FORESTS

FALL 2004

ALABAMA'S

A Publication of the Alabama Forestry Commission

RED

Hurricane Ivan Timber Damage Assessment
Tax Impacts of Hurricane Ivan

Seedlings Available from Hauss Nursery

• Tree Planting Procedure for Small Bare Root Seedlings

• Thinning with a Whole Tree Chipper

A MESSAGE FROM . . .



BOB RILEY Governor, State of Alabama

urricane Ivan hit Alabama on September 16, 2004, bringing with it vast damage and destruction, especially in the southwestern part of the state. According to assessments from the Alabama Forestry Commission, over half a billion dollars in timber damage occurred in the twelve counties hardest hit by the storm. The timber damaged by this storm is over twice the amount that was harvested last year in the assessment area. Almost three-fourths of this forestland was owned by private non-industrial landowners. For many of these landowners their financial stability and dreams for the future were swept away in a matter of minutes.

I have established the Alabama Forest Recovery Task Force (AFRTF) consisting of 30 members of state agencies, businesses, and the timber industry to facilitate salvage efforts, maximize the recovery of damaged timber, and limit the loss of timber of forest landowners. The AFRTF will develop plans to move storm-damaged timber to wood storage facili-

ties and work with forest landowners to minimize their losses due to the storm.

Although hit hard by Hurricane Ivan, the forestry community in Alabama will survive this setback and forestry will continue to play a vital role in Alabama's economy. \clubsuit



TIMOTHY C. BOYCE State Forester

n the weeks since Hurricane Ivan hit Alabama, the Alabama Forestry Commission (AFC) has been assessing the vast amount of timber damaged by the hurricane and is making plans for the salvage, restoration, and protection of Alabama's forest resource. The men and women who own timber that was damaged didn't just lose trees – for many of them they lost a long-term investment in their future. Their hopes for a college education for their children and grandchildren, and their dreams of comfort and security in their golden years vanished in almost the blink of an eye.

Although there is no way that we can completely eliminate losses of this magnitude, the Commission is working with the Governor's Forest Recovery Task Force to help these landowners rebuild their future and provide stability for the forest industry. Through this task force we are assisting landowners with salvage efforts as quickly as possible, helping

to find markets for the damaged wood, working to identify short- and long-term storage facilities for the timber, and helping to eliminate the barriers of safely harvesting and transporting this timber.

We are also making plans for long-range forest health problems such as the Southern Pine and Ips Beetles that target damaged timber, as well as the possibility of the introduction of unwanted invasive species in the area. Both now and in the future, the AFC is making arrangements for additional fire protection because of heavy fuel loading from the downed timber and forest debris, and we will be working with landowners to help them with fire protection and mitigation on their property.

The AFC has already held landowner meetings in the disaster areas to provide citizens and members of the forest industry with up-to-date information and to address concerns about timber salvage and forest health. A landowner help line was temporarily established, manned by trained forestry professionals to answer questions for landowners seeking assistance. Because of the important need to provide information to landowners now and in the future, the Commission will dedicate a large section of this issue of the magazine and issues in the upcoming year to disaster recovery.

There are many problems to address as a result of the damage from Hurricane Ivan. Some of them are being taken care of in the present; others will appear and have to be dealt with in the years to come. I can assure you that the Alabama Forestry Commission will remain dedicated to continuing our efforts to meet the needs of our forest landowners and resource managers.



Vol. XXIII, No. 3 Governor **Bob Rilev**

Fall 2004

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Cover: The forest floor is strewn with the gifts of autumn.

Photo by Kim Nix

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The Strongs used indigenous plants including beautyberry, oakleaf hydrangea, and brightly colored wildflowers to landscape around their home.

ellowleaf Farm in Shelby County began simply as a weekend getaway for Mike and Cathy Strong's young family. They were struggling to achieve a balance between family and career but the balancing act was becoming more difficult.

They had enjoyed childhoods when family time often was spent relaxing and enjoying the outdoors. They recalled many summer days roaming the woods using only creativity to play games of action and adventure. As parents, they knew those family experiences were more than recreation. They were significant moments that taught and shaped their character as adults, and forged a powerful family bond. They wanted their sons, John Paul and McDonald, to have the same opportunity.

They bought the first piece of land along Yellowleaf Creek with this vision in mind when the boys were only four and six years old. Often bringing them here for an afternoon or a weekend of

outdoor fun, they also began involving the boys in management decisions by teaching them skills needed to work on the farm. Yellowleaf Farm worked its magic, quickly eclipsing all other recreation as their boys' favorite diversion into their college years.

Almost twenty years after the first purchase, the weekend retreat is a 553-acre TREASURE Forest. Mike and Cathy have lived on the farm for eight years and their sons returned to the Shelby County farm to live after college graduation a few years ago.

In 2003, Yellowleaf Farm was named the Helene Mosley Memorial TREA-SURE Forest Award winner for the 17county northwest region.

Some of the family's many accomplishments are recorded in earlier issues of this magazine. The 2001 winter issue features a cover story on their restoration of more than ten historic log structures. A 2004 issue includes a few of their bridges in an article on affordable permanent stream crossings.

While these are significant and noticeable accomplishments, it is the day-today, year-round commitment to the farm that is the foundation of its success. The family works together daily to improve and maintain Yellowleaf Farm with primary emphasis on wildlife enhancement and secondary emphasis on timber pro-



duction to improve the health of the stand.

"When we bought this farm we didn't know a lot about wildlife or timber management," Mike said. "One of the best things we did was meet local Alabama Forestry Commission and Natural Resource Conservation Service folks. Through the help of many great people, going to seminars, and talking with other landowners, we learned."

The Strongs began with a wildlife strategy to promote and sustain an existing deer population while encouraging turkey, quail, and ducks. They emphasized native vegetation by fertilizing and disking natural honeysuckle and briar, and promoting natural vegetation cover on slash piles for additional food and shelter.

A five-year prescribed burning program yields multiple benefits for wildlife, timber, and aesthetics. It produced significant forage regeneration for whitetail deer and attracted the first turkey and quail population of the farm. Through experimentation, the Strongs learned that an alternating or patterned prescribed burn strategy needed cover for wildlife. Firelanes on all stands assist with prescribed burning and provide edge effect and additional cover for wildlife.





Supplemental wildlife food plots planted in Egyptian wheat, grain sorghum, sedum sorghum, partridge pea, and clover, and roadside plantings of chufa and peas set the table for all types of game and non-game species. Six portable deer feeders are moved frequently throughout the farm, using about 600 pounds of soybeans each week. Four miles of road within the farm is disked, limed, and seeded for wildlife.

The latest wildlife program on the property is a 250-acre licensed bobwhite quail reserve within converted mixed pine-hardwood and open fields. "Three years ago we started visiting state licensed quail preserves and began seriously discussing establishing one here," Mike said. They began carefully developing a quail management strategy to improve and enhance existing landscape.

Bobwhite quail feed primarily on seeds, fruits, insects, and small amounts of green matter. They thrive best where approximately equal amounts of cultivated crops, idle fields out of cultivation from three to ten years, and forestland are found in small, wellscattered fields. To create the optimum environment, the Strongs began by improving cover for the small birds. Thickets, briar patches, and field edges are maintained by mowing, disking, and prescribed burning. Twenty acres of pastureland in the quail reserve allow open areas for fertilized native plants including

honeysuckle. Choice planted foods include Egyptian wheat and par-

Native plants and trees are cultivated to produce generous mast for all types of wildlife: (clockwise: American beautyberry, common persimmon, and Black Tupelo berries.



A salvaged southern pine beetle spot creates a nice edge effect in this pine plantation.

tridge peas. Alternate disking of natural or planted openings each year maintains forbs and legumes.

Three properly located and well constructed lakes provide the Strong family with excellent recreational activities such as fishing and wildlife viewing. Mike and Cathy's home and guesthouse are scenically located on the largest lake, which is managed for largemouth bass and bluegill. Their goal is not to grow trophy bass but simply to make fishing enjoyable. To accomplish this, they work closely with aquatic specialists to maintain a healthy fish population through proper stocking levels and sufficient nutritious foods. To promote the food chain of bass feeding on bluegill, 300 pounds per acre per year of bass under 16 inches are harvested. Threadfin shad and supplemental feeders help feed bluegill from October through April.

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Mike, Cathy, and McDonald Strong on the porch of The Liars' Den, one of several restored log structures on the property.

A one-acre pond stocked only with catfish is also provided with supplemental feeders. Both lakes are fertilized and limed according to pH levels. Adjacent to the fifteen-acre lake is a wetland area for waterfowl management. A water control structure allows water to be released at a desired time, rate, and duration.

A useful and attractive road and bridge system around Yellowleaf Farm provides access for harvesting timber, monitoring the growth and health of the forest, exercising, recreation, education, and observing nature. Their creative use of recycled flatbeds from trucks and trailers, surplus utility poles, and materials found around the farm was included in a recent issue of this magazine as examples of low-cost permanent bridges.

For two decades, Yellowleaf Farm has hosted friends, family, church groups, and scout troops for days and weekends of recreation and fellowship. In recent years, Mike and Cathy have opened their gates for well-attended landowner tours that featured wildlife and forest enhancement, cabin restoration, the quail preserve, and low-cost bridge construction options.

"Being TREASURE Forest landowners creates within us a sense of pride and accomplishment," Mike said. The family was working toward multiple-use forest management from the beginning and saw the program as an opportunity. "It gives us access to information. It has been such a great program for us that we have recommended it to others. It is one of the best programs I have ever been involved in."

Future plans for Yellowleaf Farm are as simple as its beginning - to continue to enjoy it, to live there and share it, and try to learn something new about it every day. Mike says he and Cathy never wake up a day on the farm that they are not grateful to be there. "We talk about it every day – how fortunate we are," he said.

Although John Paul and McDonald now have busy careers, they remain involved in the management decisions on the farm, sharing the work and recreation with their parents just as they did many years ago. The bond formed of love and respect for Alabama's natural resources seems destined to carry the family farm into many future generations. \clubsuit



Several johnny houses provide brooding shelter for quail released into the licensed preserve.



Three properly located and well constructed lakes provide the Strong family with excellent recreational activities such as fishing and wildlife viewing.

HURRICANE IVAN

TIMBER DAMAGE Assessment

By Bruce Springer, Forest Management Division Director & Tilda Mims, Information Specialist, Alabama Forestry Commission

Here a coast early on September 16, 2004, with sustained winds of over 130 mph, causing extreme wind and water damage throughout the southwest counties. High winds and rains continued to sweep across the state for the next 24 hours, causing tremendous timber damage.

Immediately following the storm and in addition to moving in personnel to clear roads, the Alabama Forestry Commission (AFC) began an aerial survey, mapping, and damage assessment of the commercial forestland damaged by the hurricane. While there was scattered timber damage throughout the state, twelve southwest Alabama counties directly impacted by the storm were identified for a more detailed assessment. These twelve counties included: Baldwin, Butler, Clarke, Coffee, Conecuh, Covington, Crenshaw, Escambia, Geneva, Mobile, Monroe, and Wilcox.

On Monday, September 20, the Commission began surveying merchantable forestland in the assessment area using five airplanes with two observers per plane. Only merchantable forests with moderate to significant timber damage were recorded. Observers recorded the location, level of damage, and type of damaged timber. This process took approximately two weeks to complete.

Assessments were then entered into the AFC's computerized Geographic Information Mapping System (GIS) to determine acreage lost. Timber volumes were calculated based on average volumes per acre for pulpwood and sawtimber-sized stands by county, species, and product classification using Forest

(Continued on page 8)

Elishia Johnsor



Inventory Analysis Data (FIA 2000). Timber values were determined using First Quarter 2004 Timber Mart South prices for South Alabama.

These twelve counties contain approximately 2,728,800 acres of merchantable forestland. Approximately 300,000 acres were moderately-to-severely damaged (greater than 20% damage), which incurred a potential estimated loss of \$473,277,304 if not harvested. In addition, the AFC estimated 9,073,600 acres of merchantable forestland in 55 disasterdeclared counties (outside the 12-county immediate impact area) that incurred damage amounting to \$136,950,609.

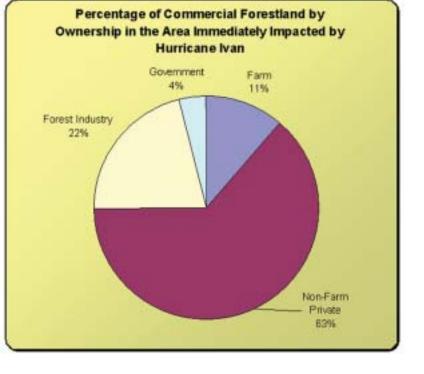
The total timber damage in Alabama caused by Hurricane Ivan is estimated to be \$610,227,913.

These values may not reflect the fair market value of this timber as measured by a certified appraiser. These values do not reflect the loss in time of future harvests or the cost of reforestation. These values do not reflect the increased harvesting costs or subsequent losses that may be incurred by landowners, due to such things as wildfire, insects (especially southern pine beetle), or disease.

To put the damaged timber value in perspective, the stumpage value of wood harvested and processed in the twelvecounty assessment area during 2003 was approximately \$193,715,000. The AFC estimates that damaged timber from Hurricane Ivan is 2.44 times more than what was harvested last year in the assessment area.

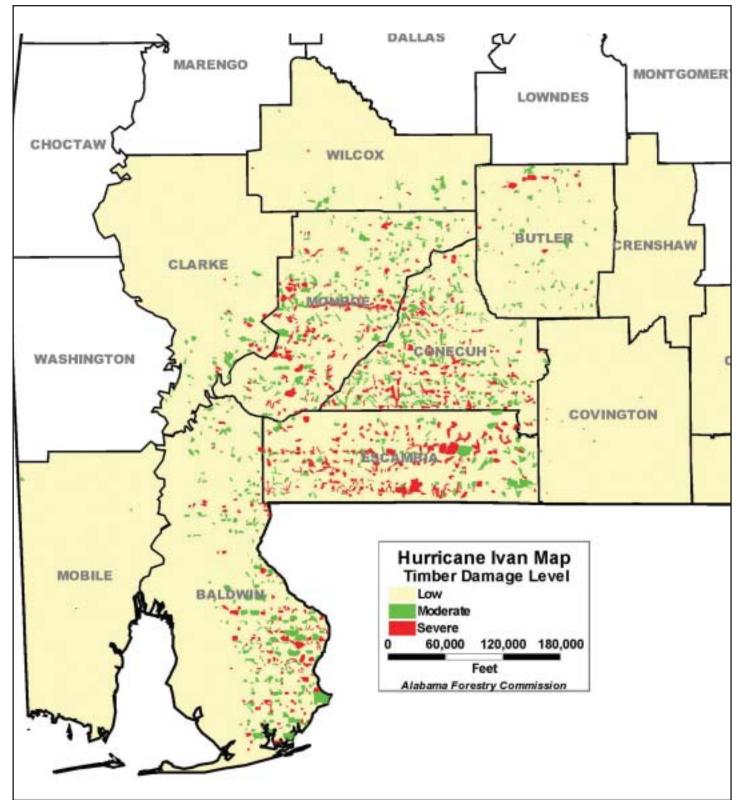
Detailed maps of damaged areas are free and readily available for landowners and loggers to use in the harvest operation. Call the Alabama Forestry Commission office in the county where your land is located or contact the AFC online at **hurricanehelp@forestry.state.al.us.**





Kevin Taylor, Cherokee County Manager and member of one of the Alabama Forestry Commission emergency relief crews, working to clear roads and remove fallen trees from buildings following Hurricane Ivan.

Southwest Alabama Counties Most Severely Effected by Hurricane Ivan



Tax Impacts of Hurricang Ivan By L. Louis Hyman, Fire Staff, Alabama Forestry Commission

urricane Ivan visited Alabama on September 16, 2004. The Hurricane smashed Gulf Shores in the early morning, then proceeded northeasterly across the state, devastating the forests of southwest Alabama. Tree and home damage occurred across the state before the storm exited into Tennessee late that evening. Even when the hurricane winds began to lessen, imbedded thunderstorms produced straight-line downbursts that knocked over trees and snapped power lines across the state.

The storm had a tremendous impact on our state, with effects that will last for several years. There is some help available to homeowners and landowners within the casualty loss regulations of the Federal Income Tax Codes. These rules apply to all casualties, which is damage caused by any windstorm, fire, ice, or theft.

In order to be considered a casualty loss, the damage must occur because of an identifiable event that is "sudden, unexpected, or unusual." Hurricane Ivan fits this definition, and its damages can be considered casualty losses. In this article, we will look at how to handle casualty loss damage to homes, yard trees, forest improvements, and standing timber. We will also look at how to handle the loss and things you can do now.

Damage to Homes

The basic rule for calculating a casualty loss is to determine the decrease in the Fair Market Value (FMV) of the property from just before and just after the casualty event, minus any insurance payments received. The loss is limited to the adjusted "basis" in the property.

For a home, the change in FMV can be done by either getting a formal appraisal of the house after the storm, or by totaling the cost of cleanup and repairs. You can use the cost of repairs as an estimate of the change in FMV if the repairs are actually done; if they are needed to return the property to pre-storm condition, but not increase the value of the property; if the repairs are for damage only; and if the costs are not excessive.

You cannot use cost of repairs if the work increases the value of the property. You can use the cost of repairing a wood shingled exterior wall, but you cannot include the cost of adding a new brick veneer siding.

The actual loss is the cost of repairs, minus any insurance payments received. For most folks, this means the casualty loss will be the insurance deductible, plus any loss that insurance will not cover, such as damage to furnishings from rain, leaking, or flooding.

In addition, the IRS limits losses to the adjusted basis of the property, which includes depreciation of furnishings and equipment. If the house is a total loss, then the casualty loss will be the adjusted basis of house and furnishings less any insurance received. The IRS also has deduction limits, which are outlined below.

Damage to Yard Trees

The same general rule applies to shade trees and yard landscaping. The loss is the change in FMV of the property, less any insurance. This can be estimated by the cost of removing any damaged or destroyed trees and shrubs, less any salvage income (from firewood sales), and the cost of replanting or pruning. Again this is limited to the basis of the property. For very large shade trees or very special specimen trees, an appraisal of the property may show a larger change in the FMV of the property with the loss of the tree. There are certified arborists who can do this special appraisal. Again, the loss is limited to the basis of the entire property.

Damage to Forest Improvements

Part of the impact from the hurricane was damage or destruction of forestland improvements such as roads, bridges, fences, gates, and shooting houses. Similar to home damage, the loss is the change in FMV of the property, or it can

be based on the cost of clearing and repairs, limited by the basis in the land. These costs must be reasonable and necessary to restore the property to its condition prior to the storm. Any insurance payments should be deducted from the cost to get the loss.

Damage to Standing Timber

Again the theory is that the casualty loss is the change in FMV, less any reimbursement, limited to the basis. A deduction is allowed only if the damage renders the timber unfit for use, or results in it being sold for less value than it was appraised for prior to the storm.

The landowner must attempt to salvage the damaged timber, even though it results in saw timber trees being sold as pulpwood, with depressed stumpage prices. If no buyers are willing to purchase the trees, the landowner needs to document contacts made and their refusal to purchase.

The timber loss is the change in value from what it

was appraised prior to the storm, to its salvage value, or zero if it cannot be salvaged. The big limit on this is the BASIS of the timber. For most persons, the basis is very small, either because the stand was natural regeneration, or the basis was used up by the reforestation tax credit and amortization, or by the fact that the land was purchased many years ago. Let's look at an example. John owns 40 acres of forestland, with 200 MBF (thousand board feet) of saw timber, with a pre-storm value of about \$50,000. His adjusted timber basis was \$2,000. The hurricane knocked it all down. If he could not salvage the timber, his casualty loss would be \$50,000 or \$2,000 basis, which ever is smaller. If he could sell his wood for pulpwood salvage, he might get \$3,000. In that case, the casualty loss would be \$50,000 less \$3,000 equals \$47,000, or \$2,000 basis. In either case, the loss would be limited to the basis in the timber or \$2,000.

casualty loss and the later salvage as two separate events. First, the landowner calculates the casualty loss using either the change in FMV or the basis. He then books this as a loss deduction against ordinary income. This deduction uses up all the basis in timber on the tract. Secondly, he sells the salvage timber. This sale income is netted against any remaining timber basis (in most cases – zero) and an involuntary conversion gain is incurred. This gain can be deferred (see next section) or treated as capital gains income.

Deferring Involuntary Conversion Income

Under a Revenue Ruling issued in 1980, known as the Hurricane Frederick Rule, if a landowner has Involuntary Conversion gains, and uses that income to buy replacement property, the "gain" is deferred until the new timber is cut. This ruling was codified as IRC Section 1033.

What this means is that when a landowner has a severe casualty loss and salvages his timber, the landowner can re-invest in trees and not pay taxes until the trees are later sold. The re-investment can be either the purchase of new forestland with standing trees, or reforestation (site preparation and replanting) of the damaged timber stand.

There is a two-year replacement period for this benefit. If the trees are salvaged in 2004, you have until January 1, 2007 (or January 1, 2008 if salvaged in 2005) to replace the timber. The new stand will receive the basis of the original stand (which will

be \$0) so that when you sell the timber years from now, you will pay capital gains tax on the entire sale income. If you do not spend all the salvage income for timber replacement, you must pay capital gains tax on the difference. If you spend more than the salvage income, the rest of the cost, above the salvage income, is put into the new basis for the stand.

> (Continued on page 12) Alabama's TREASURED Forests / 11



Involuntary Conversion Income

In the example above, the landowner was able to salvage his timber, and the income he received would be considered involuntary conversion income. What this means is that the timber was sold against his wishes; he had to sell because of the hurricane damage.

In a recent court ruling (Weyerhaeuser Company vs. the United States), the court ruled that a landowner should treat the

Reporting Casualty Losses

Casualty losses are reported using IRS Form 4684 and on personal tax Form 1040. Generally, the casualty loss is reported in the tax year in which the casualty occurred. Any salvage income is either reported in the year in which it is received, which may be the next year, or a statement of deferral of casualty income is made. If you choose to defer taxes on casualty income, you must attach a written statement to your tax form for that year. The statement must list the date and details of the casualty, the income you received, and your intention to use that income to purchase replacement property under Section 1033.

The IRS separates tax treatment of casualty losses on "personal use" property from business or investment properties. Personal use property includes homes, real estate, and personal items that are not purchased as an investment or used in a business. Casualty losses on personal use properties must first be reduced by \$100 per event, then further reduced by 10 percent of the taxpayer's adjusted gross income.

For example, your home was flooded with \$10,000 damage that your insurance would not cover, and your family's adjusted gross income was \$70,000. Your loss would be \$10,000 less \$100, less 10% of \$70,000, for a deductible loss of \$2,900.

If the property is within a Federally Declared Disaster Area, which for Hurricane Ivan includes the entire state of Alabama, you can choose to deduct your casualty loss on an amended tax return for the previous year. Usually this results in lowered income for that year, and an additional tax refund. The taxpayer can otherwise choose to claim the loss in the year of the casualty, and wait until the next spring to get a possible refund. The advantage of filing an amended return is that the refund may come faster than waiting until next April.

For a disaster occurring in 2004, you have until April 15, 2005 to claim a casualty loss on an amended return for tax year 2003.

What Do I Do Now

Wow, this is a lot of information in a very short space. What should you as a landowner with hurricane damage do first? There are some simple steps each of us can take. Make up a Hurricane Ivan folder. First, document the loss. Take pictures, collect newspaper clippings, and print out web pages that show the hurricane and what it did to your property and area.

Second, collect financial records and advice. Figure the basis in your house, property, and timber. Save copies of insurance checks, salvage income, and repair costs. (Also, make a copy of this article and put it into the file for later reference.)

Third, salvage what you can, and repair what you can. Get the best price possible for salvage, which will be significantly lower than prices were last summer. Work with your logger and keep records. If you sell by the ton, make sure



to get copies of the trip tickets, to document the volume removed. Also make sure the number of truckloads leaving your property equals the number of trip tickets you receive. There will be an increased amount of timber harvesting over the next year, and loggers and mills might get confused as to which load came from which landowner.

Fourth, get with a Certified Public Accountant (CPA) early. Have your CPA determine if an amended 2003 return claiming the casualty loss would work for you. Share this article to help the CPA plan what is best for you. Spring will be real busy for CPAs with so many other landowners in the same boat, but your accountant may have time to help you now.

Hurricanes, storms, and fires are facts of life in forestland management. Your TREASURE will survive.

WHAT IS BASIS?

This article uses the phrase "adjusted basis" several times. What does this mean?

Basis is the cost of the property, when you acquired it. You acquire basis in three ways: You can buy the property, you can inherit the property, or you can build the property, including planting trees.

When you buy a property, the cost is allocated to the different parts of the property, such as the land, any houses or structures, and the timber. A buyer would allocate part of the purchase price to each area and record that value.

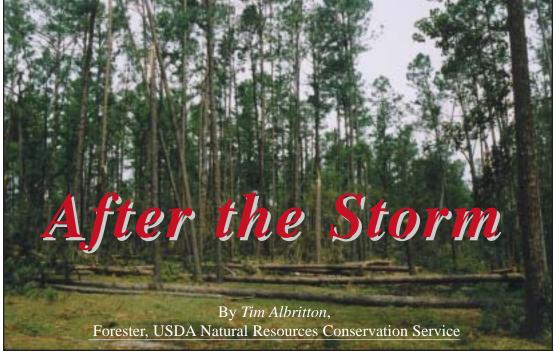
When you inherit a property, the basis is the fair market value of the property, and all the parts, on either the date of death or when the estate is probated (within nine months of death). This stepped-up basis is the only time the value of the property is used instead of the cost of acquisition.

The third way to get basis is to build something. When you build a house on a lot, you create basis in that structure. Similarly, when you plant trees on your land, the new trees have a basis, which is the cost of reforestation.

Basis is adjusted over time by either adding more to it by building new things, or by selling off parts of the property, such as a timber thinning. $\widehat{\mathbf{m}}$

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Photo by Elishia Johnson



other Nature can wreak havoc not only on forestland but on homeowners as well. Whether by tornadoes or hurricanes or snow or ice, weather damage to trees can be very costly. If you have experienced storm damage, assessing the damage to your trees should be your first step.

Obviously trees blown down or broken at the main stem will have to be removed. But what about those trees still standing?

Here are some of the types of damage to look for: broken branches, torn bark, partially uprooted trees or leaning trees, and lightning damage.

Repairing the damage now can reduce the chance of insect attack or invasion of disease organisms. Violently broken limbs can cause torn or stripped bark and expose the cambium. The cambium is the thin layer of living tissue beneath the bark where growth occurs. This type wound provides easy access to the cambium for a

variety of organisms not otherwise able to penetrate the bark.

To improve appearance and hasten wound closure, carefully use a chisel or sharp knife to trim ragged edges of the dead or dying bark. Care should be taken not to expose any additional cambium tissue.

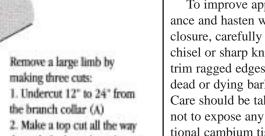
Pruning the jagged remains of broken limbs is a common repair that homeowners can make after a storm. This will reduce the risk of decay pathogens from entering the tree. The proper pruning technique, in most cases, is to cut off the limb stubs where they join the next largest branch or the trunk. Do not simply cut immediately below the break.

While you are pruning broken branches, consideration should be given to pruning limbs on the opposite side. This will help to balance the tree and improve aesthetics. With larger trees or trees in dangerous positions, you should consult a professional tree surgeon or arborist.

When pruning large limbs, care should be taken to prevent the limb from tearing or stripping bark from the trunk. This can be avoided by using a three-step method of pruning. The first cut is a partial cut, made on the lower side of the limb, one or two feet from the trunk. The second cut is made on the top of the branch a few inches out from the first cut. This should allow the limb to fall without stripping the bark back to the trunk. The pruning process is completed by making the third cut next to the trunk, just outside the branch collar.

Young trees that have been uprooted or wind thrown can often be saved. This is accomplished by removing excess soil to allow room for the roots to be placed back in the original location. Raising the tree back up to a vertical position can be accomplished with a come-along or winch. The tree should be properly braced in two or three directions. Cover the wires with rubber or plastic to protect the bark. Water the tree roots fully to remove any air pockets. Then add a fresh layer of mulch 1 to 3 inches deep and extending out 3 to 4 feet. Fertilizing will help, but don't over do it.

The hurricane is gone, but you can minimize the damage done to your prized shade tree with a little tender loving care and the proper techniques. $\boldsymbol{\hat{\varphi}}$



through the branch, within 1" of the undercut 3. The final cut should be just beyond the branch collar (A)

This diagram illustrates the proper pruning of broken limbs. Courtesy of International Society of Arboriculture

000h, Seer!!!



By Alan Williams, Forest Management Specialist, & Ryan Prince, Wildlife Biologist, Alabama Forestry Commission

n the late 1930s an "expedition" of biologists and technicians set out for Tallapoosa County in Alabama to determine if deer were present in the county. After several days of searching they were unable to find a deer or even a deer track. In that time frame, most counties in Alabama were absent of deer.

Later in the century, through a combination of research, restocking efforts by the Alabama Department of Conservation and Natural Resources (ADCNR), and change in land use practices, there was a population explosion of deer. Numerous research projects focused on deer population dynamics. In one such project in another state, six deer (four does and two bucks) were released in a 1200-acre fenced enclosure. Six years later the population was a minimum of 160 deer. Other research projects of the time had similar results. Given the proper habitat and conditions, deer can multiply at an exponential rate.

According to some sources the deer population in Alabama in 1950 was approximately 3,000 animals. In 1960 there were two reported bow kills. Today our population is near 1.5 million deer with an annual bow kill in excess of 40,000. The increased population trend continues. The absence of natural predators (cougar and wolves) and the increase of habitat fragmentation create a near-perfect environment for reproduction and survival.

In some areas of Alabama deer have become pests. Urban areas with high deer populations can be a nightmare for homeowners. Shrubbery, ornamentals, and other landscaped plants may be damaged or destroyed. Also deer create a hazard to many of Alabama's motorists each year resulting in injury and even death. Nationwide, the average cost to repair a vehicle involved in a car-deer collision is between \$2,000 to \$2,400.

Increasing deer populations have been a blessing to the hunting industry and a curse to some who don't have an outlet to solve localized overpopulation problems.

Desired populations vary depending on long-term and short-term land objectives. Generally, a farmer planting vegetables or soybeans for harvest does not want his profits lowered through excessive deer damage. On the other hand, a tract managed for timber might have a tolerance for higher deer numbers. With an approximate population of one deer per 16 acres it may be time to encourage sportsmen and landowners to consider more sound wildlife management practices.

Deer damage can be addressed through the use of short- and long-range measures. A temporary remedy in an urban setting could be an electric fence, frightening devices, odor or taste repellents, or a chain link fence depending on the specific situation. A more permanent solution could include planting different flora and placement of plantings. However, the true burden of controlling the deer population lies on the shoulders of the sportsman. They should be dedicated to managing the deer herd for improved health. This can be accomplished in part by keeping good accurate records, aging and weighing harvested deer, maximizing habitat conditions and diversity, and consulting with a natural resource professional. Harvesting of one third of the deer population each year will help maintain it within its carrying capacity.

There are several sources of information available to the land manager. Foresters and wildlife biologists are available through the Alabama Forestry Commission, Department of Conservation and Natural Resources, and through private consulting firms. Contact one of these professionals for recommendations.



This map illustrates the remnant distribution of the deer population in Alabama before restocking efforts began.

Reprinted with permission from **Managing Wildlife** by Greg and Deborah Yarrow, 1999, Alabama Wildlife Federation.

White-tailed Deer Densities in Alabama, 2000



The secretive nature of white-tailed deer makes it impossible to determine precise population densities over wide areas. This map depicts deer densities across a broad landscape in Alabama, based on information available in the year 2000. Actual densities in a localized area may be considerably different. Population levels are expected to be in a continuous state of change.

Reprinted with permission of the Alabama Department of Conservation and Natural Resources, Wildlife and Freshwater Fisheries Division.



Alabama's TREASURED Forests / 15

E.A. Hauss Nursery Seedling Species

he Alabama Forestry Commission's E.A. Hauss Nursery in Atmore is now taking orders for seedlings for the 2004-2005 planting season. Pines, hardwoods and wildlife and habitat foods are available. For additional information call (251) 368-4854.

PINES

Loblolly Pine (Pinus taeda)

The principal commercial southern pine; a large, resinous and

fragrant tree with rounded crown of spreading branches. Reaches heights of 80-100 feet. Loblolly pine is native

in 15 southeastern states. Among the fastest growing southern pines, it is extensively cultivated in forest plantations for pulpwood and lumber. One of the meanings of the word loblolly is "mud-puddle," where these pines often grow. *Habitat:* From deep, poorly drained flood plains to well drained slopes of rolling, hilly uplands. Forms pure stands, often on abandoned farmland.

Longleaf Pine (Pinus palustris)

Large tree with the longest needles and largest cones of any eastern pine, and an open, irregular crown

one row added each year. Attains heights of 80-100



feet. Longleaf pine is a leading world producer of naval stores. The trees are tapped for turpentine and resin and then logged for construction lumber, poles and pilings, and pulpwood. The seedlings pass through a "grass" stage for a few years, in which the stem grows in thickness rather than height and the taproot develops rapidly. Later, the elongating, unbranched stem produces very long needles. *Habitat:* Well drained sandy soils of flatlands and sandhills.

Slash Pine (Pinus elliotti)

Large tree with narrow, regular, pointed crown of horizontal branches and needles. Reaches heights of 60-100 feet. An important species for both lumber and naval stores and one of the fastest growing Southern pines. Its beauty makes it popular as a shade and ornamental tree. *Habitat:* Low areas such as pond margins, flatwoods, swamps or "slashes," includ-

ing poorly drained sites.

1st Generation (cycle) — These

seedlings are grown from seed collected from our grafted orchards. These orchards are established using selected high performance parent trees from variable natural stands. These seedlings are often referred to as "improved" pine seedlings.

1.5 Generation (cycle) — These seedlings are grown from seed collected from our grafted orchards which have been established using the best performing parents from our 1st cycle orchards.

2nd Generation (cycle) — These seedlings are grown from seed collected from our grafted orchards using the best performing crosses and/or parents from our first cycle orchards based on progeny test data.

HARDWOODS

Cherrybark Oak

(Quercus falcata var. pagodifolia) Cherrybark oak is a variety of southern red with pagoda-shaped leaves having 5-11 broad, shallow lobes with whitish hairs beneath, and smooth cherry-like bark with short ridges. Usually attains a height of 50-80 feet. Belongs to the red oak group.

Yellow and red fall colors. Habitat: Rich bottomlands and along streams. Also occurs on well drained lowland soils.

Nuttall Oak (Quercus nuttallii)

Tree with swollen base and open crown of spreading to horizontal or slightly drooping branches. Important red oak species for wildlife and hardwood production. Leaves turn brown in fall and shed gradually in early winter. Achieves height of 60-100 feet. Not distinguished as a species until 1927, when it was named for Thomas Nuttall, British-American botanist and ornithologist. The foliage resembles pin oak. Habitat: Wet, poorly drained clay soils of flood plains.

Shumard Oak

(Quercus shumardii)

Large tree with straight axis and broad rounded, open crown.



Reaches height of 60-125 feet. Leaves turn yellow, red and brown in the fall. Important timber tree; a handsome shade

tree. A member of the red oak group. *Habitat*: Moist, well drained soils including flood plains along streams; also on dry ridges and limestone hills.

White Oak

(*Quercus alba*) Tall, beautifully shaped tree with grayishwhite bark. Leaves

are bright green above, whitish or graygreen beneath, turning red or brown in fall, often remaining attached in winter. Usually reaches a height of 60-80 feet. The most important lumber tree of the white oak group, its high-grade wood is useful for all purposes.

Habitat: Tolerant of many soils: sandy moist bottomlands, rich upland stony ridges; prefers moist soils.

(Continued on page 30)

Tree Seedlings Available from AFC's E. A. Hauss Nursery

2004-2005 Season Prices

PINE SEEDLINGS Price per 500 Price per 1000				
Loblolly				
Coastal 1.5 Generation	\$25.00	\$39.00		
Coastal 2nd Generation	\$28.00	\$44.00		
Piedmont 2nd Generation	\$28.00	\$44.00		
Slash 1.5 Generation	\$25.00	\$39.00		
Longleaf 1st Generation	\$45.00	\$70.00		

HARDWOOD and WILDLIFE PACKAGES

Cherrybark Oak	a 1dOut	Crab Apple	Persimmon
Nuttall Oak Shumard Oak SoldOut	White Oak <u>SoldOut</u> Yellow Poplar <u>SoldOut</u>	Dogwood	Sawtooth Oak
Shumard Oak Source	Yellow Poplar Some	Overcup Oak	Chinese Chestnut
	(Please order in multiple	es of 25, 100, 500, or 1000)	
Prices: \$15.00 per 2	5 \$35.00 per 100	\$135.00 per 500	\$200.00 per 1000
Thunber	rgii Lespedeza ^{SoldOut} \$26	5.00 per 500 \$42.0	0 per 1,000

Ordering Information

- •**TO PLACE YOUR ORDER** Call Hauss Nursery at 251-368-4854 or your county Alabama Forestry Commission office. OR visit our website at www.forestry.state.al.us where you can print out an order form and fax it to 251-368-8624. You will receive an acknowledgment within five to seven working days.
- •UPON RECEIPT OF ACKNOWLEDGMENT Remit a 10% non-refundable deposit if your order is for more than 50,000 pines or 10,000 hardwoods. Remit full payment for all other orders.
- •**PAYMENTS** All payments/deposits are due within 30 days of the acknowledgment date. We accept credit cards and checks or money orders payable to the Alabama Forestry Commission. For proper credit, please note your customer ID number on your payment. We do not accept cash.
- •AVAILABILITY Orders are available for delivery during December, January, and February only.
- •HAUSS NURSERY PICK-UP Schedule your delivery at least two weeks in advance by calling 251-368-4854.
- •UPS DELIVERY Orders of less than 2,000 hardwood seedlings are shipped via UPS or are available for pick-up at Hauss Nursery. Select shipping date from calendar enclosed with your acknowledgment and return with your payment. UPS charges (available upon request) are based on the number of seedlings shipped per order.

•COOLER DELIVERY - All pine seedlings and orders of more than 2,000 hardwood seedlings may be shipped to our cooler locations in Atmore, Autaugaville, Florence, Huntsville, Opelika, Ozark, and Tuscaloosa. Schedule your delivery at least two weeks in advance, then call your cooler location to verify delivery.

4165 Ross Road • Atmore, Alabama 36502 • Phone: 251-368-4854 • FAX: 251-368-8624 E-mail: haussnursery@forestry.state.al.us • Web Site: www.forestry.state.al.us Business Hours: Monday-Friday 7:30a.m. - 4p.m.



Tree Planting Procedure for Small, Bare Root Seedlings

By David Mercker, Extension Forester, The University of Tennessee

ree seedlings receive foremost care while growing in a managed nursery: fertile soil, ample moisture, and weed/insect and disease control. Lifting seedlings out of this comfort zone shocks them. Consider: soil is dislodged from their roots, they are handled several times, packaged, shipped, exposed to threatening wind and heat, placed in planting bags or machine buckets, roots unveiled to open air, replanted in often very harsh soil, then left to high temperatures with the hope of adequate precipitation for sustenance through the first few growing seasons.

If planting steps are not very carefully followed, the mortality rate rises.

"It is better not to have planted, than to have planted incorrectly."

Seedling survival is more likely if attention is given to the following:

Plant in Late Fall or Early Winter

In southern locations, November, December, and January are ideal months for planting seedlings (later months for northern locations). Tree roots grow during cooler months. By planting well before the growing season, roots will settle into their new environment, elongate, and begin preparing to supply water to the foliage when warmer temperatures arrive.

Plant on Cooler Days

Temperatures ranging between 35 -60° F are ideal. Higher temperatures could cause transpiration rate to increase and dry the roots. (Transpiration is the process by which water vapor leaves a living plant and enters the atmosphere). Lower temperatures could freeze the roots, causing mortality.

Protect Seedlings During Vehicular Transport

Transporting seedlings in an enclosed vehicle is preferred to open-air transport. If open-air must be used, cover the bags of seedlings with a tarp. High winds increase transpiration rate, rapidly drying the roots. It is best to transport on cool days or at cooler times of the day.

Proper Seedling Storage

Seedlings will remain healthier if they are stored in an enclosed cooler where temperature and moisture are regulated. Keeping the air temperature low and humidity high will slow transpiration. Maintain air temperature at 35 - 38° F. Find a place to store your seedlings well ahead of their arrival from the nursery. When stacking bags of seedlings for long storage periods, criss-cross them, leaving large air gaps for better ventilation. Otherwise, heat will build near the center of the bags. If controlled facilities are not available or if the seedlings will quickly be planted in the field, store the seedlings in a cool, dark location, away from the wind (cellar, barn, etc.). Periodically inspect the roots and needles to determine if watering is necessary.

Seedling Treatment at the Planting Site

Once on-site, seedlings can deteriorate rapidly. High air temperature and wind place stress on seedlings (particularly when humidity is low). Park your transport vehicles in the shade, in lower spots, shielding the seedlings from destructive elements. Insulation tarps provide desirable protection. Avoid opening seedling bags until near the time of planting. Avoid exposing roots to the open air for very long. If air temperatures reach 75° F, planting should cease.

Large portable coolers are ideal for field storage of seedlings (a good consideration when selecting a contractor).

Methods of Planting

Two methods are used for planting tree seedlings: hand planting and machine planting. Both are acceptable. Hand planting is more common on steeper terrain or in forested areas that have recently been harvested. Hand tools are used to penetrate the soil and create an opening for the roots. Once the seedling is planted, the hole is resealed with the tool and foot pressure.

A machine planter is normally pulled behind motorized equipment with a 3point hitch. The planter has a coulter (slicing through the soil), a foot (pulling the machine below surface level), trencher plates (opening the soil for seedling placement), and packing wheels to re-close and compress the soil. Machine planting as compared to hand planting, generally: has slightly better survival rate, delivers more consistency in spacing, and works best when converting old fields or pastures to forest.

Care should be taken not to "J" root seedlings, but rather leave the root in a natural, vertical position. Plant seedlings deep, at least to the original level planted while in the nursery (as noted by the darkened ring where the lower stem meets the roots). It's better to plant slightly too deep than too shallow. Make sure that all air pockets are sealed by applying pressure to the soil surrounding the seedling. Straighten seedlings as needed.

Conduct a Survival Check

For the first two summers after planting, conduct a survival check. If costshare funds were used to establish the planting, it may be necessary to maintain a certain level of live seedlings. The original planting plan should have specified this minimum survival level. Your forester can assist with your survival check. \clubsuit



Care should be taken not to "J" root seedlings, but rather leave the root in a natural, vertical position.



Pine and hardwoods seedlings, as well as wildlife and habitat foods are available now for the 2004-2005 planting season at the AFC's Hauss Nursery.



Patience, Planning, and Hard Work

By Tilda Mims, Information Specialist, Alabama Forestry Commission

hen growing up on a Tennessee farm, Glenn Whiteside knew he wanted a place of his own one day. Working as an agricultural sales representative for a chemical company fostered that interest, as he observed Alabama farmers using the latest tech-

nology to convert land into productive, working farms.

He looked around for more than a year before discovering an old cotton farm in Lawrence County. The farm had about 95 acres in marginal cotton land and the rest was a tangle of cutover and sweetgum. A few whitetail deer and quail used the property, but resident wildlife was scarce. When Glenn looked at the property, however, he saw potential.

Before discussing he walked almost

every acre with Billy Frost of the local Natural Resources Conservation Service (NRCS). He later met with Alabama Forestry Commission and Farm Services Agency representatives to discuss the land's opportunity for wildlife habitat and cost-share assistance. In January 2001, he purchased the 263-acre farm near the Flatrock community.

Less than four years later, the air is alive with a wonderful variety of songbirds and soft mud is speckled with animal prints. An old logging road cleared

smooth enough for a stroll opened up the canopy, prompting a colorful display of native wildflowers including larkspur, St. John's wart, and Indian pink. Thinning nearby pine plantations encouraged greater growth of forbs in those areas while providing food, nesting, and brood rearing habitat for quail.

before planting. Genetically modified soybean and corn allow herbicide to be sprayed right over the tops of the plants, killing only undesirable vegetation.

This summer's big project was developing a 150-yard levee to impound water for waterfowl. Before planning the levee, Glenn contacted the local NRCS for



TREASURE Forest landowner Glenn Whiteside looked to Alabama Forestry Commission professionals for guidance with his property. Left to right: Les Fields, Lawrence County Ranger; Whiteside, Bruce Frederick, Lawrence County price with the owner, Ranger; and Johnnie Everitt, Colbert-Lawrence County Manager.

technical guidance on pertinent federal and state laws. The twoacre moist area will be planted in millet and soybeans. A water control structure in the levee will allow water to be released at a desired time, rate, and duration. Prescribed burning, disking, or mowing every two to three years will set back plant succession and increase desirable seedproducing plants in the area.

Glenn steadily eliminates undesirable hardwoods using the hack and squirt method. Eleven species of oak, including 100 sawtooth oaks, are planted strategically around wildlife openings and yearround food plots. Fertilizing has greatly improved productivity of existing wildlife foods and mast trees.

No-till planting is used throughout the farm except in areas for turkey to dust. Glenn finds it easier, less expensive, and reduces erosion. A pre-treatment of the herbicide Touchdown knocks back weeds

This farm is Glenn's hobby and he does all of the work himself. He shares it with family and friends, and particularly enjoys hosting youth hunts and having church friends visit. His goal is a simple one - wildlife habitat enhancement. "My goal is not to have a showplace; my purpose is to enjoy wildlife," he says.

While it may not be a showplace yet - Glenn's enthusiasm and vision for the farm make it easy to believe his planning, hard work, and patience will continue to craft a haven for wildlife. $\boldsymbol{\Re}$



Red-Cockaded Woodpecker

By Jeremy Lowery, Wildlife Biologist, Wildlife and Freshwater Fisheries Division, Alabama Department of Conservation and Natural Resources

he red-cockaded woodpecker (RCW), Picoides borealis, was once a widely distributed and relatively abundant species across the southeastern United States. With the loss of preferred old growth pine habitat and changes in land management practices beginning in the early 1800s, the decline of the species began. The United States Fish and Wildlife Service listed the RCW as an endangered species in 1970. By the time of listing, the species had declined to fewer than 10,000 individuals in small, widely scattered, isolated populations. Despite protection under the Endangered Species Act of 1973, the numbers of RCWs continued to decline throughout the 1970s and into the 1980s in many parts of the species' range.

The RCW is a relatively small woodpecker averaging 20 cm (8 inches) in length and weighing approximately 40-55 grams (1.4 to 1.9 oz.). It is black and white with prominent white cheek patches which extend from the base of the bill to the back of the neck. It is black above, with black and white barring on its backs and wings. The throat and belly are white to gravish white with distinct black spots along the sides of the breast. Bills are black and legs are gray to black. Plumage in males and females is very similar and difficult to distinguish in the field. Adult males have a few red feathers located between the black crown and the white cheek patch but these feathers are not easily seen unless the bird is in hand.

RCWs are endemic to the southeastern U.S. Their range originally extended from Maryland and Kentucky west to Missouri and south to Texas and Florida. Within their range, red-cockaded woodpeckers *Fall 2004*



require specific habitat types for nesting and feeding. The preferred nesting habitat includes mature or old growth live pine trees, with an open, park-like environment with very few hardwoods present. In this habitat, RCWs excavate cavities that are approximately 6-10 inches deep and 3-5 inches in diameter in living pine trees. Old growth pines are selected for cavity excavation because of their susceptibility to the red heart fungus that makes excavation easier. However, the excavation process usually takes several months to complete. RCWs also prefer to feed on the boles of living pine trees greater than 9 inches in diameter.

Red-cockaded woodpeckers live in small groups that share and actively defend small territories throughout the year around their nesting and roost trees. RCWs are one of the few bird species found in the United States that exhibit cooperative breeding. Cooperative breeding refers to a social system that involves some mature individuals that may be assisted by others in the rearing of young. In these breeding systems, a mated pair of adult woodpeckers may function alone, be accompanied by the current year's offspring, or be assisted by a few helpers which are usually the male offspring from the previous year.

The red-cockaded woodpecker is a highly monogamous species that nests once a year, but is capable of re-nesting if the first nest attempt fails. Approximately 20 percent of all nesting attempts are unsuccessful. Predation, nest desertion, and kleptoparasites seem to be responsible for most nest failures. Age is also strongly correlated with reproductive success. Successful nesting attempts usually produce two to five eggs, which are laid in late April to early May. After 10 days of incubation, the eggs will hatch and young are capable of flight in 24-29 days.

Today, the value of timber precludes the maintenance of mature pine forests in most of the RCW's range. Also, the suppression of wildfires and decreased use of prescribed burning has lead to the encroachment of hardwood mid-story into mature pine stands, which deters utilization by RCWs. The remainder of the population is found primarily on publicly owned and managed lands which are dedicated to the preservation of the red-cockaded woodpecker.

For more information on the red-cockaded woodpecker, please contact Jeremy Lowery, Wildlife Biologist, at (205) 468-3172. ♥

Thinning With a Whole-Tree Chipper

By Tilda Mims, Information Specialist, Alabama Forestry Commission

labama's 4.5 million acres of pine plantations represent an abundance of fiber and timber production opportunities for the private landowner. As these pines

begin to reach pulpwood size, landowners often consider a basic pine management tool – thinning.

Thinnings can be thought of as intermediate harvests where some trees are cut from a stand several years before the final harvest. Through thinning, reduced competition for light, water, and nutrients promotes growth rate, size, and value of the remaining trees.

In Alabama, a typical pine plantation thinning is deferred until 15-20 years into the life of the stand when trees are large enough to give a significant amount of marketable wood. This delay poses several disadvantages to the landowner. Obviously, one would prefer to have large sawtimber trees as quickly as possible. Delaying thinning delays rapid growth. Also, the wait often places the stand at risk for hazards resulting from overcrowded conditions, such as wildfires fed by excessive dry fuels on the forest floor, and the probability that southern pine beetle infestation will occur.

Pruning pines at age 10-11 years is gaining acceptance, but by the time pines are thinned – making the stand more accessible – trees are beyond the optimum time for pruning.

Within the last ten years, the widespread introduction of whole-tree chipping technology in the woods by the forest industry has opened the possibility of thinning young pine plantations much earlier in the rotation.

When thinning using a whole-tree chipper (WTC), trees are harvested with a 22 (Alabama's TREASURED Equation)

feller-buncher, skidded to a decking area, and chipped onsite, producing a product suitable for use in pulpmaking and as boiler fuel. Chips are blown into trailers and trucked to the purchasing mill. Finer



BEFORE: The day of the thinning, the cleared row is free of small wood, brush, and vines.



AFTER: Three months after thinning, new herbaceous growth quickly appears as sunlight reaches the previously dark forest floor.

chips made from the tops and limbs are blown from the grinder into a large enclosed truck for transport to a boiler or storage facility.

Evergreen Forest Products, Inc. conducts whole-tree chipping for International Paper's Prattville mill in Autuaga County. For many years, trees as young as age 10-11, depending on the growth of the stand, have been successfully thinned with this equipment on industry land. They use a combination of systematic and selective cutting. In this method, every

fifth row is removed and slow-growing, poor-quality timber between the cut corridors is harvested as well. The feller-buncher enters the stand from the cleared row, fells and accumulates the marked trees, along with all small wood, brush, and vines, etc., for grapple skidders to pull to the chipper. The access corridors also provide openings for later thinning operations.

Kevin Caton, procurement manager for Evergreen Forest Products, says the practice is total utilization of the stand. "Inwoods processing of whole trees gets a higher yield from the harvested acreage because bark, limbs, and non-merchantable stems are used as well." Their operation leaves a very clean stand ready to respond rapidly to the available sunlight and the reduction in competition, he added.

International Paper forester Keith Luker says there is a fundamental economic benefit of thinning earlier in the life span or rotation – more desirable trees live to grow for the full rotation. "Thinning 10-11 years into the life of the stand has given us more

surviving trees to manage," he said. "We get in while the trees are young to thin out competing vegetation and cull trees."

Managing more healthy trees improves the total financial return by producing more large trees suitable for sawtimber and other solid wood products, said Luker.

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Timber is a long-term investment. A stand may not reach maturity for 25-30 years down the road. If you thin your timber, a financial return is possible early in the rotation – many years before the final harvest. Stand value is enhanced by thin-

ning out slow-growing, poor-quality timber and by emphasizing production of sawtimber-size trees through optimum growing conditions for the remaining trees. Whole-tree chipping is an option for landowners to enjoy all the benefits of thinning – increased growth, greater survival, and less risk of insect and disease infestation – earlier in the life of the stand. \clubsuit



Grapple skidders drag trees and slash to the whole-tree chipper.



Chips are blown into trailers and trucked to the purchasing mill.



Finer chips made from tops and limbs are blown from the grinder into a large enclosed truck for transport to a boiler or storage facility. *Fall 2004*



The whole-tree chipper processes the stem and discards small limbs and slash.



Tops and limbs are fed into a grinder.



Pine chips.

Photos by Tilda Mims

Planting Mast-Producing Trees for Wildlife

By *Chris Jaworowski*, Wildlife Biologist, Wildlife & Freshwater Fisheries Division, Alabama Department of Conservation and Natural Resources

Provide supplemental food sources to the wildlife openings is the most common management strategy used by Alabama sportsmen and land managers to provide supplemental food sources to the wildlife on their properties. Openings of clovers and other small grains are planted every year to supplement the diets of deer, turkey, and many other game species. These wildlife openings require many hours of manpower to prepare and can be expensive depending on the size and number of plots planted. These openings are beneficial to wildlife on an

anted labor involved with preparation. The answer can be as simple as planting mast-producing trees on your property. Mast-producing trees benefit a variety of wildlife species by providing food, ize shade, nesting habitat, and cover. Mastproducing trees include both soft and

annual basis as they have to be replanted

every year. Because of this, wildlife biol-

wildlife populations on a long-term basis

hard mast species. Examples of soft mast

ogists are often asked for management

strategies and techniques that benefit

while decreasing the annual cost and

species include wild plum, crab apple, and persimmon, while hard mast species include white oak, red oak, hickory, and sawtooth oak, just to name a few. Unlike food plots, mast-producing trees require little maintenance or cost after the initial expense of planting is covered. By combining a wildlife opening maintenance program with the planting of mast-producing trees, managers can cut annual costs while providing a variety of forage for the wildlife on their property. If your property does not have adequate mastproducing trees, this could be a beneficial option.

Prior to planting trees you should determine the type of soils you have in the areas to be planted. This can be accomplished through a simple soil test available through Auburn University at a minimal cost. Contact your local Extension office for instructions on collecting samples as well as collection boxes. After receiving the results, you must determine the species of trees that will best suit your soil types. Some species require well-drained loamy soils while others require only sufficient sunlight and moderate fertility. Site locations for soft mast species can include the edges of existing openings or small, outof-the-way openings. Old agricultural fields are ideal sites for planting hard mast producers. Consult with your local forester or nursery on proper planting depth and spacing of your trees for optimal success.

By combining the planting of mastproducing trees with a food plot program, land managers can cut down on the costs and labor of planting openings while still supplying supplemental food sources to wildlife. After the initial costs of planting are over, mast-producing trees will provide years of forage and cover to many wildlife species with little maintenance or future cost to the manager. Unlike wildlife openings, both the wildlife and the wildlife manager will enjoy mast-producing trees for many generations to come.

For more information on planting mast-producing trees, contact your county Extension or Alabama Forestry Commission office, or Chris Jaworowski, Area Biologist, Lowndes Wildlife Management Area, 227 Ridgeland Farm Rd., Lowndesboro, AL 36752.



Land Stewardship at Its Finest

eet the Saloom Family. Originally from Enterprise, Alabama, Dr. Salem Saloom is a general surgeon in Brewton, where he has lived since 1979. Dianne, his wife, is originally from Chicago. Patrick is their 20-year-old son, a student at the University of West Florida majoring in marine sciences. Recently, Salem and Dianne spent a month on a medical mission to Togo, Africa, where he operated on 120 people. But Salem's typical day begins at 6:30 a.m. when he goes to the hospital, and ends well after dark where he can usually be found working on "the farm."

After purchasing the original 158 acres in Conecuh County in 1983 with the idea of managing the property for timber production and wildlife benefits, Salem and Dianne established Saloom Properties, LLC. They consulted a certified public accountant and tax estate attorney to form the LLC (Limited Liability Company) for estate planning purposes and tax incentives. Over the years, an additional 1,022 acres have been purchased surrounding the original tract. Hunting rights are currently leased on a 644-acre tract adjacent to the property to establish an adequate land base to practice quality deer management with plans of purchasing this tract in the future. Saloom Properties, LLC was certified as TREASURE Forest #414 in 1986.

After purchasing the property, Salem harvested 2,300 board feet of eastern red cedar from the property using a portable sawmill. Utilizing this timber, he built a cabin with a deck overlooking the pond. A barn and shed were also built to house tractors and implements.

I first met Salem in November of 2001 when looking over their property for the Land Stewardship Biologist Assistance Program, a partnership between the Alabama Forestry Commission, Alabama Wildlife Federation, Alabama TREA-SURE Forest Association, The Longleaf *Fall 2004*

By John Dickson, Wildlife Biologist

Alliance, and the USDA Forest Service. A three-year prescribed burning rotation for all upland pine stands was chosen and 400 acres were burned this past winter. High protein forage species and small grain mixtures that would maximize food plot productivity were planted for deer and turkeys. Perennial species have also



Dr. Salem Saloom using a drip torch during the prescribed burning of 400 acres on his property last winter.

been added to reduce planting time and costs. Native soft mast species such as persimmons and plums have been planted as well as native mast-producing hardwoods such as willow and water oak.

Harvest data and observations have been recorded since the beginning of the quality deer management program. Buck sightings have more than doubled in the past three years. Twenty buck sightings were recorded for 2001, 32 in 2002 and last hunting season 43 buck sightings occurred. "Antlerless" deer sightings have remained constant over this time period, although doe harvest has increased significantly. Although not statistically tested, the data collected points to the fact that there is an increase in the number, age, and quality of bucks seen as the program progresses.

Dr. Saloom worked with the local Natural Resources Conservation Service district conservationist to apply for cost share assistance through the Wildlife Habitat Incentives Program (WHIP). Cost share assistance was obtained for implementing firebreaks, prescribed burning, and expanding food plots through a fiveyear contract. The firebreaks were planted in winter annuals after they were initially established. Prior to establishing permanent firebreaks, the Alabama Forestry Commission created firelines for prescribed burning. All acreage requiring prescribed burning under the WHIP program was burned this past winter. To achieve the long-term goal of increasing the total acreage in wildlife openings from 1% to 3%, two food plots were doubled in size and one new food plot was created. Salem also painted two miles of boundary lines and added iron gates to all entrances to restrict access.

Due to the sandy soils on the property, annual road maintenance is essential. The long-term goal of creating road access throughout the entire property was recently accomplished in 2003. Hundreds of hours of bulldozer work were performed to create new roads, "crown" roads, establish water bars and turnouts, create firebreaks, and expand food plots. In areas that are highly erodable, bricks, small gravel, and oyster shells have been added to prevent the soil from eroding. The steepest slopes are seeded with bahia grass and compacted with a cultipacker, while the firebreaks are planted in winter and summer annuals. Dr. Saloom received cost share assistance to seed the roads in highly erodable areas. Two stream crossings had 48-inch culverts installed and 32 dump truck loads of concrete and 20 loads of red clav to allow

(Continued on page 26)

The Alabama Forestry Commission and Illegal Dumping

hy would the Alabama Forestry Commission (AFC) be interested in illegal dumping? The answer is because it has a responsibility in preventing wildfires.

The Forestry Commission is responsible for suppressing wildfires on approximately 22 million acres. Suppression is dangerous and expensive. There is expense in paying for the suppression as well as the damage caused by the fire. The solution is to prevent or mitigate as many wildfires as possible. One technique of mitigation is accomplished through prescribed burning which reduces the damage caused by an unexpected wildfire. Another technique is prevention by reducing or eliminating illegal dumps.

Illegal dumping appears to be an Olympic sport in some areas of the state. Both sociological factors and lack of landfills have an impact upon the location and frequency of this undesirable activity. The most common items associated with dumps are washing machines, clothes dryers, water heaters, construc-

By: Douglas A. Smith, AFC Retired

tion material, and household garbage most frequently containing beer bottles and baby diapers. A typical location is a creek or drain leading into a waterway.

Regardless of the reasons, illegal dumps contribute to pollution, become an eyesore, and are a source of wildfires. It is common for a dump to grow in size and then be burned to reduce the quantity of debris. Burning also destroys evidence associated with those who dump.

For every fire that is prevented, there is one less fire to be suppressed. For each dump eliminated, there is one less likely source of ignition. Therefore, AFC investigators attempt to identify those who dump and prosecute them. Illegal dumping, a misdemeanor, must usually be seen by an officer in order to make an arrest. However, the legislature recently passed a bill that allows for a presumption of guilt with a chance for rebuttal. According to 13a-7-29 of the Code of Alabama, if a name appears on documents in the dump, then that person is presumed guilty unless they can justify their innocence. It is possible that the guilty party only deposited a small amount of debris

or litter within a larger pile of debris. Without adequate rebuttal, the person can be charged by an officer and must appear before a judge to answer for the entire dump.

Some officers have access to video equipment that can be used to monitor dump sites. This system has some limitations but has been successful in several prosecutions. This type of monitoring has also revealed other illegal activity.

Sentencing for a class C misdemeanor is limited to \$500 and/or three months in jail. Some judges modify the fine and require the guilty party to clean up the dump. This can become rather expensive if the dump is large.

Through a program offered by the Alabama Forestry Association, witnesses may be rewarded up to \$5,000 for information related to a forestry crime.

When illegal dumping is defeated, we all win. Do your part to help protect the environment, enhance our view of nature, and reduce wildfires. It is all possible with one prevented or eliminated dump.

Land Stewardship at Its Finest

(Continued from page 25)

access throughout the property. Two 10foot by 8-foot concrete fords were used as were two steel Bailey bridges.

In 1984, a two-acre pond site was cleared and soil samples were taken to determine clay content and soil acidity by the Natural Resources Conservation Service. The proper amount of lime was applied to neutralize the pH, and the pond was stocked with bream and bass purchased from the Department of Conservation and Natural Resources. White amur were also added to the pond to control aquatic weeds. The pond is fertilized every six weeks during the summer to increase fish production, and smaller bream and bass are removed from the pond to keep the fish population in balance. A Department of Conservation and Natural Resources fisheries biologist seines the pond every five years to determine how many pounds of fish should be harvested from the pond and inspects the pond periodically to determine aquatic weed species and control. Two herbicide applications have been applied to the pond to control aquatic plant species.

After Salem purchased the property, he applied herbicides to a two-acre kudzu patch. Herbicide applications have been applied several times to stop the spread of this invasive species. Cogongrass is also established in several areas and was sprayed recently with varying herbicide concentrations to determine which rate was most effective. Annual monitoring and herbicide applications will ensure that invasive species are controlled.

Since 1990, Dr. Saloom has been working with a registered forester who has recommended, marked, and overseen timber harvests through their completion. Three separate timber harvests were performed with wildlife management and water quality control as integral considerations in the process. The income derived from the timber harvests was reinvested into the property for further improvements.

Working with forestry consultants, wildlife and fisheries biologists, and other natural resource professionals, Dr. Salem Saloom has managed to derive income from timber production and create excellent wildlife habitat through good forest stewardship. He has utilized services offered by the Natural Resources Conservation Service, Department of Conservation and Natural Resources, and the Alabama Forestry Commission to establish a long-term plan for his property and obtain cost share assistance for various management activities. **@**

DON'T GET BURNED BY IVAN

In the wake of Hurricane Ivan, many areas of our state received extensive damage to the forest resources. The tremendous amount of available fuel on the ground creates a very high hazard for wildfire. In order to protect you, your property, and your community from another devastating loss, the Alabama Forestry Commission is asking citizens to follow the guidelines below to ensure no lives are lost or homes destroyed because of the careless use of fire.

•DON'T DO ANY OUTDOOR BURNING UNLESS IT IS ABSOLUTELY NECESSARY.

•If possible, haul debris to an approved debris disposal site in your area. (Your local Alabama Forestry Commission or County Commission office will know the location of available sites.)

•If hauling your debris to an approved site is impossible because of volume or distance, take the following safety precautions when attempting to burn.

•Where feasible, debris piles can be covered with plastic and burned immediately after rainfall is received.

•If debris piles cannot be covered, they should only be burned during periods of high fuel moisture (after rain) and low winds.

•If burning more than one-quarter of an acre in size or within 25 feet of a natural combustible material, a burn permit must be obtained. This can be done free of charge by calling the toll-free number located on the front page of your local telephone directory under "Emergency Numbers." Obtaining a burn permit does not relieve you from liability in the event the fire escapes.

•The person doing the burn should use all necessary safety precautions when doing outside burning. You should have plenty of manpower and tools available to control the fire, and you should stay with the fire until it is completely out.

For more information about how to safely conduct outdoor burning or if you want information on how to make your home FIREWISE, contact your local Alabama Forestry Commission office or log on to our web site at www.forestry.state.al.us.

Visit the AFC website at www.forestry.state.al.us

The Changing Landscape of Cooperative Forestry

By Bob Showalter, State Forester of South Carolina

Editors Note: The following was a letter sent to Robert T. Jacobs, Regional Forester with the United States Department of Agriculture Forest Service, Region 8, in Atlanta. It was written in August 2004 by Bob Showalter, Chairman of the Southern Group of State Foresters (SGSF) at the time, regarding an SGSF Review of Cooperative Forestry in the South. The letter gives a very clear picture of forestry in the South now, as well as a glimpse into the future and the challenges facing the states in providing landowner assistance to a rapidly changing customer.

he Southern Group of State Foresters' (SGSF) Executive Committee appointed an ad hoc committee at the request of Ken Arney to review the Region's Cooperative Forestry Unit. The committee was not to review the present structure of Cooperative Forestry but was to offer ideas and assistance in developing a unit with programs and activities that better meet the needs of state foresters and the constituents we serve.

The ad hoc committee under the leadership of Alabama State Forester Tim Boyce met at the regional office this past April and developed its recommendations that were shared with the rest of the state foresters at the SGSF annual meeting in June. We now offer you our perspective on the direction of Cooperative Forestry.

As we see it, human influences provide the dominant impact on southern forests. Negative influences are resulting in the continuing loss of forest resources. We are seeing more downsizing, restructuring and repositioning of our

forest industries and the divestiture of their forestlands. Large blocks of forestland are being broken up as ownership and owner objectives change. The resulting fragmentation, combined with competing uses for the region's remaining forests, places severe strain on the resource. Wood demands continue to increase, and more market share is being satisfied through imports. Depressed domestic markets reduce landowner motivation and incentive to manage their forests, which will affect forest health and production in the long run. For these reasons, resource management both in rural and community forests should be the major focal point for Cooperative Forestry. We must target the small private landowners and communities to accentuate the positive human influences over our forests. Clearly we have enough forest resources to serve the needs of all our citizens if they are properly managed.

More demands on state forestry agencies dictate that we look at visionary new approaches to rural and community forest management. The one-on-one process of landowner assistance will always have its place, but we must realize the limits such direct involvement places on our ability to significantly impact the rapidly growing number of owners who

There is a need to develop new innovative approaches that assist landowner organizations and cooperatives as well as community-based organizations to facilitate more involvement in issues and outcomes that affect them and southern forestry. need assistance. There is a need to develop new innovative approaches that assist landowner organizations and cooperatives as well as communi-

ty-based organizations to facilitate more involvement in issues and outcomes that affect them and southern forestry. Mentoring programs and group learning processes should be developed. (We can certainly look to the model used by the Cooperative Extension Service; however, the extension model needs to be improved to be more effective.) We need to focus more attention on the relationship between forest resources and a healthy environment. We must be more

vocal in stressing the importance of healthy forests for healthy watersheds and healthy forests to combat air pollution. With the diminishing scale of traditional forest industries, we need to be looking at new, innovative ways to sustain forests and bring forest-related income into our forest communities. We need to be more involved in the understanding and marketing of carbon sequestration credits and various other emerging environmental services that will likely become a major part of forestry. We must improve our ability to assess these issues and deliver the appropriate information and services at the local level.

Many areas of our current Cooperative Forestry programs accentuate positive influences on our forests through rural community assistance, forest product marketing, outreach, stewardship/rural forestry, nursery and tree improvement, and urban and community assistance. These programs provide significant benefits to people and the South's forest resources. However, they should be woven together into a comprehensive whole to more completely and effectively serve our constituents.

Many studies indicate that forest landowners are extremely diverse. This will become even more pronounced as we see a greater influence in our country from Hispanics, African Americans, Asians, and other ethnic groups. Aging "baby boomers" will increase the number of older citizens who own forestland. More women are becoming forest landowners.

Forest landowners are also diverse in their reasons for owning land, although their interest in the economics of forestry and marketing of their "commodities" is still strong. There is a growing interest

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among forest landowners in other resource values such as wildlife management (game and non-game), aesthetics, forest diversity, outdoor recreation, and ecosystem management. Many owners are also interested in multiple land uses that are woven into their forest holdings such as pasture for horses, cattle, small ruminants, fruit and nut trees, wildlife plots, trails, ponds, and lakes. Agroforestry will become an emerging issue for many forest landowners. For these and probably numerous other reasons, Cooperative Forestry should lead the way to reach out to underserved and new forest landowners. Outreach should not be thought of as just serving minority groups; it should be the goal of Cooperative Forestry to develop creative ways to reach the millions of diverse forest landowners in the South who are not taking advantage of current programs nor actively managing their forestland. Outreach can blend well with landowner organizations and cooperatives.

The increasing urban development issues in the wildland urban interface area and the continuing loss of canopy cover in our communities must be addressed. It is critical that Cooperative Forestry provides strong leadership and advanced technical assistance in urban and community forest resource management. No longer are urban and community forestry programs considered public relation tools primarily used to explain forestry to "city dwellers." The profession and practice of managing forest resources located in an urban setting has matured. Today, urban foresters manage the entire forest as a viable, functional, and sustainable ecosystem. We need to manage our urban and community forests as a resource and integrate these resources into the infrastructure of our nation's communities, thereby, making positive changes in the quality and extent of these resources, and ultimately the quality of life for our urban residents.

The loss of and changes to forestland in the South will likely persist, and it will be a continuing challenge to find solutions to address the altering landscape. Therefore, it is critical that State Forestry programs seek to conserve and protect working forests at every opportunity. Cooperative Forestry must continue to provide strong leadership in Forest Legacy. Additionally, Cooperative Forestry should provide leadership and direction to help states craft other programs, whether through private landowner or community assistance, that would meet their long-term objectives.

Cooperative Forestry should demonstrate an active role in bridging the gap between states' needs and USDA Forest Service Research. Forest product development and marketing of biomass technology is a good example of where state forestry agencies, Cooperative Forestry,

Forest Service Research, and forest landowners come together. Cooperative Forestry, working through state foresters, should be the catalyst in helping identify emerg-

ing research areas as well as facilitating the distribution of new science and technology. Cooperative Forestry should be a leader in the important role of coordination between the Cooperative Extension Service, southern forestry schools, the Southern Governors' Association, state forestry associations, and state forestry agencies.

Cooperative Forestry should not only be at the cutting edge of forest technology, but it should be the leader in tracking new and emerging issues at the local, state, regional, national, and global levels. Strong ties between southern state foresters, Cooperative Forestry, and the International Forestry staff in Washington should also exist. In other words, Cooperative Forestry should serve the southern region by being the compass that points a clear direction to the future. This would entail combining data to create new, conclusive information that answers the questions of where are we headed, why are we headed in that direction, and do we need to change or hold the course.

Cooperative Forestry should be the catalyst that helps state foresters become more visible in program accomplishment to our partners, the general public, and especially our congressional delegations and state legislators. This role would ensure the creation of a dynamic information bank containing available statistics, GIS data, maps, web sites, and links to state information, etc. The overall goal of the information bank would be to show how important southern forestry is to citizens and what State and Private Forestry and state forestry organizations contribute to our constituents' success.

Although we receive funding through various federal legislative programs, the rules and legislation are generally written in such a way that many, if not all, of the present "programs" complement each other. Cooperative Forestry should not think of itself as program administrators.

The loss of and changes to forestland in the South will likely persist, and it will be a continuing challenge to find solutions to address the altering landscape. This approach encourages polarization, turf battles, and lack of teamwork. Instead, the unit should be guided by strategic planning with measurable goals and objectives resulting in collaboration, teamwork, and

achievement. The present strategic process being developed within the SGSF could be used as a model. Program reviews of state operations as they are conducted today should be replaced with collaborative goal setting and consultation.

Cooperative Forestry must also identify common and overlapping issues with the Fire and Aviation, Forest Health, and National Forest Units to ensure all aspects of forest resource management are addressed.

In conclusion, the SGSF hopes that you will accept our ideas and recommendations as a sign of our support for the Cooperative Forestry Unit and our willingness to work with you and your staff to ensure that the unit is the best it can be. We also hope the deputy regional forester for State and Private Forestry will work with the SGSF by developing other ad hoc committees to assist the new director and staff of Cooperative Forestry in the refinement of these ideas and recommendations and in the development of a strategic plan for our common future.

I would like to take this opportunity to thank Tim Boyce, Paul Frey, Bob Lazenby, Leah MacSwords, and John Burwell for serving on the committee and Gerald Wicker for his excellent facilitation and note taking. I also want to thank you and Ken Arney for allowing the SGSF to provide our ideas for the future of Cooperative Forestry.

E.A. Hauss Nursery Seedling Species

(Continued from page 16)

Yellow or Tulip Poplar (Liriodendron tulipfera)

One of the tallest and most beautiful east-

ern hardwoods with a long, straight trunk, a narrow crown that spreads with age, and large showy flowers resembling tulips or lilies. Reaches a height of 80-120 feet. Yellow fall color. One of the chief commercial hardwoods, yellow poplar is used for furniture, crates, toys, musical instruments, and pulpwood. Habitat: Moist, well drained soils, especially valleys and slopes.

WILDLIFE FOOD and HABITAT

Chinese Chestnut (Castanea mollissima)

Often planted for shade and nut consump-



tion by humans as well as for wildlife uses. Chinese chestnuts are resistant to the blight that has all but wiped out the native American chestnut. Wildlife Uses: Deer, squirrel, and other

users of hard mast. Mature Height: 60-70 feet. Fruit Bearing Age: 15-20 years, annual. Fruit Information: 3/4" diameter nuts, fall September-October. Planting Tips: Maximum nut production: 25 feet apart in sunny, open areas. Prefers rich, moist soils.

Common Persimmon

(Diospyros virginiana) Wildlife Uses: A variety that includes deer and turkey. Mature Height: 60 feet. Fruit Bearing Age: 10 years, biennial. Fruit Information: Up to



1 1/2" diameter, orange colored fruit, ripens and falls September-November. Planting Tips: Groups of 10-15 trees, 20 feet apart. Classified as shade tolerant but needs partial sunlight. Prefers rich, somewhat moist soils, but will grow on a variety of sites. Multiple tree plantings are necessary for fruit production.

Flowering Dogwood (Cornus florida)

A favorite tree in the southeast, used extensively for ornamental purposes as well as for wildlife food. Wildlife Uses: Berries are eaten by quail, turkey, song birds, squirrels, etc. Mature Height: 20-40 feet. Fruit Bearing Age: 4-6 years, every 1-2 years. Fruit Information: Red berries, 1/8"-1/4", ripens October-November. Planting Tips: Border: 10 feet apart. Plant randomly to increase diversity in older pine stands. Does well in partial shade but needs some sunlight. Prefers moist, rich soil, but will grow on a variety of sites.

Overcup Oak

(Quercus lyrata) A member of the white oak group. *Wildlife* Uses: Acorns utilized by deer, turkey, squirrel, and other animals that eat hard mast. Usually found in wet,

swampy areas; therefore, provides food for ducks also. Mature Height: 80 feet. Fruit Bearing Age: 20-25 years, acorns produced every 3-4 years. Fruit Information: Medium-sized acorns. Planting tips: 25 feet apart. Plant in wet areas, but not areas covered by water. Will withstand occasional flooding. Tolerates some shade, but does best in direct sunlight.

Sawtooth Oak (*Quercus acutissima*)

Tree with a large, round crown and chestnut-like foliage. Pointedteeth leaves are 4"-8" long. Handsome shade or specimen tree. Wildlife Uses: Deer, turkey, squirrel, and other animals that use hard mast. Mature Height: 50 feet. Fruit Bearing Age: 5-6 years, annual. Fruit Information: Acorns up to 1 1/4" in size, about 40-80 acorns/pound. Nuts mature August-October. Planting Tips: Needs direct sunlight. Plant as a border or as a grove in green field food plots. To form dense areas of escape/cover, plant 8 feet apart.



Southern Crab Apple (Malus augustifolia)

Wildlife Uses: A variety that includes deer and turkey. Planted close together they provide thickets for cover. Mature Height: 20-30 feet. Fruit Bearing Age: 3-5 years, annual. Fruit information: 3/4"-1 1/2" yellowish-green fruit. Planting Tips: Borders and fence rows: 6-9 feet apart. To form thickets: 50 seedlings, 3-4 feet apart. Prefers rich, moist soil in direct sun. Do not plant near trees of the juniper family, as crab apples are susceptible to applecedar rust.

Thunbergii Lespedeza (Lespedeza thunbergii)

Thunbergii was developed to be deer resistant. In



areas with high deer populations, it is the recommended species. Wildlife Uses: Food/cover for bobwhite quail, but seeds also eaten by a variety of birds. Mature Height: 6-8 feet, multiple branches from the base. Fruit Bearing Age: 1-2 years, annual. Fruit Information: Small seeds mature and drop September-October. Planting tips: 2 x 3 foot spacing in plots up to an acre. Plant in open fieldlike areas such as logging decks, skid trails, or old fields that receive direct sunlight. Grows in a variety of soil conditions.

Wildlife plantings are an excellent way to promote one of Alabama's most valuable resources. The key to development and enhancement of wildlife habitat is increasing food and cover. Trees and shrubs benefit wildlife on a continuing basis without the time and expense of planting food plots every year.

All seedlings listed are first quality, one-year-old (18"-24" tall) bareroot nursery stock. Trees listed are native or well adapted species to the climate in Alabama and the southeast. They are less susceptible to insect and disease attack than exotic species.

Our staff is available to answer questions and make recommendations concerning wildlife plantings. Contact us about growing large quantities and species not listed. 🏟

Hunters Urged to Use Caution in the Woods

he damage from Hurricane Ivan extends from the Gulf Coast into much of Alabama's forestland. With hunting season underway, many will be spending time in the woods and exposed to danger from downed and weakened trees. The Alabama Department of Conservation and Natural Resources and the Alabama Forestry Recovery Task Force have suggestions on what hunters can do to keep themselves safe in the woods.

- •Blocked Roads: In areas severely impacted by Hurricane Ivan, many hunters will find roads leading to camp houses and hunting areas that are blocked with downed trees and limbs. If faced with this situation, don't try to pick up more weight than you can handle. Use equipment to do the job.
- •Widow Makers: Sometimes the trees that are left standing have limbs that are either dead or only partly attached to the trunk. These "widow makers" can fall without warning and very little sound. Be aware of and stay away from these trees. Mark these areas with colored reflective tape and inform your club members and others to avoid these trees.

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•Storm-Created Debris: Shy away from using random piles of trees downed by Hurricane Ivan as ground blinds since these piles can be very unstable. If the debris shifts, you might become injured or entrapped.

•Logging Activities: Logging activity will be high in areas where a lot of timber was damaged by Hurricane Ivan. Make sure that you know where trucks and equipment are working in order to avoid collisions or being run over by equipment that will be concentrating on removing damaged timber. Four-wheelers can be particularly dangerous because of their speed and small size, and the fact that their engine noise could drown out the noise of other equipment. Be aware of what and who is in the woods at all times and inform all of your hunting companions.

•Four-Wheeler Trails: Hunters should walk their four-wheeler trails as well as trails leading to and from shooting houses or tree stand sites. Remove hazards such as spring poles, spears, and overhanging logs to avoid accidents. Leaving these hazards on the ground, or trying to ride around them, could lead to accidents and problems later on.

•Tree Stands: Heavy rains and wind from Hurricane Ivan caused extensive damage to many trees still standing in Alabama's forests. Hunters should inspect each tree for possible damage prior to attaching a tree stand to the trunk. The heavy rain associated with Ivan may have caused soil erosion around the roots, which could lead to a weakened root system and increased potential for the tree to fall. Hunters should use extreme caution prior to attaching a tree stand to any tree. Always wear and use a full-body safety harness while climbing, hunting, or descending from a tree stand.

- •Power Hazards: Hunting club members should be cautious about possible electrical hazards, especially in remote areas where lines could still be down to camp houses, or where electric lines could still have limbs and trees on them. Downed lines present a possible fire and electrocution hazard to hunters and should be repaired by a professional to avoid future problems.
- •Common Sense: Your common sense will often alert you to danger. Keep a sharp eye out for hazards and alert others to them. Although you might see a problem and avoid an accident, that doesn't mean a friend will be so lucky if not forewarned.

The Alabama Forest Recovery Task Force has developed a web page with information relating to damage from Hurricane Ivan at **www.alaforestry. org/ivan/index.htm.**

For more information on hunting in Alabama visit the Department of Conservation's web site at **www.out-dooralabama.com**. ♠

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Common Pokeweed

(aka - Pokeberry, Poke Root, Poke Sallet, Inkberry, Poke, Cancer Root) *Phytolacca Americana*

By Coleen Vansant, Information Manager, Alabama Forestry Commission



t's been used as a symbol for a presidential candidate, it was the basis of a popular song in the 60's, and one Alabama town has an annual festival to honor it. Poke, Poke Sallet (sometimes spelled Salet) or Pokeweed, whatever you prefer to call it, has become almost as southern as magnolias, hound dogs, and corn bread.

During the presidential campaign of James K. Polk, the 11th president of the United States, enthusiastic supporters wore poke (Polk in their case) leaves in support of their candidate. In 1969, "Poke Salad Annie" was a popular song that told of a poor southern girl who picked the wild plant called pokeweed for a vegetable. Every spring, the town of Arab, Alabama holds an annual Poke Sallet Festival to herald the popular plant. Poke or pokeweed is derived from the Algonquian Indian word "pakin" or "puccoon" referring to a dye plant used for staining. It is the only plant of its type in North America and is a member of the pokeweed family. The perennial pot herb is native to eastern North America and is most commonly found along roadsides, fencerows, recently cleared land, open woods, barnyards, and pastures. It grows in most soils in full sun or part shade.

Poke has a large carrot-type root and can grow as tall as 10 feet. Its smooth stems are succulent, purplish and bear alternate, lance-shaped, shiny leaves with smooth, curled margins. The leaves can be 3.5 to 12 inches long. The small, white to greenish flowers hang in long, drooping, grapelike clusters of five to twelve berries. The berries are wider than long in diameter, beginning as green then turning dark-purple and usually contain ten seeds. It reproduces from seeds or from a very large taproot.

Poke is considered to be a very toxic plant and it has been known to cause death in rare instances. The roots, leaves, berries and seed are all considered poisonous. The toxins are more prevalent in the mature plant. Although considered toxic, poke sallet (an old mountain term for *cooked greens*) is used in the south as a spring vegetable. Both the young tender leaves and shoots are eaten, although it is recommended that they be boiled twice, discarding the water each time to rid the leaves of any possible poison. The cooked greens have a spinach-like taste and the cooked roots are said to taste like asparagus. It is canned commercially and sold in grocery stores with other greens. Most sickness from eating the plant is due to improper preparation.

Traditionally Native Americans used poke in poultices and to prepare a salve for medication of boils and other skin problems and for rheumatism. Many home remedies call for the use of some part of the plant to treat tonsillitis, mumps, and other complaints involving swollen glands. It is also thought to have antitumor properties and is used in the treatment of various malignancies. Other medicines from various parts of the plant are used as an expectorant, narcotic, purgative, anti-inflammatory, and a laxative. Pregnant women should not come in contact with the plant because it may cause malformations in a developing fetus.

The plant is as poisonous to animals as it is to humans. However, birds – apparently immune to its poisonous properties – consume the berries. Animals usually don't eat the plant because of its bitter taste, although the roots are boiled and mixed into a medicine to drench cattle.

The pokeberry produces a beautiful dark red-purple juice that was used by settlers and Native Americans as a dye.



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