May in Texas. They have a wingspread of about 1 1/2 inch (30-42mm) and are white in color with dark spots on the wings. The coloration of the adults, as well as the larvae, can be quite variable. Shortly after the moths emerge, they mate and the female lays several hundred eggs in a mass on the underside of the leaves. She covers them with hair like scales from her body so they appear as a white, cottony patch on the leaf. There may be as many as four generations per year in southern areas of the state.

Since both the fall webworm and the tent caterpillar construct webs in the crowns of their hosts, it is important to distinguish between the two. The web of the fall webworm is more flimsy and encloses the ends of the leaves of individual branches. The tent caterpillar confines its web to limb crotches and flat mats along branches, and they are only found early in the spring.

The fall webworm has a large complex of natural enemies - more than 50 species of parasites and 30 species of predators are known in America. These beneficial insects along with disease, starvation and unfavorable weather conditions usually keep webworm populations at tolerable levels. Should direct control become necessary, nests of the webworm may be pruned from high value trees and destroyed. Chemical controls recommended for the fall webworm include Sevin and the bacteria *Bacillus thuringiensis*. All suggested chemicals must be currently registered and labeled for use by the US Environmental Protection Agency and the Texas Department of Agriculture. Before using any pesticide, read and carefully follow all application directions, cautionary statements and other information appearing on the label.



Literally - Living in a Vertical Forest - *Global Construction Review, May 16, 2014.*

The world's first "vertical forests" have bloomed on two towers in Milan. They'll act as lungs for residents of a hot, polluted city, but a key challenge was working out how the buildings would handle all that greenery blowing in the wind.

The Bosco Verticale residential towers are 110m and 76m high respectively and their outsized balconies will be home to 900 trees, 5,000 shrubs and 11,000 floral plants.

The project, in the Porta Nuova district of Milan, aims to deliver a new model for sustainable housing and urban regeneration in one of Europe's most polluted cities.

The greenery will boost oxygen and humidity while absorbing CO2 and dust. It will also passively cool people down – the designers say the shading could lower the inside temperature by 2°C in the hot summer.

The towers have two-room apartments, duplexes and penthouses all with extra-large balconies – they stick out 3.35m to accommodate the greenery – staggered across the facades.

The biggest challenge was calculating the loads created by all that greenery blowing in the wind, and they had to use a wind tunnel to test the idea.

"There is very little available literature on the subject of trees growing on facades," said Arup project manager Luca Buzzoni.

"In strong winds there was a danger they would create a significant bending moment on the slabs, so we tried to assess the forces based on available knowledge on wind engineering, and wind tunnel tests using a 1:100 scale model of the building and a full scale set of different tree types to confirm our estimations of generated forces."

Another challenge was that the design precluded columns on the corners, which increased the length of the cantilever span of the balconies. But Arup's tests confirmed that it all would work with a fairly conventional, post-tensioned concrete frame.

Special little trees

Each plant was chosen by botanists to thrive in its particular microclimate. The trees were cultivated in a Milan nursery to limit their growth and prevent damage and excessive weight on the structure.

They are fed with treated water taken from a rainwater recycling system. The pumping system is powered by integrated photovoltaic panels.

Leaf-Cutter Ants Could Hold Key for Biomass - John Davis, *Domestic Fuel*, <http://domesticfuel.com/2014/08/20/leaf-cutter-ants-could-hold-key-for-biomass/>

A fungus from leaf-cutter ant gardens could be key in how biomass gets broken down into bioenergy sources. An article from the Pacific Northwest National Laboratory found at <http://www.pnnl.gov/science/highlights/highlight.asp?id=2690>, says researchers working with colleagues at the Great Lakes Bioenergy Research Center are using metabolomic and metaproteomic techniques to examine the dynamics of nutrient turnover in the gardens of leaf-cutter ants to discover how sugars, key in biofuels production, can be released.

(NOTE: *Metabolomics is the systematic study of the unique chemical fingerprints that specific cellular processes leave behind. Metaproteomics is the study of all protein samples recovered directly from environmental sources.*)

Their results provide new insights into microbial community-level processes that underlie this important ant-fungus symbiosis.

The article goes on to point out that the study yields important information on how metabolomics can help us understand how microbes can break down plant material to release the raw materials needed to make biofuels.

All about Geocaching - <http://www.geocaching.com/guide/default.aspx>

Do you remember enjoying scavenger hunts? If so, you might like the modern-day version called "geocaching". Geocaching is a real-world, outdoor treasure hunting game using GPS devices to navigate to a specific set of coordinates to try to find the geocache (container) hidden at that location.

You can hunt for caches on other people's property or you can place a cache on your property. You can limit the searches to folks you know (perhaps for a family reunion activity or to teach your children/grandchildren to feel comfortable in the forest) or, if you don't mind strangers on your property, you can post the coordinates online.

For more information about hiding or hunting geocaches, please see <http://www.geocaching.com/guide/default.aspx>.



**Tyler County Forest
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DO NOT FORWARD

OFFICERS & DIRECTORS
2015-2016

- Pres: Sarah Reinemeyer
- VP: Jeffrey Parker
- Sect: Brianne Parker
- Treas: Charles Zimmerman
- Dir: Betty Zimmerman (past President)
- Dir: Jack Clark
- Dir: DeAnna Turner
- Dir: Dr. Jay Fish

Check your membership date above for 2015 dues. '15 or greater = OK.

Board of Director's Meeting - February 20, 2015, 5:00PM

Membership 2015

Be sure to check the one or two digit code on the mailing label, above. If it is a **15** or greater, then you are paid through 2015 already. And if it is greater than **15** then you are way ahead of the pack, so you are done for at least a couple or more years.

If you see you haven't paid for 2014, not to worry, the TCFLOA does not attempt to entice anyone into paying for years gone by.

Be sure to use the form in the next column and send your check to the Treasurer, Charles Zimmerman at the address at the bottom of the form. This will insure a speedy turn around on your check.

Note that we are asking for your e-mail address. This will allow us to get time sensitive information on special programs, conferences, workshops and hearings to you. We will **NOT** give your address to any other groups, people, advertisers, etc. This information is for your board members and newsletter editor **only**.

Look at the address label above to check your membership status **now**.

Remember, if the number on the last line **isn't** a **15** or greater, then consider renewing your membership now.

MEMBERSHIP FORM

For Calendar Year 2015 - 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.

Associate Membership: Any individual not 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.

PLEASE BE SURE TO INFORM THE TREASURER OF ADDRESS CHANGES

NAME

ADDRESS

CITY / STATE / ZIP

PHONE APPROX # TIMBER ACRES IN TYLER CO.

E-Mail

Please make checks payable to TCFLOA, and mail to:
Charles Zimmerman, Treasurer TCFLOA, 298 County Road 2152, Woodville, TX 75979