



## Staying Informed on Carbon Offsets

By: David Mercker, University of TN, Extension Forestry Specialist

About a-half-dozen years ago, there was considerable discussion in the forestry community regarding the possibility of compensating forest landowners for sequestering atmospheric carbon. These ecosystem payments were viewed, by many, as a reward for landowners who kept their woodlands as woodlands and as a potential for improving the ROI when timber markets were struggling. Our Extension Forestry Team was receiving inquiries on how to participate in this emerging market. It prompted the writing of a UT Extension Publication, "The Business of Carbon Credit Trading for Forest Landowners." <https://utextension.tennessee.edu/publications/Documents/W217.pdf>

This publication provided an overview of carbon sequestration and helped inform forest landowners about CO<sup>2</sup> storage, carbon measurement, participant eligibility and included an estimate of cash flow. It stressed that only those landowners with a serious and lasting commitment to long-term sustainable forest management should consider the project. Carbon credit trading is a contractual agreement, lasting several years, with initial costs that may not be suited for all ownerships. Removing timber during a contract period affects carbon sequestration rates, potentially resulting in a penalty. Further, the program is funded by private investors, not the government, and these investors are counting on participating landowners to deliver a product: sequestered carbon. And like the stock market, prices paid for sequestered carbon fluctuate, with no minimum guarantee. Finally, it concluded that profitability would more likely occur on larger forested tracts, uniform in stand structure, pine over hardwoods, existing on high-quality sites and with rapidly growing trees. The size requirement eliminates most landowners in Tennessee from participating.

About the time of that publication, the great economic stagnation occurred, and interest in this subject waned. The Chicago Climate Exchange (CCX), a primary com-

modity-based trading market for carbon credits in the United States, closed. More recently, renewed interest has arisen, with the California Green House Gas Emissions Trading Program becoming a leading option. In the U.S., carbon markets are broken into voluntary and compliance sectors. The compliance sector, which purchases carbon offsets to fulfill legal obligations to offset emissions, has grown rather quickly and composes about 85% of the U.S. carbon market. Still, in a report published in the *Consultant* (Jenkins and Smith, 2013), minimum feasibility requirements for projects are about 4,000+ acres at market price of \$10-12 per carbon offset (an offset is a metric ton of CO<sup>2</sup>). However, the authors report that prices could reach 3-to-7 times higher.

Figures that high could change everything. The market could also expand if governments intervene and establish mandatory targets for CO<sup>2</sup> reduction. It could also become less significant as industries adapt to be more successful in lowering their carbon emissions. For now, for the average Tennessee forest landowner, the recommendation is to be patient, but keep an ear to the rail and close (and cautious) eye on this developing market.

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## Regional Tree Farmer of the Year Judging Process

By: Tom Kain, Domtar, Tree Farm Committee Member

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I have been fortunate enough to be a judge for naming the Regional Tree Farmer of the Year (RTFOY) five times. Included in the article is a description of how the process works. So let us start at the beginning. Each State is encouraged by the National office to submit an application for the National Tree Farmer of the Year. Those applications are then separated into four regions of ATFS. A committee comprised of National ATFS staff and State chairs rank the applications in their region. The two applications in each region that receive the most points are then the regional finalists.



## How Might Trees Respond to Increased Atmospheric CO<sup>2</sup> Levels?

By: David Mercker, University of TN, Extension Forestry Specialist

There is much to be said, written and researched on the subject of carbon dioxide (CO<sup>2</sup>) gas, its effects on atmospheric temperatures, and what the future holds. Some of it is even controversial . . .

The forestry sector is caught in the middle of this science. We have long understood that trees, through photosynthesis, sequester carbon and store it in stems, trunks and roots. We also understand that as trees and forests mature, at some point, through death and decay, become a net emitter of CO<sup>2</sup>. Further, rather than allowing the wood to decay and release carbon back into the atmosphere, wood can be converted into long-live wood products, for instance flooring, cabinets or lumber. The result is stored carbon rather than released carbon. And through this process, commerce activity occurs: landowners sell timber, loggers are paid to harvest and transport it, mills convert it to a primary product and manufacturers make things with it. Wood is a natural, biodegradable and renewable product . . . the kind we like.

Quantifying the sequestration of carbon by forests is still a fairly young science. But researchers at the University of Michigan School of Natural Resources and Environment recently reported (Zak, et. al. 2011) that forests appar-

ently have greater ability to sequester carbon than traditionally understood. In the 12-year study, the researchers intentionally forced high levels of CO<sup>2</sup> into the canopy of an experimental forest to simulate increased release through combustion. The forest consisted of aspen, birch and maple species.

Results indicate that, when compared to the control, trees in the experiment grew faster. During the last three years of the study, "the CO<sup>2</sup> -soaked trees grew 26 percent more than those exposed to normal levels of carbon dioxide." Apparently the increased carbon had a fertilizing effect that encouraged trees to grow more fine roots, thereby procuring more soil nitrogen. The study then continued by indicating that as trees mature, eventually the law of diminishing returns would occur, and growth would subside.

Exactly how this might change the way that foresters manage forests in the future is not clear. But CO<sup>2</sup> sequestration likely will become, along with "wood, water, wildlife and recreation," yet another objective factored into silvicultural training and timber harvest scheduling.

*Reference: Pinchot Newsletter, Spring 2012.*

## TN Tree Farm Committee Hosts Tree Farm Tour for Congressman Diane Black

Provided By: Tennessee Forestry Association

The TN Tree Farm Committee and TFA hosted a very successful tour for Congressman Diane Black (R) Gallatin, at the Sycamore Springs Tree Farm in Allardt near Jamestown in Fentress County. The tour took place on Tuesday, January 29. Congressman Black is sponsoring the Keep the Forest and the Farm in the Family legislation on the federal level. Passage of this legislation will help reduce the estate tax burden on family forest owners and farmers. TFA appreciates Joe and Lyna Pennycuff inviting the Congressman, representatives from TDA/TDF; TN Farm Bureau and TFA members to their impressive Tree Farm. We appreciate the Pennycuff's generous hospitality very much. We also thank Congressman Black for her interest and dedication to Tree Farmers in Tennessee.



## Supreme Court Rules on Forest Roads

By: David Mercker, University of TN, Extension Forestry Specialist

On March 20<sup>th</sup>, the Supreme Court issued its ruling on the Decker v. NEDC case regarding whether storm water runoff from forest roads is point-source or nonpoint source pollution. Traditionally, EPA exempted silvicultural (logging) operations from federal permitting requirements. This long-standing interpretation was challenged (and won) by the Northwest Environmental Defense Center in the Ninth Circuit Court. However, the Supreme Court, in a 7 to 1 ruling, upheld the EPA interpretation. Scott Jones, of the Forest Landowner Association, sums it up this way, "This is a significant win for private forest landowners."



## How Can We Keep our Woods Bug, Weed & Disease Free?

Provided by: American Forest Foundation

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Since 2009, more than 90 new plant pests have entered the United States.

What's even more troubling is the U.S. Forest Service estimates that nearly 58 million acres of forests are at risk from damaging pests and pathogens. These numbers probably keep all woodland owners up at night, rightfully so. Do you know who's out there protecting our ports and eradicating the threat of forest pests?

The U.S. Department of Agriculture (USDA) has primary responsibility to reduce and eliminate the threat of these destructive pests. USDA agencies provide us with the following protection:

- **Animal and Health Plant Inspection Service (APHIS).** APHIS is tasked with training Customs and Border Patrol agents on agricultural inspections and keeping an eye out for high risk threats through targeted alerts. If a pest does make it through one of our ports of entry, APHIS acts immediately to set up a quarantine area and prohibit the movement of infected material. Sometimes this requires the removal of infected trees or plants to prevent any further spread.
- **The U.S. Forest Service (USFS).** For species that have become much more entrenched, and for native species that have increased uncontrollably, the Forest Service is tasked with developing mitigation and management solutions to protect the integrity of our forests. The USFS Forest Health Management Program works on the ground to track and survey pests, treat infected acres, and reduce the spread. The USFS Research & Development Programs work to study new biocontrol agents, management techniques, and the best way to preserve and restore the unique genetics of tree species at greatest risk. The Forest Service also provides states with tools and resources to leverage with their own state resources to curtail this threat locally.

The American Forest Foundation (AFF) is a national forest conservation organization that represents America's more than 10 million family forest owners. AFF's Free The Trees Campaign (<http://www.forestfoundation.org/free-the-trees>) was launched this year to fight for programs, like APHIS and others, that combat forest pests and pathogens. Join fellow woodland owners and forest enthusiasts in this advocacy effort to ensure that our forest heritage is protected for current and future generations. Visit our website and sign our advocacy petition.

To properly confront this threat, we also need to launch a citizen science effort—spreading the word to fellow woodland owners, so we can all work together to stop the spread. In addition to advocating for important federal programs, the Free the Trees Campaign is also working to give woodland owners the tools and information they need to tackle this issue on their own woodland as well as sharing helpful advice with neighbors.

Fortunately, there are a variety of resources available.

- The National Invasive Species Information Center, for one, provides a map ([www.invasivespeciesinfo.gov/unitedstates/state.shtml#.UPclPvLhdio](http://www.invasivespeciesinfo.gov/unitedstates/state.shtml#.UPclPvLhdio)) that allows you to get a state-by-state overview of threats you should look out for.
- The U.S. Department of Agriculture also has a website called "Hungry Pests" ([www.hungrypests.com](http://www.hungrypests.com)) that tracks the spread of problem species, provides answers to frequently asked questions, and offers information on steps you can take to combat threats in your area.
- Closer to home, you can call on a [local forester or cooperative extension office](#) (you'll find a starting point for contacting these experts at [www.mylandplan.org/pests](http://www.mylandplan.org/pests)) for help in identifying culprits and fighting them off.



## How Can We Keep our Woods Bug, Weed & Disease Free?

By: Provided by American Forest Foundation

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It's always easier to prevent pests and diseases than try to deal with a full-blown infestation. Here are a few other tips to keep our woodlands safe and better able to fend off pests:

- **Don't Move Firewood:** Insects and diseases can hide out in firewood. As a general rule of thumb, moving firewood 50 miles is too far, and 10 miles or less is best.
- **Practice Thinning:** Growing too close together can increase stress on trees—and make it easier for pests to spread from one to the other.
- **Limit Host Species:** If a particular species is a major problem in a region, consider planting less-susceptible species.
- **Diversify.** Grow a diversity of tree species on your woodland, providing assurance that the land won't be completely devastated if a new species-specific pest is introduced in your area.
- **Watch Out:** Keep your eyes peeled for signs of infestations: You could be the first to discover a bug in your area!

Find additional tips and resources on [MyLandPlan.org](http://MyLandPlan.org), the American Forest Foundation (AFF)'s website for woodland owners. Explore MyLandPlan's newly expanded invasive pest and pathogen section at <http://mylandplan.org/pests>. Take a stand against forest pests and pathogens and join AFF's Free The Trees Campaign. Make a commitment to spread the word to friends and family while advocating for programs that will keep our forests safe into the future.

For More information on Tennessee's Forest Health Program, contact Heather Slayton at TN Division of Forestry, 615-837-5432 or [heather.slayton@tn.gov](mailto:heather.slayton@tn.gov)

## From the American Forest Foundation....

### Farm Bill Update

On Wednesday, May 15, the House Agriculture Committee passed their Farm Bill, just one day after the Senate Agriculture Committee passed their bill out of committee. Provisions in both bills include *huge wins for forest owners*.

Next Steps. Next week, the Senate will continue debating amendments and when they get back from Memorial Day recess. The House still hasn't set their schedule, but may start debating their version as early as mid-June.

What to know more? Check out our [American Forest Foundation press release](http://www.forestfoundation.org/house-and-senate-ag-committee) at <http://www.forestfoundation.org/house-and-senate-ag-committee> and learn how the House and Senate [versions may differ](#) in certain forest provisions.

### Fight Forest Pests and Diseases

We often hear from Tree Farmers, *"my top concern is keeping my woods healthy and free from invasive species and other forest pests."* And, according to the U.S. Forest Service, 58 million acres of our nation's forests face imminent threats from pests and pathogens.

ATFS has launched the **Free the Trees** campaign to help fight this growing problem, and you can be a part. [Sign](#)

[the petition to urge Congress to support policies and programs that mitigate the threat.](#) Please also help us spread the word! Share the petition with other landowners and forest enthusiasts.

### Urge Your Senators and Representatives to Cosponsor the Forest Roads Bill

Senators Wyden (D-OR) and Crapo (R-ID) and Representatives Herrera Beutler (R-WA) and Schrader (D-OR) have reintroduced the bill to provide forest owners with certainty that their forest roads will not be subject to additional permitting under the Clean Water Act. The legislation ends the confusion in the courts over whether forest roads are point sources. The Supreme Court did not resolve this issue in its recent ruling, and litigators are already seeking new ways to use the courts to regulate forest roads as point sources.

[Write to your Senators](#)

[Write to your House Members](#)

TFA Note: Contact Information for TN's Congressional Delegation can be accessed on the TFA website at: <http://www.tnforestry.com/GovernmentAffairs/CongressionalDelegation/>



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## **Regional Tree Farmer of the Year Judging Process**

By: Tom Kain, Domtar, Tree Farm Committee Member

*(continued from on page 1)*

This is where the on-site judging comes into play. Normally four judges are divided into two teams of two and assigned two regions each. You can not be a judge for the region your state is located. I have been paired with a judge from New Jersey, Dennis Galway. We have judged regional finalists in the North Central and Western regions. At this point we schedule visits and make travel arrangements. Once on the Tree Farm we review the management plan, tour the property, review any supplemental information, and interview the Tree Farmer. The Tree Farm visits take between 6 and 12 hours. The variation depends on the size of the Tree Farm, our travel timeline, and discussions. The interview begins with explaining the goals for the visit, the process, and responsibilities going forward. We are always asked if Tree Farm size matters. The short answer is no because we are looking for the quality of management and how much the Tree Farmer has been able to act as an influencer in their County, State or on the National level. We selected the Lange's a few years ago as the North Central Tree Farmer of the Year, a 25 acre tree farm.

We individually score each Tree Farm after we leave the property, many times on a plane. On the last day we compare notes to make sure we both heard the same story and that our facts are correct. We need to do this because many times during the tour a support person, like the consulting forester, will engage one judge in conversation while the other judge is talking to the tree farmer. The judging sheets are divided into 17 areas that we score. Dennis and I have used a ten point scale for each section. It is not uncommon that the two regional finalists are separated by less than ten points.

Over the years it has been my privilege to be a part of the National Tree Farmer of the Year determination. I have met wonderful Tree Farmers across the nation. I know we have many Tree Farmers in Tennessee that would give many of the past regional recipients a run for their money. As we always say this is a recognition award and every State should enter one Tree Farm. Will you nominate a Tree Farm this year?

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## **TN General Assembly Passes Green Building Legislation**

The Tennessee Forestry Association supported legislation sponsored by Senator Steve Southerland (R) Morristown and Rep. Andrew Farmer (R) that allows for the use of any wood grown and/or processed in Tennessee to be eligible for use in construction projects by the State of Tennessee. Concerns were that only wood certified under the Forest Stewardship Council (FSC) could be used in state construction projects if the State of Tennessee only implemented the LEED green building standard. At present, the US Green Building Council only recognizes the LEED Green Building program. LEED will only include FSC wood in its building standards.

The legislation, which passed both the House and Senate unanimously, allows for the use of all wood grown and/or processed in Tennessee in State supported building projects. TFA believes that the State of Tennessee should certainly be including wood grown in our state in state construction. By passing this legislation unanimously in both Chambers, the Tennessee General Assembly certainly sent a strong message of support for Tree Farmers and timberland owners throughout our state.

### **SAVE THE DATE:**

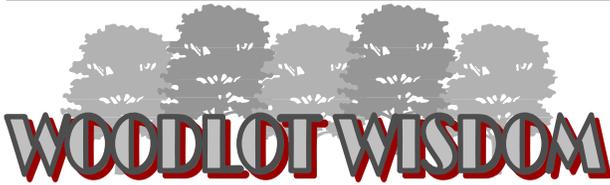
#### **2013 National Tree Farmer Convention**

Journey to one of America's most beautiful summertime destinations, Minneapolis, Minnesota, one of the oldest and strongest timber regions and cultural hotspots in the nation.

Join the hundred of Tree Farmers, landowners, industry professionals and partners on our shared quest to manage our forests and involve our families in ways to create "Healthy Forests for a Healthier Future."

Registration information is available at [www.treefarm.system.org/tree-farmer-conventions](http://www.treefarm.system.org/tree-farmer-conventions).





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### TFA Sure Appreciates Our Tree Farm Members!!!!

Thank you so much to all of our Tennessee Tree Farmers who are members of the Tennessee Forestry Association. Your financial support and influence locally, statewide and nationally mean so much to us. **If you are not presently a member of the Tennessee Forestry Association, we sure hope you will consider joining. Most Tree Farmers qualify for the \$50.00 annual membership rate. With your membership you can keep up to date on legislative activities, events and news items that are so important to the Tennessee forestry community.** To join TFA, visit the TFA website at: [http://www.tnforestry.com/files/1131/File/Membership%20Brochure\\_low\\_res.pdf](http://www.tnforestry.com/files/1131/File/Membership%20Brochure_low_res.pdf), or call the TFA office at 615 883-3832 or email Dana at [dhoward@tnforestry.com](mailto:dhoward@tnforestry.com).

### Please Support Tree Farm Silent Auction at TFA Convention

The TN Tree Farm Committee annually sponsors the Silent Auction at the TN Forestry Convention. The funds generated by the Silent Auction support the TN Tree Farm program activities and events throughout the year. This year the Silent Auction will be held on Thursday evening, October 24 during the TFA convention that is scheduled for the Downtown Doubletree Hotel in Memphis, October 23-25. Items that sell well during the Silent Auction include forestry supplies, crafts, ballgame/event tickets, household decorative items, hunting trips, etc. Items can be sent to the TFA office at 2605 Elm Hill Pike, #G, Nashville, TN 37214 or contact TFA and the staff will arrange for the item to be picked up and brought to the Convention. If you can attend the TFA annual convention, you are welcome to bring items with you and we also hope you will bid often and have fun at the Silent Auction in support of your TN Tree Farm program.



### TN Forestry Association Upcoming Meetings

#### June 27th, 2013

##### **West TN Regional Meeting**

Date: Thursday, June 27  
Location: Jackson, Catfish Cabin  
Time: Social @ 5:00 p.m. Dinner @ 6:00 p.m.  
Program: Meeting the Challenges for Forestry, Forest Industry & Loggers  
Presenter: Rick Meyer, Forest Resources Association  
Registration Fee \$20.00, pay at the door

#### October 23rd–25th, 2013

##### **TFA Annual Convention**

Location: Memphis, Downtown Doubletree Hotel  
Dates: October 23-25  
Room Rate: \$105.00 + \$15.00 parking  
More Information Coming Soon!!!

