BMP Display Log and Photos

May 13, 2006 – Family Forest Fun Day and Equipment Show

June 2006 – Teachers Conservation Institute

October 14, 2006 – Jones State Forest Family Field Day

April 14, 2007 – Texas Forest Landowner Council Tailgate Party

May 10, 2008 – Family Forest Fun Day and Equipment Show

November 2005

Golden Triangle BMP Informer

Serving Hardin, Jefferson, and Orange Counties

Updating FOREST LANDOWNERS on Forestry and Water Quality Issues

TEXAS FOREST SERVICE Best Management Practices Project P.O. Box 310 Lufkin, TX 75902 sharrington@tfs.tamu.edu

From the Editor . . .

A forest landowner's right to manage his/her property as he/she chooses is of the utmost importance. Forest landowners have either purchased their land with hard-earned money or have acquired it from family members who purchased the land long ago.

Landowners have earned the right and should always have the right to manage their property in the manner that best fits their goals. However, these rights are accompanied by responsibilities.

Responsibilities include protecting water quality for future generations. Texas' non-regulatory BMPs allow landowners the opportunity to be a steward of the land and avoid prohibitive government regulations.

BMPs are simple, inexpensive practices that protect land from erosion and maintain stream quality.

Did you know . . .
Losing a layer of soil the thickness of one dime across one acre (about the size of a football field including the end zones) amounts to losing 10,000 lbs. (5 tons) of soil per acre?

BMPs and Burning

Prescribed fire is a tool used to prepare sites for replanting, reduce accumulation of combustible materials, recycle forest nutrients, encourage growth of fire-adapted species, and aid in the general health of the forest. There are many guidelines and precautions that should be taken when doing a prescribed burn. Only trained, experienced individuals should conduct burns.

With fire come concerns of surface runoff, soil erosion and water quality. There are Best Management Practices that apply to burning and structures (such as firelanes) associated with it. Firelanes are permanent barriers that will be maintained over time for the specific purpose of stopping the spread of fire or for access to an area for the control of a fire.

If you are building or maintaining firelanes on your property, make sure they have water control devices where needed. Waterbars and wing ditches can be used on firelanes just like they are on dirt roads. When using wing ditches, make sure they do not divert the runoff water directly into a stream.

Reseeding the firelane is another method of preventing soil movement, and is also good for wildlife.

Mowing, rather than reblading, should be used, if feasible, to maintain firelanes over time in order to avoid exposing bare soil to potential erosion.

Another thing to keep in mind when burning – burning in a streamside management zone (SMZ) reduces the filtering capacity of the litter on the forest floor. Plan burns that minimize impacts on the SMZ. You can keep fire out of an SMZ by putting a temporary fireline around the perimeter.

Where Can I Get . . .?

Topo maps:

USGS Information Services
Box 25286
Denver, CO 80225
1-888-275-8747

Longview: (903) 758-0166
Tyler: (903) 592-0212
(903) 593-0128
(903) 534-0174

Websites:
www.topozone.com – find and print topo maps
www.teraserver.com – find and print topo maps and aerial photos

BMP-related products:

See the *BMP Product and Vendor Guide* at the TFS website: http://texasforestservice.tamu.edu. Click on Sustainable Forestry, then Best Management Practices, and look under publications.

Technical help on BMPs:

Shane Harrington
PO Box 310
Lufkin, TX 75902
(936) 639-8182
Sharrington@tfs.tamu.edu

Also on TFS website under *Best Management Practices*:

BMP Handbook – *Texas Forestry Best Management Practices*

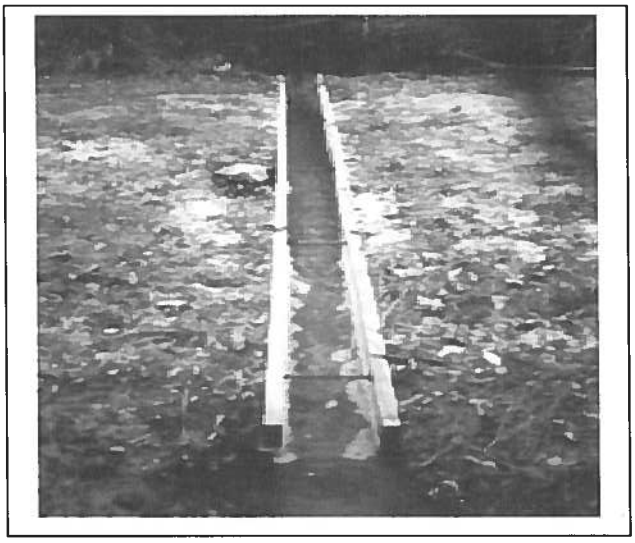
Support literature – *Forestry BMPs for Water Quality; Streamside Management Zones*; *Forestry, Wetlands and Water Quality*

Improving My Land

Open-Top Box Culverts

If there is a section of road on your land that always seems to be wet but doesn't really carry much water, an open-top box culvert may be useful. Open-top box culverts are easier to maintain than pipe culverts, and are installed at road grade.

Pipe culverts, if not installed to the proper depth, can cause a hump in the road and hinder driving. Proper installation of open-top box culverts allows for smooth travel for all types of traffic. It is important to remember, however, that they do not carry a lot of water and are not suited for handling flowing streams.



Open-top box culverts are installed at road grade, handle traffic well, minimize rutting, are fairly easy to maintain, and are relatively inexpensive.

Open-top box culverts are constructed of treated wood and can be reinforced with all-thread bolts. Good construction and proper reinforcement is essential to prevent the culvert from collapsing. Back fill must be tamped to the top of the culvert. Also, it may be necessary to stabilize the ends of the culvert with rock to minimize soil movement. The culvert should be installed across the road skewed at an angle of 30 to 45 degrees, pointing downhill.

You should periodically clean out this type of culvert to keep it working properly.

Do BMPs Work?

The Texas Forest Service has been monitoring logging operations for impacts to water quality since 1992. Since that time, six "rounds" of monitoring have been completed; another will begin in 2006. Each round consists of visiting 150 tracts on public, private and industrial forestland. The monitoring indicates that Texas landowners do a pretty good job in using BMPs. Executive summaries along with full reports from each round can be found on our website http://texasforestservice.tamu.edu.

We now need to take this a step farther and ask: how effective are BMPs in reducing nonpoint source NPS pollution? For example, it is easy to see the effects of BMPs on a woods road after a rain. Can we produce numbers that show exactly how much sediment, for example, a streamside management zone (SMZ) prevents from reaching the stream?

One study[1] shows some astounding results. The study compared two clearcuts in Eastern Kentucky; one received BMPs and one did not. The following conclusions were made:

- *Streamflow increased by as much as 138 percent following the harvest.*
  Trees use a lot of water. When trees are removed, more water moves across the land, increasing the potential for erosion. An increase in streamflow was measured for eight years following the harvest, as compared to an uncut tract.

- *Suspended sediment in the streamwater was 14 times higher on the clearcut with BMPs and 30 times higher on the clearcut without BMPs, as compared to an uncut tract.*
  BMPs had a drastic impact on the amount of sediment reaching the streams. Seventeen months later, the levels of suspended sediment were only 4 times higher on the BMP clearcut and 6.5 times higher on the non-BMP clearcut. (The Environmental Protection Agency estimates that forestland use contributes only 3 percent of all sedimentation reaching streams on a nationwide average.)

- *Clearcutting resulted in increased concentrations of nutrients in the streamwater and the concentrations were highest on the non-BMP clearcut.*
  Excessive nutrients in the water act to disrupt the natural balance and can make the water unsuitable for the critters that live there.

- *The streamside buffer strip (SMZ) was effective in reducing the impact of clearcutting on increases in streamflow and sedimentation.*
  This article stresses the effectiveness of SMZs in reducing NPS. A quick glance at the results of the TFS monitoring program indicates that when a tract failed to comply with the voluntary Texas BMPs, it was usually due to a lack of an adequate SMZ. The Texas voluntary guidelines recommend a 50-foot buffer on each side of perennial or intermittent streams – the same size SMZ was used in this study.

A similar study is currently being conducted by the Texas Forest Service Best Management Practices Project Office. Study sites are located in Cherokee, Houston, Newton, and San Augustine Counties.

[1] Arthur, M. A., G. B. Coltharp, and D. L. Brown, 1998. Effects of Best Management Practices on Forest Streamwater Quality in Eastern Kentucky. Journal of the American Water Resources Assoc. 34(3): 481-495.

Distribution of the *Sam Rayburn BMP Informer* is provided free of charge to forest landowners of Hardin, Jefferson, and Orange Counties. Funding has been provided through cooperation of the Environmental Protection Agency (EPA), the Texas State Soil and Water Conservation Board (TSSWCB) and the Texas Forest Service (TFS). **If you would like for your name to be removed from our mailing list please contact Shane Harrington at (936) 639-8180 or sharrington@tfs.tamu.edu.**

The Texas Forest Service is an Affirmative Action/Equal Opportunity Employer committed to Excellence Through Diversity.

TEXAS FOREST SERVICE
The Texas A&M University System

P. O. Box 310
Lufkin, TX 75902-0310

Forestry Acronyms

BMP	Best Management Practices
CFLOA	County Forest Landowner Association
FLEP	Forest Land Enhancement Program
FSA	Farm Service Agency
NIPF	Nonindustrial Private Forest (landowner)
NPS	Nonpoint Source (pollution)
NRCS	Natural Resources Conservation Service
SFI	Sustainable Forestry Initiative
SMZ	Streamside Management Zone
SPB	Southern Pine Beetle
SWCD	Soil and Water Conservation District
TCEQ	Texas Commission on Environmental Quality
TFA	Texas Forestry Association
TFS	Texas Forest Service
TLC	Texas Logging Council
TRe	Texas Reforestation Foundation
TSSWCB	Texas State Soil and Water Conservation Board
WHIP	Wildlife Habitat Incentives Program
WQMP	Water Quality Management Plan
WRP	Wetlands Reserve Program

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BMP Program Highlights

The Texas Forest Service BMP Program was started in 1989 as a result of the Clean Water Act and the importance of controlling nonpoint source pollution. Below are some of the achievements accomplished by the BMP Program since 1989.

- Prevented 11,831 tons of sediment from entering East Texas streams annually
- Prevented 95,961 tons of erosion form occurring on East Texas forestlands annually
- Monitored the highest ever BMP implementation rate, 91.7%, in the history of the program (Round 6, 2005)
- Implemented a comprehensive BMP Effectiveness Monitoring Program to evaluate the state recommended BMP guidelines
- Conducted 108 logger BMP workshops, training over 2700 people in BMPs

Your Land is the Future!

As a forest landowner in the Golden Triangle area, you have an excellent opportunity to be a major participant in the future of the East Texas forest resource. Landowners like you own over 60% of all the commercial timberland here in East Texas. The Texas Forest Service, a Member of the Texas A&M University System, exists to help you realize your land management objectives.

As you know, the forestry community is going to great lengths to continue to utilize its renewable resource while protecting the environment. In fact, forestry leaders here in Texas have developed a set of Best Management Practices (BMPs), which are voluntary standards that provide protection for the streams and creeks of East Texas during and after forestry activities. Use of these voluntary BMPs will not only protect the environment, but also avoid costly regulatory programs. Agriculture and forestry are the only land-use activities exempt from federal and state water quality regulations.

After all, who does not want to maintain the beauty and vitality of our streams? Using BMPs is easy. By simply leaving a strip of trees along streams and creeks, the quality of your water can be protected. By using proper stream crossings, you can ensure good road access while minimizing erosion.

In the near future, you will be hearing much more about the Best Management Practices program. The Texas Forest Service encourages you to take an active role in your forest management decisions. Your timberland offers tremendous personal opportunity and is the future of East Texas forestry. For more information on BMPs or on the management of your forestland contact your local Texas Forest Service office.

Timber Thieves Don't Use BMPs!

Some landowners have had timber cut and removed from their property without their permission.

If you suspect timber theft on your property or notice suspicious activity in your area, call the Timber Theft Hotline at 1-800-364-3470.

Help prevent timber theft –

- Clearly mark property boundaries, preferably with fencing.
- Gate all roads into the property.
- Ask your neighbors to report suspicious activity. Let them know when and where you are planning to have your timber cut.
- When having timber harvested, check the sale area where harvest is in progress to ensure unmarked trees are not cut.
- Know the value of your timber. Before making a timber sale, clearly mark and measure all trees to be included in the sale.
- Join a forest landowner association to improve your knowledge of forestry issues.
- Insist on a sale contract that includes Best Management Practices.

Improving My Land

Woods Road Maintenance

What could have prevented the washout that is depicted below?

Something as simple as maintaining the road ditches would have kept the water off of this road. The ditches were allowed to fill in with sediment causing the water to backup on the road.

A washout like this can result from failing to maintain the road ditch and wing ditches.

Preventative maintenance on your roads will help protect water quality and keep your access open all year. Be sure to check all of your water control structures, especially ditches and culverts on access roads to make sure that water can flow freely. Culverts can become clogged with debris and road ditches can fill in with sediment with time.

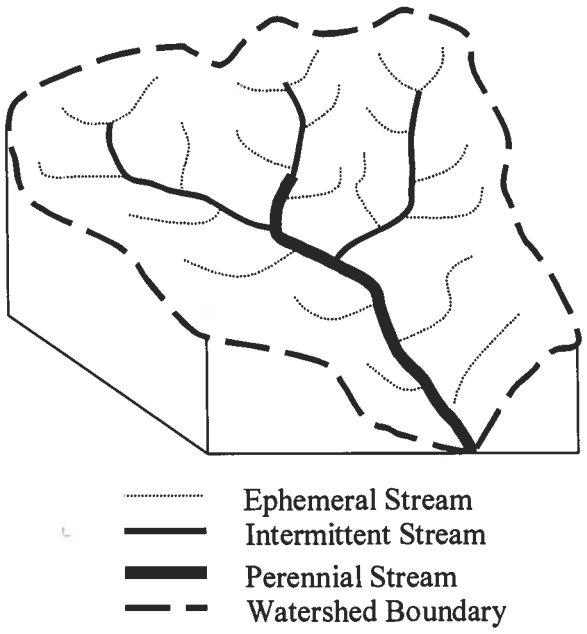
The long slow winter rains are coming to an end and will soon be replaced with the shorter duration and higher intensity spring and summer thunderstorms. Now is a good time to check your road systems. Preventative maintenance saves time and money when compared to reconstructing roads.

What is a Watershed?

A watershed is an area of land that drains rainfall into a stream or lake. They are generally named for the water body that is at the end, or downhill, portion of the area being considered. Watersheds vary considerably in size. However a small stream on your property may drain only a hundred acres. Keep in mind that your small stream flows into a larger stream that would be part of an even larger watershed such as the Sabine River.

While forested watersheds provide the highest quality water, some forestry activities have the potential to lead to erosion. The use of Best Management Practices keeps the soil in place in the watershed, preventing siltation into streams.

The figure to the right depicts a three-dimensional watershed with its associated streams. An ***ephemeral*** stream, sometimes called a drain or swag, carries water only during and for a short time after a rain. An ephemeral stream may or may not have a well-defined channel. An ***intermittent*** stream carries water at least 30%, or about four months, of the year continuously, but not year-round. Intermittent streams have well-defined channels with scoured bottoms, a result of the flow. A ***perennial*** stream flows year-round, but may pool during drought conditions.



These distinctions become important when deciding where Streamside Management Zones are recommended. As a general guideline, SMZs should be used along intermittent and perennial streams. These are the recommended minimum voluntary guidelines. Your common sense should guide your final determination.

You can find much more information about your watershed by visiting the Environmental Protection Agency's (EPA) World Wide Web page at http://www.epa.gov/surf.

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Welcome to the first issue of the Golden Triangle BMP Informer newsletter designed especially for forest landowners in Jefferson and Orange Counties.

We all want clean water for ourselves as well as for our children and grandchildren. In Texas, as a forest landowner, you have a special opportunity to protect water quality.

By using voluntary Best Management Practices (BMPs) on your forestland, you can continue to avoid unnecessary government regulations while providing clean water.

With a philosophy of protecting water quality in the forests of East Texas by non-regulatory means, the articles in this and future issues will provide you with information that you can use to make informed land management decisions based on your personal objectives.

Did you know…
Forests produce the cleanest water of any agricultural land use.

Estimated Economic Impact from Timber Damaged by Hurricane Rita
Texas Forest Service

Hurricane Rita damaged an estimated 533 million cubic feet of timber. The damaged timber volume could have been used to make various forest products such as lumber, plywood, OSB, and paper and paperboard products worth a total of $3.7 billion. Such level of forest industry economic activity could have supported a total economic activity in East Texas worth $13.2 billion. These indirect economic activities include upstream and downstream industries of the forest product industry, and the service sectors that support the timber-based communities. These estimates are based on historical average economic activities supported by the harvested timber volumes in East Texas.

A portion of the damaged timber will be salvaged. However, because of the large volume of timber damaged, the rapid decay of dead wood, and economic constraints, salvage operations are limited. The actual salvage ratio determines the ultimate negative economic impact of Hurricane Rita. For example, if only 25 percent of the damaged timber is salvaged, the potential negative direct and total economic impact would be 75 percent of the total economic activities had the timber not been damaged. This would mean a direct negative economic impact of $2.8 billion to the forest sector in East Texas, and a total negative economic impact of $9.9 billion due to Hurricane Rita.

If the Texas Forest Service/Texas Forestry Association Hurricane Rita Forest Recovery Task Force goal of 40 percent is achieved, the potential negative direct and total economic impact would be 60 percent of the total economic activities had the timber not been damaged. This corresponds to a direct negative impact of $2.2 billion to the forest sector in East Texas, and a total negative economic impact of $7.9 billion.

To achieve the higher salvage ratio, significant resources, effort, and cooperation are needed in the salvage operations to achieve the 40 percent goal and reduce the potential total negative impact by $2 billion.

This estimation includes only the negative impact from damaged timber (trees that are blown down, snapped off, leaning more than 45 degrees, or otherwise are or will be dead and thus need to be salvaged), not the 435 million cubic feet of timber that was affected (trees that are leaning less than 45 degrees, have lost only part of their crown, have only a loss of foliage, or otherwise are not subject to imminent death). Nor does it include the reduced future timber growth in the damaged area in reforestation is not done immediately or appropriately. Also, large amounts of salvaged timber will cause substantial decline of timber prices, which is another form of loss to the landowner that is not included in this estimate.

BMPs and Burning

Prescribed fire is a tool used to prepare sites for replanting, reduce accumulation of combustible materials, recycle forest nutrients, encourage growth of fire-adapted species, and aid in the general health of the forest. There are many guidelines and precautions that should be taken when doing a prescribed burn. Only trained, experienced individuals should conduct burns.

With fire come concerns of surface run-off, soil erosion and water quality. There are Best Management Practices that apply to burning and structures (such as firelanes) associated with it.

Firelanes are permanent barriers that will be maintained over time for the specific purpose of stopping the spread of fire or for access to an area for the control of a fire.

If you are building or maintaining firelanes on your property, make sure they have water control devices where needed. Waterbars and wing ditches can be used on firelanes just like they are on dirt roads. When using wing ditches, make sure they do not divert the runoff water directly into a stream.

Reseeding the firelane is another method of preventing soil movement, and is also good for wildlife.

Mowing, rather than reblading, should be used, if feasible, to maintain firelanes over time in order to avoid exposing bare soil to potential erosion.

Another thing to keep in mind when burning – burning in a streamside management zone (SMZ) reduces the filtering capacity of the litter on the forest floor. Plan burns that minimize impacts on the SMZ. You can keep fire out of an SMZ by putting a temporary fireline around the perimeter

Improving My Land

Site Preparation and BMPs

Almost one year after Hurricane Rita made landfall, landowners in southeast Texas are still trying to recover from the devastation caused by the storm. Some landowners were fortunate in that their timberland survived the storm with little damage while others are faced with the reality of starting over. By now many landowners have salvaged what was left and begin shifting their focus to preparing their lands to be replanted this coming winter.

Some sites will require little work to be done before replanting is possible while other sites may require extensive site preparation work. Site preparation is a vital tool for timberland owners who want to increase seedling survival and their initial growth rate. This activity could be as simple as just removing the debris left after the salvage operation or in some cases the site may need to be ripped and bedded before planting seedlings. As with any forest management activity, caution should be taken to ensure that these actions do not negatively impact water quality. Following are a few things to keep in mind when conducting any site preparation work.

- The boundaries of all Streamside Management Zones (SMZs) should be clearly marked before beginning site preparation activities.
- All firebreaks and firelanes should have well-installed and maintained water control structures such as waterbars and wing ditches to minimize erosion.
- Ripping, shearing, windrowing, and mechanical planting should follow the contour of the land to prevent excessive erosion.
- Minimize the amount of soil that is pushed into a windrow.
- Soil disturbance should be kept to a minimum. Avoid intensive site preparation on steep slopes and slopes with highly erodible soils.
- All reasonable attempts should be made to stabilize and repair erosion resulting from site preparation activities.
- All trash associated with site preparation activities should be disposed of properly and all equipment fluids should be caught in containers and disposed of properly as well.

These guidelines along with others can be found in the Texas Forest Service's Best Management Practices (BMPs) Handbook. These BMP guidelines are designed to prevent or greatly reduce the chances of negatively impacting water quality during any forest management activity. You can get a copy of the Texas Forest Service's BMP Handbook by going to http://texasforestservice.tamu.edu or by contacting your local Texas Forest Service office.

Best Management Practices Need to be Applied When Salvaging Timber Damaged by Hurricane Rita

The destruction caused by Hurricane Rita in southeast Texas left many forest landowners searching for answers about what to do with all the broken and damaged timber. Salvaging this timber and starting over may be the only option for many. When conducting these operations, best management practices (BMPs) should be applied as if it were a normal harvest.

Forestry BMPs are voluntary practices that are designed to be an effective and practical means of preventing or reducing erosion and the amount of water pollution generated by forestry activities. A report recently released by the Texas Forest Service documents the positive results the forestry community has achieved in protecting water quality through the implementation of BMPs.

However, in cases where there is a sense of urgency to harvest the timber, as in a salvage operation, we must still remember the long term benefits of using BMPs. BMPs help protect soil and water, two key elements necessary for growing a productive forest. Here are some things to keep in mind when harvesting or salvaging timber:

- **Make sure the ground is stable enough for heavy equipment.** Hurricane Rita dumped over 10 inches of rain is some areas. While most of East Texas was extremely dry before Rita, some areas may now be saturated. Operating heavy equipment during wet conditions can cause excessive rutting, leading to losses in the site's productivity and causing impairments to water quality.
- **Pay close attention to Streamside Management Zones (SMZs) during salvage operations.** Over 400,000 acres of timber were damaged by Hurricane Rita. Among the hardest hit areas were SMZs (50 foot buffer strips that aid in protecting water quality). Spotting the boundaries of these zones now may be impossible for the salvage contractor. Remarking or flagging these boundaries can increase their visibility.
- **Special care should be taken when operating in the SMZ.** These zones act as the final filter before any sediment or debris reaches the stream. Haul roads, skid trails, and landings should be located outside of these areas.
- **Every effort should be made to protect and leave trees not severely damaged.** This is critical when operating inside the SMZ to prevent destroying the filtering and stream shading effects of this zone. A residual density of 50 square feet of basal area per acre should be left where possible.
- **Trees and tops should not be felled across or pushed into streams**. Hurricane Rita undoubtedly caused a lot of debris to enter East Texas streams, potentially negatively impacting water quality. Though this was due to a natural occurrence, any additional debris that enters the stream as a result of the salvage operation should be removed. Failure to do so could result in reduced stream flow and impaired water quality.
- **Use dispersed skidding or cable retrieval when removing timber from the SMZ.** Utilizing this method will allow the forest floor to remain virtually undisturbed, maintaining the filtering capacity of the SMZ.

When conducting hurricane salvage operations, landowners, loggers, and foresters should continue to practice sustainable forestry. Following the state's recommended BMPs is one way to ensure this. You can get a copy of the *Texas Forestry Best Management Practices (Bluebook)* at your local Texas Forest Service office or at http://texasforestservice.tamu.edu.

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Looking for a Good Logging Contractor?

The Texas Forest Service maintains a list of all logging contractors who have attended the TFS/TFA Forestry Best Management Practices Workshop. This list is available at any TFS district office.

You can also access a list of BMP-trained loggers on the Texas Forestry Association's website at http://www.texasforestry.org. Click on *Logger Training Records*. TFA's list also shows the other courses completed by the loggers, including those with Pro Logger certification. By clicking on *Programs*, you can learn about the Pro Logger Accreditation Program, the Texas Logging Council and other TFA programs

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Are You a Tree Farmer?

The American Tree Farm System (ATFS) is the oldest and largest forest certification program in the United States. Today, 60,000 Certified Tree Farmers are managing 86 million acres nationwide (26 million acres are managed by private landowners). In Texas there are 2,000 Certified Tree Farmers managing over 4.2 million acres.

By enrolling into the AFTS you are ensuring that your forestland will be managed in a sustainable way while protecting water quality, providing wildlife habitat, and promoting healthy forest management. There is no charge to enroll your forestland into the AFTS. If you own at least 10 acres and have a written forest management plan you may qualify to become a Certified Tree Farmer.

If you qualify and are enrolled into the AFTS you will be presented with a certificate and a Certified Tree Farm sign. This sign can be displayed on your property to show that you are managing your forestland in a sustainable and environmentally friendly manner.

To become a Certified Tree Farmer you can contact your local Texas Forest Service office or the Texas Forestry Association at (396) 632-TREE or 8733.

Jones State Forest BMP Demonstration Area

Many people hear the term BMPs and may have an idea of what they are but have never really seen them applied or applied correctly. The Texas Forest Service established BMP demonstration areas during the mid 1990's on the W. Goodrich Jones State Forest located in Conroe and the Kirby State Forest located between Kountze and Woodville. The purpose of these BMP demonstration areas was to give loggers, landowners, and general public a chance to see properly implemented BMPs. Original demonstrations included a streamside management zone (SMZ), various types of stream crossings, and water control structures (i.e. wing ditches, open top box culverts, etc.).

During 2005 the Texas Forest Service decided to remodel and update the BMP demonstration area on the Jones State Forest in Conroe. Many of the original BMPs that were installed in the 90's had deteriorated and were no longer visible. Many of the original BMP demonstrations were renovated and new BMP demonstrations were added. Renovation work consisted of remarking the SMZ, clearing brush away from culvert crossings making the culverts visible again, and replacing the existing signs with new ones which explain what BMP is being used and its purpose.

A highway entrance using large rocks and timber mats was added showing how mud can be removed from tires before entering the highway. Tracking mud onto the highway can cause the roadway to become slick making it hazardous for other motorists. Also a flat rail car was placed across a stream demonstrating how it can be used as a bridge. Sometimes a stream is too large for a culvert or other type of crossing and a bridge must be used and while there are several options a flat rail car can provide a sturdy and safe crossing alternative. Another new demonstration is road stabilization using crushed concrete which will allow a road to be used during wetter months. Also grass was planted along other roadways showing how seeding roads can prevent or minimize any erosion that may occur.

You can visit the Jones State Forest anytime Monday through Friday and view the BMP demonstration area as well as other management activities that are used to enhance wildlife habitat for endangered species and to reduce the threat of wildfires and the destruction of property. For information regarding the Jones State Forest call (936) 273-2263.

Where Can I Find?

Do you often wonder where you can purchase materials such as culverts, geofabrics, timber mats, etc? Materials such as these are often used by landowners to enhance their property while maintaining and protecting water quality.

The Texas Forest Service BMP office has created a Product/Vendor Guide which lists various products along with the contact information for the vendors who sell these products. This list is currently being updated to include new products and vendors. The list can be viewed by visiting http://tfsweb.tamu.edu/sustainable/article.aspx?id=74.

Also all of the guidelines and recommendations for properly installing these products can be found in the Texas Best Management Practices Handbook. The handbook can be viewed at the web address listed above.

For more information regarding the BMP Product/Vendor Guide or the Texas Best Management Practices Handbook please call the Texas Forest Service BMP Office at (936) 639-8180.

Did you know . . .

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?

Improving My Land

Forest Roads and BMPs

Forest roads are an important part of proper forest management. These roads allow for easy access and for management activities to be carried out efficiently and easily. The problem with some roads are that they are located in areas which may stay wet for extended periods of time. Wet roads can limit access and traveling these roads while wet can increase the potential for erosion and the chance of sediment entering nearby streams.

Excessive driving on wet roads can cause rutting which can alter the natural drainage of the roadway. Altering the natural drainage of the road can cause water to pool and remain in the roadway for long periods of time. Also rutting channels water and this channeling of water can increase the potential for erosion occurring and washing out the road making it impassable.

Planning the location of your road is one way to avoid this problem. When constructing new forest roads plan to avoid areas that are prone to being wet and use water control structures such as waterbars and wing ditches to help divert water off of the road and minimize the potential for erosion. If your road is already in place and wet areas are present rock can be put down to create a stable road allowing you to use the road without causing excessive rutting.

Crushed concrete was used to stabilize this road providing access during wet months.

Before putting down any rock it may be necessary to smooth out the road and some type of geofabric should be put down. This geofabric will prevent the rock from sinking into the ground and will distribute the weight of passing vehicles preventing ruts from occurring. It is important to extend the rock well pass the wet area to ensure a well stabilized road. Guidelines for constructing and maintaining forest roads can be found in the Texas Best Management Practices Handbook which can be viewed online at http://texasforestservice.tamu.edu.

Repairing Storm Damaged Streamside Management Zones

Streamside management zones (SMZs) are important in protecting water quality and providing excellent wildlife habitat. The purpose of an SMZ is to reduce the potential quantity of sediment and logging debris reaching the stream and to prevent increased water temperatures. Caution should be taken when conducting any forest management activity within the area immediately adjacent to stream channels to ensure the protection of both instream and downstream water quality. Under proper management, timber production, wildlife enhancement and water quality may all be achieved.

Hurricane Rita passed over East Texas in September 2005, damaging a total of 435,131 acres of forestland. General stand type patterns show SMZs make up, on average, 15% of the total forested area in this damage zone (65,269 acres). Of this amount, over 90% of the SMZs were damaged severely enough to warrant restoration at some level. Family Forest Owners (FFO) accounted for almost 40% of the total SMZ area damaged by Hurricane Rita.

An initial assessment should be made of any damaged SMZ to determine the severity, current stocking level, and ability to regenerate. The best option for restoring the SMZ may be to allow it to naturally regenerate if there are adequate sources for regeneration of desirable species. It may be necessary to establish several plots within the SMZ to determine if any advanced regeneration (stems 2 – 5 feet tall), sprout regrowth, or viable seed source exists. Sprouting is a viable regeneration source for hardwood species and is dependent upon stump size. Most species sprout vigorously on stumps twelve inches and smaller. Observing abundant advanced regeneration ($\geq$300 stems/acre), numerous stumps capable of producing sprouts (50 stumps/acre), and mature seed producing trees, little or no effort should be needed for the SMZ to naturally regenerate.

Damage to the SMZ may be severe enough that natural regeneration is not an option and the area must be artificially regenerated. The SMZ should encompass 50 feet on both sides of all perennial and intermittent streams and carry a minimum basal area of 50 square feet per acre. When replanting, every effort should be made to ensure that the number of seedlings planted will meet the minimum basal area of 50 square feet in ten years.

Preferred species for planting are Water Oak, Willow Oak, Cherrybark Oak, Swamp Chestnut Oak, Nutall Oak, Green Ash, Sweetgum, Cottonwood, and Loblolly Pine. These seedlings should be hand planted. Intensive site preparation and machine planting should be avoided in these areas in order to minimize the potential for sediment and debris from entering the stream.

Upon deciding on a regeneration method, it may be necessary to remove debris and/or vegetation that may be covering existing seedlings or to create an opening to plant the new seedlings. When removing the debris, caution should be taken to prevent damaging existing seedlings, damaging residual trees, and creating areas with high erosion potential. Herbaceous weed control may be needed to control competing vegetation and to increase seedling survival. The application of herbicides within the SMZ should be done through spot treatment or individual stem injection. Aerial or ground broadcast of herbicides should be avoided within the SMZ to prevent any chemicals form entering the stream. If the area where the herbicides are to be applied is prone to flooding extra caution should be taken when applying the treatment or the treatment should be avoided. Always follow all manufacturing labels on containers when applying herbicides and always dispose of empty bottles and trash appropriately.

Whether the SMZ is naturally or artificially regenerated, Texas Best Management Practices (BMPs) Guidelines should be followed. These guidelines are designed to protect water quality during any forest management activity. For a copy of the BMP handbook visit your local Texas Forest Service office or view online at http://texasforestservice.tamu.edu. For questions regarding repairing damaged SMZs or BMPs please contact the Texas Forest Service BMP Office in Lufkin by calling (936) 639-8180.

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Forestry Acronyms

BMP	Best Management Practices
CFLOA	County Forest Landowner Association
FIP	Forestry Incentives Program
FSA	Farm Services Agency
NIPF	Nonindustrial Private Forest (landowner)
NPS	Nonpoint Source (pollution)
NRCS	Natural Resources Conservation Service
SFI	Sustainable Forestry Initiative
SIP	Stewardship Incentives Program
SMZ	Streamside Management Zone
SPB	Southern Pine Beetle
SWCD	Soil and Water Conservation District
TFA	Texas Forestry Association
TFS	Texas Forest Service
TLC	Texas Logging Council
TMDL	Total Maximum Daily Load
TNRCC	Texas Natural Resource Conservation Commission
TRe	Texas Reforestation Foundation
TSSWCB	Texas State Soil and Water Conservation Board
WHIP	Wildlife Habitat Incentives Program
WQMP	Water Quality Management Plan
WRP	Wetlands Reserve Program

November 2006

Golden Triangle BMP Informer

Serving Hardin, Jefferson, and Orange Counties

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Seedlings On-line!

The Texas Forest Service is currently accepting on-line pine and hardwood seedling orders on the TFS website at http://texasforestservice.tamu.edu. Look under *Forest Management*, then *Nurseries*. Special features of the on-line service include: volume discounts, flexible payment methods, flexible shipping methods, automatic e-mail notification, a secure website, and facilitated customer access.

The Texas Forest Service Indian Mound Nursery near Alto will produce pine, containerized longleaf, containerized loblolly and 28 species of hardwood seedlings this year. The planting season for northeast Texas runs December through March; southeast Texas planting season runs December through February because of the warmer climate. Seedlings may be purchased from the TFS website, through a local Texas Forest Service office, or by calling the Indian Mound Nursery at (936) 858-4202.

Remember BMPs When Planting

Landowners and contractors should keep water and soils in mind when preparing to plant and preparing. There are Best Management Practices to guide you during these operations.

Remember these points when doing site preparation and planting:
In general -

- Mark boundaries of all streamside management zones (SMZ) clearly before site preparation activities.
- Plan ahead to minimize disturbance by equipment in SMZs.
- Site preparation activities should skirt SMZs and stream channels. Any debris should be placed above the ordinary high water mark of any stream or body of open water.
- Any site preparation practices and planting should be done following the contour of the land.
- Avoid intensive site preparation on steep slopes and on slopes with thin or highly erodible soils.
- Hand plant excessively steep slopes and wet sites.

When using prescribed fire –

- Firebreaks should have water control structures (water bars, wing ditches, etc.) in order to minimize erosion.
- Burning in an SMZ reduces the filtering capacity of the ground covering. Plan burns to minimize impacts on the SMZ.
- Avoid, when possible, site prep burns on steep slopes or highly erodible soils.

When using chemicals –

- Carefully plan application to avoid direct and indirect entry of chemicals into streams and impoundments.
- Avoid applying chemicals to vegetation protecting eroded slopes, gullies, drainages, and other fragile areas subject to erosion.

Want to See Examples of BMPs at Work?

You can take a "Virtual Tour" of the Jones State Forest and Kirby State Forest BMP Demonstration sites on the TFS website. Color photographs depict many BMPs with explanations about application as well as installation techniques.

Go to http://texasforestservice.tamu.edu and click on **Forest Management**, then Water Quality, then look under Forest Tours.

Who Can Answer My BMP Questions?

Your local forester can answer most of your questions pertaining to BMPs but if you do not have a forester the Texas Forest Service can help. The Texas Forest Service has a staff that is dedicated to working with BMPs and landowners.

Assistance with your BMP needs can be obtained by contacting one of the BMP Foresters.

Northeast Texas
Jacob Donellan
1203 W. Loop 281, Suite B102
Longview, TX 75604
Phone: (903) 297-3910

Southeast Texas
Shane Harrington
P.O. Box 310
Lufkin, TX 75902
Phone: (936) 639-8180

Improving My Land

Do Your Firelanes Measure Up?

Firelanes are important in protecting your valuable timber. Even though it has been a fairly wet fall and winter and fire danger has been relatively low, you should know the condition of your firelanes.

If you have an erosion problem on your firelanes, it is important to solve the problem at its source. Soil erosion is usually a result of the firelane carrying too much water. For example, just filling in the washed areas is not as good as installing a water bar or other water control structure. Water bars and wing ditches work just as well on firelanes as they do on temporary roads or skid trails. When installing wing ditches, make sure that the runoff water is not being discharged directly into streams.

Seeding can also help minimize erosion in a firelane, as well as provide supplemental food for wildlife.

A firelane such as this needs water control structures to minimize erosion.

Proper maintenance of a firelane may include mowing rather than blading to minimize both fuel build-up and soil erosion. When blading is necessary, every effort should be made to minimize exposure of the bare soil.

IRS Timber Tax "Form T" Updated and Timber Tax Relief Provided by Gulf Opportunity Zone Act of 2005

Dr. Linda Wang, Economist and Tax Analyst, Texas Forest Service

Forest landowners with timber holdings in a trade or business (under Section 631(b)) who make an outright sale of timber (lump-sum sale) that qualifies for capital gains treatment, or forest landowners who claim a depletion deduction, are required to file a Form T—Forest Activities Schedule, available from the IRS website (http://www.irs.gov/pub/irs-pdf/ft.pdf). The IRS revised and updated Form T in December 2005 to conform to the latest tax law changes.

In the revised Instructions for Form T, the IRS stated that up to $10,000 of reforestation costs *per qualified timber property per year* can be deducted. If you are required to file Form T, the reforestation costs are to be reported in Part IV of Form T—Reforestation and Timber Stand Activities. If you are not required to file Form T, to claim a reforestation cost deduction, you still need to attach a statement to your return providing tract information, acreages reforested and total amounts of qualified expenses.

If your reforested acreage is in the Hurricane Rita zone and your total land holdings are no more than 500 acres, up to $20,000 of qualified reforestation costs *per eligible property per year* are deductible. The reforestation, however, must take place between September 23, 2005 and the end of 2007. This tax relief was authorized under the Gulf Opportunity Zone Act of 2005, passed by Congress in December 2005. Trusts, publicly traded C corporations and real estate investment trusts are not eligible.

The Hurricane Rita zone is the portion of the hurricane disaster area determined by President George Bush to warrant individual and/or and public assistance from the federal government. This includes the following counties: Angelina, Brazoria, Chambers, Fort Bend, Galveston, Hardin, Harris, Jasper, Jefferson, Liberty, Montgomery, Nacogdoches, Newton, Orange, Polk, Sabine, San Augustine, San Jacinto, Shelby, Trinity, Tyler, Walker.

For more information, please see:

National Timber Tax Website: http://www.timbertax.org/
National Timber Tax Website (Larry Bishop – "Gulf Zone Legislation Helps All Tree Farmers"): http://www.timbertax.org/publications/articles/tree_farmer/mar_apr_06.asp
National Timber Tax Website (Larry Bishop – "Catching up on a Recent Tax Development"): http://www.timbertax.org/publications/articles/tree_farmer/may_june_06.asp
Library of Congress- Thomas (Gulf Opportunity Zone Act of 2005, Sec. 101): http://thomas.loc.gov/

Distribution of the *Sam Rayburn BMP Informer* is provided free of charge to forest landowners of Hardin, Jefferson, and Orange Counties. Funding has been provided through cooperation of the Environmental Protection Agency (EPA), the Texas State Soil and Water Conservation Board (TSSWCB) and the Texas Forest Service (TFS). **If you would like for your name to be removed from our mailing list please contact Shane Harrington at (936) 639-8180 or sharrington@tfs.tamu.edu.**

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Looking for a Good Logging Contractor?

The Texas Forest Service maintains a list of all logging contractors who have attended the TFS/TFA Forestry Best Management Practices Workshop. This list is available at any TFS district office.

You can also access a list of BMP-trained loggers on the Texas Forestry Association's website at http://www.texasforestry.org. Click on *Logger Training Records*. TFA's list also shows the other courses completed by the loggers, including those with Pro Logger certification. By clicking on *Programs*, you can learn about the Pro Logger Accreditation Program, the Texas Logging Council and other TFA programs

February 2007

Golden Triangle BMP Informer

Serving Hardin, Jefferson and Orange Counties

Updating FOREST LANDOWNERS on Forestry and Water Quality Issues

TEXAS FOREST SERVICE Best Management Practices Project P.O. Box 310 Lufkin, TX 75902 sharrington@tfs.tamu.edu

Since 1991 the Texas Forest Service has conducted six rounds of BMP implementation monitoring. During each round a minimum of 150 randomly chosen tracts are inspected for the implementation of BMP's with the cooperation of the landowner. Once all the tracts have been inspected the data that was collected is used to produce a report which shows how well BMP's are being used.

Starting in January 2007 the Texas Forest Service will begin its seventh round of BMP implementation monitoring. Over the next year and a half the Texas Forest Service will randomly select a minimum of 150 tracts and with the cooperation of the landowner evaluate them for the implementation of BMP's. In 2008 the seventh report will be released showing the overall findings of the inspections. Hopefully we will continue to see an increase in the implementation rates and see a decrease in the number of deficiencies.

All previous reports can be found on the Texas Forest Service website at **http://tfsweb.tamu.edu/sustainable/article.aspx?id=710&**. You can look at each report and see how far we have come over the years in the implementation of BMP's but also see the areas in which we still need to improve. If you have any questions about the BMP implementation reports or BMP's in general please feel free to call me at (936) 639-8180 or email me at **sharring-**

Timber Sale Contract Basics

By: Shane Harrington, BMP Forester, Texas Forest Service

Today there are many reasons why a landowner chooses to harvest his or her timber. A landowner may choose to harvest timber in order to increase forest productivity, forest health concerns, salvage storm damaged timber, or there may be financial considerations as to why they harvest.

Timber sale contracts play an important role when conducting any timber sale. These contracts provide a set of guidelines for the sale to operate under but most importantly a timber sale contract protects the interests of both the buyer and seller. When having a timber sale contract prepared there are few basic points that should be included in the contract.

- Name, address, and signature of all parties involved in the timber sale
- Legal description of the property along with maps showing property boundaries and harvest area
- Date of execution (length of time given to the buyer to harvest the timber, typically in the south 18 months is adequate)
- Payment schedule (will this be a lump sum or pay as cut timber sale)
- Penalty to buyer if unmarked trees are harvested

Best Management Practices (BMPs)

BMPs should always be included in timber sale contracts because it may be necessary to spell out specific practices such as where and how to cross streams, where to place roads and skid trails, and when work should be halted due to wet weather.

Before conducting any timber sale you should always consult with a professional forester who can assist you with your sale. A professional forester as well as most attorneys can also write you a timber sale contract. Once you have a timber sale contract written make sure you review it and understand everything that is outlined in the contract. Keep in mind that these are only a few of the points that should be included in a timber sale contract and thus why it is very important that you seek assistance from a professional forester. If you would like more information on timber sale contracts please contact me at (936) 639-8180 or contact your local Texas Forest Service office.

Texas Water Facts
Texas Water Resources

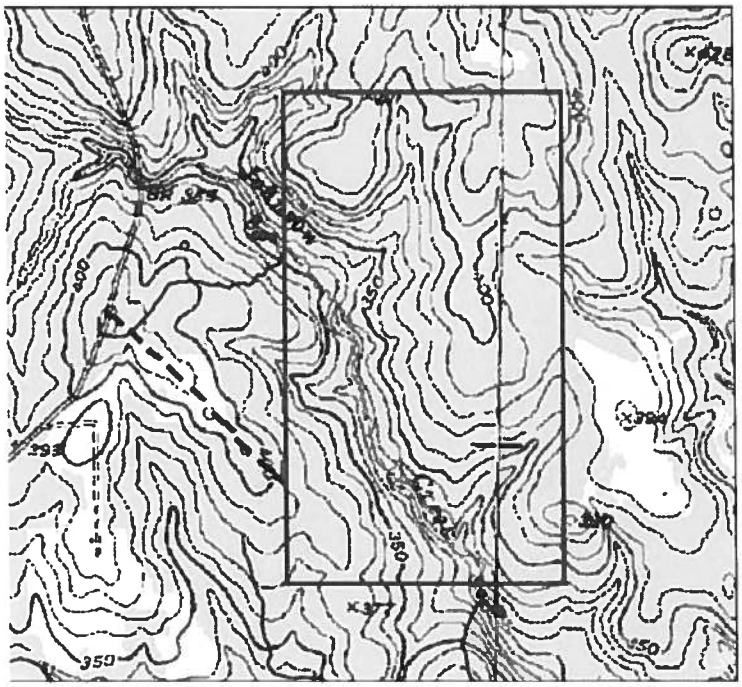
- In Texas, water rights depend on whether the water is groundwater or surface water. Generally, Texas groundwater belongs to the landowner. Groundwater is governed by the rule of capture, which grants landowners the right to capture the water beneath their property. The landowners do not own the water but have a right only to pump and capture whatever water is available, regardless of the effects of that pumping on neighboring wells. Surface water, on the other hand, belongs to the state of Texas. It can be used by a landowner only with the state's permission.
- Of all water used in Texas, about 60% is groundwater; the other 40% is surface water.
- In the next 25 years, the fastest growing groups of water users are projected to be cities and industries. By the 2040's, cities and industries will use more water than agriculture.
- Texas has about 6700 dams and reservoirs.
- Statewide, there are about 32 Texas aquifers. Nine aquifers provide 97% of the groundwater we use.
- About 80% of the groundwater used is for irrigating agricultural land. There are 6.3 million acres of irrigated agricultural land.
- The Ogallala Aquifer, West Texas High Plains, provides about 2/3 of all groundwater used in Texas.
- Texans use 16.5 million acre/feet of water per year. An acre/foot of water is enough to cover one acre of land, one foot deep....325,851 gallons.

Improving My Land

Harvest Planning

Planning is often the most overlooked yet most important part of any harvest activity. Potential sources of sedimentation can often be avoided with proper planning. There are several tools available to help with planning – you may want to visit with your logger or forester about using these sources of information.

Even though you may have a good feel for the lay of your land, a topographic map provides great information to discuss placement of any new access roads. Topographic ("topo") maps are produced by the US Geological Survey (USGS) and show land contours and elevation.



Not only are topo maps practical, but they can also reveal interes-ting facts such as elevations of points of interest. This hilltop near Greasy Creek, just west of LaFayette, is 376 feet above sea level.

Other tools to help you, your forester and your logger in harvest planning are county soil surveys and aerial photos. Soil surveys, available from the Natural Resources Conservation Service (NRCS), can give the specific soil name and characteristics found on your tract. Aerial photos, available from appraisal districts, TFS offices, and Farm Services offices, can give you a bird's-eye view of your land.

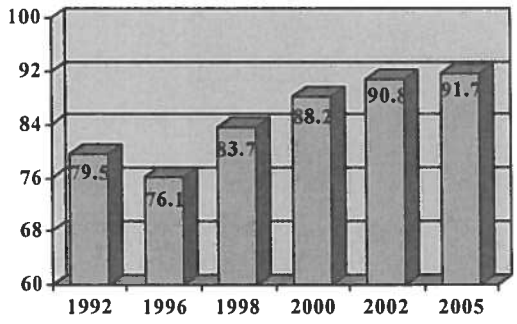
Texas' Forestry Best Management Practices Report Card – Results from 15 years of BMP Implementation Monitoring in Texas

A soon-to-be released report by the Texas Forest Service titled "A History of Forestry BMP Implementation Monitoring in Texas", documents the tremendous gains that have been made in Best Management Practices (BMP) implementation over the years. "The results show that the forestry community has truly embraced the importance of using BMPs to protect water quality," said Hughes Simpson, Texas BMP coordinator.

The report covers results from the past 15 years of BMP implementation monitoring in which a total of 904 sites in East Texas were evaluated on public, industrial, TIMO, and private lands. By measuring the progress that has been made since the initial survey, strengths and weaknesses have been determined, so that future educational efforts can be focused on those areas needing the most improvement.

Since the monitoring program began in the early 1990s, overall BMP implementation rates have increased by over 20% to an all time high of 91.7%. Even greater strides have been made in traditional problem areas – temporary roads (+56%), stream crossings (+43%), and streamside management zones or SMZ's (+28%).

Overall Percent BMP Implementation, 1992-2005



Family forest landowners, long considered the critical link to protecting water quality, have led most of the recent advancement. Tremendous gains have been made on private land, most notably on temporary roads (+68%), site preparation (+59%), stream crossings (+58%), and SMZs (+42%). Their overall BMP implementation rate also increased significantly (+29%) and is at an all time high of 88.6%.

In order to continue to improve implementation of BMPs, the Texas Forest Service will offer several new courses that focus on stream crossings, forest roads and SMZs through the Texas Forestry Association's Pro Logger continuing education program.

"The dramatic improvements shown by this report really demonstrate the effectiveness of the Texas Forest Service BMP program as well as the forestry community's commitment to environmental stewardship," said Simpson.

To learn more about BMPs, visit the Texas Forest Service webpage at http://txforestservice.tamu.edu/sustainable/bmp

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Federal and State Agency Websites

Environmental Protection Agency	**www.epa.gov**
Farm Services Agency	**www.fsa.usda.gov**
Natural Resource Conservation Service	**www.nrcs.usda.gov**
Texas Commission on Environmental Quality	**www.tceq.state.tx.us**
Texas Forest Service	**http://txforestservice.tamu.edu**
Texas Forestry Association	**www.texasforestry.org**
Texas Parks and Wildlife Department	**www.tpwd.state.tx.us**
Texas State Soil and Water Conservation Board	**www.tsswcb.state.tx.us**

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Watch Word... TMDL

A Total Maximum Daily Load or TMDL is the total amount of pollution (load) that a stream can handle in any given day without harming its beneficial uses, such as swimming, drinking or fishing.

Land disturbing activities such as farming, mining, highway construction and forestry have the potential to cause erosion and stream sedimentation. Sedimentation is only one kind of pollution that TMDLs address. Others include heavy metals, a lack of oxygen in the water and even bacteria. Basically anything in the water that makes it unsuited for its intended use is a pollutant.

Best Management Practices, or BMPs, are specially designed practices that reduce and eliminate this type of water pollution. For example, we have all seen the silt fences along the roadway during highway construction. There is a set of voluntary guidelines designed specifically for forestry in Texas.

Improving Water Quality in Adams and Cow Bayous
A TMDL Project for Bacteria, Dissolved Oxygen and pH

The state of Texas requires that most streams, lakes, and bays be suitable for swimming, wading, fishing, and a healthy aquatic environment. However, in two bayous in Orange County—Adams Bayou (Segment 0508) and Cow Bayou (Segment 0511) and most of their associated tributaries—low dissolved oxygen levels indicate that existing conditions are not optimal for aquatic life, and concentrations of bacteria pose a potential health risk for swimmers. In Cow Bayou, pH values are also occasionally lower than the criteria established to protect general water uses.

In response to these conditions, a total maximum daily load (TMDL) project has been initiated to determine the measures necessary to restore water quality in these bayous. The goal of a TMDL is to determine the amount (or load) of a pollutant that a body of water can receive and still support its designated uses. The allowable load is allocated among all the potential sources of pollution within the watershed, and measures to reduce pollutant loads are developed.

Oxygen, which dissolves in water, is essential for the survival of aquatic life. While the amount of dissolved oxygen in water fluctuates naturally, various human activities can cause unusually or chronically low dissolved oxygen levels, which may harm fish and other aquatic organisms.

Bacteria from human and animal waste often indicate the presence of disease-causing microorganisms that pose a threat to public health. People who swim or wade in the bayous may be at risk.

Although not a pollutant, pH plays a key role in the health of an aquatic ecosystem. The level of pH in a water body indicates its acidity or alkalinity. An appropriate level of pH acts as a buffer for certain pollutants. For example, certain chemicals and metals are more toxic to aquatic life at lower pH values than at high pH values.

Learn more about water quality standards and monitoring by reading *Clean Water for Texas: Working Together for Water Quality*, available on the web at www.tceq.org/goto/tmdl/.

Certified Forest Steward

The Certified Forest Steward program will identify and reward landowners who follow a written Stewardship plan. Once you have a Stewardship plan, you can request certification or be nominated by a local resource professional, consultant, or county agent. All TFS district offices have the nomination forms. Nomination forms and an overview of the program can also be obtained on the TFS website: http://texasforestservice.tamu.edu/shared/article.asp?DocumentID=472&mc=forest.
The form requires a list of your Stewardship practices that have been installed in the last five years plus a copy of your Stewardship plan.

Each accomplishment will be awarded points based on importance to proper land management. Of course, BMPs are a part of the point system. For example, a thinning using BMPs to improve a timber stand is worth more points than fencing to manage woods grazing. Any practice that has the potential to affect water quality must use BMPs for your nomination to be considered.

If you qualify, you will be presented a "Forest Stewardship" sign for your property and a certificate at a public ceremony of your choice.

For more information about obtaining your own Stewardship plan and becoming a Certified Forest Steward, contact your local TFS district office or TFS Stewardship Coordinator Brad Barber in College Station at (979) 458-6650 or bbarber@tfs.tamu.edu.

Improving My Land

Managing Streamside Management Zones

Streamside management zones (SMZs) provide a protective, vegetated buffer around a stream or river. The flexibility of voluntary BMP guidelines allows you and your forester or logging contractor to manage these buffer strips. In meeting objectives like maximum return on your timber investment or forest health improvement, trees within the SMZ may be selectively thinned.

Thinning Recommendations

In many instances, the majority of the trees along your streams may be hardwoods. Hardwood trees may have lower economic value than pines, but have high wildlife and aesthetic value. In cases like this, thinning pine trees and leaving hardwoods can create both economic return as well as retain wildlife habitat and aesthetic value.

If the trees within the SMZ are mainly pines, removing all of them may jeopardize the functions of the SMZ. In this case, pine trees can be selectively thinned, leaving at least 50% of the original crown cover.

Be sure to talk to your forester or logging contractor about thinning within your streamside management zone.

Texas Forest Service BMP Effectiveness Monitoring Project

For almost 15 years, the Texas Forest Service has promoted the use of Best Management Practices (BMPs) to prevent or reduce the amount of water pollution when conducting forestry operations. While it is common knowledge that BMPs are an effective and practical means of mitigating forestry non-point source pollution, there is no quantifiable data to substantiate their obvious aesthetic improvements.

The Texas Forest Service recently began a stream monitoring project designed to test the effectiveness of the state recommended BMPs. Four sites under intensive forest management located in Cherokee, Houston, Jasper, and Newton Counties are undergoing rigorous habitat assessments, biological, and physiological monitoring before and after forestry operations. Sites were selected that encompassed the higher topography and erodibility hazards found in East Texas forestlands. Each site has a designated reference (above the treatment area) and test (below the treatment area) section.

Method, frequency, and parameters that will be monitored on the four sites:

Method	Frequency	Parameters
Habitat Assessment	Twice per year (spring and fall)	Texas Commission on Environmental Quality method
Biological Sampling	Twice per year (spring and fall)	Aquatic insects, fish
Physiochemical – Grab Samples	Monthly	Dissolved oxygen, pH, conductivity, temperature, turbidity, total nitrogen, total phosphorous, total suspended solids
Physiochemical – Strom Samples	After storm events (15-20 storm events estimated per year)	Total nitrogen, total phosphorous, total suspended solids

Statistical analysis is performed comparing the habitat assessment, biological, and physiochemical "test" section results on each of the four project sites before and after the treatment to see if they are significantly different. This same analysis is used to test for differences between the reference and test sections within sites, so that any changes due to natural variability in the test section are not falsely attributed to a treatment effect. A final report is to be produced in spring 2008 documenting the results of this 4-year project.

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August 2007

Golden Triangle BMP Informer

Serving Hardin, Jefferson, and Orange Counties

Updating FOREST LANDOWNERS on Forestry and Water Quality Issues

TEXAS FOREST SERVICE Best Management Practices Project P.O. Box 310 Lufkin, TX 75902 sharrington@tfs.tamu.edu

Want to See Examples of BMPs at Work?

You can take a "Virtual Tour" of the Jones State Forest and Kirby State Forest BMP Demonstration sites on the TFS website. Color photographs depict many BMPs with explanations about application as well as installation techniques.

Go to http://texasforestservice.tamu.edu and click on **Sustainable Forestry**, then *Best Management Practices*, then *Forest Tours*.

You're in the Majority

The majority of the timberland in East Texas is owned by landowners just like you. More than 60% of the 12 million acres of timberland in East Texas are owned by nonindustrial private landowners. The forest industry owns 32%, and all levels of government combined only own about 7%.

TFS-an Approved Carbon Verifier

Texas Forest Service (TFS), well known for its role in protecting and sustaining the state's forest resources, has added a new dimension to its responsibilities - verifier of forestry offset projects for landowners seeking to sell their trees' carbon credits on the open market.

The agency was notified Nov. 2, 2007, by the Chicago Climate Exchange® (CCX®) of its application's approval, making TFS the first state forestry agency in the nation to become an Authorized Verifier for Forestry Offset Projects. The CCX® is currently the only market that trades forestry carbon.

Landowners are realizing that in addition to the value of the timber, the carbon stored in their forests has economic and environmental value as well. In order to sell the carbon credits however, landowners must first go through a multi-step process, one of which is to quantify the amount of carbon stored in their trees.

"As a CCX-approved verifier, Texas Forest Service's role is to verify the quantity of the carbon stored in a landowner's forest stand," said Burl Carraway, manager of the TFS Sustainable Forestry Program.

The agency's new responsibility is part of its ongoing exploration into the emerging forestry ecosystem services arena and is an integral part of its mission to sustain the state's healthy forest resources for current and future generations

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Who Can Answer My BMP Questions?

Your local forester can answer most of your questions pertaining to BMPs but if you do not have a forester the Texas Forest Service can help. The Texas Forest Service has a staff that is dedicated to working with BMPs and landowners.

Assistance with your BMP needs can be obtained by contacting one of the BMP Foresters.

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Improving Your Land

Site Preparation and BMPs

It's that time of year for landowners to begin planning for reforestation projects. In some cases before the planting process can occur the land must be site prepared. As with any other forest management operation there are some things to consider before carrying out the activity.

Some sites will require little work to be done before replanting is possible while other sites may require extensive site preparation work. Site preparation is a vital tool for timberland owners who want to increase seedling survival as well as increasing their initial growth rate. This activity could be as simple as just removing the debris left after the harvest operation or in some cases the site may need to be ripped and bedded before planting seedlings. As with any forest management activity caution should be taken to ensure that these actions do not impact water quality. Following are a few things to keep in mind when conducting any site preparation work.

- The boundaries of all Streamside Management Zones (SMZs) should be clearly marked before beginning site preparation activities.
- All firebreaks and firelanes should have well-installed and maintained water control structures such as waterbars and wing ditches to minimize erosion.
- Ripping, shearing, windrowing, and mechanical planting should follow the contour of the land to prevent excessive erosion.
- Minimize the amount of soil that is pushed into a windrow.
- Soil disturbance should be kept to a minimum. Avoid intensive site preparation on steep slopes and slopes with highly erodible soils.
- All reasonable attempts should be made to stabilize and repair erosion resulting form site preparation activities.
- All trash associated with site preparation activities should be disposed of properly and all equipment fluids should be caught in containers and disposed of properly as well.

These guidelines along with others can be found in the Texas Forest Service's Best Management Practices (BMPs) Handbook. These BMP guidelines are designed to prevent or greatly reduce the chances of impacting water quality during any forest management activity. You can get a copy of the Texas Forest Service's BMP Handbook by going to http://texasforestservice.tamu.edu or by contacting your local Texas Forest Service office.

THE WET CENTER

Studying Water Issues in East Texas

John Boyette, District Forester, Texas Forest Service, Nacogdoches, TX

Stephen F. Austin State University, in their quest to stay on the cutting edge of forestry and environmental science research, has established the Waters of East Texas Center (WET Center) at the Arthur Temple College of Forestry and Agriculture. Its mission is to conduct research and assessment projects on water related resources, ecosystems, and issues in the East Texas Region. They have assembled an impressive list of scientists from various related fields including hydrology, soils, wetlands, wildlife biology, ichthyology, and many others.

The expanding population of our state is going to have far-reaching and profound effects on a multitude of natural resources, and water is one of the most important. As Dr. McBroom reminded us, we are capable of producing many different forms of energy as alternatives to oil, but there is no substitute for water. Within the next 60 years, the population of Texas is expected to double to close to 50 million people. Much of that population growth will be in the major urban centers such as Houston, DFW, and San Antonio. Along with that growth in people, the demand for clean water is expected to grow by about 27%. That may not sound so bad, but consider that many of our water supply systems are working at maximum capacity right now, and periodic summer droughts can often overload these systems, triggering rationing in some areas.

Texas is a large and very diverse state. Rainfall patterns change drastically as you travel from east to west. East Texas may average 45 inches of rain or more, whereas Central Texas may average about half that, and West Texas gets even less. State leaders are aware of the need for more water. There are a number of new reservoirs on the drawing board right now. Many of these projects, such as Lake Fastrill and Lake Marvin Nichols, are controversial and have been tied up in the courts for some time. There are some very good reasons for resisting the construction of new lakes in East Texas, but the fact is, we will have to build more if we are to meet the growing demand for water.

Another looming problem is sedimentation. It is estimated that 13% of Texas reservoir storage capacity will be lost in the next 50 years due to sediment flowing into them. This amounts to about 4.5 million acre feet of water. An acre foot is one acre of water, one foot deep, or 43,560 cubic feet of water. By contrast, if we build all of the lakes that have been proposed, we will have increased our capacity by 3.4 million acre feet. Clearly, sedimentation is a problem that will need to be addressed. One possible solution is dredging. However, this brings up a new set of problems. What does one do with millions of acre-feet of sediment? Some of this material may be contaminated with heavy metals and other pollutants. Wetlands are great filters, but when you clean a filter out, you can get pretty dirty if you're not careful.

Obviously, reducing the amount of sedimentation that reaches our lakes is one way to deal with this problem. There are a lot of sources of sedimentation including road and bridge construction, agriculture, and logging. We in the forestry community have been advocating Best Management Practices on logging operations for some time. One of the studies cited by the WET Center group showed the difference between logging sites when BMP's were used and when they weren't. A logging site that had no BMP's (Streamside Management Zones, water bars, wing ditches, culverts, etc.) contributed about 3000 pounds of sediment per acre to the waterways. A site that had BMP's used properly, contributed about 500 pounds per acre. By comparison, a site that is not even being logged will contribute about 200 pounds per acre. This information is very gratifying because it shows that BMP's do actually work.

There are a number of conservation strategies that the WET Center is looking at. One idea is to encourage home owners in drier climates, such as DFW, to convert their lawns from San Augustine grass to a native species like Buffalo grass. It may not look quite the same, but when you consider that San Augustine grass requires 45-50 inches of annual rainfall, and DFW gets maybe half that amount, that could translate into a huge savings of water. Another idea is to collect rainfall runoff from rooftops. This water would not be clean enough for drinking, but it certainly could be used for watering lawns and gardens. In Nacogdoches for instance, an average sized home could produce an average of four to seven thousand gallons of water per month with a gutter collection system.

One of the most serious drawbacks to building more reservoirs is the destruction of bottomland hardwood ecosystems. Bottomlands contain unique habitats for a variety of plant and animal species and provide other valuable wetland services. The law requires a three to one mitigation of wetlands that are destroyed. In other words, for every acre of wetland that is covered by a lake, three acres of new wetlands have to be created elsewhere. Where are these new wetlands going to be established? Is this even feasible? All of these questions and more will have to be addressed if we are to meet the future needs of Texas for clean water in an environmentally responsible manner.

Distribution of the *Sam Rayburn BMP Informer* is provided free of charge to forest landowners of Hardin, Jefferson, and Orange Counties. Funding has been provided through cooperation of the Environmental Protection Agency (EPA), the Texas State Soil and Water Conservation Board (TSSWCB) and the Texas Forest Service (TFS). **If you would like for your name to be removed from our mailing list please contact Shane Harrington at (936) 639-8180 or sharrington@tfs.tamu.edu.**

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TEXAS FOREST SERVICE
The Texas A&M University System

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Looking for a Good Logging Contractor?

The Texas Forest Service maintains a list of all logging contractors who have attended the TFS/TFA Forestry Best Management Practices Workshop. This list is available at any TFS district office.

You can also access a list of BMP-trained loggers on the Texas Forestry Association's website at http://www.texasforestry.org. Click on *Logger Training Records*. TFA's list also shows the other courses completed by the loggers, including those with Pro Logger certification. By clicking on *Programs*, you can learn about the Pro Logger Accreditation Program, the Texas Logging Council and other TFA programs

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Are You a Tree Farmer?

The American Tree Farm System (ATFS) is the oldest and largest forest certification program in the United States. Today, 60,000 Certified Tree Farmers are managing 86 million acres nationwide (26 million acres are managed by private landowners). In Texas there are 2,000 Certified Tree Farmers managing over 4.2 million acres.

By enrolling into the AFTS you are ensuring that your forestland will be managed in a sustainable way while protecting water quality, providing wildlife habitat, and promoting healthy forest management. There is no charge to enroll your forestland into the AFTS. If you own at least 10 acres and have a written forest management plan you may qualify to become a Certified Tree Farmer.

If you qualify and are enrolled into the AFTS you will be presented with a certificate and a Certified Tree Farm sign. This sign can be displayed on your property to show that you are managing your forestland in a sustainable and environmentally friendly manner.

To become a Certified Tree Farmer you can contact your local Texas Forest Service office or the Texas Forestry Association at (396) 632-TREE or 8733.

Supplemental Food Plots

Supplemental food plots provide a highly nutritious food source that can be beneficial to many species of wildlife. The establishment of locally adapted annual (spring and fall) or perennial forages on suitable soils provide supplemental foods and cover during critical periods of the year. During the dry summer months, as plant growth slows nutrient levels in native vegetation is much lower than when the plants are actively growing in the spring. For this reason, summer is often the most stressful time of the year for wildlife, especially for white-tailed deer. High protein supplemental forage can help increase fawn survival, increase body weights, and improve antler development.

The shape, size, location, and percentage of the total land area should be based on the requirements for the target species (e.g. 2-5% of area for white-tailed deer) and should meet the goals of a comprehensive wildlife management plan. A minimum of 1% of the acreage should be planted in both winter and summer food plots. It is always best to establish a variety of species to provide more diversity and to insure against the failure of one type of planting. Livestock should always be excluded from small plots.

Forage quality native vegetation can be greatly improved by fertilizing preferred browse plants such as honeysuckle, greenbriar and blackberry. Fertilization extends the growing season of most plants longer into the summer. By maintaining this growth, the plants stay palatable and have higher nutrient levels, and protein content, longer into the summer than the surrounding vegetation. By applying a balanced fertilizer in the spring and then applying ammonium nitrate or a high nitrogen fertilizer at 60-day intervals during the growing season, palatability and protein levels can be increased.

Managing the habitat for proper nutrition should be the primary management goal. Food plots should not be considered a cure-all to correct habitat deficiencies. Plantings should be considered as supplements to well managed natural habitats. Supplemental feeding should always be combined with population management, or the resulting artificially higher numbers of animals will have a negative impact on native plants. Consult with the NRCS, TAEX, TPWD, and local seed dealers for food plot mixtures suitable for your area, as well as local conditions. Plant according to soil tests and fertilize as necessary.

Wildlife Considerations for Your Forestland

Texas is home to approximately 1200 wildlife species, more than any other state. Texas's wildlife belongs to every citizen of Texas, not just the landowners whose property an animal calls home. However, the habitat that these same species need for their survival is, for the most part, privately owned. Texas is a private lands state, with approximately 97% of the land in private ownership. Because most of Texas is privately owned, the responsibility for the conservation and wise use of Texas' wildlife resources rests with the private landowners of the state.

The Texas Parks and Wildlife Department is charged with the regulation and management of fish and wildlife resources in Texas. However, because of the vast extent of private land ownership and the variety of habitat in Texas, cooperative work with landowners by Texas Parks and Wildlife Department staff has long been a key to the success of the state's wildlife conservation programs. TPWD sets harvest regulations, provides the legal protection for the state's wildlife resources, and provides technical assistance to landowners. But it is the private landowners who protect and manage most of Texas' wildlife and wildlife habitat. For more information regarding TPWD incentive programs please visit *www.tpwd.state.tx.us.*

Improving You Land

Temporary Stream Crossing
Dragline Mats

Often times stream crossings are necessary in order to carry out management activities for our forestland. When faced with the decision of installing a stream crossing a landowner must first decide whether the crossing will be permanent or temporary. Permanent crossings are more expensive and time consuming to install but can handle heavier traffic such as loaded log trucks. Also there are fewer alternatives for permanent crossings with culverts and bridges typically being the preferred choice.

Temporary crossings however provide more alternatives for crossing a stream depending on the size and amount of water the stream is carrying. A common method for creating temporary access across a stream is the use of drag line mats or bridge mats. These mats are constructed of several hardwood cants bolted together. These mats come in different lengths and widths. When purchasing or using a bridge mat make sure that you allow enough length that the mat can span the stream and leave enough excess providing stable approaches.

Bridge mat or dragline mat installed correctly to provide access during a timber harvest.

The key to using and installing either permanent or temporary streams crossings is to avoid or at least greatly minimize the effects to water quality. Before installing a mat make sure that the stream banks are level with each other, banks are stable, and your crossing in a narrow straight section of the stream. For more information on temporary stream crossings contact the BMP Project Office at (936) 639-8180.

Digital Orthophoto Quads

A Management Tool for Foresters and Landowners

The Texas Forest Service and other natural resource agencies use Digital Orthophoto Quads (DOQs) as a management tool. DOQs combine the image characteristics of an aerial photograph with the uniform scale and positional accuracy of a map. They provide a bird's-eye view of a tract of land and also can be used to accurately measure distances and areas.

DOQs provide the latest view of surface features and are more up-to-date than USGS topographic maps. They are color infrared images derived from photographs taken 1994-1997.

DOQs have become an integral part of the TFS's Geographical Information System (GIS). A GIS is a computer hardware and software system designed to collect, manage, manipulate, analyze, and display real-world, on-the-ground land features. The images are used as a base map upon which property boundaries, roads, political boundaries, topography, streams, and many other layers can be added.

Some uses of DOQs:

- Land use analysis and planning
- Vegetation and habitat analyses
- Land management
- Transportation analysis
- Viewing deer leases and hunting areas
- Birds-eye view of your neighborhood

One use of this GIS is to delineate streamside management zones (SMZs). The GIS can automatically establish a 50-foot buffer around a stream and calculate the acreage in this area. If tree growth information is available, timber volumes can be determined.

DOQs can be ordered or downloaded from the Texas Natural Resources information System (TNRIS) website at http://www.tnris.state.tx.us. At the top of the page, click on **Digital Data**; on the next page on the left, click on DOQs. A link to USGS MapFinder ™ is available to help you find which quad you need.

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Environmental Quality Incentives Program (EQIP)

EQIP is a voluntary program that offers eligible landowners both technical and financial assistance in applying conservation practices that address needs and concerns determined by state and local conservation leaders. It assists landowners who apply for eligible conservation activities that are a part of their conservation and management plan. Forestry measures such as site preparation, tree planting, forest stand improvement and invasive species control are eligible practices in almost all east Texas counties. The program is administered through contracts developed with landowners who are accepted into the program. Acceptance into EQIP is determined by eligibility of both the owner and the desired conservation practice.

Applications for EQIP can be made year-round, however contract development and funding does occur at a specified time during the year. Information on the closing of a sign-up period can be obtained through the local NRCS office or the Texas NRCS website.

For more information, contact the local USDA Service Center or NRCS district office or visit www.tx.nrcs.usda.gov/ .

Reforestation and BMPs

Winter is upon us and with the cooler temperatures many landowners are beginning to focus their attention to reforesting their properties. The harvest has been successfully completed, the land site prepared, and now it is time to put the new seedlings into the ground. Many landowners only associate best management practices (BMPs) with the harvest operation but reforestation jobs if done improperly can also negatively impact water quality. There are BMP guidelines for all aspects of forest management including reforestation.

Landowners and contractors should keep water and soils in mind when preparing to plant or site prepare the land. There are BMPs to guide you during these operations.

Remember these points when doing site preparation and planting:

- Mark boundaries of all streamside management zones (SMZ) clearly before site preparation activities.
- Plan ahead to minimize disturbance by equipment in SMZs.
- Site preparation and reforestation activities should skirt SMZs and stream channels. Any debris should be placed above the ordinary high water mark of any stream or body of open water.
- Any site preparation practices and planting should be done following the contour of the land.
- Avoid intensive site preparation on steep slopes and on slopes with thin or highly erodible soils.
- Hand plant excessively steep slopes and wet sites.

In recent years and months water quantity and quality have become important issues for the residents and landowners of Texas. As stewards of the land we should all do our part to protect this natural resource. Using BMPs is just one way that landowners can protect water quality during their forest management activities.

For more information regarding BMPs please contact your local Texas Forest Service Office or visit http://texasforestservice.tamu.edu.

Management Considerations for Wildlife

Each wildlife species has unique habitat requirements, so start by learning more about the species that interest you most. The following practices are aimed at producing wildlife diversity:

- Provide more edge habitat by creating a patchwork of small stands harvested at different times. Favor wildlife that use the interior of large forest areas by making large clearcuts.

- When clearcutting, leave scattered live trees with narrow crowns to provide more vertical habitat. (Kill these trees before they begin to suppress the reproduction.)

- Leave corridors of standing trees through large clearcuts to provide cover for wildlife that need to cross over them.

- Thin sapling and pole stands more heavily than necessary for timber production to provide more sunlight and thus stimulate growth of vegetation near the forest floor.

- Retain live trees with cavities for squirrels, raccoons, and other cavity dwellers.

- When thinning or harvesting stands, leave or create dead standing trees (snags). They provide insects and nesting cavities for birds.

- Favor tree and shrub species that produce edible seeds, berries or fruits (e.g., oak, black cherry, hickories, dogwood, etc.). Thin oak stands regularly to encourage acorn production. Plant fruit-bearing trees in openings. Seed log landings and skid trails with grass and clover.

For added diversity and winter cover, plant or encourage scattered groups of slow-growing conifers such as red cedar.

Improving My Land

Stream Crossings

Two types of stream crossings that minimize stream sedimentation and provide dependable access are culverts and geoweb. When sized to proper length and diameter for the stream drainage area, culverts can provide excellent access across streams (see left column). Different types and sizes are available for various needs, ranging from 18-inch diameter galvanized steel to 10-foot diameter tank cars.

Geoweb can provide a permanent low-water crossing or ford that minimizes stream sedimentation. The plastic material forms a honeycomb-shaped mat that is filled with soil or gravel to form a solid road base. Best used in crossings with flat approaches to the stream, properly installed geoweb allows permanent access across a stream, even for a fully-

New Stream Crossing Workshop A Success

Texas Forest Service in 2007 began offering a new BMP workshop focusing on stream crossings to logging professionals as part of the Pro-Logger program. This course is approved for 6.0 hours of continuing education, meeting the annual requirements for logging contractors to maintain their certification.

To date, Texas Forest Service has conducted five workshops, training over 150 people. "The response we have seen from logging professionals in East Texas has been tremendous" said Shane Harrington, BMP Forester, Texas Forest Service. "We've even had other states contact us about using our workshop as a model for their own states" said Harrington. Future dates for additional stream crossing workshops are being planned now for 2008.

This new workshop is designed like the traditional BMP course in which attendees spend the morning session participating in discussions, watching videos, and listening to slide presentations. After lunch, the class travels to several field sites to apply the principles that were presented earlier that morning. Topics covered in this workshop include:

How to plan a stream crossing
Advantages and disadvantages of various stream crossing methods
Proper installation and remediation of stream crossings

The idea to develop this course came after the release of the 2005 Texas BMP Implementation Monitoring report, a document produced to determine the extent to which the forestry community is voluntarily following the recommended guidelines. The report showed that stream crossings consistently ranked lower than any other category evaluated, which is a concern, given the sensitivity of these areas.

"Implementing BMPs on stream crossings is absolutely critical because these locations are direct contact points to the stream. Improperly constructing a stream crossing can have a negative impact on water quality," said Hughes Simpson, Texas BMP Coordinator.

Participants have seen the benefits in attending this course. Post workshop evaluations have shown that 97% of attendees would recommend this class to others, noting that the course material was explained very well. The evaluations also showed significant interest in attending other BMP related workshops, such as courses on forest roads and streamside management zones, offered by Texas Forest Service. Typical written comments from participants were:

I think this was a good workshop and everyone that works on dirt needs to attend.

Good. The men did a great job of showing different ideas about future logging procedures.

Thanks for your effort. The class is needed to try to get everyone on the same page!

Good. Great opportunity to expand knowledge.

To register for this workshop or any other course required for the *Pro-Logger certification,* contact the Texas Forestry Association at (936) 632-8733. For more information on Best Management Practices, please contact the Texas Forest Service at (936) 639-8180 or go online at http://texasforestservice.tamu.edu.

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Websites of Interest

Texas Forest Service - http://texasforestservice.tamu.edu

Texas Tree Planting Guide - http://texastreeplanting.tamu.edu/

Texas Wildlife Fact Sheets – http://www.tpwd.state.tx.us/huntwild/wild/species/

Preparing a Community Wildfire Protection Plan – A Handbook for Wildland-Urban Interface Communities - http://www.safnet.org/policyandpress/cwpphandbook.pdf

Common Hardwood Tree Diseases – Prevention and Control – http://forestry.about.com/od/forestdiseases/p/dis_com_hwd.htm

State of Texas Threatened and Endangered Species Regulations – http://www.tpwd.state.tx.us/huntwild/wild/species/endang/regulations/texas/index.phtml

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Famous Trees of Texas

The Kissing Oak: On July 24, 1857, Senator Sam Houston made one of his more than 60 campaign speeches under this live oak. Following one such address, he gallantly kissed each of the ladies responsible for crafting and presenting him with a Texas flag.

The Hangman's Oak: The tombstone reads: "Remember, friends, as you pass by, as you are now, so once was I. As I am now, you soon will be; prepare for death and follow me." Above this inscription are the names of eight men who lie beneath it in a common grave. They were victims of a brutal and senseless murder by members of a detachment of Confederate cavalry.

See the sidebar to read more about these and other famous trees in Texas history

Forestry Services Vendor Database

The Texas Forest Service website has a user-friendly Forestry Services Vendor Database. This is an interactive database that allows you to find information on various vendors that do forestry-related work in East Texas.

The four main databases that can be accessed:

- tree planting vendors,
- mechanical site preparation vendors,
- herbicide applicator vendors, and
- prescribed fire vendors.

The database can be queried to list only those vendors that meet specified criteria. For example, you might list only those tree planting vendors that machine plant and do work in Cass County.

The data can also be downloaded onto your computer. When this is done, data is downloaded into a comma-delimited file that can be opened by MS Excel.

For information of the preferred vendor database visit the Texas Forest Service website at http://texasforestservice.tamu.edu and click on the Forest Management tab, then click on Preferred Vendor Datatbase. Additional information can be obtained by contacting your local Texas Forest Service Office.

Interactive Website on Forests & Trees

How do you increase awareness and appreciation of paper and wood products as a natural, renewable resource to tech-savvy kids? You launch an informative, interactive and creative website called KnowYourTrees.org.

The Abundant Forests Alliance recently launched KnowYourTrees.org as a way to reach out to kids and others with important messages and facts about the health of forests and to help strengthen positive associations with paper and wood products and their many valuable uses.
The animated site allows visitors to learn about 10 tree species and contains interesting information about numerous wood and paper products. For example, did you know that there are more than 5,000 products made from trees; or that every day U.S. paper makers recycle enough paper to fill a 15-mile-long train of boxcars?

Important facts about the abundance of North America's forests are weaved throughout the site to counterbalance misinformation and erroneous perceptions about North America's forests.

For more information:

http://www.abundantforests.org

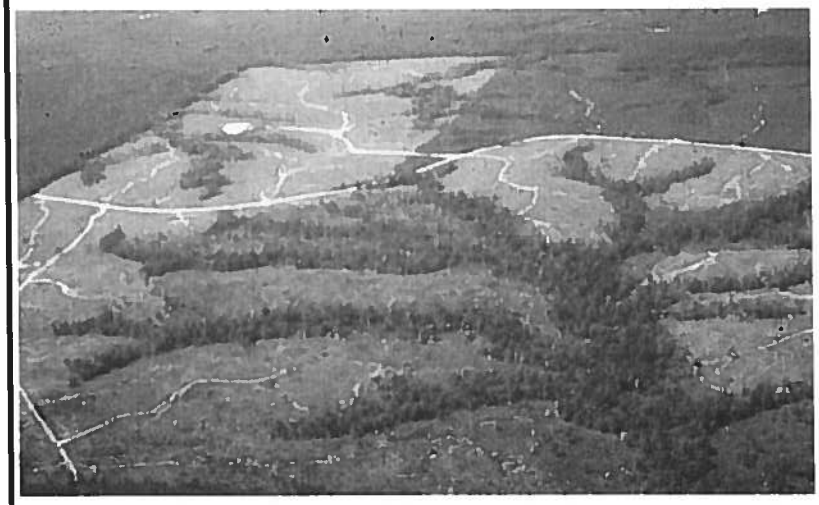
http://knowyourtrees.org

TheTreeFarmer.org

Improving My Land

Streamside Management Zones

A great way to improve and protect your forestland is by creating a Streamside Management Zone, or SMZ. An SMZ is a protective buffer of vegetation along a stream or creek. As a general rule of thumb a 50-foot buffer of trees on both sides of the stream is usually sufficient for protecting water quality.



Streamside Management Zones are easily visible in this photo.

SMZs help improve your land by:

- Reducing the amount of sediment or dirt that may get into a stream
- Providing shade to maintain a consistent water temperature for the fish and the insects that they eat
- Stabilizing stream banks and protecting them from erosion
- Providing habitat and travel corridors for wildlife.

Don't forget that you can harvest (thin) in an SMZ and still be within the voluntary guidelines. Just leave 50% of the shade for a distance of 50 feet from the bank on both sides.

Ask your logging contractor or other forestry professional about SMZs. Your land will benefit in many ways and you can show your commitment to being a good "Land Steward."

Determining Stream Types

The majority of our freshwater that is used for consumption originates on forestlands. As our population continues to increase the demand for usable water will increase as well. Forest landowners can ensure that are protecting this valuable resource by leaving streamside management zones (SMZs) along the streams that run throughout their property. Streams are divided into three groups (perennial, intermittent, or ephemeral) based on the amount of time during the year that water flows through it. The Texas Forest Service recommends that a 50-foot SMZ be left along side perennial and intermittent streams and professional judgment should be used on ephemeral streams or drains. Each stream type has identifiable characteristics that aid in its identification. Below are characteristics for each stream type that should be useful in determining the stream type on your property.

A perennial stream will flow at least 90% of the year and have a well-defined channel. This channel will be winding or sinuous and show evidence of soil and debris movement. Water pools will be present, even during dry conditions. High water marks are sometimes noticed along the stream, as well as wetland vegetation, such as mosses, ferns, and some woody species. Gray soils with red specks are associated with these types of streams. Remember that the Texas Forest Service recommends leaving a minimum width of 50 feet on either side of perennial streams.

An intermittent stream will flow at least 30% of the year and this is usually during the winter months. Intermittent streams also have a well-defined channel that is winding or sinuous. The channel will also show evidence of soil and debris movement from one part of the stream to another. Water pools are only present during wet conditions and high water marks along with wetland vegetation will occur in these areas. Intermittent streams usually have brown soils with gray soils mixed in. Again the Texas Forest Service recommends leaving a minimum width of 50 feet on either side of intermittent streams.

An ephemeral stream or drain only flows during or shortly after rain events. These streams do not always have well-defined channels because they are short lived. Ephemeral streams are generally always straight, lack water pools, and high water marks and wetland vegetation are not found. The soils in this area are usually characteristic of the surrounding lands. The Texas Forest Service recommends that professional judgment be used in determining whether or not an SMZ should be left along ephemeral streams. Some may choose to leave a small SMZ or stringer along an ephemeral stream while others may choose not to leave one.

SMZs are very important in protecting our streams from increased temperatures, excessive erosion, and provides habitat for various species of wildlife. SMZs can be thinned in order to remove some of the economic value, however it is important to leave a minimum of 50 square feet of basal area, evenly distributed. Senate Bill 977 can help reduce the financial burden of leaving an SMZ. If any debris from the thinning of an SMZ should end up in the stream, it should be removed immediately to prevent the stream flow from becoming blocked.

More information on SMZs and stream types can be found on the Texas Forest Service website at http://texasforestservice.tamu.edu or by calling your local Texas Forest Service office.

Distribution of the *Sam Rayburn BMP Informer* is provided free of charge to forest landowners of Hardin, Jefferson, and Orange Counties. Funding has been provided through cooperation of the Environmental Protection Agency (EPA), the Texas State Soil and Water Conservation Board (TSSWCB) and the Texas Forest Service (TFS). **If you would like for your name to be removed from our mailing list please contact Shane Harrington at (936) 639-8180 or sharrington@tfs.tamu.edu.**

TEXAS FOREST SERVICE
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August 2008

Golden Triangle BMP Informer

Serving Hardin, Jefferson, and Orange Counties

Updating FOREST LANDOWNERS on Forestry and Water Quality Issues

TEXAS FOREST SERVICE Best Management Practices Project P.O. Box 310 Lufkin, TX 75902 sharrington@tfs.tamu.edu

From the Editor . . .

A forest landowner's right to manage his/her property as he/she chooses is of the utmost importance. Forest landowners have either purchased their land with hard-earned money or have acquired it from family members who purchased the land long ago.

Landowners have earned the right and should always have the right to manage their property in the manner that best fits their goals. However, these rights are accompanied by responsibilities.

Responsibilities include protecting water quality for future generations. Texas' non-regulatory BMPs allow landowners the opportunity to be a steward of the land and avoid prohibitive government regulations.

BMPs are simple, inexpensive practices that protect land from erosion and maintain stream quality.

Did you know...
Losing a layer of soil the thickness of one dime across one acre (about the size of a football field including the end zones) amounts to losing 10,000 lbs. (5 tons) of soil per acre?

What Can I Do About Dry, Powdery Summer Roads?

During the hot, dry summer, woods roads can be as troublesome for hauling timber as wet roads are in the winter. Many roads on sand or silt soils will not hold up to heavy traffic under the dry conditions we often experience in East Texas.

One way to help hold the road surface together is to add organic matter. This will provide both support and traction for vehicles.

A good source of organic matter is hay. Large round bales of hay can be rolled out along the roadway to cover the soft spots. An average round bale will cover a little more than 200 feet.

Another method used to hold dry roads together is to wet them with water trucks. Wetting roads is a costly and short-term solution compared to adding hay.

Adding hay will give you access under dry conditions and help protect the road from erosion long into the wet season. This additional organic matter will also make a great seed bed in the fall for replanting the roadway.

Looking for a forestry consultant to aid in the management of your forested property? Call any Texas Forest Service office for a copy of the Professional Management Service Referral List. Over 60 names, addresses and phone numbers of firms that provide professional forest management services are listed. These services may include timber marketing, appraisals, management plans and other forestry activities.

How Do I Know What Size Culvert I Should Use?

The most critical factor in installing a culvert is correct sizing. Purchasing and installing a poorly-sized culvert can be a waste of time, money, and effort. Three factors determine what size is correct – drainage area, soil type, and slope.

Step 1: *Figure drainage area.*

Most of you who know your property well and can estimate the number of acres of watershed or drainage area. If you need help, contact your local TFS or NRCS office.

Step 2: *Determine the soil type.*

Grab a few handfuls of soil to tell if it feels like clay, sand, or a mixture of both. Heavier clay soils require larger culverts.

Step 3: *Figure the slope.*

Estimate the average slope of the drainage area. Steeper slopes require larger culverts.

The following gives proper culvert size for moderate slopes (5-15%) and medium soils:

Area Drained (ac.)	*Culvert Diameter (in.)*
10	24
30	30
50	36
75	42
100	48

Improving My Land

Revegetating Forest Roads

The following guidelines can help you create well-vegetated roads:

Seedbed Preparation

- If the soil is loose, or even firm but not compacted, and has not been sealed by rainfall, no seedbed preparation may be needed.
- If the soil is compacted, sealed by rainfall, or graded to clay, use a disk or similar equipment to loosen a 3-4" depth.

Planting

- When temporary plants (annual grasses) are used, a follow up with permanent vegetation is likely to be needed.
- If possible, use mixes. Legumes should always be used in mixes with grasses.
- Broadcast and lightly drag seed into soil, or firm with a roller.

Fertilizing

- In general, apply about 600 lbs. of triple-13 per acre either at the time of planting or mix into the top 2-3" during seedbed preparation.

Well-vegetated roads minimize erosion, provide wildlife habitat enhancement, and are pleasing aesthetically.

Forestry and Water Quality in East Texas

The increased demands on water resources in Texas may lead to a limited supply of available freshwater for future populations. Many approaches, including the highly controversial Marvin Nichols Reservoir in Northeast Texas, are being considered as possible solutions to this problem. The forestry community is doing its part to ease this burden by protecting water quality through the use of forestry Best Management Practices.

A report released by the Texas Forest Service titled "Voluntary Implementation with Forestry Best Management Practices in East Texas", shows that the forestry community has achieved the highest rating ever for protecting water quality. Nine out of ten sites that involve forestry activities participate in environmentally sound practices.

Forestry Best Management Practices (BMPs) are practices determined to be an effective and practical means of preventing or reducing the amount of water pollution generated by forest management. In 1992, the Texas Forest Service started the Best Management Practices Project, which encourages landowners to protect water quality through voluntary means. This project provides technical assistance to landowners, professional workshops for loggers, public education, and random forestry site inspections.

The TFS project monitors 150 sites every two years to measure how well voluntary efforts are protecting water quality. Sites were chosen randomly throughout east Texas based on the annual timber harvest of each county. The four ownership groups that were targeted are public (national forests), forest industry (forest landowners who own forest product facilities), corporate landowners (forest landowners who do not own forest product facilities), and private landowners.

During the last round of monitoring Family Forest Owners showed an all time high in BMP implementation rate at 88.9%. Public ownership had the highest BMP implementation rating at 98.4%. All four ownerships had an overall BMP implementation rate of 91.7%. This is the highest BMP implementation rating ever monitored since the Texas Forest Service began monitoring in 1992. BMP implementation was generally higher when:

- a professional forester is used
- the logger has attended the Best Management Practices workshop
- the landowner is familiar with Best Management Practices
- the landowner is a member of a forestry organization
- Best Management Practices are included in the timber sale contract
- the timber is delivered to a major Sustainable Forestry Initiative[SM] mill.

Education is the key to continued success in this project. According to the report, "continuing effective educational programs for non-industrial private landowners and BMP training for loggers can minimize water quality impacts from silvicultural operations." To view a copy of this report, visit the Texas Forest Service webpage at http://texasforestservice.tamu.edu/pdf/forest/water/round6.pdf.

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Culvert Installation

When installing a pipe culvert, soil should be compacted at least halfway up the side of the pipe. Cover equal to a minimum of half the culvert diameter should be placed above the culvert (but preferably one foot of fill per foot of culvert diameter). Never use less than one foot of cover.

For multiple-pipe installations, the distance between pipes should be a minimum of half the pipe diameter.

Texas Forest Service

September 2005

FOREST STEWARDSHIP BRIEFINGS

Timber ◊ Wildlife ◊ Water Quality ◊ Soil Conservation ◊ Best Management Practices ◊ Recreation ◊ Aesthetics

EXOTIC INVASIVE PESTS

by Joe Pase, Entomologist, Texas Forest Service, Lufkin, TX

For more information:

- http://www.texasinvasives.org
- http://www.invasive.org/eastern/srs/
- http://cswgcin.nbii.gov/issues/invasives/index.html
- http://txforestservice.tamu.edu/shared/article.asp?DocumentID=370&mc=forest
- http://bc4weeds.tamu.edu/weeds/index.html

INSIDE THIS ISSUE:

What is an exotic invasive pest? One definition goes like this: any species, including its seeds, eggs, spores, or other biological material capable of propagating that species, that is not native to that ecosystem; and whose introduction does or is likely to cause economic or environmental harm or harm to human health.

The invasion of nonnative plants, animals, and other organisms into the United States and Texas has caused and will continue to cause significant problems. The world's global economy and increasing international trade make the likelihood of introductions a constant threat. Usually a nonnative invasive pest is introduced by accident such as in packing material from a foreign country or the "innocent" release into the wild, for instance, of an unwanted aquarium plant or snail. Or maybe an attractive nonindigenous flower was introduced as an ornamental yard plant and then escaped. Exotic pests can enter the country in many ways, but once in the wild, invasive species may continue to reproduce, and displace native species. Human actions are the primary means of invasive species introductions.

When an organism is introduced into a new area, it is likely to die out because conditions for survival and reproduction are not favorable. However, some organisms are able to thrive in their new environment and may develop to pest status. The absence of natural enemies for the new pest allows populations of the pest organism to rapidly increase. Once a pest becomes established, even over a relatively small area, it is often very difficult and costly to eradicate it.

Some classic examples of exotic invasive pests that have impacted our forests include gypsy moth, balsam and hemlock woolly adelgid, Dutch elm disease, chestnut blight, kudzu, Chinese tallow, and many, many others. Several that have gained recent attention include giant Asian dodder in Houston, Asian longhorned beetle in Chicago and New York, and emerald ash borer in several northcentral states.

When a new pest is found, the identity of the pest must first be made. Then surveys are conducted to determine the geographical area of the infestation, what the pest is attacking, and what kind of damage may be occurring. If the pest is deemed an economic or environmental threat, quarantines are established to slow or halt its spread, efforts to eradicate it may begin, and research to gain a better understanding of the pest will be initiated.

The Texas Forest Service (TFS) is very interested in exotic invasive pests that could impact the forest resources in East Texas or the state. To address the exotic pest problem, recent efforts have involved cooperating with the City of Houston to eradicate giant Asian dodder from several Houston localities and surveys to detect the fungus that causes Sudden Oak Death. With a grant from the USDA Forest Service, TFS Forest Pest Management specialists are developing a web page on Texas invasive forest threats (http://www.texasinvasives.org). This web page is a cooperative effort among TFS, USDA Forest Service, the Lady Bird Johnson Wildflower Center in Austin, and the Houston Advanced Research Center.

THE TREASURE IN TREES

by Robert Burns, Extension Communications Specialist, Department of Agricultural Communications, Texas A&M University System, Agricultural Research & Extension Center, Overton, TX

For more information:

- http://recenter.tamu.edu/pubs/1555.html
- http://texasforestservice.tamu.edu/urban/default.asp

To some ears, "urban forestry" sounds contradictory. But for over 30 years, the Texas Forest Service's (TFS) urban forestry program has taken root and spread among the state's largest cities.

In Texas' larger cities, urban foresters have quietly played a key role in saving communities money on infrastructure and improving quality of life for residents.

The program began in 1972 with a small effort that emphasized genetic improvement of trees in North Texas communities. Before long, full-time urban foresters were working in Houston and Fort Worth. Today, in light of growing recognition of the value of trees in urban areas, TFS also has urban foresters in Abilene, Amarillo, Austin, Conroe, Corpus Christi, Dallas, El Paso, San Antonio, and Weslaco.

Why have urban foresters? Why worry about trees in the city at all? John Giedraitis, coordinator of the urban forestry program, cites a number of compelling reasons:

- Trees properly used in a landscape can increase property values by as much as 20% and provide food and shelter for birds and urban wildlife.
- Planted strategically, the right shade trees can reduce building cooling costs by as much as 50%.
- Trees reduce the temperature of streets and parking lots by 8 to 10 degrees in the summer, making paved surfaces last longer without repairs.
- Trees improve air quality by trapping dust, absorbing air pollutants such as nitrogen dioxide, sulfur dioxide and ozone, and by converting carbon monoxide to oxygen.
- Trees slow the rate that storm water runs off, reducing the size and number of concrete drains and other structures needed.

But savings for cities can be even more dramatic. A study sponsored by the USDA and the Houston Green Coalition found that increasing the average tree cover in Houston by 30 to 40% could provide $3.5 billion savings on storm water infrastructure and $297 million worth of pollutant removal benefits.

In 2000, the USDA study estimates Houston's tree canopy removed 83 million pounds of pollutants - 35.4 million tons of which were ozone - saving the city $208 million. More trees could save the city some of the costs of lowering automobile and factory emissions to meet federal and state guidelines for air quality.

FORESTRY SERVICES VENDOR DATABASE

from TFS website

For more information:

- http://tfsfrd.tamu.edu/vendors/default.htm

The Texas Forest Service website has a user-friendly Forestry Services Vendor Database. This is an interactive database that allows you to find information on various vendors that do forestry-related work in East Texas.

The four main databases that can be accessed:

- tree planting vendors,
- mechanical site preparation vendors,
- herbicide applicator vendors, and
- prescribed fire vendors.

The database can be queried to list only those vendors that meet specified criteria. For example, you might list only those tree planting vendors that machine plant and do work in Cass County.

The data can also be downloaded onto your computer. When this is done, data is downloaded into a comma-delimited file that can be opened by MS Excel.

Natural Regeneration of Oaks

Natural regeneration is the least expensive way to grow oaks. To regenerate oaks in a mixed hardwood stand, follow these steps:

Measure Regeneration Potential - Have a forester inventory the advance reproduction and the overstory to determine the ability of the stand to regenerate itself. The number of oak seedlings needed to stock a stand depends on their height, since large seedlings are more likely to survive than small seedlings. When seedling numbers do not meet stocking goals, the forester should evaluate stump sprout potential. If both seedling numbers and stump sprout potential are inadequate, you still may get satisfactory regeneration from acorns. Rely upon acorns only in years when there is a good acorn crop. Generally, a stand must be at least 50 percent mature oak to be a good acorn producer.

Evaluate and Plan to Control Competition - Control competitors by chemical or mechanical treatment depending on the size, density, and species of plants. ***Be sure to contact a forester for regulations and recommendations concerning herbicides and their applications!***

Apply a Regeneration System - A regeneration system is a combination of harvest and other activities that creates conditions favoring tree regeneration.

To satisfy oak seedling light requirements, harvest areas must be at least 1/2 acre (160-feet diameter circles). A harvest area of at least 2 acres (200 feet wide) is recommended because smaller openings are costly to manage and harvest and have a larger proportion of their area in "edge," increasing the potential for adverse edge effects (reduced oak seedling growth due to shade from border trees, increased branching of border trees, reducing their wood quality). If deer browsing is a problem, harvest areas of at least 4 acres.

If your main objective is to grow timber, there is no reason to limit stand size. If your objective is to provide periodic timber harvests and encourage wildlife diversity, harvest small blocks of timber at planned intervals (e.g., 10 to 15 years) to create a mix of stand ages.

Regeneration systems that will satisfy oak light requirements are group selection, clearcutting, and shelterwood

Monitor Competition and Oak Development - Inspect the stand the first year after applying a regeneration system. Determine whether the number of oak seedlings and stump sprouts is adequate and evaluate competition from undesirable vegetation. If oak regeneration is not adequate, plant oak seedlings. Control any competition from undesirable trees and shrubs. Oaks seemingly buried under dense herbaceous vegetation probably will emerge after four to six years.

adapted from "Woodland Owners' Guide to Oak Management," a 2005 publication by Melvin J. Baughman, Extension Specialist, Department of Forest Resources, University of Minnesota, St. Paul, MN; and Rodney D. Jacobs, Forestry Consultant, U.S. Forest Service, retired.

For more information:

- http://www.extension.umn.edu/distribution/naturalresources/DD5938.html

*** Notice ***

Due to some last minute and unavoidable schedule changes, the date for the Western Gulf Silvicultural Technology Exchange (see July 2005 edition of Forest Stewardship Briefings) has been changed from September 1 to October 3, 2005. Location and agenda remain the same. Go to www.peopleware.net/1542a.

The Texas Big Tree Registry

Big trees are a part of our Texas heritage. The Texas Forest Service coordinates the Big Tree Registry program in Texas, and the purpose of the program is:

- to locate and recognize the largest known species of its kind that grow in the state of Texas;
- to obtain the cooperation of the tree owners to protect and preserve these specimens as landmarks for future generations to enjoy;
- to stimulate interest in and a greater appreciation of trees -- their worth as an a natural resource and as individual specimens.

American Forests, a nonprofit conservation organization, produces the National Registry of Big Trees . It can be found on the web at: http://www.americanforests.org/resources/bigtrees/register.php.

from TFS website

For more information:

- Pete Smith, TFS, psmith@tfs.tamu.edu
- http://texasforestservice.tamu.edu/shared/article.asp?DocumentID=476

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INVASIVE PLANT CONFERENCE

On November 17th through 19th, the first statewide conference in Texas on non-native invasive plants will be held at the Lady Bird Johnson Wildflower Center in Austin, Texas.

The first two days of the conference will be a professional level meeting designed to serve scientists, land managers, state and federal agencies, local governments, and other professionals interested in invasive plant research and policy in Texas. The third day (November 19th) is devoted to public awareness and educational outreach and will be open to the general public.

This conference will feature:
- Multiple sessions with dozens of experts from the field
- Working groups and panel discussions
- Trade exhibits
- Poster sessions
- Banquet dinner and awards ceremony
- Full day of public awareness & educational outreach activities

Registration forms for the conference will be available online on the TEXASINVASIVES.ORG web site. The web site - http://www.texasinvasives.org/index.html - will contain detailed information about registration, housing, social events, and all costs.

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Texas Forest Service

December 2005

FOREST STEWARDSHIP BRIEFINGS

Timber ◊ Wildlife ◊ Water Quality ◊ Soil Conservation ◊ Best Management Practices ◊ Recreation ◊ Aesthetics

TIMBER LOSS FROM RITA

by Pat Schaub, Communications Specialist, Texas Forest Service, College Station, TX

For more information:

- http://texasforestservice.tamu.edu/pdf/forest/ritaassessment.pdf
- http://txforestservice.tamu.edu/shared/article.asp?documentid=1158
- http://texasforestservice.tamu.edu/pdf/admin/admin/RitaRecoveryTaskForceUpdate27Oct.pdf

INSIDE THIS ISSUE:

After Hurricane Rita made landfall on Sept. 24, she made her way north through East Texas, cutting a wide swath - 771,000 acres - through the heart of Texas' timber country. The estimated dollar amount of timber impacted in the hurricane is set at $833 million, according to Texas Forest Service (TFS) officials.

"The total damaged and affected trees by Hurricane Rita are estimated at 967 million cubic feet, or about 6% of the total East Texas timber growing stock," said Jim Hull, State Forester and TFS Director.

"Damaged trees" are those that are likely to die within 12 months. "Affected trees," while not likely to die in 12 months, are those whose growth will probably be impaired.

In 2004, 645 million cubic feet of timber was harvested in East Texas. The total damaged timber from Rita was slightly less than that at 533 million, but the total damaged plus affected was more.

"The worst damage crews found was in southern Newton and Jasper counties."

The Texas Forest Service launched two days of aerial surveys that refined the damage boundaries projected by a preliminary map prepared by the USDA Forest Service, Southern Research Station (SRS). Then, Forest Inventory and Analysis (FIA) field crews from the TFS and SRS collected ground-truthing data on 222 points in the impacted area.

"The worst damage the crews found was in southern Newton and Jasper counties," said Burl Carraway, Assistant Department Head of the TFS Sustainability and Economic Development Department.

"Now that we know the extent of timber damage, we are looking at both short- and long-term ways to address the problem," said Carraway.

One of the ways landowners can begin to recover is to implement a reforestation plan for their land. The TFS hopes to use some of the information collected in the ground-truthing - such as age and density of the trees that were impacted - to recommend types of trees best suited to withstand hurricane and tropical force winds.

In addition, Carraway says that his office will be studying the economic impact of the timber loss of the area in relation to additional mills that might be looking to locate there.

Beyond timber damage, the hurricane also affected Streamside Management Zones (SMZs), which are recommended protection zones around a stream, lake or other water body. Carraway said that many of these zones were hard hit by the storm and will need to be restored and rehabilitated in the future to ensure water quality in the area.

RITA & INCOME TAX DEDUCTIONS

by Linda Wang, Economist and Tax Analyst, Texas Forest Service, College Station, TX

For more information:

- http://texasforestservice.tamu.edu/images/forest/economics/HurricaneRitaTimberLoss2pager.pdf
- http://txforestservice.tamu.edu/shared/article.asp?documentid=1149
- http://texasforestservice.tamu.edu/shared/article.asp?documentid=1161
- www.timbertax.org

Timber destroyed by Hurricane Rita in East Texas may allow timberland owners to claim a deduction on their federal income tax return.

Deductible casualty loss for timber held for business or investment purposes is the smaller of *the adjusted basis of timber for the timber block* and *the difference of the fair market value immediately before and after the loss,* reduced by salvage sale income.

The key for most cases is to figure out "the adjusted basis." Generally, the cost of a property is called "basis" in tax terms. Adjusted basis is the original basis reduced or added by adjustments (such as a new purchase or sale of part of the timber).

The original basis for:

- a purchased timber asset is the purchase price and related costs (such as legal fees and timber cruises).
- a gifted timber asset is the donor's adjusted basis in most instances.
- an inherited timber asset is the fair market value (or special use value if so elected) on the date of death or on the alternative valuation date.

If you didn't determine a basis of your timber at the time of acquisition, it is necessary to use the current volume before the storm, growth rate over the years, and timber price at the time of acquisition to get the best possible estimate.

Here's what you need from your forester: fair market value of the timber immediately before and after the storm. This usually requires timber volume in thousand board feet, cords or tons, and timber prices to establish the fair market value. Also, if you don't know your basis, you will need additional information such as timber price and volume estimate at the time of acquisition or inheritance to set up the original basis for the timber.

All casualty losses are claimed first on Form 4684. Follow the instructions for this form and it will direct you to the proper reporting forms. Generally, if you hold timber for investment, after using Form 4684 for casualty loss calculations, the amount of loss is then entered into Schedule A of Form 1040. If your holding is business property, your casualty loss is then entered on Form 4797.

Landscape trees damaged by Hurricane Rita may qualify for a tax deduction under "casualty loss deduction" as well. This deduction is available for damaged trees and shrubs on personal use (residence), business or investment property. To read about this topic, see "For more information" side bar, 2nd and 3rd bullets.

STORM DAMAGE TO HARDWOOD TREES

by Joe Pase, Entomologist, Texas Forest Service, Lufkin, TX

For more information:

- http://texasforestservice.tamu.edu/pdf/admin/admin/RitaStormDamageGeneralNOFHM$.pdf

Fortunately, many hardwood trees will survive storm breakage. Hardwood trees that are standing and have even a small portion of the crown remaining will probably recover in time. However, the process may take several years.

Large hardwood trees that are uprooted should be removed. It is important to remember that hardwood trees with large damaged areas on the trunk or large broken limbs may be infected with decay fungi. After several years, theses decay fungi typically weaken a tree structurally and make the tree more susceptible to future storm breakage. Decay fungi probably won't kill a hardwood tree. Damaged hardwood trees in residential areas that are not removed should be properly pruned to eliminate broken branches and branch stubs and promote rapid healing.

A guide for evaluating damaged hardwood trees can be found at http://texasforestservice.tamu.edu/shared/article.asp?DocumentID=448&mc=urban.

POST-HURRICANE FOREST HEALTH

In addition to the direct damage to pine trees caused by storms, insects and fungi often cause additional losses.

Insect Problems

Recently-cut trees and logs, trees damaged by storm or other causes, and dying trees are very susceptible to insect attack. The most damaging insects that initially attack downed pine trees and logs are ambrosia beetles and wood borers.

Forest landowners often expect a build-up of pine bark beetle populations, in particular the dreaded southern pine beetle, after timber is damaged by storms. In East Texas and across the South, storm damage to timber has NOT caused southern pine beetle outbreaks.

Fungus Among Us

Dead timber left in the woods or on log decks for longer than two or three months is likely to be colonized by various decay fungi. These fungi can rapidly degrade the wood and render it unusable.

Forest landowners with storm-damaged timber should consider salvage logging as a way to utilize the timber rather than letting it go to waste. Timber salvage operations are more time consuming than regular logging, therefore the prices paid for the damaged timber will be lower than standing, green timber prices. Salvage should be conducted as soon after the damage as possible before various wood boring insects and decay and stain fungi further degrade the timber. Also, dead timber often dries out rapidly and has less dollar value if weight scaled. Large volumes of harvested pine logs that will not be immediately processed at a mill can be kept under a water sprinkler system or in a log pond to prevent invasion of insects and fungi.

Hidden Damage

Following a storm, some pine trees may not exhibit any signs of damage other than leaning. These trees are commonly referred to as root sprung. Unless they are attacked by pine bark beetles, they may not die immediately, but they usually decline over a period of several years and eventually are attacked by bark beetles. Root sprung trees should be removed if a salvage operation is conducted.

by Joe Pase, Entomologist, Texas Forest Service, Lufkin, TX

For more information:

- http://texasforestservice.tamu.edu/pdf/admin/admin/RitaStormDamageGeneralNOFHM$.pdf
- http://www.alaforestry.org/ivan/Publications/water_storage.pdf

MONEY REALLY DOES GROW ON TREES!

$205 billion. That's billion with a "b." That is what it would cost to replace all the trees within the eight-county region around Houston, according to a Texas Forest Service (TFS) report.

Beyond the sheer landscape value of trees, the report - Houston's Regional Forest: Structure-Functions-Values - also documents the contributions trees make in air pollution removal, carbon sequestration and residential energy savings. Combined, these three functions of trees provide $456 million in annual benefits to the region's citizens.

The report also documents the loss of the region's forests to changes in land use. "Our study shows that land classified as forest declined by 17% between 1992 and 2000," said Mickey Merritt, Houston regional urban forester for TFS.

"As people build new homes and businesses in suburban and rural areas, we're turning our traditional forests into 'urban' forests," according to Merritt. "So, if we want the benefits of trees for our kids and grandkids, we need to set up new tree programs and policies today."

This report is the first-of-its-kind look at the functions and values of trees across the Houston metropolitan area.

by Pete Smith, Partnership Coordinator, Texas Forest Service, College Station, TX

For more information:

- http://texasforestservice.tamu.edu/shared/article.asp?documentid=1166
- www.HoustonRegionalForest.org

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ARBORICULTURE 101

Title: Arboriculture 101 - A 4-Day Tree Care Course
Dates: Friday, Saturday, January 6 & 7; January 20 & 21, 2006
Time: 8:00 a.m. - 5:00 p.m.
Location: Montgomery College, Conroe/The Woodlands
Description: This course is designed to provide practitioners with an in-depth knowledge of how to care for urban trees.

Who will benefit from this course:

- Architects, engineers and developers who design and build structures around trees.
- Landscape architects and managers.
- Those interested in taking the ISA Certified Arborist Exam.
- Certified landscape professionals, certified arborists, certified foresters, licensed pesticide applicators, other individuals seeking continuing education credits.
- Seasoned professionals seeking to learn the latest recommendations for caring for trees.
- Anyone with an interest in urban trees.

Contact John Warner, Texas Forest Service at (936) 273-2261.

For topics covered, see: http://treevents.tamu.edu/cgi-bin/webevent.cgi?cmd=opencal&cal=cal1.

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Texas Forest Service

March 2006

FOREST STEWARDSHIP BRIEFINGS

Timber ◊ Wildlife ◊ Water Quality ◊ Soil Conservation ◊ Best Management Practices ◊ Recreation ◊ Aesthetics

MULCH ADO ABOUT NOTHING?

by Dr. Michael Merchant, Urban Entomologist, Texas Cooperative Extension, Dallas, TX

For more information:

- http://citybugs.tamu.edu/IntheNews_Details.asp?ID_Key=425
- http://termites.tamu.edu/formosan.html
- http://www.agctr.lsu.edu/termites/
- http://www.agctr.lsu.edu/NR/rdonlyres/B49C9FA5-24A9-4631-9210-68ECDE9FF1B6/2712/pub2908termites.pdf

INSIDE THIS ISSUE:

A recent email circulating on the Internet suggests that bark mulch being sold through certain large retailers is likely to be infested with an alarming new termite species. The message warns consumers to be on the lookout for termite-infested mulch which the state of Louisiana is attempting to ship to whoever will take it. The termite being shipped, according to the message, is the Formosan termite.

According to Dr. Dennis Ring, extension entomologist from Louisiana State University in Baton Rouge, the university published an article in October, notifying people about a quarantine on shipping wood from Formosan termite-infested areas and warning people in hurricane areas to be careful how to dispose of their yard debris.

There is currently a quarantine on all wood waste from hurricane-devastated areas of southern Louisiana [see top article, page 2]. The quarantine specifically addresses the concern about Formosan termite-infested wood products being shipped to new areas. According to Dr. Gregg Henderson, research entomologist and termite expert from LSU, all yard debris and dead trees are being burned or shipped to a large local landfill near New Orleans. The state is currently considering how or whether large quantities of wood material can be treated prior to shipping to overflow landfills in Mississippi that do not currently have Formosans.

Louisiana neither encourages nor condones the sale of wood waste in mulch from the hurricane damaged areas. If anyone is chipping, bagging and selling mulch from southern Louisiana it is being done illegally. The same would be true for Texas where there are also large quantities of wood from Hurricane Rita-affected areas that also have Formosan termites.

Formosan termites are commonly found in damaged trees in the New Orleans area. It is possible for Formosan termites to be transported in wood mulch. This has occurred in at least one instance, prior to last year's hurricane season, and was observed by researchers at Texas A&M University. However, the chance for Formosan termites to be shipped in this way is relatively low for several reasons. For one, the chipping and mulching process used to make landscape mulch is highly destructive to termites and the likelihood of transporting a viable mini-colony of Formosans in this manner is relatively low.

A far more common route that Formosan termites are distributed is via the sale and distribution of recycled railroad ties. Railroad ties are pulled from railway beds and commonly sold throughout the country for use in landscaping. Unfortunately, Formosan termites can easily inhabit the untreated center areas of railroad ties. When railroad ties are collected from Formosan termite-infested areas they can easily transport these termites to many parts of the country.

Twenty-five counties in Texas have been found with Formosan termite infestations, although the principal infested areas are along the upper Gulf coast between Houston and Louisiana.

Much To Do About Termites

by Dr. Dennis Ring, Entomologist, Professor, Extension Specialist, Department of Entomology, Louisiana State University AgCenter, Baton Rouge, LA

For more information:

- http://www.lsuagcenter.com/

Efforts are under way to prevent the spread of Formosan subterranean termites in mulch from New Orleans and Louisiana following hurricanes Katrina and Rita.

It is true that there is a lot of cellulose debris (wood, paper and their products) in Louisiana following these two hurricanes. Yes, Formosan subterranean termites are found in the parishes affected by the hurricanes and will get in mulch. However, the Louisiana Department of Agriculture and Forestry (LDAF) in Louisiana imposed a quarantine for the Formosan subterranean termite on October 3, 2005, in Calcasieu, Cameron, Jefferson, Jefferson Davis, Orleans, Plaquemines, St. Bernard, St. Charles, St. John the Baptist, St. Tammany, Tangipahoa and Washington parishes (the parishes affected by the hurricanes).

Provisions of the quarantine imposed by the LDAF include:

- Movement of wood or cellulose material is prohibited unless either (1) it is fumigated or treated for Formosan subterranean termites and is approved for movement by the commissioner or his designee(s) or (2) written authorization is given by the commissioner or his designee(s) for the movement of untreated wood or cellulose material from the quarantined parishes.
- Temporary housing cannot be moved from the named parishes until written authorization is given by the commissioner or his designee(s).
- All architectural components (beams, doors and salvaged wood) cannot be sold or placed in any structure in any parish until the architectural components are fumigated or treated for Formosan subterranean termites
- Additionally, it is strongly recommended that all new construction and reconstruction of structures in the quarantined parishes use pressure-treated wood or non-cellulose materials. [The Texas Department of Agriculture has placed entry restrictions on wood materials from southeast Louisiana that could contain Formosan subterranean termites.]

The quarantine is in effect until it is rescinded by the commissioner of agriculture. If a waiver of a requirement or an authorization to carry out one of the prohibited acts is granted, it does not rescind or modify the quarantine.

Texas Brigades Wildlife Leadership Camps

by Dale F. Prochaska, Texas Parks and Wildlife Dept., Kerr Wildlife Management Area,, Hunt, TX

For more information:

http://www.texasbrigades.org

The Texas Brigades is a wildlife-focused leadership development program for high school youth ages 13-17. There are four different camps: **Bobwhite Brigade**, **Buckskin Brigade**, **Feathered Forces**, and **Bass Brigade**. Students will be introduced to habitat management, honing communication skills and developing a land ethic. Top wildlife professionals and resource managers serve as instructors and mentors. Each camp is 4 ½ days long.

The camps are held on private ranches and at environmental camps in different areas of the state. In addition to learning animal anatomy and behavior, botany, nutrition, habitat management, population dynamics, etc., students will also learn valuable leadership skills. They will write news releases, practice public speaking and find out how to handle radio and television interviews. Through these activities, students develop valuable life skills that will help no matter their career goals.

The Texas Brigades is a cooperative effort of Texas Cooperative Extension, Texas Wildlife Association, TPWD, USDA-NRCS, the Lower Colorado River Authority, the Texas Deer Association, the Mellon Foundation, Quail Unlimited, and the National Wild Turkey Federation.

Attracting Birds to Your Property

Birds need shelter from hard rains and cold winds and protection from predators. Young birds especially need cover while they are learning to fly. The most dangerous backyard predator may be the local house cat. You can add shelter and food sources to your yard by including wildlife needs in your landscaping plan.

Fortunately, most of the qualities you look for in plants are also a high priority for birds. We like to have lots of flowers and fruits, dense growth and long-lasting foliage. Birds do too! Even if you have only a deck or window planter, you can attract birds and offer shelter by careful plant selection. A hanging basket of fern or ivy could shelter a wren. A small evergreen tree in a tub could break a cold wind or keep the rain off.

If your landscape is mostly lawn, plant an island of shrubs and flowers. Perhaps five or seven (odd numbers look best when grouping) boxwoods or hollies surrounded by zinnias or marigolds would work well and add attractive color. Add a small flowering fruit tree such as pear, plum, crab apple, or dogwood.

If your landscape is mostly shrubs and lawn, a fast-growing tree such as honey locust, green ash or red maple will add height to your yard. A small grove of the trees would be even more attractive.

If your landscape is mostly trees, you have an advantage. Many people wait a lifetime for their trees to reach full height. Planting a few shade-tolerant smaller trees and shrubs will give a layered effect and will attract different kinds of birds. Consider dogwood, holly, aromatic sumac, and viburnum, among others. You may want to add a few evergreens. They are excellent protection from cold winds and will protect your house as well as the wildlife when planted on the north and west sides.

from Arkansas State Parks publication, "Cover."

For more information:

- http://www.tpwd.state.tx.us/huntwild/wild/wildscapes/
- http://www.tpwd.state.tx.us/huntwild/wild/wildscapes/guidance/planning/home_lot_dev/design_tips/index.phtml

Community Wildfire Protection Plan

Texans have watched communities and over a million acres go up in flames during this recent wildfire season, and as such, prevention and protection have become increasingly important to the state's communities.

In 2005, the Urban Wildland Interface (UWI) program took notice of this problem and brought the Community Wildfire Protection Plan (CWPP) to Texas. CWPP is a nationwide program that offers the best solution for identifying strategies for increasing a community's resilience to wildfires. It is being spearheaded in Texas by Justice Jones, UWI Specialist. Jones put together a template that makes the process easier for communities. You can find the template on the TFS Web site.

To have a working CWPP in a community, structural ignitability and hazardous fuels reduction need to be addressed and involve three entities: the local fire department, a local government official, and the area UWI specialist. The federal government recognizes the CWPP and will use its presence as a determining factor in appropriating funds after a disaster or for fuel reduction. Federal partners will also participate in the process when plans are developed in proximity to federal lands and focus fuels reduction efforts in areas identified as at-risk in a CWPP.

The ultimate goal for a community with a CWPP is to become one of the Firewise Communities/USA, which is a nationally recognized program whose goal is to encourage and acknowledge action that minimizes home loss to wildfire.

For more information contact your local UWI specialist or Justice Jones, jjjones@tfs.tamu.edu.

by Elysa Nelson & the Communications Office, Texas Forest Service, College Station, TX

For more information:

- http://www.tamu.edu/ticc/UWI_contacts.pdf
- http://texasforestservice.tamu.edu/shared/article.asp?DocumentID=1209
- http://texasforestservice.tamu.edu/fire/interface/default.asp
- http://www.firewise.org/usa/

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AERIAL PHOTOGRAPHS AVAILABLE

From 1979 through March 2002, the Texas Forest Service (TFS) has been taking black and white aerial photographs of the forested region of East Texas. The photographs are taken during the winter months when hardwood trees have dropped their leaves. This makes ground features more visible and allows for easy separation of pine and hardwood timber.

TFS no longer takes the black and white photos. Instead, color infrared photographs have been taken and digitized. Most TFS District offices should have digital copies of these photos taken from 2003 through 2005.

Black and white photos from 1979 through 2002 are available for purchase at a nominal charge . For a map and list of quadrangles and the years they were photographed, go to the TFS website at http://texasforestservice.tamu.edu. Click on *Forest Management*, then *Aerial Photographs of East Texas Areas.* To receive help in locating or ordering a photo for your particular property, contact your local TFS office or Donna Work at dwork@tfs.tamu.edu.

To obtain a free print-out of your property from the color infrared photography, contact the TFS office located in or near the county where your property is located.

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Texas Forest Service

January 2007

FOREST STEWARDSHIP BRIEFINGS

Timber ◊ Wildlife ◊ Water Quality ◊ Soil Conservation ◊ Best Management Practices ◊ Recreation ◊ Aesthetics

STATE OF THE TEXAS FOREST

by Ed Barron, former Texas Forest Service Associate Director, College Station, TX

For more information:

- http://texasforestservice.tamu.edu/shared/article.asp?DocumentID=1226
- For updated economic impact data, go to http://tfsweb.tamu.edu/uploadedfiles/sustainable/econdev/economic_impact2004.pdf

Texas Forest Service completed the data collection of the 2003 Forest Inventory and Analysis in June 2003. The Southern Research Station of the USDA Forest Service provided compiled data and tables in 2005. These data provide information on forest area, volumes, ownership, forest types, growth, removals and mortality.

In 2003, the volume of softwood growing stock in East Texas was 9.3 billion cubic feet; hardwood volume was 6.4 billion cubic feet. East Texas had 11.9 million acres of timberland, an increase of over 100,000 acres since 1992. Total land area in the 43-county survey area is 21.5 million acres.

Timberland ownership changed from the historic trend of 63% family forest owner, 29% forest industry, and 8% public. Industrial ownership decreased to 16% in 2004, and to 9.7% in 2006. The remaining former industrial lands are now owned by Timber Investment Management Organizations (TIMOs), Real Estate Investment Trusts (REITs), and other investment groups. East Texas has approximately 198,000 family forest owners. Approximately 87,000 of these landowners own 327,000 acres in parcels of 1 to 9 acres, indicating the extent of forest fragmentation.

In 2003, pine forests totaled 5.6 million acres, an increase of 30% since 1992, while upland hardwood acres decreased by 45% to 1.8 million acres.

East Texas sawmills increased output by 8% in 2004 to 1.9 billion board feet, while paper and paperboard production increased 6% to 2.56 million tons. Structural panel production increased by 5% over 2003 to 2.86 billion square feet. Hardwood lumber production increased 13% over 2003 to 325 million board feet in 2004.

Globally, the forest products markets have been affected by the opening of China to capitalism, foreign investment and trade as well as the collapse of the former Soviet Union. While world timber demand is expected to rise over the next 20 years, the timber supply forecast is still expected to be only 77% of demand by 2020.

Between 1992 and 2003, annual removals of softwood on family forest lands exceeded growth by 20%. Conversely, on industrial lands, removals were only 78% of growth during this period. Hardwood growing stock removals are only 82% of growth.

Infestations of southern pine beetle have been low- to non-existent in East Texas since 1997. However, imported pest organisms, Sudden Oak Death, and invasives like Giant Asian Dodder are of concern. In addition, Hurricane Rita made landfall on September 24, 2005, and affected an estimated 967 million cubic feet of East Texas growing stock.

The forest-based economy in 2004 produced $17.5 billion of direct economic impact in Texas, employing 75,846 workers and paying $2.7 billion in wages, salaries and benefits. The direct economic impact of the forest sector in East Texas was $6.8 billion for goods and services.

INSIDE THIS ISSUE:

LANDOWNERS AND THE ESA

from "Endangered Species Act-What Landowners Should know" by Charles E. Gilliland, Research Economist with the Real Estate Center, TAMU, College Station, TX

For more information:

- http://recenter.tamu.edu/TGrande/vol9-4/
- http://recenter.tamu.edu/pdf/1648.pdf
- http://www.fws.gov/southwest/es/EndangeredSpecies/lists/
- http://www.tpwd.state.tx.us/huntwild/wild/species/endang/index.phtml

The Endangered Species Act (ESA) of 1973 enshrined species protection as the ultimate societal objective. Species preservation trumped all other considerations, even existing social and economic programs. The incidental take permit, which resulted from 1983 revisions to the ESA, opened the door to development even in the presence of endangered species.

In view of continued opposition, policy makers continue to search for regulations that can preserve endangered species while accommodating reasonable land uses. Consequently, the ESA regulatory framework now includes an array of measures designed to facilitate landowners' plans and protect endangered species.

The U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) administer ESA for both land– and marine-based species.

To comply with the ESA and maximize property potential , landowners must understand what the act does and does not allow. Taking an endangered species violates the law, according to section 9(a)(1)(B) of ESA. Most people interpret "take" to mean capturing or killing an endangered plant or animal. However, the ESA defines take as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or to attempt to engage in any such conduct." Also included are actions "significantly impairing essential wildlife behavioral patterns, including breeding, feeding, or sheltering." Activity that adversely impacts existing habitat qualifies as take as well.

Planned activities that will result in a take, such as land development, generally require a permit from either the FWS or the NMFS. Landowners and prospective buyers must identify which activities are prohibited by the ESA. The FWS and NMFS can assist in determining which, if any, proposed actions are likely to result in a take. The FWS and the NMFS have created mechanisms to allow private landowners to comply with the ESA while making profitable use of their property. These include:

- Candidate Conservation Agreements
- Safe Harbor Agreements
- Habitat Conservation Plans

The prudent landowner should consider engaging experts with experience in filing applications for the various permits available to them, and with knowledge of the various programs available.

INTERACTIVE WEBSITE ON FORESTS & TREES

from International Paper's "Tree Lines" newsletter, fourth quarter 2006

For more information:

- http://www.abundantforests.org
- http://knowyourtrees.org
- TheTreeFarmer.org

How do you increase awareness and appreciation of paper and wood products as a natural, renewable resource to tech-savvy kids? You launch an informative, interactive and creative website called KnowYourTrees.org.

The Abundant Forests Alliance recently launched KnowYourTrees.org as a way to reach out to kids and others with important messages and facts about the health of forests and to help strengthen positive associations with paper and wood products and their many valuable uses.

The animated site allows visitors to learn about 10 tree species and contains interesting information about numerous wood and paper products. For example, did you know that there are more than 5,000 products made from trees; or that every day U. S. paper makers recycle enough paper to fill a 15-mile-long train of boxcars?

Important facts about the abundance of North America's forests are weaved throughout the site to counterbalance misinformation and erroneous perceptions about North America's forests.

American Forests Expanding

The American Forest & Paper Association (AF&PA) is pleased that the National Academy of Sciences confirms that America's forests are being maintained in the face of rapid population growth and are providing important products and jobs to households nationwide. Despite widespread, erroneous media reports of deforestation, America's forests are healthy and are expanding.

According to a National Academy of Sciences study on reforestation published November 14, 2006, America's forests "gained growing stock during 1990-2005 while harvesting much round wood and some fuel."

The study also concluded that population growth, sprawl and poor economic conditions are the leading causes of deforestation noting that "it is not forest industries themselves but rather a high density of population in combination with poverty that tends to drive deforestation."

"The American forest products industry employs some 1.3 million people and is among the top ten employers in 42 states," said AF&PA President and CEO Juanita D. Duggan. "These hard working men and women provide us with products we depend on, and they ensure that our woodlands remain green and vibrant by planting 1.7 million trees every day."

Duggan also noted that the study provides "grounds for optimism" about the prospects for the continuation of vibrant reforestation. "We have more trees now than we did 70 years ago and this important study provides information and insight that will help us build on that legacy."

from American Forest & Paper Association website

For more information:

- http://www.afandpa.org
- Charles Lardner, AF&PA, charles_larder@afandpa.org

Timber Income and Tax Seminar

The Texas Forest Service, USDA Forest Service, and Montgomery-Harris County Forest Landowners Association are sponsoring a timber income, property and estate tax seminar on January 26, 2007.

The seminar is to be held at Montgomery College in Conroe/The Woodlands, Texas. Cost is $50 per person and $25 per additional family member. A workbook is included, one per family. Lunch and refreshments are also provided. Continuing Educational Credits are available for foresters, loggers and CPAs.

This 5-hour tax workshop will provide:

- Information about timber-related tax incentives (this information is unfamiliar even to most tax professionals).
- Practice applying tax rules using actual detailed examples.
- Guidance on how to avoid pitfalls and maximize benefits relating to timber, property and estate taxes.
- Answers by the experts to your specific questions.

The instructors are Dr. Linda Wang, Tax Specialist, USDA Forest Service, Atlanta, Georgia; and Dr. John Greene, Forest Economist, USDA Forest Service, New Orleans, Louisiana.

To download a brochure with a registration form, go to the web address in the sidebar.

You can also contact Robin Baxter for registration information at (936) 273-2261 or rbaxter@tfs.tamu.edu. For information on the seminar itself, contact John Warner, Texas Forest Service Urban District Forester at the same number or at jwarner@tfs.tamu.edu.

Spaces are guaranteed for the first 75 people to register. The seminar runs from 8:00 a.m. to 2:30 p.m.

For more information:

- http://texasforestservice.tamu.edu/shared/article.asp?DocumentID=1230

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Upcoming Events

- Houston Arbor Day Celebration - **January 27, 2007**. Help plant 20,000 trees in one day! Contact Dallas Singleton, Texas Forest Service Urban Forester, at (936) 546-1570.
- Coastal Bend Tree Health Conference - **January 30, 2007**. Flint Hills Resources, 1925 Tuloso Midway Rd., Corpus Christi, TX. Guest speaker: John Worrell, Bartlett Tree Experts. For more information, contact Karen Woodard at (936) 546-3129 or kwoodard@tfs.tamu.edu; or Michael Potter at (361) 767-5217 or MPotter@ag.tamu.edu.
- Ecosystem Service Markets: Everyone's Business - **February 27, 2007,** at the Westin Galleria, 5060 West Alabama, Houston, TX. Open to all. Time: 9:00 a.m. - 6:00 p.m. For more information and to register, go to http://tfsregister.tamu.edu.
- National Oak Wilt Symposium - **June 4-7, 2007**, at the Hilton Austin in Austin, TX. Registration before April 1, 2007, is $295; $350 after. Space is limited. For more information and to register, visit the Texas oak wilt web page at http://www.texasoakwilt.org or call Mike Waltersheidt at (512) 587-7515.

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Texas Forest Service

August 2007

FOREST STEWARDSHIP BRIEFINGS

Timber ◊ Wildlife ◊ Water Quality ◊ Soil Conservation ◊ Best Management Practices ◊ Recreation ◊ Aesthetics

NEW BIOFUEL DEVELOPED

by Sam Fahmy, science writer, University of Georgia Office of Public Affairs/News Service, Athens, GA

For more information:

- http://www.renewableenergyaccess.com/rea/news/story?id=48588

A team of University of Georgia (UGA) researchers has developed a new biofuel derived from wood chips. Unlike previous fuels derived from wood, the new and still unnamed fuel can be blended with biodiesel and petroleum diesel to power conventional engines.

"It's going to take a while before this fuel is widely available. We've just started on developing a new technology that has a lot of promise. The exciting thing about our method is that it is very easy to do," said Tom Adams, director of the UGA Faculty of Engineering outreach service. "We expect to reduce the price of producing fuels from biomass dramatically with this technique."

Adams explained that scientists have long been able to derive oils from wood, but they had been unable to process it effectively or inexpensively so that it can be used in conventional engines.

The researchers have also set up test plots . . . to explore whether the charcoal that is produced when the fuel is made can be used as a fertilizer.

The researchers have developed a new chemical process, which they are working to patent, that inexpensively treats the oil so that it can be used in unmodified diesel engines or blended with biodiesel and petroleum diesel.

Here's how the process works: Wood chips and pellets -- roughly a quarter inch in diameter and six-tenths of an inch long -- are heated in the absence of oxygen at a high temperature, a process known as pyrolysis. Up to a third of the dry weight of the wood becomes charcoal, while the rest becomes a gas.

Most of this gas is condensed into a liquid bio-oil and chemically treated. When the process is complete, about 34 percent of the bio-oil (or 15 to 17 percent of the dry weight of the wood) can be used to power engines.

The researchers have also set up test plots in Tifton, Georgia, to explore whether the charcoal that is produced when the fuel is made can be used as a fertilizer. Adams said that if the economics work for the charcoal fertilizer, the biofuel would actually be carbon negative.

"You're taking carbon out of the atmosphere when you grow a plant, and if you don't use all of that carbon and return some of it to the soil in an inert form, you're actually decreasing the amount of carbon dioxide in the atmosphere," Adams explained. "We're optimistic because in most types of soil, carbon char has very beneficial effects on the ecology of the soil, its productivity and its ability to maintain fertility."

Although the new biofuel has performed well, Adams said further tests are needed to assess its long-term impact on engines, its emissions characteristics and the best way to transport and store it.

INSIDE THIS ISSUE:

CHEVRON, TAMU AND BIOFUELS

from TimberBuySell.com, May 29, 2007

For more information:

- http://www.timberbuysell.com/Community/DisplayNews.asp?id=973
- http://www.prnewswire.com/cgi-bin/stories.pl?ACCT=104&STORY=/www/story/05-29-2007/0004596944&EDATE=

Chevron Corporation and the Texas A&M Agriculture and Engineering BioEnergy Alliance (Texas A&M BioEnergy Alliance) announced that they have entered into a strategic research agreement to accelerate the production and conversion of crops for manufacturing ethanol and other biofuels from cellulose.

Chevron Technology Ventures will support research initiatives over a four-year period through the Texas A&M BioEnergy Alliance, a formal partnership combining the collective strengths of The Texas A&M University System's two premier research agencies in agriculture and engineering -- the Texas Agricultural Experiment Station (TAES) and the Texas Engineering Experiment Station (TEES).

The research initiatives will focus on several technology advancements to produce biofuels including, but not limited to:
-- identifying, assessing, cultivating, and optimizing production of second-generation energy feedstocks for cellulose and bio-oils with a focus on non-food crops,
-- characterizing and optimizing the design of dedicated bioenergy crops through advances in genomic sciences and plant breeding,
-- developing integrated logistics systems associated with the harvest, transport, storage and conversion of bioenergy crops, and
-- developing advanced biofuels processing technologies.

"The development of biofuels from agricultural feedstocks requires a regional approach and research into many alternatives for the long-term energy needs of our country," said Dr. Elsa Murano, vice chancellor and dean of Texas A&M Agriculture and Life Sciences. "We have been able to capitalize on decades of existing research into sorghum, sugarcane, forage and oil-based cropping systems, which should provide us with premier, dedicated feedstocks for biofuels and renewable energy that are sustainable within existing agricultural production systems."

"Cellulosic ethanol, as opposed to sugar- or starch-based ethanol, broadens the choice of feedstock without impacting food supplies," said Rick Zalesky, vice president of Biofuels and Hydrogen, Chevron Technology Ventures.

Cellulose is an energy-rich carbohydrate that is the main structural component of green plants, found in the stems, stalks and leaves. One of the primary technical and scientific challenges of making biofuels from cellulose involves designing a low cost method for releasing sugar from cellulose that is bound in the plant cell wall for fermentation into ethanol or other biofuels.

FAMOUS TREES OF TEXAS

from the Texas Forest Service website—Famous Trees of Texas

For more information:

- http://famoustreesofTexas.tamu.edu

The Kissing Oak: On July 24, 1857, Senator Sam Houston made one of his more than 60 campaign speeches under this live oak. Following one such address, he gallantly kissed each of the ladies responsible for crafting and presenting him with a Texas flag.

The Hangman's Oak: The tombstone reads: "Remember, friends, as you pass by, as you are now, so once was I. As I am now, you soon will be; prepare for death and follow me." Above this inscription are the names of eight men who lie beneath it in a common grave. They were victims of a brutal and senseless murder by members of a detachment of Confederate cavalry.

See the sidebar to read more about these and other famous trees in Texas history.

Texas Forest Expo & Institute

Whether you live in a neighborhood or own a family forest, the **Texas Forest Expo** will provide you with answers to protecting and managing your property. It is free, fun for the entire family and includes activities for the children.

A vast array of activities, workshops and exhibits will give you the tools to address issues that you face when caring for your property. Just a few of the important issues you will learn about are how to:

- protect your home and trees from wildfire
- generate alternate income from your property
- landscape to attract the wildlife you want while deterring those pesky critters you don't
- manage vegetation
- plan residences with Firewise and green principles
- keep your trees healthy
- control water quality and manage ponds.

The Expo will be held at the Lone Star Convention Center in Conroe, Texas. Friday, **October 26**, hours are from noon to 7:00 p.m. On Saturday, **October 27**, hours are from 9:00 a.m. to 6:00 p.m.

Also, the **Texas Forest Institute** professional development series for community leaders, natural resource professionals, emergency responders and public workers offers solutions to the increasingly complex challenges associated with living, working and growing in the urban-rural interface. The series offers two distinct training opportunities:

1. *Emerging issues in the urban-rural interface*
2. *Tree care and grounds maintenance*

Institute fee if $50 includes:

- One-day workshop (Oct. 26, 2007; 8:30 a.m. - 4:30 p.m.)
- Lunch
- Course materials

Continuing Education Credits (CEU) are offered.

For more information:

- http://texasforestservice.tamu.edu/conferences/texasforestexpo/
- texasforestexpo@tfs.tamu.edu
- (936) 273-2261

Rita Ravaged Area Gets Free Trees

It has been two years since Hurricane Rita struck Southeast Texas. As citizens have been rebuilding their lives and homes, many have found that they can now start rebuilding their towns as well. A program called Operation Green Streets (OGS), of the Texas Forest Service, is here to help!

This fall, OGS is giving away 10,000 FREE TREES to residents in hurricane-affected counties. Approximately 15,000 urban or "in-town" street trees were destroyed by the storm in Beaumont, Port Arthur, and Orange alone. In an effort to replenish the urban treescape of Southeast Texas, free trees will go to the first 10,000 registrants who live within the city limits of any community within Jefferson, Orange, Jasper, Tyler, Hardin and Newton counties. All trees should be planted in the front yard of each residence and watered regularly.

"With almost 1,000 tree requests in the first 10 days of registration, homeowners should move quickly to reserve their tree," says Karen Woodard of the Texas Forest Service.

Citizens may register for one tree per household on-line at http://operationgreenstreets.tamu.edu or call toll free 877-512-TREE (8733). Registration deadline is October 5. Trees may be collected November 10 at designated pick-up sites throughout the six counties.

Funding for Operation Green Streets is provided by a grant from the USDA Forest Service in cooperation with Texas Forest Service whose project partners include Golden Triangle Sierra Club, Time Warner Communications, and numerous local partners.

from the Texas Forest Service website

For more information:

- http://texasforestservice.tamu.edu/main/article.aspx?id=2982
- http://operationgreenstreets.tamu.edu

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The Texas Forest Service is an Affirmative Action/Equal Opportunity Employer committed to Excellence through Diversity.

Carbon Credit Conference

The Texas A&M University Ag Research and Extension Center in Overton, Texas, is hosting a multi-state (Texas, Louisiana and Oklahoma) Carbon Credit Conference on September 28, 2007, from 9:00 a.m. to 4:00 p.m..

In addition to traditional agricultural, range, and forest products, landowners may now potentially realize income from the sale of carbon credits. But what does it mean? Is it a good deal? And does it truly provide an opportunity to generate additional income? This conference will help landowners, foresters, farmers and others gain a strong understanding of the carbon market, how it works, and if they might benefit from carbon credits.

The registration fee is $30. This fee includes lunch, refreshment breaks and instructional materials. You can view the agenda and register online at http://www.reynoldsforestry.com/Carbon_Credits_Conference.htm.

Questions: Contact Barbara Ampong, bampong@tamu.edu; Phone: 903-834-6191.

This program offers 5 Continuing Forestry Education units.

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Texas Forest Service

November 2007

FOREST STEWARDSHIP BRIEFINGS

Timber ◊ Wildlife ◊ Water Quality ◊ Soil Conservation ◊ Best Management Practices ◊ Recreation ◊ Aesthetics

THE TRINITY RIVER IN REHAB

by Mike Jackson

from A&M Systemwide - newsletter for A&M System Employees and Retirees; May/ June 2007 edition

For more information:

- http://www.tamus.edu/systemwide/07/05/features/trinity-river.html
- http://twri.tamu.edu/news/2007/04/27/restoring-the-trinity/
- http://trinityriverbasin.tamu.edu/

Jim Cathey dipped a bottle into the Trinity River and held it up to the sun. The water was as murky as chocolate milk. A few minutes later and a few miles away, he dipped another container into water from the Trinity that flowed through a manufactured wetland. "It's like bottled water that you'd find in a convenience store."

Though the water wasn't ready to drink, its clarity helped Cathey prove a point to a visiting team of ecologists and researchers from Texas Cooperative Extension. Wetlands naturally filter sediment and chemicals from the water, he said.

Cathey, an Extension wildlife specialist, and the team visited the Richland-Chambers wetlands this spring on a tour of the Trinity. They set out on the three-day journey to examine rural landowners' efforts to improve the river.

Cathey is also leading educational efforts for a state project to rehabilitate the river. "You don't hear as much about the Trinity as you do about other rivers in the state," he said. "But it flows from the Dallas area all the way to Houston, and a lot of people rely on it."

At Richland-Chambers, about 80 miles southeast of Dallas, two agencies have teamed up to rebuild more than 200 acres of wetlands to be used as a natural filter. The agencies—Tarrant Regional Water District and Texas Parks and Wildlife Department—intend to eventually restore wetlands on 2,000 acres in the Richland Creek Wildlife Management area. There, water from the Trinity is pumped into the restored wetlands. The water will eventually be piped into the Richland-Chambers Reservoir.

The river suffers from decades of poor land management along its banks, Cathey said. Ranchers and farmers cleared the land for cattle grazing and cotton long ago. With few trees and other vegetation to slow storm water drainage, runoff flows too quickly over the land and into the creek, eroding the banks along the way. Conditions are similar all along the Trinity. The river has also been degraded by sewage and treated effluent from the Dallas-Fort Worth area.

Communities and hundreds of other property owners along the river are counting on the state's effort to improve the Trinity's ecosystem and water quality. The plan, the Trinity River Basin Environmental Restoration Initiative, was announced by Gov. Rick Perry in Sept. 2005.

Two Texas A&M University System agencies are leading the river's restoration initiative. The Texas Water Resources Institute will coordinate urban projects; the Institute for Renewable Natural Resources will manage rural efforts. Both agencies are units of the Texas Agricultural Experiment Station and Extension.

The state is also counting on help from the property owners, Cathey said. They are able to do things that the state cannot, such as reintroduce native plants and wildlife on private land along the river. They can also restore wetlands, which would help clean the river, he said.

INSIDE THIS ISSUE:

LONGLEAF FOR WILDLIFE AND PROFIT

by Rusty Wood, Forest Stewardship Biologist, Texas Parks & Wildlife Dept., Nacogdoches, TX

For more information:

- http://www.fws.gov/southeast/partners/pfwpine.html
- http://edis.ifas.ufl.edu/FR064
- http://plants.usda.gov/factsheet/doc/fs_pipa2.doc
- http://www.longleafalliance.org/landowners/whylongleaf.htm
- http://tfsweb.tamu.edu/uploadedFiles/FRD/Stewardship/does_longleaf_make_dollars_and_sense(1).pdf

The longleaf pine was once the dominant conifer throughout the southeast, covering nine states from Texas east to Florida and north to Virginia. Fire determined where longleaf pines were found. Other southern pine species such as loblolly and slash were relegated to the wetter areas that burned less frequently such as creek bottoms and around ponds and streams. By the mid twentieth century, 95% of the longleaf stands had been cut and converted to other species or other uses.

Longleaf pines have an undeserved reputation of being hard to establish and slow growing. The fact is, with today's improved containerized nursery stock and new planting techniques, many landowners are experiencing 90% survival rates. New advances in herbicide applications are helping to shorten or bypass the grass stage altogether. Longleaf growth rates actually compare well to that of other southern pine species. When planting longleaf for wildlife, the recommended stocking is 450 trees/acre.

Prescribed fire can be introduced into the stand as early as two years after establishment. Prescribed burning serves many purposes in a longleaf stand including reduced competition from other woody vegetation, the consumption of leaf litter, and return of nutrients into the soil. Prescribed burning keeps browse plants typically used by deer "knocked back" and within reach from the ground as well as being more tender and palatable. Longleaf pines produce high quality wood products. Longleaf stands produce more utility pole classed logs per acre than the average loblolly pine stand. Longleaf also has a denser specific gravity than other southern pine species. This equates to more money in your pocket when selling a product based on weight. Longleaf are the most drought resistant, insect and disease resistant, and fire resistant species of all southern pines.

Properly managed stands of longleaf often take on a park like appearance with a grassy understory filled with native grasses, clovers, legumes, wildflowers, and forbs. Many of the native plants and associated animals can only thrive in this type of environment with ample sunlight and prescribed burning. There are a multitude of songbird species that are associated with this open pine/grassland habitat including Bachman's sparrow (*Aimophila aestevalis*); a species in decline and has been noted as a conservation priority in the state of Texas. Two game animals, the Bobwhite quail and Eastern Turkey use this habitat for nesting and brood rearing. Many reptiles and amphibians including the Louisiana Pine Snake (*Pituophis ruthveni*), also considered a conservation priority, make their home in these forests. Whitetail deer can readily be seen feeding in the understory of the forests browsing on the early successional plants kept young and tender by frequent fires.

When added together, the benefits of longleaf including the ecological, economical, aesthetic, and wildlife value make planting longleaf a smart investment for enhancing your property's value.

COST SHARE PROGRAMS FOR LONGLEAF

For more information:

- http://www.tpwd.state.tx.us/landwater/land/private/lip/
- http://www.tx.nrcs.usda.gov/programs/EQIP/index.html
- http://ecos.fws.gov/partners/viewContent.do?viewPage=home

There are many cost shares available for landowners wishing to restore longleaf to their land. The Landowner Incentive Program (LIP) is a Texas Parks and Wildlife program that will pay 75% of the cost for stand establishment and maintenance.

EQIP and Partners for Fish and Wildlife are cost share programs available from the NRCS and U. S. Fish and Wildlife Service respectively that will provide financial and technical assistance for longleaf pine stand establishment and maintenance.

BMP 15-YEAR REPORT CARD

A report released by the Texas Forest Service titled "A History of Forestry BMP Implementation Monitoring in Texas" documents the tremendous gains that have been made in Best Management Practices (BMP) implementation over the years. "The results show that the forestry community has truly embraced the importance of using BMPs to protect water quality," said Hughes Simpson, Texas BMP coordinator.

The report covers results from the past 15 years of BMP implementation monitoring in which a total of 904 sites in East Texas were evaluated on public, industrial, Timber Investment Management Organization (TIMO), and private lands. By measuring the progress that has been made since the initial survey, strengths and weaknesses have been determined, so that future educational efforts can be focused on those areas needing the most improvement.

Since the monitoring program began in the early 1990s, overall BMP implementation rates have increased by over 20% to an all time high of 91.7%. Even greater strides have been made in traditional problem areas – temporary roads (+56%), stream crossings (+43%), and streamside management zones or SMZ's (+28%).

Family forest landowners, long considered the critical link to protecting water quality, have led most of the recent advancement. Tremendous gains have been made on private land, most notably on temporary roads (+68%), site preparation (+59%), stream crossings (+58%), and SMZs (+42%). Their overall BMP implementation rate also increased significantly (+29%) to an all time high of 88.6%.

"The dramatic improvements shown by this report really demonstrate the effectiveness of the Texas Forest Service BMP program as well as the forestry community's commitment to environmental stewardship," said Simpson.

by Hughes Simpson, BMP Coordinator, Texas Forest Service, Lufkin, TX

For more information:

- http://texasforestservice.tamu.edu/uploadedFiles/Sustainable/bmp/TFS%20BMP%20Trend%20Analysis%20(1990-2005).pdf
- http://texasforestservice.tamu.edu/main/article.aspx?id=71

FREE PELLETIZED FERTILIZER?

The orange-striped oakworm is a fall defoliator that feeds on oak trees in the southern United States. This caterpillar was locally common in East Texas this fall.

Mature orange-striped oakworms are charcoal black with orange-yellow stripes and a jet black head. Young caterpillars will have more of a yellow-brown color. The second thoracic segment (right behind the head) has a pair of long, black spines with shorter spines on the abdominal segments along the back. The long thoracic spines or "horns" make the caterpillars appear intimidating, but the larvae are harmless and do not have the capacity to "sting" or bite. Sometimes they will "spit" or regurgitate "juice" when they are picked up. They may be present in East Texas forests from August to October.

Young caterpillars feed by skeletonizing the leaf surface. Older caterpillars are defoliators and may consume all but the leaf midrib. Tree health is rarely affected by oakworm defoliation. Because the caterpillars feed during late summer and into the fall, most photosynthesis and tree growth are complete and foliage loss has little impact on the tree's health. Native predators and parasites usually help keep the insect from being a problem every year. Usually the caterpillars are more of a nuisance than a pest because their droppings can be an annoyance in areas frequented by people. When caterpillar numbers are high, their droppings sound like a soft rain.

Control is not recommended except for severe defoliation of high value trees. Think of the caterpillars as beneficial; they convert oak leaves to pelletized fertilizer for free, resulting in fewer leaves to rake!

by Dr. James Robinson, Professor and Extension Entomologist (retired), TAMU, Overton, TX, and H. A. (Joe) Pase III, Entomologist, Texas Forest Service, Lufkin, TX

For more information:

- http://insects.tamu.edu/fromthefield/orangestriped_oakworm.html
- http://bugguide.net/node/view/6469

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PUBLICATIONS OF INTEREST

"TERMINOLOGY FOR FOREST LANDOWNERS" - This publication is a glossary of timber terms, many with original illustrations, from "abiotic" to "yield table;" "section" measurements to "taxes."

Authors: Donald P. Hanley, David M. Baumgartner, and Leila Charbonneau

Publisher: Washing State University Extension Publications

Published: April 1987. Revised: February 2006. 40 pages.

To download: http://smallwoodnews.com/Docs/PDF/Landowner/TimberTerminology.pdf

TEXAS COOPERATIVE EXTENSION PUBLICATIONS - Most of these research-based publications are available as pdf documents and can be viewed online. Printed copies of many publications can be ordered online and are also available from county Extension offices. Some of the publications are available in both English and Spanish.

Go to: http://tcebookstore.org/

Under the "Animals" category, you can find wildlife, fish and pond articles. Forestry, fisheries and pesticide publications are under "Agriculture." Land, air and water topics are covered under "Environment."

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Texas Forest Service

December 2007

FOREST STEWARDSHIP BRIEFINGS

Timber ◊ Wildlife ◊ Water Quality ◊ Soil Conservation ◊ Best Management Practices ◊ Recreation ◊ Aesthetics

TAX TIPS FOR FOREST LANDOWNERS

by Linda Wang, Forest Taxation Specialist, and John L. Green, Research Forester, Southern Research Station, USDA Forest Service, Southern Region, Atlanta, GA

For more information:

- http://www.treefarmsystem.org/leaders/TaxTips07.pdf
- http://www.timbertax.org
- http://www.timbertax.org/publications/extensionpubs/Basicsof Basisp1983.pdf

This is an abbreviation of the information contained in the guide listed in the sidebar.

Purpose for Owning Timber - Forest owners must classify their timer management activities into one of three categories for tax purposes:
- Trade or business,
- Income-producing (or investment), or
- Personal use.

The distinction is important in terms of how income, expenses and losses are treated and reported for tax purposes.

Tax Basis of Timber - Basis is a tax concept of the cost of your forest land and timber. If properly documented, timber basis can lower your taxes by reducing the taxable proceeds from timber sales, enabling reforestation cost recovery or allowing timber loss deductions.

Timber Management Expenses - Generally when there is a profit motive, ordinary and necessary expenses incurred for managing forest land as a business or an investment are deductible even if there is no current income from the property. Property tax and interest are currently deductible, but you may elect to capitalize them if doing so provides a tax benefit.

Ordinary and necessary expenses associated with timber management generally include the costs of: post-establishment timber cruises, consulting forester fees, brush control, protection from fire, insects and disease, pre-commercial thinning, timber stand improvement, tools of short useful life, travel directly related to timber activities, hired labor, and mid-rotation fertilization.

Timber Planting Costs - Under IRC section 194, a taxpayer may elect to deduct outright up to $10,000 per year of qualifying timber establishment costs, and amortize any additional amount over 84 months, rather than capitalizing and recovering them at the time of a timber sale.

Cost-share Payments - Cost-share payments generally must be included in income unless a section 126 election is in effect. Under this election, cost-share payments from qualified government programs may be wholly or partially excluded from income.

Timber Income - In almost every situation, it benefits you to have your timber sale income qualify as a long-term capital gain. Among the reasons are that long-term capital gains are taxed at lower rates than ordinary income, and are not subject to self-employment taxes.

Timber Losses - In general, loss deductions are permitted on property held for business or investment purposes. It is important to note that your deduction for a loss is limited to your adjusted basis in the asset lost, minus any insurance or other compensation received.

A casualty loss is caused by natural or outside forces that are sudden, unexpected, and unusual - e.g., by fire, ice storm or hurricane. A loss that is unexpected and unusual but occurs over time - e.g., by disease or insect attack - is a non-casualty loss. Other kinds of loss, timber theft and condemnation, result from human activity. A timber theft loss is deductible in the year you discover it.

INSIDE THIS ISSUE:

POST-WILDFIRE QUAIL SURVEY

by Kay Ledbetter

from A&M Systemwide - newsletter for A&M System Employees and Retirees; July/August 2007 edition

For more information:

- http://www.tamus.edu/systemwide/07/07/research/quail-return-rate.html

Texas Agricultural Experiment Station and Texas Cooperative extension personnel are trying to find out how and when quail populations in the High Plains will recover after last year's wildfires. A study was started last spring to monitor the impacts of wildfire on quail, says Ken Cearley, Extension wildlife specialist in Canyon.

Dale Rollins, Extension wildlife specialist in San Angelo, said "This scale of wildfires is a rare event and presented a unique research opportunity for us. We often use prescribed burning as a tool for managing quail habitat, but on a much smaller scale. Our main interest is determining how long it takes those quail to repopulate that area 2, 3, 4 miles from the unburned edge."

Ten-mile-long sampling transects are in Gray, Roberts, Hutchinson, Carson and Wheeler counties. By counting calling males in the spring, they hope to be able to tell how many breeding birds are available going into the nesting season.

The survey began last year, but the single year's data will provide limited information by itself, Cearley said. Last year was a dry year and that affected the number of quail almost statewide, so it probably also affected the survey in and around the burns. A third year of data gathered in 2008 would be helpful, but that will depend on funding, he said.

Funding for the study has been provided by the Panhandle Chapter of Quail Unlimited, several local landowners, West Texas A&M University and Extension's Quail Decline Initiative.

In the first year, scent stations and artificial nests with chicken eggs were used to determine how many potential nest predators-coyotes, skunks, etc.-were in the vicinity of each transect and could affect the survival of quail nests.

Habitat photos were taken last year to evaluate shrub cover and nesting cover. Forb diversity counts were done at each sampling station to give an idea of food plant availability

While the 2006 data are still being analyzed, preliminary observations from last summer showed the sandier sites with shinnery oak rebounded more quickly than the hard-land sites, which are typically short-grass communities with less vegetation. "Often, we'll find out that a burn will enhance the diversity and abundance of forbs, so that will be useful data once it is analyzed," Cearley said.

This year is looking better for quail overall due to abundant rainfall, Cearley said. Much of the burned area looks good with what appears to be adequate cover. "We expect better numbers," he said. "Last year, there hadn't been enough regrowth of cover after the fire, early enough in the year, to attract the quail back into the area, or to provide for the survival of very many of them."

FUN FACTS ABOUT FUNGI

For more information:

- http://mushroomexpert.com/

"Welcome to the Hidden Kingdom! We find fungi so fascinating that we wanted to share some fun facts about fungi with you. Fungi both cure and cause disease. They determine what plants grow in your yard and in forests, and keep us from being buried in waste. Some fungi taste great - others can kill you!" This site, presented by the Utah State University Intermountain Herbarium, is a learning experience for everyone on the facts about fungi. As indicated by the introduction, the facts are presented in an entertaining manner, with the scientific concepts clearly explained.

Before taking the family on a mushroom gathering expedition, be sure to visit the MushroomExpert.com!

An Era of Deconstruction?

Dr. Robert Falk, a Research Engineer at the U.S. Forest Service Forest Products Lab, has been focusing on the development of reuse options for wood materials salvaged from building dismantlement (or deconstruction). Simply put, deconstruction is building construction in reverse, involving the careful dismantling, salvage, and re-use of building components.

Each year, over a billion board feet of structural lumber goes into landfills from the demolition of buildings. Much of it is high quality, old-growth wood that is, for the most part, unavailable from any other source.

Upon finding some high-quality wood siding that was coated with lead based paint (LBP), Dr. Falk and co-workers developed a method to remill the siding to remove the LBP while producing a value-added product.

Using conventional woodworking equipment, they produced high-quality and high-value flooring and paneling (worth about $4 per square foot). By monitoring air quality, blood lead levels in the machine operators, and testing for residual lead in the end product, they showed that the removal of the LBP could be done safely. They were able to take a high cost disposal problem and turn it into a value-added opportunity.

Dr. Falk believes his research on the reuse of lumber and timber is fostering the reuse of wood materials that would otherwise end up in the landfill. That helps conserve our wood resource and is good for the environment.

from "Newsline," newsletter of the USDA Forest Service's Forest Products Laboratory, Madison, WI, Vol. 6, Issue 2

For more information:

- http://www.fpl.fs.fed.us/documents/newsline/newsline-2007-2.pdf
- http://www.fpl.fs.fed.us/staff/staff--falk-robert.html

Chestnut Tree Poised for Comeback

Tromping through a Massachusetts state forest, Brad Smith spots an old stump with dead shoots and one lone, green sprout – a sad but not uncommon remnant of a once-proud species – the American chestnut tree. Except for a few mature trees, the species has struggled for 50 years to survive. Stumps send up sprouts that are quickly attacked by the same invasive blight that wiped out about 3.5 billion chestnut trees between 1904 and 1950.

Now, however, an American chestnut revival may be imminent. Scientists using traditional plant breeding techniques are on the verge of a breakthrough.

Hidden on a country road that winds through rural Meadowview, VA., is a 93-acre plot of ground that holds the future of the American chestnut: about 120 hybrid saplings. The trees – going on two years old and four feet tall – are considered "fully blight resistant" and thriving.

At this rate, by 2010 there should be enough "holy grail" nuts to begin planting in selected test sites in national forests. By 2015, production from such plots is expected to grow exponentially – yielding enough nuts to allow for full-blown replanting – if everything goes well.

Researchers have spent 25 years breeding resistant Chinese varieties of chestnut with nonresistant American versions – then "back-crossing" or breeding resistant American chestnuts with one another.

The American chestnut was once dominant in forests from Maine to Florida, a majestic giant that easily grew four feet across, 120 feet high and lived for centuries. Its nuts were an important source of food for animals and humans and its rot-resistant wood prized by timber and furniture companies.

One new problem the American Chestnut Foundation is facing isn't blight, but keeping the seeds from being sold on eBay for fat profits.

by Mark Clayton, Staff Writer, Christian Science Monitor

For more information:

- http://www.csmonitor.com/2007/0807/p02s01-sten.htm
- http://www.acf.org/

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PUBLICATIONS OF INTEREST

"INTRODUCTION TO ESTATE AND GIFT TAXES" - Publication 950 of the Internal Revenue Service. This publication is not updated annually, but as needed to reflect changes in the law. This new edition is must reading for anyone working on their estate plan. **Go to:** http://www.irs.gov/pub/irs-pdf/p950.pdf.

"FOREST LANDOWNERS GUIDE TO THE FEDERAL INCOME TAX" - Ag. Handbook No. 718. The primary purpose of this handbook is to foster good forest management by combining, in one source, relevant information for analyzing investments in forest management and an explanation of the Federal income tax law associated with those investments. **Go to:** http://www.timbertax.org/publications/aghandbook/aghandbook.asp.

"Evaluating the Efficiency of Carbon Sequestration in American Chestnut (*Castanea dentata*)" - Found on the American Chestnut Foundation website, this 2005 Technical Update addresses the use American chestnuts to effectively take up and store carbon. **Go to:** http://www.acf.org/News%20Items/Carbon%20Topic%20Links/Jacobs%20EPRI%20Carbon%20Sequestration%201011518.pdf.

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Texas Forest Service

February 2008

FOREST STEWARDSHIP BRIEFINGS

Timber ◊ Wildlife ◊ Water Quality ◊ Soil Conservation ◊ Best Management Practices ◊ Recreation ◊ Aesthetics

CARBON CREDITS - WHAT ARE THEY?

by Eric Taylor, Texas AgriLife Research and Extension, Overton, TX; Burl Carraway, Texas Forest Service, College Station, TX; Darwin Forster, Texas AgriLife Extension, Lufkin, TX

For more information:

- http://texasforestservice.tamu.edu/uploadedFiles/Sustainable/enviro/TCEA%20Carbon%20Credits%20for%20Landowners.pdf
- http://texasforestservice.tamu.edu/main/article.aspx?id=2366

INSIDE THIS ISSUE:

Carbon dioxide (CO_2) is one of several greenhouse gases (GHGs) recognized and monitored by the U.S. Environmental Protection Agency (EPA).

Natural sources of atmospheric CO_2 such as volcanic activity, wildfire and the respiration processes of plants and animals are by far the largest sources of emissions. There is concern, however, over the increase in CO_2 in the atmosphere caused by man-made sources - burning of fossil fuels for heating, power generation and transport and from the rate of deforestation due to urbanization and other land use changes.

The U.S. has joined international efforts to limit greenhouse gases through voluntary initiatives and is committed to reducing national GHG emissions by 18% by 2012. As a result, there is growing interest at the state, regional and federal level to establish CO_2 cap-and-trade mechanisms and to develop voluntary registries (official records or listings on specific subjects).

A carbon cap-and-trade market might work as follows. A business entity such as a manufacturing company must purchase the right to emit or be allocated a specific amount of the total allowable CO_2 emission or "cap" established by the government. This is called an emission allowance. While the manufacturer must comply with this allowance, there is a certain degree of flexibility in how it complies. An entity has the options to:

- Reduce point emissions,
- Use alternative energy sources with lower or no emission (e.g., solar, wind, etc.),
- Purchase offset credits from another entity that has reduced its emissions below the allowance, or
- Purchase offset credits from carbon sequestration projects that sequester (fix) atmospheric carbon.

Why Forests?

Forests are great at sequestering carbon. In fact, U.S. forests sequester 200-280 million tons of carbon per year. This currently offsets 12% of the U.S. GHG emissions resulting from human activity. Plants remove CO_2 from the atmosphere through the process of photosynthesis and store the carbon in plant tissue.

How Can I Sell My Carbon?

First, you need to identify a Carbon Aggregator in your area, through which you can register carbon credits from your property. Next, you'll need to meet basic requirements for eligibility. Possible requirements could be: 1) You have planted pine on open land since January 1, 1990; 2) You've maintained a minimum of 250 trees per acre; and 3) You've enrolled your land in the American Tree Farm System, the Conservation Reserve Program, a long-term forest conservation easement, or transferred ownership of the land to a land trust or similar entity.

The next step would be to quantify your property's carbon sequestration potential by using look-up tables that list carbon accumulation coefficients, or by direct measurements in the field. Once properly enrolled, your credits will be available for sale through the Chicago Climate Exchange® (CCX). For more detailed information, go to articles listed in the sidebar.

HIRING AN IMPORTED KILLER

from the High Plains/ Midwest Ag Journal, dated 11/21/07

For more information:

- http://www.hpj.com/archives/2007/nov07/nov26/Tinybeetleshowing-promiseinh.cfm

When imported ornamental trees turn renegade, sometimes it takes an imported killer to chew them down to size. Texas Cooperative Extension (Texas AgriLife Extension) entomologists are using beetles from Greece to combat invasive saltcedar along the Pecos River in West Texas.

Saltcedar was first introduced from southern Europe and Asia in the 1800s for erosion control and as an ornamental. Unfortunately, it was far too adaptable. Now thick stands of rogue trees choke many of the state's environmentally sensitive western waterways, sucking up water to the exclusion of native vegetation and municipalities.

To help combat the program, Dr. Allen Knutson, Extension entomologist at Dallas, and Dr. Jack DeLoach, Agricultural Research Service scientist at Temple, successfully established a small population of saltcedar leaf beetles along a creek near Big Spring. Knutson said those beetles have since spread along five miles of the creek and defoliated 40 acres of saltcedar.

In 2006, Extension organized the Saltcedar Biological Control Implementation Program to release more beetles at sites in the Upper Colorado River Watershed and along the Pecos River.

Releases of beetles by Knutson's colleague Dr. Mark Muegge, Extension entomologist at Fort Stockton, at two sites on the Pecos River have been especially successful. Beetles were released in mid-summer of 2006 and defoliated several trees before cold weather stopped them. Muegge said the adult beetles overwintered and began feeding and reproducing in April. Populations at both Pecos River sites increased and dispersed during the summer.

By mid-October, beetles had defoliated more than 500 saltcedar trees across about 90 acres along the Pecos River, said Muegge. "The rapid success at these sites demonstrates the potential these beetles have for long-term suppression of saltcedar on the Pecos River."

The saltcedar leaf beetle eats the trees' leaves, Knutson said. Without leaves, the tree can not manufacture food. Once defoliated, the saltcedar regrows new leaves which are soon eaten by another generation of beetles. After repeated defoliation, the trees slowly starve to death.

The Biological Control Implementation Program plans to establish saltcedar leaf beetles at other sites in the Pecos River watershed in 2008.

Muegge said research by U.S. Department of Agriculture scientists demonstrated that the beetles feed and reproduce only on saltcedars and do not pose a threat to any crop or native plant. Both adults and larvae feed on saltcedar leaves, but larvae eat more leaves.

CHOPSTICKS-NOT JUST FOR EATING ANYMORE

by staff writers, AFP, Tokyo, August 21, 2007

For more information:

- http://timberbuysell.com/Community/DisplayNews.asp?id=1370

Japan will try to turn millions of wooden chopsticks that go discarded each year into biofuel to ease the country's energy shortage. Japan has virtually no natural energy resources of its own.

Each of Japan's 127 million people uses an average of 200 sets a year, meaning 90,000 tones of wood, according to data.

Disposable chopsticks have historically been a cash cow for Japan's forestry industry, which says it uses timber from thinning that would have otherwise been dumped.

But today, about 90 percent of chopsticks used in Japan are imported from China, mostly using bamboo and aspen timber.

TFS-AN APPROVED CARBON VERIFIER

Texas Forest Service (TFS), well known for its role in protecting and sustaining the state's forest resources, has added a new dimension to its responsibilities - verifier of forestry offset projects for landowners seeking to sell their trees' carbon credits on the open market.

The agency was notified Nov. 2, 2007, by the Chicago Climate Exchange® (CCX®) of its application's approval, making TFS the first state forestry agency in the nation to become an Authorized Verifier for Forestry Offset Projects. The CCX® is currently the only market that trades forestry carbon.

Landowners are realizing that in addition to the value of the timber, the carbon stored in their forests has economic and environmental value as well. In order to sell the carbon credits however, landowners must first go through a multi-step process, one of which is to quantify the amount of carbon stored in their trees.

"As a CCX-approved verifier, Texas Forest Service's role is to verify the quantity of the carbon stored in a landowner's forest stand," said Burl Carraway, manager of the TFS Sustainable Forestry Program.

The agency's new responsibility is part of its ongoing exploration into the emerging forestry ecosystem services arena and is an integral part of its mission to sustain the state's healthy forest resources for current and future generations.

from TFS website

For more information:

- http://texasforestservice.tamu.edu/main/article.aspx?id=3202&terms=Carbon+Credits
- http://texasforestservice.tamu.edu/main/article.aspx?id=2366&terms=Carbon+Credits

FROM THE GUTS OF TERMITES . . .

An international team of scientists has sequenced and analyzed the genomes of the microbes found in termite guts. Termite guts harbor a gold mine of microbes that have now been tapped as a rich source of enzymes for improving the conversion of abundant biomass and wood to valuable next-generation biofuels.

The termite is a remarkable machine. It can digest a frightening amount of wood in a very short time, as anyone who has had termites in their house is painfully aware. Instead of using harsh chemicals or excess heat to do so, termites employ an array of specialized microbes in their hindguts to break down the cell walls of plant material and catalyze the digestion process.

Like cows, termites have a series of stomachs, each harboring a distinct community of microbes under precisely defined conditions. These bugs within bugs are tasked with particular steps along the conversion pathway of woody polymers to sugars that can then be fermented into fuels such as ethanol. The mandibles of the insect chomp the wood into bits, but the real work is conducted in the dark recesses of the belly, where the enzymatic juices exuded by microbes attack and deconstruct the cellulose and hemicellulose, which, along with lignin, are the basic building blocks of wood.

Adapting these findings for an industrial-scale system is far from easy. Termites can efficiently convert milligrams of lignocellulose into fermentable sugars in their tiny bioreactor hindguts. Scaling up this process so that biomass factories can produce biofuels more efficiently and economically is another story. To get there, we must define the set of genes with key functional attributes for the breakdown of cellulose, and this study represents an essential step along that path.

These findings follow on the heels of the announcement by Dept. of Energy Secretary Samuel Bodman in 2007 that DOE will invest up to $375 million in three new Bioenergy Research Centers to accelerate basic research in the development of cellulosic ethanol and other biofuels.

from timberbuysell.com and biopact.com, dated November 22, 2007

For more information:

- http://biopact.com/2007/11/scientists-publish-genomes-of-termite.html
- http://www.timberbuysell.com/Community/DisplayNews.asp?id=1780

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TAX AND ESTATE PLANNING

TAX AND ESTATE PLANNING CONFERENCE
THURSDAY, FEBRUARY 28, 2008 - CONROE, TEXAS

Topics to be covered:
- Estate Planning Fundamentals
- Property Gifting Options
- Will and Trust Basics
- Estate Tax Payment Relief Provision
- Family Limited Partnership
- Limited Liability Company
- Special Use Valuation for Forest Land
- Conservation Easements
- Updates on Federal Income Tax on Timber

- Registration begins at 8:30 a.m.
- Presentations from 9:00 a.m. until 4:00 p.m.
- $50 per person; additional family or business member(s) $20 each - workbook not included
- Location: **City of Conroe Service Center**, 401 Sgt. Ed Holcomb Boulevard South
- Go to http://texasforestservice.tamu.edu/main/popup.aspx?id=3262 or contact John Warner, TFS, at (936) 273-2261

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Texas Forest Service

April 2008

FOREST STEWARDSHIP BRIEFINGS

Timber ◊ Wildlife ◊ Water Quality ◊ Soil Conservation ◊ Best Management Practices ◊ Recreation ◊ Aesthetics

CORPORATIONS GROWING FORESTS

from "Arbor Day," the Arbor Day Foundation newsletter, March/April 2008 edition, and the Arbor Day website

For more information:

- http://arborday.org/join/partnerships.cfm
- http://buildaforest.com/
- http://arborday.org/fritolay
- http://www.doubletree.com/en/dt/promotions/thinktrees/index.jhtml?adId=thinktrees,redirect&cid=OM,DT,Thinktrees,Redirect
- http://arborday.org/states/?state=TX

INSIDE THIS ISSUE:

Great ideas and great partnerships mean more trees for America. Here are examples of how the work of the Arbor Day Foundation has been supported and expanded thanks to some corporate friends.

Bayer CropScience has continued its partnership that provides $1 for tree planting for every 32 oz. and 1 gallon bottle of Tree & Shrub Insect Control sold and every 3 lb. bottle of 12 month Tree & Shrub Protect & Feed Granules. Last year this resulted in 100,000 trees planted in national forests.

Nebraska Book Company has an ongoing campaign to encourage college students across the country to "Buy a Book, Build a Forest." The central theme is to promote the purchase of recycled text books. To date, the company's donations resulting from student and faculty participation has planted 100,000 trees in the fire-ravaged Gallatin National Forest in Montana.

Frito-Lay has partnered with the Arbor Day Foundation in its "Making America a Little Greener" program. This ambitious project includes providing trees to community groups and giving trees away to shoppers at Wal-Mart and Sam's Club. By the end of last year, the impressive totals were: 150,000 trees planted in the Pike and San Isabel National Forests; 50,000 for Katrina recovery efforts; 50,000 to community groups; 50,000 to Wal-Mart shoppers in a single weekend; and more to Sam's Club shoppers via a mail-in promotion. In addition, 100 trees were planted along the Katy Trail near Dallas, Texas, with Frito-Lay and Wal-Mart employees and mayors from across the state volunteering as tree planters.

Doubletree Hotels and its properties throughout the country worked with The Arbor Day Foundation to plant trees and educate children about nature. During the spring of 2007, more than 10,000 first through fifth grade students in 160 communities across North America participated in activities and events that teach a new generation about the earth and its natural resources. In total, more than 8,600 trees were planted.

Toyota has provided invaluable support to the Foundation's environmental education programs for youth. Toyota sponsors the Foundation's annual Arbor Day National Poster Contest for fifth graders and has provided funding for the updated Grow Your Own Tree kit and production of the educational video, "Arbor Day: the Holiday that Makes a Difference."

In January 2007, **Citi Cards** put in motion its customer-focused "Plant-a-Tree" initiative - a program that encourages its credit card holders to switch to paperless statements, planting a tree for each conversion made. As of September 2007, more than half a million cardmembers opted to "go paperless" and trees were planted on their behalf. **Citibank**, a member of Citi, committed to provide funding to the National Arbor Day Foundation to plant one tree in U.S. national forests for each Citibank client that converted to paperless statements. Through the program, more than 32,000 trees will be planted.

GARDENING FOR WILDLIFE

from the Texas Parks & Wildlife website

For more information:

- http://www.tpwd.state.tx.us/huntwild/wild/wildscapes/
- http://www.tpwd.state.tx.us/huntwild/wild/wildscapes/guidance/resources/

Texas Wildscapes is a habitat restoration and conservation plan for rural and urban areas. It enables Texans to contribute to wildlife conservation by developing wildlife habitats where they live, work and play.

Texas Wildscapes provide the essential ingredients for a variety of wildlife – food, water, shelter, and space. This is done by planting and maintaining native vegetation, installing birdbaths and ponds and creating structure. Feeders can supplement native vegetation, but can never replace it. The goal is to provide places for birds, small mammals and other wildlife to feed and drink, escape from predators and raise their young.

Creating a "backyard habitat" by replacing part of your lawn with native plants not only benefits wildlife, but it's less expensive and easier to maintain. Less lawn means less mowing. Native plants are hardy and drought-resistant, so they need little or no water or care. Since these plants are more tolerant of native insects and diseases, they require no chemical treatments and thus are better for the environment.

Using native plants attracts a variety of wildlife. Hummingbirds, for example, are attracted to tubular flowers like salvia, coral honeysuckle and cardinal flower. You can also attract songbirds to feast on agarita, beautyberry or black cherry trees you have planted. Imagine sharing territory with wildlife and experiencing the thrill of seeing a creature in the wild without having to travel any further than your own backyard. Attract wildlife by planting trees, shrubs, wildflowers, and grasses at your home, at school or at work. It helps our wildlife, and it's fun!

Texas Wildscapes is more than a backyard program. It applies to rural properties as well; even community parks, businesses, churches, schools and apartments can be involved. You can do more than just attract birds. Every species has its own specific habitat requirements. If you know those requirements, chances are good that whatever you desire – butterflies, frogs or even lizards – will be visiting your site!

There are two certification options available for the Texas wildlife gardener through Texas Parks and Wildlife – the traditional Texas Wildscapes certification and the more challenging and new Best of Texas Backyard Habitats program.

Texas Wildscapes requires that the person be providing food, shelter and water for wildlife using a majority of native plants. Best of Texas Backyard Habitats makes this more challenging by requiring that the site be obviously a native plant habitat, that the applicant take active measures to control non-native threats and that the participant be involved in a number of conservation stewardship activities.

TEXAS WILDSCAPE CERTIFICATION

from the Texas Parks & Wildlife website

For more information:

- http://www.tpwd.state.tx.us/huntwild/wild/wildscapes/certification/tx_wildscapes/

Certification in the Texas Wildscape program requires that a "wildscape" have:

- At least 50% native plants
- Food for the wildlife year round. A feeder alone will not be considered, but if at any time there is not food available for the wildlife from plants, a feeder would then be required.
- Shelter for the wildlife. This might include various plant features, should include plants in each of the tall trees, understory, shrubs, bushes and wildflowers; may include nest boxes, brush piles, rock piles, toad houses and other shelter projects.
- Water in a useable, reliable form for the wildlife.

The Wildscapes certification fee is $15.00. Applications can be found online.

Woody Biomass Grants

Agriculture Secretary Ed Schafer on March 7, 2008, announced the award of $4.1 million to help 17 small businesses and community groups find more innovative uses of woody biomass from national forests in new products and renewable energy. The grants will help create markets for small-diameter woody material, damaged and other low-valued trees removed to reduce the risk of fire hazard, insect infestation or disease.

"The renewable use of shrubs and underbrush removes unhealthy overgrowth in our National Forests and creates local opportunity for new products and energy sources," said Schafer.

USDA's Forest Service selected 17 small businesses and community groups for grants ranging from $170,000 to $250,000. The recipients must provide at least 20 percent of the total project cost, while a total of $6 million in non-federal matching funds range from $65,590 to more than $1.3 million per project.

The Forest Service's State and Private Forestry Technology Marketing Unit, at the agency's Forest Products Laboratory in Madison, Wisconsin will administer the grant program.

from USDA website; press release by Donna Drelick

For more information:

- http://www.usda.gov/wps/portal/usdafarmbill?navtype=SU&navid=FARM_BILL_FORUMS

Texas Outstanding Tree Farmers - 2008

The Sam Houston Area Council Boy Scouts of America have been voted the 2008 Outstanding Tree Farmers of the year for Texas.

The Sam Houston Area Council BSA owns and operates Camp Strake, a 2,291 acre Tree Farm located just south of Conroe off I-45 in Montgomery County. The Tree Farm also serves as a Boy Scout camp to over 45,000 campers each year and is know as the "busiest camp in the United States," with programs in forestry, wildlife, watershed management, environmental science and others. "The camp is a 'working forest' and provides a lot of opportunities to showcase effective timber management while emphasizing that proper management of natural resources is a duty, responsibility and privilege," said Roy Wallace, Camp Director.

Camp Strake is managed for timber production, with wood going to local mills. Other conservation practices include continuous wildlife habitat/sanctuary, watershed management, natural regeneration, and participation in the red-cockaded woodpecker Safe Harbor program. Controlled burning, mulching and single tree selection harvests all contribute to the protection, health and improvement of Camp Strake's forest assets. The Sam Houston Area Council BSA has owned the property since 1943, which has been under written forest management and in the Tree Farm program since 1972.

The Camp Strake Tree Farm continuously influences the public as it is a "working forest." Consulting forester Wayne Pfluger and the camp staff receive numerous inquiries on the variety of forestry activities conducted on the property.

The Outstanding Tree Farmer of the Year competition recognizes private landowners for the exceptional job they are doing of enhancing the forest on their property. Winners are also chosen based on their efforts to foster and promote the practice of sustainable forestry to other landowners and the public. To be a Certified Tree Farmer, a landowner must manage his or her forest in an environmentally sound manner in accordance with the American Tree Farm System's standards and guidelines. Tree Farmers provide Americans with a renewable supply of essential timber and wood products. Their forests help clean the air, protect watersheds and provide homes for wildlife.

from "Texas Forestry," magazine of the Texas Forestry Association, April 2008 edition

For more information:

- http://texasforestry.org/tree_farm.htm
- http://www.treefarmsystem.org/index.cfm

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"GROW THE VOTE"

The Texas Forestry Association (TFA) is a non-profit trade association for forestry in Texas. TFA has teamed up with the American Forest & Paper Association (AF&PA), the national trade association of the forest, paper and wood products industry, to provide its members information on issues before the U.S. Congress that affect the forest industry.

Go to the TFA website at http://www.texasforestry.org/ and click on "Grow the Vote" near the bottom of the homepage. This will take you to a site where you can further explore:

- Hot Topics on Capitol Hill
- How to Take Action
- Forest Products Industry Background
- Legislator Scorecards
- 2008 Election Information

The 110th Congress offers the forest industry new opportunities and challenges. Every day decisions are made that impact jobs and economic growth in forest products communities across the nation, and this site makes it easy to get involved and stay connected.

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Texas Forest Service

May 2008

FOREST STEWARDSHIP BRIEFINGS

Timber ◊ Wildlife ◊ Water Quality ◊ Soil Conservation ◊ Best Management Practices ◊ Recreation ◊ Aesthetics

WOODLAND OWNER SURVEY

from Timber BuySell.com website; article posted 3/28/08

For more information:

- http://www.timberbuysell.com/Community/DisplayNews.asp?id=2392
- http://fiatools.fs.fed.us/NWOS/tablemaker.jsp

In 1994, there were an estimated 10,000,000 private woodland owners in the Untied States. The USDA Forest Service's National Woodland Owner Survey is an annual survey of these individuals and organizations that own over two-thirds of the woodland in the U.S. The purpose of this survey is "to increase our understanding of private woodland owners - the critical link between forests and society."

The first national woodland owner survey was conducted by the USDA Forest Service in 1978 and was subsequently followed by another national survey in 1994. The National Woodland Owner Survey is now being conducted on an annual basis; every year, more forest land owners from across the United States are contacted. It will take 5 to 10 years to complete the current cycle of ownership surveys in a state. Landowners will be asked to fill out a questionnaire no more than once during a state's inventory cycle. The implementation plan for the National Woodland Owner Survey after the initial baseline surveys are completed is still being developed.

The eight sections of the survey ask questions related to:

- The general characteristics of the landowner's woodland
- Reasons for why they own woodland
- How they use their woodland
- If their woodland is managed, how is it managed
- How landowners learn about their woodland
- The landowner's concerns about using their woodland
- Intended future uses of their land
- Some general demographic information

The information collected will be used to produce statistical reports of general trends in landowner attributes. Groups that will use this data range from the Congress of the United States to local landowner groups and forestry consultants.

The National Woodland Owner Survey helps private woodland owners in myriad ways. On a broad scale, it helps create a dialogue between landowners and the rest of society. Although individual landowners and landowner organizations do communicate with the rest of society on a regular basis, having scientific information pertaining to this important and diverse group of people has proven to be a very effective communication tool.

From a political perspective, this information helps politicians and government agencies quantify trends in woodland ownership and design programs that meet the needs of both the landowners and the broader needs of society. In particular, the information from this survey is used to allocate funding for various landowner assistance programs.

The private sector also finds this information useful, be they consulting foresters providing services to the landowners or large corporations that need to know what types of products they can expect to receive from private lands.

INSIDE THIS ISSUE:

STATUS OF U.S. FORESTLAND

from "Forests & People," official publication of the Louisiana Forestry Association; Vol. 58 No. 2; First Quarter 2008

For more information:

- http://www.fia.fs.fed.us/program-features/rpa/default.asp
- http://safnet.org/aboutforestry/index.cfm

The most recent USDA Forest Service data confirms that U.S. forestland is roughly as abundant today as it was 100 years ago. The Forest Service's Resource Planning Act 2007 (RPA data) reveals both state and regional increases in forestland across the country.

Among the key findings in the report are:

- There are 750 million acres of forestland in the U.S. today, about the same as in 1907.
- Eleven states had increases of over 25% over the last century, and nine had increases of over 30%.
- Overall, forestland in the northern U. S. has increased by almost 30%.
- The United States ranks fourth on the list of most forest-rich countries, following the Russian Federation, Brazil and Canada.

This encouraging data is provided by the Forest Service's Forest Inventory and Analysis (FIA) National Program. On the state level, statistics show:

- Virginia, South Carolina, Tennessee, Kentucky, and Louisiana have more forestland today than a century ago.
- Over the same period of time, forestland in Vermont, Pennsylvania and North Dakota has almost doubled.
- Forestland in Massachusetts and New York has shown an increase of over 70%.

The new data reinforces findings in a 2007 report by the Society of American Foresters (SAF), which found that replanting and reforestation efforts, as well as natural forest re-growth on abandoned agricultural lands, have generally offset any loss of forestland during the 20th century due to urban/suburban growth.

Historical trends indicate that the standing inventory (volume of growing trees) of hardwood and softwood tree species in U. S. forests increased by 49% between 1953 and 2006.

For the past 50 years, tree removals have remained below 2% of standing inventory (the figure for 2006 was 1.68%). Meanwhile, the net growth of trees has been near 3% (in 2006, 2.64%).

It is also noted that the stability and abundance of forestland, together with the growing conservation ethic of the American public over the past century, has helped many species on the brink of extinction (e.g., wild turkey, elk) make full recoveries.

The report notes significant challenges such as fire, insects and disease, invasive weeds, unmanaged recreation, and land conversions.

The report reinforces the importance of continuing sustainable forest practices to insure forestland remains abundant for generations to come.

RECORD KEEPING FOR FOREST LANDOWNERS

from Timber BuySell.com website; article posted 4/6/08

For more information:

- http://timberbuysell.com/Community/DisplayNews.asp?id=2426

Forest landowners should keep records of activities on their forestlands. Accurate, complete and well-organized records are important for a number of reasons but especially for reporting forest management expenses and revenues for income tax purposes.

A publication called "Keeping Records of Forest Management Activities" is primarily for landowners whose main source of income is not from the forested property. It introduces you to record keeping, what to record and simple recording systems.

To download this 12-page booklet, go to http://smallwoodnews.com/Docs/PDF/Landowner/ForestryFinance.pdf.

Texas Master Naturalists

The Texas Master Naturalist program activities are coordinated and funded by AgriLife Extension and Texas Parks and Wildlife. It is a venture directed toward developing local corps of "master volunteers" to provide education, outreach, and service dedicated to the beneficial management of natural resources and natural areas within their communities.

An individual gains the designation of Texas Master Naturalist™ after participating in an approved chapter training program with a minimum of 40 hours of combined field and classroom instruction, obtaining 8 hours of approved advanced training, and completing 40 hours of volunteer service. To retain the Texas Master Naturalist title during each subsequent year, volunteers must complete 8 additional hours of advanced training and provide an additional 40 hours of volunteer service coordinated through their local chapter. Check for local chapters near you on the website in the sidebar.

Many communities and organizations rely on such citizen volunteers for implementing youth education programs; for operating parks, nature centers, and natural areas; and for providing leadership in local natural resource conservation efforts.

from the Texas Master Naturalist website

For more information:

- http://grovesite.com/page.asp?o=tmn&s=MN&p=210150

'Tis the Season for Oak Wilt Spread

Spring has arrived, and with its dazzling display of color and growth come the sap-feeding beetles that can spread oak wilt and cause death and destruction during this time. Understanding the oak wilt life cycle is important in preventing new infections from this fungal disease.

In mid March, Texas Forest Service foresters and arborists begin identifying red oaks that have succumbed to the oak wilt fungus. Some of these diseased trees will form fungal mats, a mushroom-like structure just under the bark. These sweet smelling mats attract sap feeding beetles, which, after feeding on the fungal mats, fly away covered with diseased spores seeking their next meal of tree sap. If they happen to feed from a wound on an oak, the spores can dislodge, germinate and infect the new oak – and the neighborhood. This is the beginning of a new oak wilt disease center.

In Texas, fungal mats can form on diseased red oaks from February through May. Sap beetle activity, and thus dispersal of fungal spores, is also at its peak during this time of year. Add to the equation the oaks being more susceptible to infection in spring makes this time of year the wrong time for oak pruning. The long standing recommendations to avoid pruning or injuring oaks from February to June and to paint oak wounds year-round tie directly to the life cycle of the oak wilt pathogen.

Equally important to stopping the spread of the disease is the eradication of oak wilt stricken red oaks, especially those that have died during the fall months. These trees generally do not dry out over winter and often harbor the fungus until springtime, when fungal mats begin forming. It is important for communities dealing with oak wilt to monitor the health of red oaks in the immediate area adjoining oak wilt disease centers. Red oaks can contract the disease from nearby live oaks via root grafts much in the same way that live oaks share the disease with each other. If a red oak contracts oak wilt, there is potential for fungal mat formation and long distance spread of this disease.

For additional information about preventing oak wilt spread, or to contact a professional about oak wilt in your neighborhood, go to www.texasoakwilt.org.

by Eric Beckers, Staff Forester, Texas Forest Service, Austin, TX

For more information:

- http://www.texasoakwilt.org
- http://texasforestservice.tamu.edu/main/article.aspx?id=1172
- http://texasforestservice.tamu.edu/main/article.aspx?id=1173

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WOODY BIOENERGY SYMPOSIUM

Northeast Texas
Woody BioEnergy Symposium

June 4-6, 2008

Jefferson Institute in Jefferson, Texas

Something for everyone:

June 4 - Sustainable Forestry for Bio-Energy and Bio-Based Products Training for Natural Resource Professionals
June 5 & 6 - East Texas Woody Bio-Energy Community Development Conference
June 6 (evening) - Woody Bio-Energy Opportunities for Landowners

For more information, contact Brock A. Fry, Marion County Extension Agent-Agriculture/Natural Resources:
Phone: (903) 665-2421 E-mail: bafry@ag.tamu.edu

For agenda, go to:
http://grovesite.com/page.asp?o=tamu&s=ntbs&p=261992

TEXAS FOREST SERVICE
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Texas Forest Service

July 2008

FOREST STEWARDSHIP BRIEFINGS

Timber ◊ Wildlife ◊ Water Quality ◊ Soil Conservation ◊ Best Management Practices ◊ Recreation ◊ Aesthetics

EXOTIC PESTS IMPACT FORESTS

by Joe Pase, Entomologist, Texas Forest Service, Lufkin, TX; adapted from a report by Debra McCown, reporter for the Bristol Herald Courier (VA), published: July 5, 2008

For more information:

- http://www.invasivespeciesinfo.gov/
- http://texasforestservice.tamu.edu/main/article.aspx?id=1260
- www.invasive.org/eastern/srs/

INSIDE THIS ISSUE:

Walking through eastern U.S. forests today, it's nearly impossible to find an American chestnut, the durable hardwood that used to rule the forest. Or what about an American elm, the towering tree that used to line the streets of U.S. cities?

One of the first forest pests of the modern scientific era was introduced into the port of New York on nursery stock at the end of the 19th century – chestnut blight. It wiped out literally billions of trees around the United States, changing the forests of the eastern U.S. forever. American chestnut was a vital part of the economy. Now it's gone and it's not necessarily substituted by the species that came in after it.

The next major exotic tree killer to reach American soil began in the 1930s when a shipment of elm logs infected with Dutch elm disease arrived from Europe. The American elms were one of the most popular street trees at the time. When Dutch elm disease came, it went tree to tree, street to street, town to town and by the end of the 1970s, the disease, a fungus spread by beetles, had killed hundreds of millions of elm trees.

Another exotic pest making its way into the U.S. is the gypsy moth, which affects primarily oak trees. Gypsy moth caterpillars don't kill the trees outright; they defoliate them. If such extensive defoliation happens two or three years in succession, the tree will often die.

In a natural system, native plants and their insect and disease pests live together. From time to time, pest populations may increase to outbreak levels, but natural controls will eventually prevail and the pest outbreak will subside. But when a disease or insect pest comes from the other side of the world, there are no natural controls to check the pest's spread.

More recently, hemlock in the forests of the eastern Unites States is under attack by an accidental Asian import, the hemlock woolly adelgid. The adelgid is an insect that feeds on the sap of the tree and infested trees often die within a few years. Hemlock trees are dying by the thousands.

The emerald ash borer has the potential to do to ash trees what Dutch elm disease did to the American elm. This pest has already killed over 30 million trees in Michigan and is well established in the Midwest.

The potential for emerald ash borer and gypsy moth to become established in Texas exists, but so far it has not happened. Interestingly, even though American chestnut does not occur in Texas, the chestnut blight fungus has impacted native Texas chinkapin (also called chinquapin) to the extent that this small tree seldom reaches seed bearing size. Dutch elm disease is present in eastern Texas but fortunately it hasn't been a serious problem to native elm trees.

An established exotic plant that has already impacted the forests of East Texas is the Chinese tallow tree. This invasive tree has replaced many native plant species and seems to continue to spread. Texas has also become home to Japanese climbing fern which is beginning to impact our forests by replacing native plant species.

WHY MANAGE MY FOREST? PART I

prepared by Glenn & Evelyn Charlson for distribution by the Tree Farm System, May 2007

For more information:

- http://www.treefarmsystem.org/index.cfm
- http://safnet.org/aboutforestry/index.cfm
- http://www.texasforestry.org/

Forest landowners knowingly make a choice regarding management of their property. Some landowners and resource managers choose to "let nature take its course" on some forestland. In such cases, they make a conscious management decision to not actively manipulate the vegetation.

The concepts of "preservation" and "natural dynamics free of human impacts" are relative. Forests are dynamic communities that are continuously changing and adapting to external inputs and internal disturbances. Natural processes like forest succession, plant competition, wildlife, and insect activity, tree aging and decay, windstorms, fires, and climate change will cause changes in forest composition, structure, and function over time. Forests cannot be maintained in a static, unchanging condition. Also, there are no forest ecosystems undisturbed by human activities. Disturbance has occurred through impacts on climate, atmospheric composition and inputs, fire control, management of wildlife populations (intentional and unintentional), introduction of exotics, recreational use, other human uses, etc. Passively managed forests will continue to change and will be subjected to human impacts; however, these changes and impacts often will be different than in actively managed forests.

Passive management does require monitoring, and certain events may necessitate the implementation of some short-term active practices. Examples include control of exotics, fire management, disease and insect management, wildlife management, recreation management, removal of diseased or weakened trees that pose safety hazards, and loss of attributes desired by the landowner. Passive management requires an understanding of the effects of natural processes and the impacts of other human activities (internal and external to the forest) on the development of the forest. In some situations, a blend of passive management and active silvicultural treatment may most effectively achieve landowner goals.

The results of this option are not economically predictable, but in all probability it would be less than a "managed" stand of timber. The main reason for this is that nature is controlling the return on the timber investment.

There is another reason a landowner may not want to manage their forest. They may like the forest just as it is. This line of thought fails to consider that forests are not static objects. They are living and dynamic, changing to some degree every day. As natural living creatures, trees have life spans just like people. Some species can live for thousands of years, some for hundreds of years and some for just a few decades. Some preserved areas no longer have large trees that led to the preservation.

(Part II coming next month)

HEART 'O TEXAS OAK

from the Texas Forest Service website—Famous Trees of Texas

For more information:

- http://famoustree-softexas.tamu.edu/TreeHistory.aspx?TreeName=Heart%20OTexas%20Oak

This live oak tree near the town of Mercury has attracted attention because it is located at the exact geographical center of the State of Texas. This location was determined by a U.S. Geodetic Survey, the results of which were published in 1922.

Known widely as the Heart O' Texas Oak, it stands at a point whose coordinates divide the second largest state in the Union into four equal areas. The tree is 437 miles from the state's most westerly point on the Rio Grande above El Paso; 412 miles from the most northerly point in the northwest corner of the Panhandle near Texline; 401 miles from the most southerly point on the Rio Grande below Brownsville; and 341 miles from the most easterly point on the Sabine River near Burkeville.

Stewards of the Land

The Forest Stewardship Program began in 1990 under the direction of the USDA Forest Service. Under this program, the Certified Forest Steward Award is a way to recognize landowners who have multiple-use management plans and are implementing activities on the ground. In Texas, there are currently over 450 recognized "Certified Forest Stewards."

Recently, two of these Texas Certified Forest Stewards were also recognized by another program, Texas Parks and Wildlife's Lone Star Land Steward Awards.

Receiving the award for the Edwards Plateau Region of Texas were J. David and Margaret Bamberger, owners of Selah, Bamberger Ranch Preserve. Rangeland improvement, spring restoration, wildlife habitat enhancement, endangered species management, and conservation education are just a few of the accomplishments on this Blanco County ranch.

For the Pineywoods Region, Jane Baxter and the G. Gibson family's Mustang Prairie Tree Farm in Trinity Co. were recipients of the award. The property is managed using key practices such as prescribed burning, pine thinning, and deer population control. Native prairie was restored on the property, improving the habitat for eastern wild turkey and other birds.

For more information:

- http://www.tpwd.state.tx.us/landwater/land/private/lone_star_land_steward/
- http://texasforestservice.tamu.edu/main/article.aspx?id=1180

SFI® Landowner Workshops

Texas Forest Service and Texas Forestry Association are celebrating the 10 year anniversary of the Sustainable Forestry Initiative® (SFI) sponsored landowner workshops. The SFI program is an environmental certification system that integrates the protection of our environment with the perpetual, sustainable growing and harvesting of trees. Participants not only practice sustainable forestry on their own lands, but also promote it on other forestlands through their support of outreach programs like the landowner workshops.

The first educational seminar was held on January 31, 1998 just outside of Lufkin and led to the creation of the Angelina / Nacogdoches County Forest Landowners Association. Since that date, over 40 workshops have been conducted throughout the state, reaching more than 4,000 forest landowners.

"It is truly amazing how successful this program has been. We have conducted workshops for landowners in every county in East Texas as well as the major metropolitan areas of the state, including Houston, Dallas, and Austin," said Hughes Simpson of the Texas Forest Service.

The main objective of these workshops is to educate attendees on the importance of practicing sustainable forestry. Forest landowners are able to learn about best management practices (BMPs), wildlife management, reforestation, and many other forestry related topics. With the ever changing landscape of the forestry community, these workshops are vitally important in educating new forest landowners on sustainable forestry as well as helping long-time forest landowners keep abreast of the latest information on how to best manage their lands.

Another important goal of these workshops is to encourage forest landowners to join or create local forest landowner associations so they can have a collective voice as well as the continuing educational opportunities. "Typical workshops can attract upwards of 150 people, many of whom either decide to join the association or renew memberships," said Simpson.

Invitations are mailed to family forest landowners in a multi-county area served by a respective landowner association. Attendance at these workshops is free of charge, with lunch and refreshments provided for all attendees.

by Hughes Simpson, Program Coordinator, Texas Forest Service, Lufkin, TX

For more information:

- http://www.texasforestry.org/state_implementation_comm.htm
- http://www.sfiprogram.org/
- Texas Forest Service - (936) 639-8180

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TEXAS TIMBER PRICE TRENDS

Timber Price Trends Report is a bimonthly publication of the Texas Forest Service reporting average prices paid for standing timber, commonly called the "stumpage price." Average stumpage prices are calculated from actual timber sales as reported by more than 60 cooperators active in the East Texas timber market.

Values are weighted by volume sold to filter out the effect that size of sale has on price paid. Thus, the average price reported is the average price paid per unit of wood, NOT per average timber sale. Price series for five or more product categories are reported for two reporting regions from eastern Texas and extending back to 1984.

Go to http://texasforestservice.tamu.edu/main/article.aspx?id=148. Here, a complete current issue of the *Texas Timber Price Trends* is available in PDF format. A hard copy is also available through an annual mail subscription for $10 per year. To subscribe, please send your request and check or money order to:

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John B. Connally Bldg.
301 Tarrow, Suite 364
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Texas Forest Service

August 2008

FOREST STEWARDSHIP BRIEFINGS

Timber ◊ Wildlife ◊ Water Quality ◊ Soil Conservation ◊ Best Management Practices ◊ Recreation ◊ Aesthetics

TREE FARM SYSTEM ENDORSED

from a press release dated August 8, 2008

For more information:

- http://www.treefarmsystem.org/cms/pages/38_66.html
- http://www.pefc.org/internet/html/news/4_1154_65/5_1105_1894.htm

Family forest owners in the U.S., who own nearly two-thirds of the country's forestlands, recently cheered the international approval of the American Tree Farm System® (ATFS) by the Programme for the Endorsement of Forest Certification schemes (PEFC). PEFC is an international, independent, non-profit, non-governmental organization, founded in 1999, which promotes sustainably managed forests through independent third party certification. ATFS is the oldest and largest forest conservation, certification, and advocacy program in the U.S.

Family forest landowners welcomed the endorsement by PEFC for certifying sustainably produced wood, a step that will open the door to new green markets for wood that is sustainably produced on their land. The Geneva-based PEFC made the announcement after a 14-month rigorous review designed to provide assurance to purchasers that certified wood and paper products are in fact produced from sustainably managed forests.

For some U.S. companies like NewPage Corporation whose North American operations include a mill in Rumford, Maine, this change could not come soon enough. "We sorely needed this endorsement in order to satisfy our customers who are demanding that our pulp and paper come from certified forest operations," said Tony Lyons, Director of Fiber Supply at the NewPage Rumford Mill.

He added that the market dynamics for sustainably produced wood have changed dramatically over just the last two years. "We can't meet the demand, and that's a shame when qualified forest owners are standing ready. This fixes that problem."

"This is fantastic news for conservation-minded family forest owners who are struggling to survive in tough economic times," said Laurence Wiseman, President and Chief Executive Officer of the American Forest Foundation, the parent group of ATFS. "PEFC approval is the key to connecting more of the good operators to the rapidly growing marketplace of green manufacturers, distributors, retailers and consumers."

Forest landowners who voluntarily commit the extra time and expense to produce wood sustainably under the ATFS will now qualify for access to the international markets that they never had before. Traditional markets for U.S. wood have been shrinking as more foreign wood gains control into those markets, and Wiseman believes this endorsement step will help U.S. growers.

The United States is permanently losing 1.5 million acres per year of family forestland to development. Many people mistakenly assume that forestland they see is owned by either the government or large paper companies, when in fact 60 percent of all the wood harvested in the U.S. actually comes from family forestlands. For many of these small forest landowners, achieving some economic return on their property is essential if they are to avoid the pressures of development.

"By joining the largest forest certification system in the world, the American Tree Farm System is creating new markets for American growers," said Ben Gunneberg, Secretary General of PEFC International.

INSIDE THIS ISSUE:

WHY MANAGE MY FOREST? PART II

prepared by Glenn & Evelyn Charlson for distribution by the Tree Farm System, May 2007

For more information:

- http://www.treefarmsystem.org/index.cfm
- http://safnet.org/aboutforestry/index.cfm
- http://www.texasforestry.org/

Some landowners and resource managers choose to "let nature take its course" on some forestland (see *Forest Stewardship Briefings*, July 2008). However, there is only one way to keep a forest as it is and that is management. Landowners can manage the forest so that the conditions they like can be maintained somewhere within the forest area.

While no set of management guidelines can cover all situations, professional and landowner judgment must combine scientific knowledge along with common sense within a plan for each individual's specific piece of property. Lands which are actively managed usually follow a specific written plan (25-30 years in length) tailored by a forestry professional to meet that individual landowner's goals while insuring their resources remain on course for future generations.

Forest management for timber production requires that growth be concentrated on those trees with the highest potential value. This is accomplished through periodic thinning, an exercise which requires knowledge of both timber markets and species growth characteristics. The timing of timber sales, both seasonally and within a business cycle, can significantly increase the value of a given timber sale. Effective regeneration of desired species can further enhance property value. The net result of effective management is optimized growth of high value trees and maximum timber sale value. Under proper management, the quality of the timber improves, and the timber actually grows faster.

On the side promoting managing forests, while it may not be for a financial reason, one might consider the benefits for improved wildlife opportunities. Many wildlife species tend to favor habitat that is specific to a given forest composition type. Each species associated with a forested habitat or niche contributes to ecosystem functioning and, in turn, larger ecosystem processes. For example, studies have shown that insect-eating birds reduce overall levels of foliage loss from insect populations. As a result, bird population can affect larger ecosystem processes such as carbon storage or primary productivity.

In summary, a managed forest will improve the visual quality level and offer a source of pride to the landowner. Riparian area diversification provides a link between the aquatic environment and vegetation which is important for many species of fish, mammals, birds, reptiles, amphibians, and insects. Lastly, landowners will experience a higher level of recreational enjoyment; whether it is hunting, camping, hiking, fishing, ATV riding, wildlife watching, off-road bicycling, or berry picking. Proper forest recreation management can enhance the recreation experience, while at the same time, complementing a number of other landowner objectives.

GOOSE ISLAND OAK

from the Texas Forest Service website—Famous Trees of Texas

For more information:

- http://famoustreesoftexas.tamu.edu/TreeHistory.aspx?TreeName=Goose%20Island%20Oak

On the Texas gulf coast is one of the largest live oak trees in Texas. In the 1960s, it was recognized as the largest live oak in the United States.

Legend has it that the Goose Island Oak was once a place where the cannibalistic Karankawas held councils and pagan ceremonies in which they devoured their enemies and even members of their own tribe. It is also referred to as a hanging tree and as a rendezvous of the fierce Comanche Indians.

In 2002, this former national champion live oak measured 340 inches in circumference, was 43 feet high and had a crown spread of 96 feet. Its age has never been accurately determined, but it is believed to be as much as 1,000 years old.

Sustainable Forestry Programs

The American Tree Farm System (ATFS) is a national program of the Center for Family Forestry that promotes the sustainable management of forests through education and outreach to private forest landowners. Founded in 1941, ATFS has 23 million acres of privately owned forestland and 90,473 certified forest properties that exhibit excellence in forest stewardship. ATFS private forest landowners (Tree Farmers) manage their forestlands for wood, water, wildlife, and recreation.

The American Forest Foundation (AFF) is a nonprofit 501(c)(3) conservation and education organization that strives to ensure the sustainability of America's family forests for present and future generations. Their vision is to create a future where North American forests are sustained by the public which understands and values the social, economic and environmental benefits they provide to our communities, our nation and our world.

Programme for the Endorsement of Forest Certification schemes (PEFC) is a framework for the assessment and endorsement of national forest certification systems that have been developed based on internationally recognized requirements for sustainable forest management. Since its launch in 1999, PEFC has become the largest forest certification umbrella organization covering national systems from all over the world, delivering hundreds of millions of tons of wood to the processing industry and then onto the market place.

for more information:

- http://www.treefarmsystem.org/index.cfm
- http://www.affoundation.org/
- http://www.pefc.org/internet/html/

Invasive Plant and Pest Council

On June 2, 2008, the Texas Invasive Plant and Pest Council (TIPPC) became officially established in the State of Texas. TIPPC originated as a motion from the floor at the second statewide Invasive Plant Conference held at the Lady Bird Johnson Wildflower Center, Austin, Texas in November 2007.

Invasive species spread easily in today's modern global commerce network and are difficult and costly to control. Invasive species impede industries, threaten agriculture and, in some cases, can endanger human health. According to the United States Department of Agriculture, invasive species impact nearly half of the species currently listed as Threatened or Endangered under the U.S. Federal Endangered Species Act. One study estimates that the total costs of invasive species in the United States amounts to more than $135 billion each year.

Texas is under attack on every front by a host of plants and pests from exotic places with exotic names like Tamarisk, Giant Salvinia, Hydrilla, Emerald Ash Borer, Channeled Applesnail, and many others. These invaders threaten the health of Texas' native ecosystems by decreasing biodiversity, threatening the survival of native plants and animals and interfering with ecosystem functions like fire, nutrient flow, and flooding.

Stakeholders from state and federal agencies, conservation organizations, academia, green industry and the public sector had long discussed the need for one unified body to address the threat of invasive species in Texas. The objectives of TIPPC are to promote understanding and awareness of invasive plant and pest impacts in Texas; provide a forum for the exchange of scientific, educational and technical information; and support research and restoration activities that reduce impacts of invasive plants and pests in Texas.

The organization has 96 charter members and will be governed by an interim board until a general election is organized. Membership in TIPPC is open to individuals, corporate and institutional entities.

from a press release dated June 26, 2008

For more information:

- http://www.texasinvasives.org/TIPPC/Press_release.pdf
- http://www.texasinvasives.org
- http://www.naeppc.org

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TEXAS FOREST EXPO IS COMING

Building Forests One Backyard at a Time

What: ***TEXAS FOREST EXPO***
Where: ***Lone Star Convention Center, Conroe, TX***
When: ***Saturday and Sunday, September 27 and 28***

Come and discover the latest topics in land management, wildfire prevention and preparedness, generating alternate income from your land, landscape design, pest and invasive species management, timber and estate taxation, wildlife habitat management, tree maintenance and more!

Exhibitors and vendors will have interactive booths to answer your questions about your natural resource needs.

Texas Forest Service invites all the "Little Texans" to visit the children's exploration room with learning stations and activities to discover some of the wonders that the forest offers.

Go to **http://texasforestservice.tamu.edu/conferences/texasforestexpo/article.aspx?id=5070** for the class schedule and more information, or call (936) 273-2261.

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List of Forestry Tours

- SAF National Convention Water Resources Tour – October 23, 2005
- Wetland Mitigation Bank Tour (Wetland / BMP Committee) – March 8, 2006
- Jones State Family Forest Fun Day – October 14, 2006
- Metroplex Timber and Forestry Association Field Tour – September 28, 2007
- Cook Tree Farm of the Year Field Tour – September 29, 2007
- Central Texas Water Resources Tour – October 2-3, 2007
- NCASI Forest Watershed Field Tour – February 5, 2008
- Pecos River Restoration Tour – April 7-10, 2008
- Metroplex Timber and Forestry Association Field Tour – November 7-8, 2008

2005 SAF National Convention
Water Resources Technical Tour
Mt. Pleasant, TX
October 23, 2005

October 23

8:00 a.m.	Depart Fort Worth, TX
10:30 a.m.	Arrive Mt. Pleasant - TXU Mining Reclamation Site - Reclamation Procedures - Water Quality Improvement
12:30 – 1:30	Lunch
1:30 pm	Tour Other Reclamation Projects
3:00 p.m.	Depart for Fort Worth, Texas

Wetlands/BMP Coordinating Committee Meeting

Texas Forest Service Regional Office
Longview, TX

March 7-8, 2006

March 7

1:00 PM **Welcome and Opening Remarks**
Jacob Donellan – Texas Forest Service

1:15 PM **Introduction of Members**

1:30 PM **Agencies' Overviews and Discussion**
A representative of each agency or interest will have the opportunity to give an overview of all current issues within their respective agencies related to water quality and answer questions from the group.

4:30 PM **Adjourn for Day**

March 8

8:00 AM **Leave for Tour of Wetland Mitigation Bank**

12:00 PM **Adjourn Meeting**

FAMILY FOREST FIELD DAY
AT THE JONES STATE FOREST

You are invited to attend a "come and go" style Family Forest Field Day at the Jones State Forest.

Whether you have five or 50 acres, whether you want to attract butterflies or birds to your backyard; this event will focus on your needs - the Texas family forest landowner. Land management experts will be available to discuss current property issues, and methods to manage, protect, and better utilize your property to meet your goals.

SATURDAY, OCTOBER 14
9 A.M. - 2 P.M.
JONES STATE FOREST
CONROE, TEXAS

FREE HOTDOG LUNCH

TOPICS - Field Stations located at Middle Lake Recreation Area

◆Wildscaping - bringing nature to your backyard
- Wildlife found in Texas
- Landscapes that attract wildlife
- Threatened and endangered species found in Texas

◆Protect your property from wildfire
- Minimizing wildfire risk
- Fire suppression tactics

◆Tree health, care & maintenance
- Caring for trees for optimal health
- Pruning tips
- Proper planting techniques
- Tree removal options

◆Soil and water conservation
- Protect water quality
- Improve access to your property - proper road construction and maintenance
- Minimize erosion

◆Forest stand improvement
- Management options for small tracts
- Understory mulching demonstration
- Controlling vegetation

◆Building on your property
- Design your house in a forested landscape
- Protect trees during construction

◆Detect, prevent and control forest pests
- Common forest insect, disease, and invasive pests
- Diagnose forest pest problems
- Control options

◆Pond building & management
- Build a pond on your property
- Stocking the pond with fish
- Maintaining pond health

◆Outdoor recreation & aesthetics
- Develop recreational opportunities on your property
- Improving property appearance for your maximum enjoyment

TEXAS FOREST SERVICE
The Texas A&M University System

Texas Forestry Association

◆Generate income from your property
- Marketing forest products
- Wildlife recreational leases
- Non-timber forest products
- Tax tips

◆Forest landscape plants
- Native plants and trees in Texas
- Range and planting techniques
- Sources for native plants

◆Informational booths:
Texas Forestry Association
Indian Mound Nursery
USDA Forest Service
Master Naturalist / Gardeners

To R.S.V.P. call (936) 273-2261

http://txforestservice.tamu.edu

TEXAS FOREST SERVICE
The Texas A&M University System

301 Tarrow Drive
Suite 364
College Station, Texas
77845

FAMILY FOREST FIELD DAY
AT THE JONES STATE FOREST

Directions & Map

From Houston go north on IH-45 30 miles to FM 1488 (Exit 81)
From Conroe go south on IH-45 6 miles to FM 1488 (Due to construction, exit Creighton Road) Go west on FM 1488 for approximately 2 miles, look for signs directing you to Jones Lake Recreation Area.
For further directions, contact Robin at (936) 273-2261.

Parking & Shuttle

Park your vehicle in the Jones Lake Recreation Area. Shuttle service provided continuously to / from Middle Lake Recreation Area (field stations).

Metroplex Timber and Forest Association
Fall Tour
September 28, 2007

Friday, September 28

8:00 a.m.	Depart Dallas, TX for Marshall, TX
10:00 a.m.	Tour of NorBoard OSB Plant
12:00 – 1:00	Lunch – Marshall, TX
1:00 p.m.	Tour with Red River Forest Management, Brian Hook ▪ Tour of active hardwood harvesting job
4:30 p.m.	Arrive Marshall, TX and check in at hotel
5:00 – 6:30 p.m.	Free Time
6:30 p.m.	Dinner, local restaurant in Marshall

The Outstanding Tree Farmer of the Year competition recognizes private landowners for the exceptional job they are doing of enhancing the forest on their property. Winners are also chosen based on their efforts to foster and promote the practice of sustainable forestry to other landowners and the public. To be a Certified Tree Farmer, a landowner must manage his or her forest in an environmentally sound manner in accordance with the American Tree Farm System's standards and guidelines. Tree Farmers provide Americans with a renewable supply of essential timber and wood products. Their forest helps clean the air, protect watersheds, and provide homes for wildlife.

Established in 1941, the American Tree Farm System is the oldest and largest forest certification program in the United States. Today, 65,000 Certified Tree Farmers are managing 22 million acres of forest. Texas joined the American Tree Farm System in 1944. Currently, there are 2,500 Tree Farms in Texas.

Tree Farm Field Tour Sponsors

Car-Tex
Davis Forestry
First State Bank & Trust, Carthage
Georgia-Pacific, LLC
Louisiana-Pacific Corp.
Rayco
Redding Construction
Texas Forestry Association
Texas Forest Service
Texas SuperTree Nurseries
Texas Tree Farm Committee

WOULD YOU LIKE TO BECOME A TREE FARMER? A forester will be happy to meet you on your timber tract and enroll you as a Tree Farmer. For information, contact:

Texas Forestry Association
P.O. Box 1488
Lufkin, Texas 75902-1488
(936) 632-TREE
1-866-TXTREES (voicemail)
Email: tfa@texasforestry.org
www.texasforestry.org

2007 TEXAS OUTSTANDING TREE FARMERS

John and Walta Cooke

Tree Farm Field Tour
September 29, 2007
Panola County

Outstanding Tree Farm Tour
Panola County, Texas

September 29, 2007

9:00 am.....Registration

9:30 am.....Welcome & Introductions
Philip Gates

Well Sites, Rights-of-Way, Historical Sites/PPT Presentation
John Cooke & Glenn Gill

10:00 am..... Tree Farm Tour

Stop 1 – Making the Most of Your Land.....*John Cooke & Glenn Gill*

Stop 2 – Ponds and Food Plots.....*Andrea Webb, Doug McKinney*
Rusty Wood

Stop 3 – Aesthetics & Mulching Demo.....*John Cooke III*
Redding Construction
Buddy Stalnaker
Rayco

Noon .....Lunch
Philip Gates, Moderator
Invocation: *Dr. William Everett, Central Baptist Church*
Guest Speaker: *Louie Gohmert, U. S. Congressman*

1:15 pm .....Presentations
Todd Nightingale, Ron Hufford

1:30 pm ..... Adjourn
John Cooke

Texas Tree Farm

Chairman – Todd Nightingale **Vice Chairman** – Richard Cole
Sponsor – Texas Forestry Association - Tom Boggus, President
Ron Hufford, Executive Vice President
Susan Stutts, Program Director
Tour Task Team – John W. Cooke, Walta Cooke, John W. Cooke III, Philip Gates, Jason Gill, Glenn Gill, Bill Russell, Susan Stutts

The children of William Augustus Ross were: 1) Louie Pinkney (Dixie) Ross, born April 9, 1885. After working as a jeweler in Laredo, he built Dixie Lake, located on C.R. 403 in the early 1930's. He lived alone in a cabin overlooking the lake on PR 8034; 2) Jessie Ross, born Oct. 19, 1887 and died Sept. 26, 1950. She married Walter Jefferson Pippen of Elysian Fields, Texas. He worked at the Guaranty State Bank (now First State Bank & Trust) until his death from the influenza epidemic in Jan. 1919. They were the parents of two sons:

1) William Burton (Billy Burt) Pippen, born Dec. 9, 1913 and died May 1, 1994. He married Eula Heaton Pippen on June 12, 1937. The Pippens established Pippen Motor Company in Carthage which is still owned and operated by the family. Billy Burt Pippen died on May 1, 1994. They had one daughter, Walta Nell Pippen Cooke who lives in Carthage.

2) Fred Ross Pippen, born on Aug. 15, 1917. He married Dorothy Smith of Tenaha, Texas. They have one daughter, Lynda Jane Pippen Timms of Bossier City, Louisiana. Both Billy Burt and Fred Pippen were among the first landowners to plant and grow pine timber in Panola County.

3) Nellice Ross Owens, born in 1897 and died in 1943. She married Henry Owens of Longbranch, Texas. They had two children: 1) Dan Gus Owens of Oil City, Louisiana, deceased; 2) Saralyn Owens Moore of Amarillo, Texas.

4) Parke Ross Chadwick's mother, Lou Ella Morrison Ross died when he was a baby and he was reared by an aunt, Mrs. Nannie Ross Chadwick in Carthage.

Billy Burt and Eula Pippen gave their daughter, Walta Pippen Cooke, their land inherited from his mother, Jessie Ross Pippen in Dec. 1992 and Jan. 1993. This timber farm consisted of approximately forty-nine acres. Walta and her mother, Eula Heaton Pippen, decided to acquire adjoining land which had once been in the Ross family. On Aug. 12, 1994, they purchased 44.353 acres from the Biggerstaff Estate. On Mar. 17, 1995, Walta purchased 9.669 acres from the Glenn Pippen heirs, and on April 8, 1996 they purchased 67.618 acres from the John Cain family. This property had once been owned by Parke Ross Chadwick. On Nov. 23, 1998 Mrs. Pippen and Walta purchased 107.96 acres from the Owens-Moore families which had once been a part of the W. A. Ross Estate. In 1999, Mrs. Pippen and her daughter purchased 84.94 acres from Amon Turner. This property had once belonged to W. G. Pippen and was sold to C.E. Moore in 1913. Finally, on Nov. 20, 2003 Walta purchased 57.541 acres of timberland adjoining her father's original part from her uncle and his wife, Fred and Dorothy Pippen.

The farm now consists of all the holdings of the four children of William Augustus Ross, and hopefully it will remain a family tree farm for many years in the future.

Jack and Anabel Cooke. Mr. Cooke died in Sept. 1986 and Mrs. Cooke continued to live there until 2004 when she moved into town. Her great-granddaughter, Catherine Williams Farmer and great-great-grandson, Bryce Burton Farmer are living there now.

ROSS-PIPPEN-COOKE FARM

420 acres along State Hwy. 315, the Southwest Loop, and C.R. 403.

History:

Edward Frederick Ross was born in South Carolina on Nov. I, 1824 and died Sept. 7, 1807. He was married to Emeline Brown Ross, who was born in Georgia, Nov. 13, 1826, on April 20, 1848. They lived for a time in Conecuh County, Alabama before coming to Texas. Legend has it that their daughter Susan Alabama was born in a covered wagon while moving to Texas and that is why she was named Alabama and called Bama, probably in the early 1860's. They accumulated a large amount of land, located west of town on State Hwy. 315 for approximately three miles to just beyond C.R. 106. Their holdings continued as far south as C.R. 103, and ran for almost five miles along C.R. 108, C.R. 403, and the Dixie Lake Road.

Their children were 1) Mary Elizabeth Ross (Aunt Betty) who married a Soape. She was born in 1834 and many of the Soape ancestors still reside in Panola County including Reba Soape Stacy, Rita Soape Majors, and Linda Soape Keeling; 2) James Pinkney Ross (I849-1866); 3) John Henry Ross who was born in 1851. He was the father of Escar Ross. His land was later sold by his only daughter Anne Ross Comstock to Dr. W.C. Smith and Robby Smith; 4) Susan Alabama Ross, who was born in 1861 and died in 1933, married a Mr. Parrish; 5) William Augustus Ross was born June 18, 1856 and died Dec. 17, 1912. He married Lou Ella Morrison Ross who was born May 10, 1858 and died Aug. 10, 1901. They were the parents of four children. He later married Lucinda Tiller Pippen Adams. His grandson is Fred Ross Pippen, a lifelong resident of Panola County, now residing in Bossier City, LA. Great-granddaughters are Walta Nell Pippen Cooke of Carthage and Lynda Jane Pippen Timms of Bossier City; 6) Edward Presley Ross was born in 1858 and died in 1943. Great-granddaughters still living in Panola County are Marian Ross Anderson, Lelma Boatman, Merrill Midyett Rhodes, Birdie Pippen Kyle, and Betty Pippen; 7) Nannie Ross was born in 1864 and married Mr. Chadwick. Their children were Hurst Chadwick and Jennie Mae Chadwick; 8) Albert Sidney Ross was born in 1866 and lived in Dallas; and 9) Daniel Webster Ross who was born in 1869. He married Irene Shivers and they had two children, Elvin Webster Ross and Annie Beverly Ross Hunt. Daniel Webster Ross is the father-in-law of Panola County resident, Frances Ross.

Cooke Tree Farm

John and Walta Cooke were chosen by the Texas Tree Farm Committee for their outstanding accomplishments as tree farmers. They set an excellent example of what can be done by individuals to improve forest and wildlife habitats on privately owned land.

The Cooke's own a combined 1,592 acres in Panola County. They maintain their pine and hardwood stands for timber production and wildlife; food plots are planted each year. The Cooke's converted a wetland area to a duck pond and nesting place, and in 2001 they built a new lake on the property.

They were nominated by Glenn Gill, consulting forester, who wrote, "Two Carthage families, the Cookes and the Pippens, with roots in forestry that date back to parents and grandparents have merged their resources, properties and talents to make their combined Tree Farms both aesthetically pleasing to the public, wildlife habitats for many game and non-game species, and profitable from timber sales. There is no doubt of the pride of ownership Mr. & Mrs. Cooke exemplify, and with their son taking on many of the field duties, and their daughter and grandchildren's interest in the land, it is evident that these Tree Farms will continue for generations."

Although timber production, both pine and hardwood, is the primary objective of the Cooke Tree Farms, the location of these properties along major highways and the Sabine River puts a strong management slant on aesthetics and water quality.

With the use of diversified timber stands, selective pine harvest, SMZ'S, water-bars, wildlife food plots and the leaving of mast-producing hardwoods, we are able to address effectively and economically the Tree Farm objectives of timber, water, wildlife, recreation and the fifth and future objective, aesthetics.

John and Walta Cooke are members of Texas Forestry Association and they were named the Panola County Outstanding Woodland Conservationists in 1968 and 2005. They will compete in the Southern States Regional Tree Farm competition in 2008.

History of the Cooke-Pippen Tree Farms

VAWTER-COOKE FARM

1,005 acres located nine miles north of the Carthage square along both sides of U.S. Hwy. 59, both sides of F.M. 1794 and bordering both sides of the Sabine River.

History:

David Vawter was born in Kentucky on Jan. 21, 1800, the son of Philemon and Ann Vawter, a Primitive Baptist Preacher. On April 27, 1823, he married Amanda Lucinda Glover, the daughter of Thomas J. Glover and Nancy West Glover in Jefferson County, Indiana. David and Lucinda Vawter lived on both sides of the Ohio River in Indiana and Kentucky. He was a trader, and in 1832 built his own steamboat, the "Bravo", which sailed down the Ohio and Mississippi Rivers to New Orleans, up the Red River to Natchitoches, Louisiana, where he lived and operated steam boats from Jefferson, Texas to New Orleans until 1844.

In 1844 the Vawters sold their steamboats and bought a plantation on both sides of the Sabine River at Grand Bluff, Texas, which was a part of Harrison County until 1846. They built their home on the high cliff, on the left side of the road (now F.M. 1794) approximately one hundred or two hundred feet from the Sabine River. This original home burned in the 1860's and another home was built on the site. David Vawter was licenses and bonded for $1,000 to establish and keep up a ferry across the river at Grand Bluff, Harrison County, Texas on Sept. 3, 1844. He died here, July 13, 1845, not owning control of the ferry. On Nov. 8, 1845, Lucinda, his wife traded their Louisiana land for the "Brewster's Bluff" Ferry, later known as Grand Bluff. Lucinda operated the ferry and in 1847, she was licensed to keep a ferry at Brewster's Bluff. Court records show that she was still operating the ferry in 1848, 1849, 1852, 1854, and 1857. The Vawter family continued to own the ferry until the bridge was built in 1912.

The children of David and Lucinda Glover Vawter were: 1) Alexander Lewis Vawter 1824-1860); 2) Amanda Melvina Vawter (1826-___); 3) John Milton Vawter 1828-1909); 4) Louisa Vawter (1830-___); and 5) David M. Vawter (1833-1898).

David M. Vawter was a physician, and operated the Grand Bluff Ferry for a number of years. Dr. Vawter married Nancy Raycroft Weir, a widow with one child, Belle Weir. He saved silver dollars he collected as ferry fare, and had them made into a silver service for his wife. They were members of the Baptist Church at Old Macedonia. Their only child, Martha Lucinda (Chic) Vawter was born Sept. 8, 1875 at Grand Bluff, Texas. While living as a small child at Grand Bluff, "Chic" and her niece, three months younger, would slip off from their parents and swing over the Sabine River on a grape vine swing! Dr. Vawter moved to Carthage, Texas around 1881 and built a home on North St. Mary Street. He bought the first sewing machine ever brought to Carthage for his wife, invented by Elias Howe. He died Feb. 11, 1898, in Beckville, Texas and legend has it that he died from the same epidemic which took the lives of so many of his patients they were buried in the mass grave to his right, also in the old Estate Cemetery at Grand Bluff.

Martha Lucinda (Chic) Vawter attended Baylor College in Waco, Texas from 1893-1896. During this time at Baylor she was courted by the future Governor Pat Neff. She married John William Cooke of Pembroke, Kentucky on Jan. 6, 1897. He was born July 30, 1870 and died Feb. 29, 1952. The couple made their home in Carthage in a home on East Sabine Street, a gift from the bride's parents. Their only child, David Vawter Cooke was born Oct. 16, 1897 Dec. 22, 1903. Mr. Cooke served as president of the First National Bank for many years. Martha Lucinda also was a founding member of the Carthage Circulating Book Club and served as its third president. The Cookes raised two foster children, Mary Moss Cooke Yarborough (1904-1962) and Jack Vern-Cooke. Martha Lucinda died on Jan. 15, 1946 and Mr. Cooke died Feb. 20, 1952.

Jack V. Cooke married Anabel Smith of Carthage on Aug. ___. Their only child, John William Cooke II was born on September 5, 1939. John William married Walta Nell Pippen, daughter of Billy Burt and Eula Heaton Pippen of Carthage. Jack Cooke was a banker and an EXXON distributor. He died Aug. 1986.

John William Cooke II and his wife Walta Pippen Cooke are the parents of two children, Cheryl Pippen Cooke Williams, born Feb. 28, 1961, and John William Cooke III, born July 15, 1964. The children of Cheryl Cooke Williams are Catherine Marie Williams Farmer, born in 1980, and Jessica Leigh Williams Pace, born in 1985. Jessica married Michael Pace on May 26, 2007. Catherine Williams Farmer is the mother of Bryce Burton Farmer, born Jan. 5, 2001. He is the great-grandson of John and Walta Cooke.

John William Cooke III married Tonya Melton who had one daughter, Ali Ann Jones in Sept. 2005. They are currently residing on the property on U.S. Hwy. 59.

COOKE FARM - HOME PLACE OF JACK & ANABEL COOKE

167 acres (House located on 5 additional acres) located 5 miles west of Carthage Square on U.S. Hwy. 79 South, bordering F.M. 959 and C. R. 219.

History:

This land was purchased by Jack V. Cooke from the J. W. Cooke Estate in the early to mid 1950's. A beautiful French style home was built in 1956 by

Central Texas Water and Resource Tour

October 2-3, 2007

Participants: Hughes Simpson, Jim Rooni, James Houser, Clay Bales

Tour Agenda

Tuesday, October 2nd

7:30 am	Office Presentations • Oak Wilt – *Eric Beckers* • Stewardship – *Clay Bales*
8:30	City of Austin Watershed Protection and Development *Forrest Nikorak, P.E., Supervising Engineer*
10:15	RGK Ranch *John Barber, Wildlife Biologist*
Noon	Lunch at Dripping Springs
1:30 pm	Pedernales Falls State Park
2:30 pm	Pedernales Brush Control Program *Melissa Grote, Conservation Planner*
5:30 pm	Adjourn to Austin, TX

Wednesday, October 3rd

8:00 am	Office Presentation • Best Management Practices Program – *Hughes Simpson*
10:00	Aquarena Center on the San Marcos River
11:15	Oak Wilt Site Visit
Noon	Lunch at the Salt Lick in Driftwood
1:30 pm	City of Austin Environmental Conservation *Willie Conrad*
5:00 pm	Adjourn to Austin, TX
6:00 pm	SAF Meeting – San Antonio Water Systems

NCASI Forest Watershed Task Force
BMP Research Tour
February 5, 2008

February 5

10:30 a.m.	Depart Nacogdoches, TX for Alto, Texas
11:00 a.m.	Tour Alto Watershed Project - Alto Watershed Project - Road Sediment Study - TFS BMP Implementation Monitoring - TFS BMP Effectiveness Monitoring
12:30 – 1:30	Lunch
1:30 p.m.	Depart for Nacogdoches, Texas

Pecos River Restoration Tour

April 7-9, 2008

Monday, April 7th

8:00 am	Travel to Fort Stockton, TX

Tuesday, April 8th

8:00 am	Travel to Monahans, TX
9:00 am	59th Annual Pecos River Compact Commission Meeting
11:30 am	Lunch
12:30 pm	Travel to Pecos River Restoration Project - Brush Control - Pecos River Research
4:30 pm	Depart to Fort Stockton, TX

Wednesday, April 9th

8:00 am	Pecos River Revegetation Committee
10:00 am	Travel to Sheffield, TX
12:00 pm	Lunch
1:00 pm	Tour TNC Independence Creek Preserve
5:00 pm	Depart to Ozona, TX

Thursday, April 10th

7:00 am	Depart to Lufkin, TX

Metroplex Timber and Forest Association
Fall Tour
November 7-8, 2008

Friday, November 7

8:00 a.m.	Depart Dallas, TX for Bullard, TX
10:00 a.m.	Tour of ArborGen Texas SuperTree Nursery
12:00 – 1:00	Lunch – Jacksonville, TX
1:00 p.m.	Tour with James Houser, James Houser Consulting Foresters LLC ▪ Harvest Operation ▪ Natural Regeneration
4:30 p.m.	Arrive Marshall, TX and check in at hotel
5:00 – 6:30 p.m.	Free Time
6:30 p.m.	Dinner, local restaurant in Marshall

Saturday, November 8

7:30 – 8:30 a.m.	Breakfast
8:30 a.m.	Depart Marshall, TX for Camp County
9:00 a.m.	Tour with Mark Brian, Bird Forestry Services ▪ Natural Regeneration with Seed Tree Harvest ▪ Uneven Aged Forest Management
12:00 p.m.	Lunch
1:00 p.m.	Depart for Dallas

2006 Teachers Conservation Institute
Phase II Agenda
June 25-30, 2006

Inquiry: What are the best uses of Texas forests?

Day	Time	Event	Session Host

Reference PLT Activities are in **BOLD** print. Not all of those activities will be conducted during the week.

Sunday,	3:00-4:30	Arrival, Registration	
June 25	4:30-5:30	Welcome/Ice Breaker	Fearless Leaders/Donna
	5:30	Dinner served	
	6:30-8:00	Overview/Goals & Objectives	
		Introduce **PLT #80**	Frank
Energy, Soil & Water			
Monday,	7:30	Breakfast served	
June 26	8:00-8:15	Begin Energy Experiment	Fearless Leaders
		(PLT #80 – Nothing Succeeds Like Succession)	
	8:15-9:40	Soils Activity/Soil Profile	Ray Stoner - NRCS
		(PLT #70 – Soil Stories)	
	9:40-10:00	Travel to Creek	
	10:00-11:30	Water Quality	Donna
		-Best Management Practices	
		-Streamside Management	
		(PLT #44 – Water Wonders & A Pond Water Tour)	
	12:00-12:30	Lunch	
	12:30-3:30	Lake Investigations	Fearless Leaders
		(Marsh or Mall Activity)	Susie
	3:30-4:45	Travel to PWCC	
	5:30	Dinner served	
	6:15-7:00	Review Results	Frank
	7:00-8:30	PLT Facilitators' Roles	Cheryl
	8:30	**Reflections**	Frank
Forest Types			
Tuesday,	7:30	Breakfast served	
June 27	8:15	Leave	
	8:45-10:00	Characteristics of Forest Types	Fearless Leaders
		-- Pine Plantation (Young)	Bob
	10:00-11:30	-- Pine Plantation (Closed-in)	John
	11:30	Lunch	
	12:15-1:00	Travel to Turkey Hill Wilderness Area	
		-- Pine/Hardwood	Frank
		-- Bottomland Hardwood	Paul
		(PLT #48 – Field, Forest, and Stream)	

Day	Time	Event	Session Host
	3:30-4:00	Travel to PWCC	
	4:45-5:30	PLT Facilitator Training	Cheryl
	5:30	Dinner served	
	6:30-7:30	Results of Forest Types Investigations	Frank
	7:30	**Reflections**	Frank
Wildlife & Cultural Heritage			
Wed.,	7:30	Breakfast served	
June 28	8:00-9:00	Travel to Boykin Springs Area/Prescribed Burning	Frank
	9:15-10:00	Longleaf Pine Forest/RCW colony	Frank /Donna
	10:15-11:15	Aldridge Sawmill/Bats **(PLT # 45 – Web of Life; #88 – Life on the Edge)**	John Ippolito – USFS
	11:30-12:15	Travel to Jasper	
	12:15-1:00	Lunch at Jasper Park Pavilion	
	1:15-3:00	Urban Forestry **(PLT # 36 – Pollution Search; #55 – Planning the Ideal Community; #74 – People, Places, Things; #81 – Living with Fire)**	John Justice Jones/Karen Stafford – TFS
	3:00-4:00	Travel to PWCC	
	4:45-5:30	PWCC Fire Safe Project	John
	5:30	Dinner served	
	6:30-8:00	Burning Issues	Cheryl
	8:00	**Reflections**	Frank
Forest Management			
Thursday,	7:30	Breakfast served	
June 29	8:00	Travel to Burkeville/Wiergate P.O.	Fearless Leaders
	10:00-12:00	Canyon Rim Trail **(PLT # 79 – Tree Lifecycle; #80 – Nothing Succeeds Like Succession)**	Bob
	12:00-12:45	Lunch	
	3:30-4:30	Travel to PWCC	
	4:30-5:30	Prepare Multimedia Product	
	5:30	Dinner served	
	6:30-8:00	PLT Facilitator Training	Cheryl
	8:00	**Reflections**	Frank
Friday,	7:30	Breakfast served	
June 30	8:30-9:30	Photo session	Cheryl
	9:30-11:30	Multimedia presentation/Graduation	Participants/Frank/Cheryl
	11:30-12:00	Lunch will be available	

HAVE A SAFE TRIP!

2007 Teachers' Conservation Institute
Phase II Agenda
June 24-29, 2007

Inquiry: What are the best uses of Texas forests?

Day	Time	Event	Session Host

Reference PLT Activities are in **BOLD** print. Not all of those activities will be conducted during the week.

Sunday,	3:00-4:30	Arrival, Registration	
June 24	4:30-5:30	Welcome/Ice Breaker	Fearless Leaders
	5:30-6:15	Dinner served	
	6:30-8:00	Overview/Goals & Objectives/Pre-test	
		Introduce Energy & Succession	Frank Shockley
		(PLT #80 – Nothing Succeeds Like Succession)	
Energy, Soil & Water			
Monday,	7:30	Prepare lunches/Breakfast served	
June 25	8:00-8:15	Begin Energy Experiment	Fearless Leaders
		(PLT #48 – Field, Forest and Stream)	
	8:15-9:40	Soils Activity/Soil Profile	Dr. Ken Farrish -- SFASU
		(PLT #70 – Soil Stories)	
	9:40-10:00	Travel to Beef Creek Falls	
	10:00-11:30	Water Quality	Donna Work
		-Best Management Practices	
		-Streamside Management	
		(PLT #44 – Water Wonders & A Pond Water Tour)	
	12:00-1:30	Lunch @ Sam Rayburn Dam	
		(PLT #71 – Marsh or Mall Activity)	Susie Shockley
	1:30-3:30	Lake Investigations	Donna
	3:30-4:45	Travel to PWCC	
	5:30-6:15	Dinner served	
	6:30-7:00	Day's Review	Frank
	7:00-8:30	PLT Facilitators' Roles	Cheryl
Forest Types			
Tuesday,	7:30	Prepare lunches/Breakfast served	
June 26	8:15	Depart PWCC	
	8:45-10:00	Characteristics of Forest Types	Fearless Leaders
		-- Pine Plantation (Young)	Bob Lacher
	10:00-11:30	-- Pine Plantation (Closed-in)	Neil McGinness
	11:30-12:00	Lunch	
	12:15-1:00	Travel to Turkey Hill Wilderness Area	
		-- Pine/Hardwood	John Boyette
		-- Bottomland Hardwood	Frank
		(PLT #48 – Field, Forest, and Stream)	

Day	Time	Event	Session Host
Tues. (cont.)	3:30-4:00	Travel to PWCC	
	4:45-5:30	PLT Facilitator Training	Cheryl
	5:30-6:15	Dinner served	
	6:30-7:15	Results of Forest Types Investigations	Frank
	7:15-7:30	Reflections	Frank
	7:30-8:30	Facilitator Training	Cheryl
Wildlife & Cultural Heritage			
Wed.,	7:30	Prepare lunches/Breakfast served	
June 27	8:00-9:00	Travel to Boykin Springs Area/Prescribed Burning	Frank
	9:15-10:00	Longleaf Pine Forest/RCW colony	Donna/Dr. Whiting -SFASU
	10:15-11:15	Aldridge Sawmill/Bats **(PLT # 45 – Web of Life; #88 – Life on the Edge)**	John Ippolito – USFS
	11:30-12:15	Travel to Jasper	
	12:15-1:00	Lunch at Jasper Park Pavilion	
	1:15-3:00	Urban Forestry Urban Wildland Interface **(PLT # 36 – Pollution Search; #55 – Planning the Ideal Community; #74 – People, Places, Things; #81 – Living with Fire)**	John/Dr. Hans Williams-SFASU Karen Stafford – TFS
	3:00-4:00	Travel to PWCC	
	4:45-5:30	PWCC Fire Safe Project	John/David Treadaway-PWCC
	5:30-6:15	Dinner served	
	6:30-6:45	Day's Review	Frank
	6:45-8:00	*Burning Issues*	Cheryl
Forest Management			
Thursday,	7:30	Prepare lunches/Breakfast served	
June 28	8:00-9:15	Participants work on Projects	
	9:30-10:45	Travel to Canyon Rim Trail	
	11:00-12:00	Canyon Rim Trail **(PLT # 79 – Tree Lifecycle; #80 – Nothing Succeeds Like Succession)**	Bob
	12:00-12:30	Lunch	
	12:30-2:00	Hike Out	
	2:15-3:30	Travel to Burkeville/Wiergate P.O.	Fearless Leaders
	3:30-4:30	Travel to PWCC	
	5:30-6:15	Dinner served	
	6:30-6:45	Day's Review	
	6:30-8:00	PLT Facilitator Training	Cheryl
	8:00	Prepare Multimedia Product	
Friday,	7:30	Prepare lunch if you want/Breakfast served	
June 29	8:30-9:00	Photo session	Cheryl
	9:00-9:30	Post-Test	
	9:30-11:30	Multimedia presentation/Graduation	Fearless Leaders
	11:30-11:45	Final Reflection	Frank
	11:45-12:00	Evaluations/Check out	

HAVE A SAFE TRIP!

2008 Teachers' Conservation Institute
Phase II Agenda
June 22-27, 2008

Inquiry: What are the best uses of Texas forests?

Day	Time	Event	Session Host

Reference PLT Activities are in **BOLD** print. Not all of those activities will be conducted during the week.

Sunday,	3:00-4:30	Arrival, Registration	
June 22	4:30-5:30	Welcome/Ice Breaker	Donna Work
	5:30-6:15	Dinner served	
	6:30-6:45	Welcome/Overview	Ron Hufford/Cheryl Stanco
	6:45-7:45	Soils Activity/Soil Profile **(PLT #70 – Soil Stories)**	Dr. Ken Farrish - SFASU
	7:45 -8:30	Goals & Objectives	Cheryl Stanco
Energy, Soil & Water			
Monday,	7:30	Prepare lunches/Breakfast served	
June 23	8:00-8:15	Pre-Test	Cheryl Stanco
	8:15-9:30	Introduce Energy & Succession Begin Energy Experiment **(PLT #80 – Nothing Succeeds Like Succession, #48 – Field, Forest and Stream)**	Frank Shockley Fearless Leaders
	9:40-10:00	Travel to Beef Creek Falls	
	10:00-11:30	Water Quality -Best Management Practices -Streamside Management **(PLT #44 – Water Wonders)**	Donna Work
	12:00-1:30	Lunch @ Sam Rayburn Dam **(PLT #71 – Watch on Wetlands)**	Melanie Cornelius
	1:30-2:45	Travel to PWCC	
	3:00-4:45	Lake Investigations	Donna
	5:30-6:15	Dinner served	
	6:30-6:45	Review of Day's Concepts	Frank
	6:45-8:15	PLT Facilitators' Roles	Cheryl and Melanie
Forest Types			
Tuesday,	7:30	Prepare lunches/Breakfast served	
June 24	8:15	Depart PWCC	
	8:45-10:00	Characteristics of Forest Types -- Pine Plantation (Young)	Fearless Leaders Bob Lacher
	10:00-11:30	-- Pine Plantation (Closed-in)	Frank
	11:30-12:00	Lunch	
	12:15-1:00	Travel to Turkey Hill Wilderness Area -- Pine/Hardwood -- Bottomland Hardwood **(PLT #48 – Field, Forest, and Stream)**	John Boyette

Day	Time	Event	Session Host
Tues. (cont.)	3:30-4:00	Travel to PWCC	
	4:00-4:45	Break	
	4:45-5:30	Facilitator Training	Cheryl
	5:30-6:15	Dinner served	
	6:30-7:15	Results of Forest Types Investigations	Frank
	7:15-8:00	Begin Multimedia Projects	Cheryl
Wildlife & Cultural Heritage			
Wed.,	7:30	Prepare lunches/Breakfast served	
June 25	8:00-9:30	Travel to Boykin Springs Area/Prescribed Burning	Dr. Whiting - SFASU
	9:55-12:15	RCW cluster/Pitcher Plant Bog	Donna/Dr. Whiting
	12:25-1:10	Lunch at Sexton Pond	
	1:20-2:20	Aldridge Sawmill/Bats **(PLT # 45 – Web of Life; #88 – Life on the Edge)**	John Ippolito – USFS
	2:35-3:35	Travel to PWCC	
	4:00-5:00	Urban Forestry /UWI **(PLT # 36 – Pollution Search; #55 – Planning the Ideal Community; #74 – People, Places, Things; #81 – Living with Fire; #77 – Trees in Trouble)**	Dr. Hans Williams-SFASU
	5:00- 5:30	Break	
	5:30-6:15	Dinner served	
	6:30-7:45	PLT's Energy & Society	Cheryl
	7:45-8:00	Reflections	Frank
Forest Management			
Thursday,	7:30	Prepare lunches/Breakfast served	
June 26	8:00-9:15	Participants work on Projects	
	9:30-10:45	Travel to Canyon Rim Trail	
	11:00-12:00	Canyon Rim Trail **(PLT # 79 – Tree Lifecycle; #80 – Nothing Succeeds Like Succession)**	Bob
	12:00-12:30	Lunch	
	12:30-2:00	Hike Out	
	2:15-3:30	Travel to Burkeville/Wiergate P.O.	Fearless Leaders
	3:30-4:30	Travel to PWCC	
	4:30-5:30	Break	
	5:30-6:15	Dinner served	
	6:30-6:45	Post Test	Cheryl
	6:30-8:00	Prepare Multimedia Product	Cheryl
Friday,	7:30	Prepare lunch if you want/Breakfast served	
June 27	8:30-9:00	Photo session	Cheryl
	9:00-11:30	Multimedia presentation/Graduation	Fearless Leaders
	11:30-11:45	Final Reflection	Frank
	11:45-12:00	Evaluations/Check out	

HAVE A SAFE TRIP!