Trinity-Neches Forest Landowners Association Newsletter

First Quarter, 2015

Next Meeting

Date: *April 25, 2015*
Time: *9:00 am registration*
Place: *Saunder's Tree Farm*
Outstanding Tree Farm Tour-12058 FM 19, Frankston, TX
This field day and lunch are free but you must RSVP by contacting Texas Forestry Association at 936-632-TREE leave your name, address, telephone number and number of people attending. Transportation during the Tour will be provided. Be sure to wear comfortable walking shoes and clothing suitable for outdoors.

Inside

Benefits of Retreating to the Trees –

Monterrey Herald Health Matters, Barbara Howard,
http://www.montereyherald.com/health/20141205/natural-solutions-experience-the-healing-power-of-nature-x2014-go-forest-bathing?utm_source=WIT121214&utm_medium=Email&utm_campaign=WeekInTrees

In evaluating a forest's worth, most people would think in terms of trees being sold to be used to make lumber, paper, and even electricity. But there is more to a forest than meets the eye. We know that trees store carbon in their trunks, clean air and water, provide diverse habitat for plants and animals and give people a place to relax and play.

Researchers have found that spending time in the forest benefits humans beyond just providing a place to relax and play. There are short and long-term benefits to taking a walk in the woods.

The fragrances of plant life, the sounds of water flowing down creeks, birds chirping and the crunch of leaves beneath one's feet, as well as the sensations felt when various textures that abound in a forest are touched, are processed and transmitted to the portion of the brain that affects psychological functions.

Japanese researchers have reported that shinrin-yoku (taking in the forest atmosphere – or *forest bathing*) on a regular basis can increase a person's immune system, reduce stress and regulate portions of the human body controlled by the nervous system. To obtain maximum benefits, forest goers need to indulge in more than just an occasional 15 minute hike into and out of the forest.

The practice of shinrin-yoku involves breathing deeply and opening all the senses. The idea is "to let nature enter your body through the senses".

One study highlighted in the American Journal of Alzheimer's ***Disease & Other Dementias***, found that long-term suffering dementia and Alzheimer's patients were determined to have decreased symptoms after experiencing shinrin-yoku.

Here are some helpful hints to help you practice shinrin-yoku:

- Go into a forest an hour or so at least three times a week;
- Don't bring cell phones or cameras or other such technology with you;
- Walk slowly or sit, being quiet and still;
- Don't make any noise;
- Actively listen and identify various sounds;
- Notice changes in sounds as animals get used to you being among them;
- Breathe deeply;
- Pay attention to the aromas of the forest;
- Study the details of individual parts of the trees, soil, rocks, etc.
- Touch various objects in the forest (leaves, bark, soil, etc.)

This kind of therapy has been shown to be beneficial to the health of senior citizens who are in rest homes or treatment centers. Even if they are wheelchair bound, they (and their caregivers) receive the healing benefits.

Symptoms positively affected include:

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Why Trees Shed Their Branches -

http://texasforestservice.tamu.edu/main/popup.aspx?id=1287

You've come home from a long day at work and are relaxing on your back deck when you notice it. Scads of tiny, thin branches — some with bright green leaves still attached — are scattered around your tree.

What could cause your tree to shed its branches? Is there something wrong with it? Worse yet, is it dying?

Probably not.

Trees are hardy. During severe drought, pine and hardwood trees conserve water by prematurely shedding needles and leaves. When leaves or needles don't get enough sun, their branches often die, naturally pruning themselves from the tree.

The same happens when a loblolly pine is shaded by surrounding trees. Its lower branches simply die and drop off.

Homeowners are sometimes alarmed by this natural pruning because they think the tree is dying. But you shouldn't necessarily worry if you come home and find pencil-sized branches at the base of your tree.

If there's been no bad weather, then **branch abscission** - also known as cladoptosis - is likely to blame. The phenomenon is similar to the process that occurs when trees shed their leaves each fall.

The process is relatively common in trees such as cottonwood, post oak, white oak, white ash, American beech, black cherry, black willow, bald cypress and longleaf pine. But it doesn't occur in others like water oak, willow oak, black walnut, sugarberry, eastern red cedar and Virginia pine.

The picture above to the right shows the typical swelling and smooth break that often is found when branches fall off as a result of abscission. In the case of hardwood trees, twig girdling beetles also may prune off the ends of small branches. More information is available on twig girdling beetles at http://texasforestservice.tamu.edu/main/popup.aspx?id=1208.

Great Green Wall of China – Planting Trees to Stave Off the Desert - *Brian Stallard, Nature World News, Dec. 15, 2014, http://www.natureworldnews.com/articles/11202/20141215/chinas-great-green-wall-holding-desert-back.htm?utm_source=WIT121914&utm_medium=Email&utm_campaign=WeekI*

China's arid north is slowly being invaded by its own desert, which is the source of growing dust storms and nearly useless land. To fight it, they are planting whole forests - a living wall of hearty trees to keep the desert at bay... and it's working.

That's at least according to a study recently published in the journal *Land Use Policy* (http://www.sciencedirect.com/science/article/pii/S0264837714002348), which details how China's "Great Green Wall" has helped shelter the country from dust storms while simultaneously helping to reintroduce vegetation into the fringes of what was thought to be a hopeless dust bowl.

Of course, the wall, officially called the Three-North Shelterbelt Forest Programme (http://www.fao.org/docrep/006/AD115E/AD115E00.HTM), is a project long in the making. It takes time to transplant and grow a forest, and the project had very small beginnings back in 1978. Now looking a lot more like the "living wall" that ecological engineers envisioned, the plan is due for completion in 2050, and will contain more than 100 billion trees covering more than a tenth of China.

So far, according to the study, things are looking good for the project. Measuring dust storm intensity (DSI) for regions bordering China's Gobi and Taklamakan deserts, researchers found the growing forest was doing its intended job. Most notably, there was a significant drop in DSI between 1981 and 1998, leading to slightly improved air quality for regions as far as Beijing.

The researchers also noted that this was not just the consequence of natural effects unrelated to the wall. Their analysis showed that DSI and vegetation rose and fell with precipitation deeper into the dust bowl regions, but near the walls, improvements were constant and unwavering.
And that's great news for other ongoing projects, such as the Global Environment Facility Initiative (http://www.thegef.org/gef/great-green-wall) that is placing a Great Green Wall in a 4,400-mile stretch across Sahelian Africa (between the Sahara Desert and the Sudanian Savanna).

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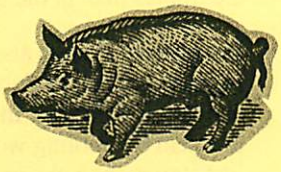
Feral Hog Facts –

Texas A&M AgriLife Extension,
http://feralhogs.tamu.edu/



- **Average litter:** Five to six pigs per litter, with 1.5 litters per year
- **Lifespan:** Four to eight years
- **Average weight:** 200 pounds for adult males, 175 for females
- **Sense of smell:** Can sense some odors 5 to 7 miles away or 25 feet underground
- **Food preference:** Believed to be 90 percent plant matter and 10 percent animal matter
- **Eating habits:** Small pigs eat 5 percent of body weight daily, large pigs eat 3 percent
- **Speed:** Can run up to 30 mph

Two Sides North America -

http://www.twosidesna.org/

Two Sides North America is a non-profit organization and global initiative whose membership seeks to offer "the other side of the story" regarding marketing campaigns that espouse a "paperless" society. Their goal is to promote the sustainability of the graphic communications industry and dispel common environmental misconceptions by providing users with verifiable information on why print and paper is an attractive, practical and sustainable communications medium.

They strongly support responsible sourcing of materials, production, print and design, consumption and disposal.

Two Sides is committed to ensuring that print and paper remains a versatile, effective and powerful means of marketing and communication, stretching the imagination and importing knowledge.

Included on their website is a "Myth and Facts" webpage (http://www.twosidesna.org/Myths-and-Facts) where they present facts about paper production, use and recycling to dispel the myths, promote well-informed, confident media buying decisions and encourage greater responsibility throughout the life of paper products.

One example of myth vs. fact: "Harvesting trees to make paper is bad" vs. "Sustainable forest management benefits people and the planet." When you click on the latter, you are taken to a webpage explaining why that is so.

Market Report, Sept. – Oct., 2014

Product	Statewide Ave. Price		Previous Ave. Price		Price/Ton Difference
	Weight	Volume	Weight	Volume	
Pine-Sawlogs	$31.17/ton	$244.78/mbf	$28.67/ton	$223.01/mbf	+9%
Pine-Pulpwood	$8.77/ton	$23.58/cord	$8.71/ton	$23.49/cord	+1%
Pine-Chip'n'Saw	$14.49/ton	$39.14/cord	$10.88/ton	$29.38/cord	+33%
Mixed Hardwood-Sawlogs	$36.82/ton	$353.86/mbf	$30.51/ton	$288.65/mbf	+21%
Hardwood-Pulpwood	$15.79/ton	$44.22/cord	$14.22/ton	$39.82/cord	+11%

Texas Timber Price Trends is a bimonthly publication reporting average prices paid for standing timber in Texas. ***This report is intended only as a guide to general price levels.*** It should not be used to judge the fair market value of a specific timber sale, which may vary considerably due to many factors. It is recommended that you use the services of a professional consulting forester in managing any timber sale. Important factors affecting timber prices include the type, quality and volume of timber for sale, accessibility, distance to mills/markets, weather conditions, economy/market conditions, who is handling the sale or is buying the timber, and contract requirements by the landowner. Hard copies of this publication can be purchased by contacting Dawn Spencer at (979)458-6630. The complete Texas Timber Price Trends can be viewed at http://tfsweb.tamu.edu/main/article.aspx?id=145 .

Conversion factors between volume and weight vary from sale to sale, so the differences in volume prices above may not equal differences in weight prices.

Stumpage price statistics include gatewood sales (estimated by subtracting cut-and-haul costs, other expenses and profits provided by reporter).

Statewide data excludes U.S. Forest Service sales.

Price calculated from specific conversion factor reported for each sale if available; otherwise, average conversion factors listed on page 4 of *Texas Timber Price Trends* (http://texasforestservice.tamu.edu/main/article.aspx?id=145) are used. MBF = thousand board feet. Doyle Log Scale used for board foot measurements.

Nature Saving Water and Soil - from *Texas Land Trends* - http://txlandtrends.org/.

Texas' increasing population, particularly within or in surrounding urban centers, continues to have significant influence on the continued loss of working lands, changing ownership sizes, and land values.

From 1997 to 2012, the Texas population increased from 19 million to 26 million residents, an increase of 36 percent or approximately 500,000 new residents annually. The majority (87 percent) of the population increase occurred within the state's top 25 highest growth counties.

Average ownership size declined from 581 acres in 1997 to 521 acres in 2012. By the end of 2012, the USDA Census of Agriculture accounted for nearly 249,000 farming and ranching operations in the state, representing a 9 percent increase since the 1997 census.

More than 54 percent of total land conversion occurred in the state's 25 fastest growing counties. During this period (1997-2012), approximately 590,000 acres were lost from the agricultural land base in these counties.

Tropical Vs. Boreal Forests – *NASA website (http://www.nasa.gov/earthrightnow), Carol Rasmussen, NASA Earth Science News Team.*

A new NASA-led study shows that tropical forests may be absorbing far more carbon dioxide than many scientists thought, in response to rising atmospheric levels of the greenhouse gas. The study estimates that tropical forests absorb 1.4 billion metric tons of carbon dioxide out of a total global absorption of 2.5 billion -- more than is absorbed by forests in Canada, Siberia and other northern regions, called boreal forests.

"This is good news, because uptake in boreal forests is already slowing, while tropical forests may continue to take up carbon for many years," said David Schimel of NASA's Jet Propulsion Laboratory, Pasadena, California. Schimel is lead author of a paper on the new research.

Forests and other land vegetation currently remove up to 30 percent of human carbon dioxide emissions from the atmosphere during photosynthesis. If the rate of absorption were to slow down, the rate of global warming would speed up in return.

The question of which type of forest is the bigger carbon absorber, said co-author Britton Stephens of the National Center for Atmospheric Research, Boulder, Colorado, has big implications for our understanding of whether global terrestrial ecosystems might continue to offset our carbon dioxide emissions or might begin to exacerbate climate change.

As human-caused emissions add more carbon dioxide to the atmosphere, forests worldwide are using it to grow faster, reducing the amount that stays airborne. This effect is called carbon fertilization. "All else being equal, the effect is stronger at higher temperatures, meaning it will be higher in the tropics than in the boreal forests," Schimel said.

But climate change also decreases water availability in some regions and makes Earth warmer, leading to more frequent and larger wildfires. In the tropics, humans compound the problem by burning wood during deforestation. Fires don't just stop carbon absorption by killing trees, they also spew huge amounts of carbon into the atmosphere as the wood burns.

Schmiel says, "What we've had up till this paper was a theory of carbon dioxide fertilization based on phenomena at the microscopic scale and observations at the global scale that appeared to contradict those phenomena. Here, at least, is a hypothesis that provides a consistent explanation that includes both how we know photosynthesis works and what's happening at the planetary scale."

– Continued on Page 5.

Benefits of Retreating to the Trees - *continued from Page 1.*

- Blood pressure is lowered;
- Stress is reduced;
- Mental clarity is increased;
- Immune system improves;
- Pulse rate is lowered;
- Blood glucose levels are decreased;
- Ability to recover from mental fatigue is enhanced.

NOTE: Before starting any health program, ask your health care provider if the activity would be an appropriate undertaking for you. And, when you retreat to the forest in hunting season, always wear hunter orange.

Great Green Wall of China – *continued from Page 2.*

Still, there is some criticism of these projects. A main concern is that planting forests where they don't naturally belong may ultimately backfire, turning these projects into massive wastes of time and money.

David Shankman, of the University of Alabama in Tuscaloosa, recently told *New Scientist* (http://www.newscientist.com/article/mg22429994.900-great-wall-of-trees-keeps-chinas-deserts-at-bay.html#.VI88dHsUPEV) that he is concerned about the unknowns.

"What is the mortality rate of planted trees? What happens when they die? And how do these trees affect grass and shrubs, which in general are more resistant to drought and more effective at erosion control?"

These are the questions, he said, that should be answered before governments and international organizations endeavor to throw even more resources into Great Green Walls.

Read more:
http://www.natureworldnews.com/articles/11202/20141215/chinas-great-green-wall-holding-desert-back.htm#ixzz3MMCPwLxj.

Become a Citizen Scientist –

Texas Invasives.Org

Do you want to help slow down the spread of harmful invasive species and reduce their ecological and economic damage? The first step is to locate where invaders have arrived and get that information to those who can do something about it. That's where citizen scientists come in. Citizen scientists are volunteers who receive expert training to identify and track important invaders in our area. There are two ways to become a citizen scientist.

1. Attend a Citizen Scientist Workshop

Join a **Satellite Group** by attending a scheduled Invaders of Texas **Citizen Scientist Workshop**. The workshops include classroom training about invasive species, GPS use, digital photography and reporting observations.

Step 1. Visit the workshop page (http://www.texasinvasives.org/invaders/workshop_results.php) and select a workshop in your area to attend.
Step 2. Click the Sign Up button for that workshop and fill out the Registration Form.
Step 3. The local Host will notify you by email if your registration is accepted. Class size is sometimes limited and registration is on a first come first served basis. So be sure and register early!

Please note: A fee may be collected at the workshop to cover refreshments. Ask the coordinator when you register. All other materials will be provided. If you have a GPS unit and/or digital camera, bring them with you.

2. Voyager Online Training Program

Become a **Voyager** by completing the **Online Training Program**. The Voyager program is for those wanting to work on their own. When you have completed the online training you will be ready to fly solo and report observations.

Step 1. Visit the online training (www.texasinvasives.org/training/index.php) page and sign up to create a user profile.
Step 2. Once you have created a profile, login and complete the online training modules and associated quizzes.
Step 3. After you have completed the online training you can login to your profile and begin reporting observations. Just click "**Add New Observation**" on your profile page to get started.

Please note: For those who would like to join their local satellite, please contact the satellite leader to request permission. After permission is granted you can change your satellite by clicking on the "**Update Profile**" link on your profile page.

Websites of Interest

Technology in the Forest (from *Eco-Link*) - http://www.idahoforests.org/img/pdf/eco/TechInForest.pdf

Smartphone Apps for the Forest Industry (National Timber Harvesting & Transportation Safety Foundation) - http://loggingsafety.com/content/smartphone-applications-forest-industry

txH2O - online magazine from Texas Water Resources Institute and Texas A&M AgriLife Extension - http://twri.tamu.edu/publications/txh2o/

Tax Tips for Forest Landowners (revised for law changes) - http://texasforestservice.tamu.edu/uploadedFiles/Sustainable/tax/Publications/Articles/TaxTips2014.pdf

Tropical Vs. Boreal Forests – *continued from Page 4.*

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For about 25 years, most computer climate models have been showing that mid-latitude forests in the Northern Hemisphere absorb more carbon than tropical forests. That result was initially based on the then-current understanding of global air flows and limited data suggesting that deforestation was causing tropical forests to release more carbon dioxide than they were absorbing.

Calendar of Events

March 27, 2015	Environmental Educators Summit – become a Project Learning Tree certified educator. Cost: $60 for PreK-8 training; $35 for Focus on the Forest Secondary Module: Climate Change & Southeastern Forests; $60 for Environmental Experiences for Early Childhood. Includes lunch. 9:00 a.m. – 4:00 p.m. Lone Star College-Montgomery, 3200 College Park Dr., Conroe. For more information, please see http://bit.ly/1tGn17L or contact Misty Bowie at (936) 632-TREE or educationintexas@texasforestry.org.
March 28, 2015	Texas Wildlife & Woodland Expo, 10:00 a.m. to 4:00 p.m., Lone Star College-Montgomery, 3200 College Park Dr., Conroe, TX. For more information, please see http://expo.tamu.edu.

Garden Seminars, Ina Brundrett Conservation Education Building, Pineywoods Native Plant Center, SFASU, 2900 Raguet Street, Nacogdoches, TX. For more information, please contact Elyce Rodewald, (936) 468-1832 or erodewald@sfasu.edu. RSVP – sfagardens@sfasu.edu or (936) 468-1832.

March 26-29, 2015	2015 National Azalea Society of America Convention. Convention and plant sale will be in the Ina Brundrett Conservation Education Building. Banquet/ASA annual meeting at Mast Hall in Historic Downtown Nacogdoches. Registration at http://sfagardens.sfasu.edu/images/stories/PDF/2015NacogdochesConventionRegistrationForm.pdf.

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