

ALABAMA'S

TREASURED

FORESTS

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A MESSAGE FROM . . .



BOB RILEY
Governor, State of Alabama



TIMOTHY C. BOYCE
State Forester

The hurricanes that have plagued our nation's Gulf Coast the past two summers have been unprecedented. This past summer was the greatest hurricane season on record and we experienced one of the most devastating national disasters our country has ever known, Hurricane Katrina.

I want to thank all of the citizens of our state who have taken even the smallest part in assisting not only our own in these times of need, but for also assisting those in other states who were victims of this tragedy. Alabamians have continually risen to the call and provided aid and comfort. Thousands of our citizens have contributed to relief efforts. Many traveled hundreds of miles to assist in whatever way they could, and many cities, counties, state agencies, private companies, churches, and organizations have donated money, supplies, equipment, and skills to help those in need.

Then there are those who stayed in Alabama and opened their homes, churches, businesses, schools, and hearts to evacuees who were displaced by these terrible tragedies.

The road to recovery will be long for many people in Alabama and other states. But I'm enormously proud that Alabamians will continue to be a beacon of hope and comfort through this time of tremendous need. ☝

In the past few months I have attended meetings across the United States through my involvement in the National Association of State Foresters and the Southern Group of State Foresters. It is evident to me that the face of forestry is changing.

Much more emphasis is being placed on non-traditional forestry issues such as forest health; carbon credits; invasive species; watersheds and water quality; endangered, threatened, and impaired species; wildlife habitat; and insect and disease control.

The Alabama Forestry Commission has taken steps to prepare for these changes, and I am confident that we will be one of the forerunners in the nation in some of these programs. This past summer we employed professional foresters to work in the areas of water quality, invasive species, and forest health enabling us to assist and educate landowners in these areas. We are working to provide southern pine beetle and invasive species contracts, and we have wildlife biologists available to provide technical assistance to forestland owners. Our southern pine beetle detection, mapping, and landowner notification program is second-to-none in the nation and provides landowners with valuable and timely information.

The Commission will continue to strive to provide the best quality technical assistance to Alabama's landowners that we can. Through knowledge, technology, and training we will ensure healthy forests, abundant wildlife, as well as clean air and water for all citizens of Alabama. ***We are Making Alabama a Better Place Through Forestry.*** ☝



The DORRILLS:

Sharing a Heritage

By *Elishia Ballentine*, Editor

How many people can say that their first date was a hike in the woods??? According to Carol Dorrill, her first date with John was exactly that. He brought her out to the Pike County family farm and proceeded to give her a walking tour of the 80 acres. She wondered if it were some sort of test, but proudly says she passed with flying colors. John was amazed that she kept up so well. After all, contrary to popular belief, “LA” (Lower Alabama) is NOT all flat land . . . there are quite a few hills and valleys. Little did he know that Carol, originally from Calhoun County, had grown up hiking all over Little River Canyon, Duggar Mountain, and the Talladega National Forest! And now, 40 years later, they’re still walking that same 80 acres together, plus a few more.

These original 80 acres and an old farmhouse had belonged to John’s parents, and much of the property has been in the family for over 100 years. In fact, in 1990, the Alabama Department of

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Agriculture & Industries recognized the Dorrill Home Place as both an “Alabama Century Farm” and an “Alabama Heritage Farm.” To achieve the Century Farm designation, it must be in the same family for 100 years or more, demonstrating a durability and love of the land. Similarly, a Heritage Farm award is given when certain of the farm structures have remained on a family farm for at least 100 years, reflecting identity and important historical and agricultural qualities.

Although the farm has grown considerably, it was that same 80 acres that achieved TREASURE Forest status in 1988 (certificate #567). Over the years, John and Carol have added several hundred acres. Much of it was formerly cropland for peanuts and cotton, but with assistance through CRP programs, long leaf and loblolly pines were planted. Today there are approximately 1000 acres in timberland of various ages.

Just as the face of the farm itself changed, so have the family’s goals for the farm . . . it is no longer principally an

economic resource for harvesting timber. A different type “investment in the future,” now the primary objective of the Dorrill family’s TREASURE forest is environmental education, with their secondary objective being aesthetics. The emphasis on education was a natural evolution of sorts for the couple. As John and Carol became more educated about managing and improving their land, they understood that other landowners wanted to learn these same principles and skills. They realized that their property provided the perfect environment to fill this demand.

Taking full advantage of its beautiful natural state, the Dorrills transformed 30 acres of mixed pine and mature hardwood into an educational forest. There was already a creek, and they built a couple ponds. They added walking trails, a shooting range, and a bridge over a wetland area. Since building their large “demonstration barn” with full meeting facilities, they estimate that several hun-

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dred people have benefited from the environmental education programs each year.

Educational activities at the farm include landowner tours for Alabama TREASURE Forest Association (ATFA) chapters, and Alabama Forestry Commission (AFC) tours demonstrating management practices such as prescribed burning and planting of longleaf pines. The county AFC staff has also given tree identification workshops, as well as "orienting" courses on finding your way in the woods and what to do if you get lost. In conjunction with the Alabama Department of Conservation & Natural Resources (ADCNR) and the local ATFA chapter, the Dorrills have hosted several successful "Outdoor Ladies" events.

They have also extended a welcome to the young people in the community such as field days and summer camps for 4-H groups and "Outdoor Kids." Day camp



Photo by Elishia Ballentine

The Dorrills enjoy an autumn walk through the woods.



A mix of pines and hardwoods provide the setting for this environmental education TREASURE Forest.

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activities typically include fishing, archery, firearm safety, and conservation. In what may become an annual event, the ADCNR held a youth fishing rodeo here this past summer (co-sponsored by the local Wal-Mart Community Outreach Program). Over 70 children (aged 12 and under) hauled in approximately 700 pounds of fish! Both John and Carol commented on how much fun it was to watch some of the kids experience the excitement of catching a fish for the first time.

The farm has hosted new employee training for the Natural Resource and Conservation Service for two years, and new opportunities to share the facility continue to arise. Now that word has reached the community about the availability of this beautiful setting, there are more and more requests for weddings, receptions, and class reunions. Even these "non-educational" events allow an opportunity to "teach" the public. Carol

feels that many people have a misconception about non-industrial, private forest landowners. "It's a choice, a priority. Instead of taking expensive vacations or making other investments, we chose to buy land and make improvements."

The Dorrills are thrilled that their children share the same philosophy and love of the land. When their sons were still small, they brought them to the farm every weekend. Living in Montgomery, the car was packed and ready to go every Friday after school let out. As they grew up, they helped their parents kill kudzu, build fences, and plant trees. Today their boys are just as involved and interested in the property. In the earlier years, they enjoyed bringing friends and church groups out to the farm; now they bring their own families to enjoy the heritage of this homestead. Carol said, "We won't be here to see all these longleaf pines and hardwoods reach maturity . . . but the grandchildren will."

Although most of the acreage has already been gifted to the children in a trust, it was with the agreement that John and Carol be allowed to continue managing it. Retired from a 44-year career with the Alabama Farmers Federation (ALFA), John says he takes great pleasure in working in the woods. His timber management practices include prescribed burning every other year and thinning hardwoods for aesthetic purposes. He also maintains green fields, noting that wildlife has

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increased since they started making timber improvements back several years ago. Deer and turkey are now plentiful, and quail seem to be coming back naturally.

Charter members of the largest TREASURE Forest chapter in the state – Pike County – the Dorrills are active in several other organizations. Carol served seven years and John is currently serving on the Alabama TREASURE Forest Association board of directors. Both were instrumental in helping to establish the ATFA Endowment Fund. The numerous certificates and plaques on the walls speak for the recognition they have received for their involvement and work through the years. Among these achievements, Carol was honored with the State Forester's Leadership Award in 1999 for helping establish TREASURE Forest programs in counties across the state. In 2001, the Dorrills received the Pike

County Chamber of Commerce Agricultural (Farm/City) Committee's Forestry Award. In 2002, the couple was given the Pike County Farm/City Service to Agriculture Award. In 2003, John was honored with ALFA's Special Service to Agriculture Award. Most recently, John and Carol received the 2005 Pike County Farm/City Conservation Award. In

February of 2006 at Auburn University, John will be formally inducted into the Alabama Agriculture Hall of Honor, recognizing his outstanding contribution to the state in the area of agribusiness. Showing

no sign of slowing down, the couple's list of accomplishments will no doubt continue to grow.

The Dorrills mutually voiced pleasant surprise at the extent of the use of their educational TREASURE Forest, saying it has greatly exceeded their expectations. Both John and Carol understand that they have been blessed with an opportunity to purchase property, as well as the ability to manage and groom it. Although it would

be easy to take it for granted, keeping it all to themselves, they feel a duty to share with others. In Carol's words, "It's almost a spiritual obligation. The land is a gift from God: we realize that we really don't own it, we're simply stewards, given the tremendous responsibility of taking care of it."

John commented on how gratifying it was to see people truly enjoying the land. This positive act of sharing or "giving back" to the community is what drives the Dorrills. Even though a TREASURE Forest means a lot of hard work, they agree that providing others with the chance to drink in the serenity of the beautiful resources of forest, land, and sky has its own rewards. 🌲



The family roots on the Dorrill's Heritage Farm run as deep as those of this old oak.

Photo by Elishia Ballentine

Photo by Elishia Ballentine



Photo by Elishia Ballentine

Left: John and Carol Dorrill get ready to greet another tour group at the demonstration barn. Top: A variety of ferns grow along the creek in the educational forest.

Achieving TREASURE Forest Certification

By *Tim Albritton*, Forester, USDA Natural Resources Conservation Service

Successfully reaching a goal can be very fulfilling. As a general rule, the harder the goal is to reach, the more gratifying the satisfaction when it is reached. This is true in all phases of our life; as a child receiving a merit badge, as a youth graduating from high school, and as an adult throughout life. The goals obviously change but the desire to reach a higher level and the great joy of reaching a goal remains the same.

For many landowners TREASURE Forest certification is the goal they desire. The first step in this process is when the landowner discovers what TREASURE Forest is and decides to make certification a personal goal.

This usually occurs when the landowner hears about the program from a neighboring landowner or a local natural resource professional.

The next phase in the process, for the landowner, is to learn what the TREASURE Forest standards and minimum requirements are and to begin working toward that standard. The on-the-ground accomplishments achieved by the landowner while striving to reach certification is a critical display of their desire and merit. Reaching this goal can bring a wonderful sense of accomplishment if the landowner has truly worked to achieve the award.

It is the TREASURE Forest subcommittee's mission to review the nomina-

tions on a quarterly basis and to assure compliance with procedures for certified TREASURE Forests. The subcommittee has the job of accepting, denying or deferring the nomination. Most nominations are accepted. The number of nominations that are turned down or deferred

3. Sufficient non-objective accomplishments that meet the minimum standards outlined in the TREASURE Forest Minimum Standards brochure.

4. A positive referral by the reviewing forester and wildlife biologist recommending certification.



Photo by Tilda Mirns

5. No detrimental practices being conducted or allowed on the nominated property (examples: soil erosion on the property without attempt to control it, over-population of wildlife without attempt to control it, or lack of desire to harvest timber once it reaches maturity).

6. A property that will positively reflect the TREASURE Forest program.

7. A landowner who displays a desire to manage

his/her resources in a manner that is commonly considered proper management.

8. A landowner that promotes and practices sound, sustainable multiple-use resource management, and uses his/her property wisely while protecting and enhancing the environment.

The title of TREASURE Forest owner is an honor afforded to few landowners. It takes sometimes years of work to reach this distinguished goal. Because of this, the TREASURE Forest subcommittee is dedicated to upholding the highest standards for certification. ♣

is less than five percent each year. This reflects positively on the foresters and biologists preparing nominations and conducting inspections.

The following list identifies the qualifications that the TREASURE Forest subcommittee looks for when reviewing a nomination for TREASURE Forest.

1. A TREASURE Forest nomination form that is completed in its entirety.

2. Sufficient accomplishments in the primary and secondary objectives that meet the minimum standards outlined in the TREASURE Forest Minimum Standards brochure.



Wildlife Habitat Recipe #1: *Corridors*

By *Derrick Heckman*, Registered Forester and Certified Wildlife Biologist, St. Clair County, AFC
and *Doug Smith*, Registered Forester, Blount County, AFC

Habitat manipulation has been a topic of argument among wildlife biologists and foresters for many years. In order to satisfy both sides of the ecological manager's agenda, to preserve water quality, break up landscape patterns, and most of all provide wildlife habitat sufficient for the species desired, *corridors* were created.

A *wildlife corridor* can best be described as a passageway or travel lane between needs; similar to the road to the local Wal-Mart. All species, including humans, need four distinct things to survive. The first is **food**, which includes summer food, winter food, and for some

species such as turkey, quail, and songbirds, brood food. All species need available **water**, with availability being the key. **Shelter** is the third component. Last on the list is **space**, which for many years was not even considered in the overall scheme of ecosystem management, but has now become, at times, the most important of all four components.

Most species, except those that are migratory by nature, do not venture more than one square mile from the spot they were born. One square mile is 640 acres; smaller game and non-game species are often found within a half square mile from the spot they were born. Wildlife biologists and foresters who are con-

cerned with wildlife habitat management concentrate on tracts to manipulate and provide exactly what is needed in the way of food, water, shelter, and space. If one or more of these components is limited or not available during the time it is needed (known as "limiting factors"), then a particular desired species will not exist on that property. Limiting factors can be a multitude of things: limitations on the basic four requirements, disease, predators, or even the arrangement of resources.

As with most successful ventures, everything starts with a plan. Wildlife planning is essentially important to evaluate resources (food, water, shelter, and

space), estimate limitations on these resources, identify diseases and predation, and approximate a carrying capacity. “Carrying capacity” is the maximum number of animals that can be sustained on a specified area or acreage if the basic necessary resources are available. Based on the needs of a species, carrying capacity can be figured into the planning process. Adjustments can be estimated in order to build and sustain a particular species, whether it is songbirds or white-tailed deer.

As urban interface (wildland encroachment by humans) becomes more and more prevalent in the rural areas of Alabama, many species become dependant on corridors and corridor management. As the large farming sections of land become quarter-section ranches, and the ranches become 40-acre mini-farms and eventually 10-acre woodlots, corridors become the lifeline between food, water, shelter, and the very important space. These wildlife corridors allow species to move from need to need in a relatively protected habitat, and will vary in width, height, and density, depending on the species traveling among them. For example, wild turkeys prefer an open hardwood canopy so they can use their keen eyesight to protect them from predators and maintain an open flight path for escape. While on the other hand, white-tailed deer prefer thick underbrush to conceal their movements and provide browse. Songbirds, depending on their species, prefer different levels of the tree canopy (vertical diversity) to provide nesting, feeding, and brood raising. Quail



Photo by Tida Mirns

Old fence rows should be retained and vegetation allowed to grow, providing browse and shelter for the targeted species.

require dense cover during their adult life as shelter from predators, constant land disturbance for feeding requirements, and an abundance of annual grasses and forbes to attract bugs to feed their hatch. Bugging area needs are about the same with turkey poults.

Before starting your project, know and understand what natural resources are present and how they are arranged on your property. Resource professionals are available to help you determine resource availability. One of the biggest challenges facing landowners, managers, and lessees today is acreage. It is difficult and almost impossible to effectively manage for deer on contiguous acreage smaller than 1,000 acres! Landowners and land managers assume that if they provide all

the necessary requirements on a 160-acre farm that “their” deer will not leave. Wrong! It is imperative that partnerships and cooperation between landowners, hunting clubs, absentee landowners, family members, and everyone involved within a mile radius of ground zero be united so that effective management can take place. However, regardless of tract size, you **can** attract wildlife to your property by simply providing or having available those necessary things (food, water, and shelter), but in most cases the targeted species will not stay on your property exclusively. It is the need for space that catches most managers by surprise.

Diversity is the spice of life and the key to making all things involving nature actually work together. By managing our forests and woodlands to diversify the landscape, we provide all things to all species. So, let us assume that you are ready to make some management decisions about your farm or forestland, and wildlife has become a valuable commodity either for personal enjoyment or income, or maybe both. You are aware of the resources necessary to sustain a particular species, but those resources are included in your timber sale. The same resources are available in a tract to the north and a tract to the south. To keep the

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Corridors provide a method for keeping wildlife on your property for as many months of the year as possible.



Photo by Elishia Ballentine



Photo by John Pfitte

Permanent fire-breaks can serve as open corridors. Disking and planting firelanes with appropriate wildlife foods not only provides habitat diversity, but also improves tract access and wildfire protection.

species from leaving your property for more suitable resources, a corridor must be left between the two tracts, providing safe passage for the species that needs

resources in both tracts. Size of the corridor is dependent on the species.

Arrangement is also important if species such as squirrels are important to

your overall wildlife management plan (the big picture). For instance, squirrels may need summer food in tract A and winter food in tract B. While the tracts may be separate, they can still be connected by a corridor no more than one-quarter mile in length. Other small mammals, some songbirds, and reptiles do not travel far on a day-to-day basis. If forced to travel through parts of your property where management decisions have had a detrimental effect on their needs, these species will find other areas that provide the necessary requirements in available supply without having to travel for half a day to get a hickory nut. In other words, if an animal can not justify traveling a short distance for food, shelter, or water, it will move residence or perish.

Forested corridors can range from 60- to 100-foot-wide Streamside Management Zones (SMZs) to a small 30- to 50-foot-wide strip of trees or brush left from one side of a harvested area connecting to the other side of the harvested area. Even long windrows stretching from one side of a harvest area to the other provide



Photo by J.W. Hybart III

Wild turkeys prefer an open hardwood canopy so they can use their keen eyesight to protect them from predators and maintain an open flight path for escape. If turkeys are important to a landowner, an open under-story corridor should be protected and managed.

a corridor for rabbits, quail, songbirds, and rodents. If wild turkeys are important to the landowner, then an open under-story corridor should be protected and managed. If deer are important, then a dense under-story corridor might be more attractive. If both species are important, then you should leave a wide corridor, providing both an open and dense under-story (again, diversity).

Also, do not forget vertical diversity as well as horizontal diversity. Changes in the under-story, mid-story, and over-story are important to all species, whether they are feathered or not. Much of the soft mast eaten by deer, squirrels, turkeys, quail, songbirds, and others is found in the under-story and mid-story, while the once-a-year hard mast of acorns and nuts is found in the over-story. Remember that all of these elements must be present within a reasonable distance for a species to exist.

Corridors do not always include forested areas. In pine plantations and other densely grown habitat, long linear openings of native or planted grasses provide a needed corridor for species such as wild turkey, quail, and songbirds. These areas provide movement between areas of nesting, feeding, bugging, and available water sources with easy escape into heavy cover. The same areas also provide many of the feeding requirements for those species during different periods of the year. Simple ways of constructing linear openings could include “day-lighting” forest roads during thinning operations. Day-lighting is simply taking the first two trees from each row running perpendicular, or the first two rows of trees running parallel on each side of forest roads inside a plantation. On native stands, roughly clear cut the first 20 feet on each side. When the thinning operation is

When thinning a pine stand, use the area of the removed row to provide wildlife needs, improve edge effect, and offer quick escapes into nearby cover.



Photo by J.W. Hybart III

White-tailed deer prefer thick underbrush to conceal their movements and provide browse. If deer are important to a landowner, a dense under-story corridor might be more attractive.

over, you will be left with a 50-foot opening. This opening will not only benefit wildlife but it will also increase viewing potential, provide for drier, more accessible roads, decrease limb damages to vehicles, and improve access for future operations.

Permanent firelanes can also serve as open corridors. Disking and planting firelanes with appropriate wildlife foods not only provides habitat diversity, but also improves tract access and wildfire protection. Another example of utilizing open corridors would be to take advantage of a first thinning in a pine stand. No matter what thinning scheme you plan to implement, use the area of the removed row to provide wildlife needs, improve edge effect, and offer quick escapes into nearby cover. If your property includes open fields, retain old fence rows or allow vegetation on both sides of old field roads to grow which will also provide browse and shelter for your targeted species.

Simply stated, wildlife needs are food, water, shelter, and space, or the arrangement of these resources. Corridors are the connecting roads and a method for keeping wildlife on your property for as many months of the year as possible. 🏠



Photo by Tilda Mirvis

Picking Up the Pieces – Casualty Loss Deductions After the Hurricanes

By *L. Louis Hyman*,
Alabama Forestry Commission Income Tax Specialist



In the past couple years, the South was hit with a series of hurricanes. Alabama was visited by Hurricane Ivan in 2004, then Dennis and Katrina in 2005. These storms had a tremendous impact on Alabama's forests, causing hundreds of millions of dollars in timber destruction. Trees had tops broken out; they were blown over, and many were shattered beyond any further use. Thousands of families had their timber investments wiped out, devastating retirement plans and college funds. Then to top it off, these landowners hear that very little of the loss is deductible from their income taxes. What can a landowner do?

The federal casualty loss deduction rules are complicated and full of loopholes and booby traps. (See "Tax Impacts of Hurricane Ivan," *Alabama's TREASURED Forests* magazine, Fall 2004.) The basic principles seem simple. If property is damaged or destroyed by a "single identifiable event" such as fire, windstorm, ice, flooding or theft, then the difference between the value of the property before the damage and its value immediately after the disaster is the casualty loss, BUT...

Any casualty loss deduction is limited to the basis in the damaged property. Basis is the actual cost of the property to the taxpayer. Basis comes from three sources. It is the allocated cost of the property when it was purchased, the fair

market value of an inherited property on the day of death (or probate), or the cash cost of improvements to a property (such as building a house or planting trees). Most forestland owners have a basis in their timber that is related to either the value of trees when they bought the property (as reflected in the purchase price of the tract), or the value of the trees on the day they inherited the property. Trees planted before 1980 may have some basis related to tree planting costs, but most landowners who planted after that year used the reforestation tax credit and amortization that reduces the basis to zero.

According to recent Internal Revenue Service (IRS) rulings, when there is a casualty loss, the loss is limited to the total basis of all timber on the tract, not just the basis of the trees actually damaged.

Many landowners have complained that limiting the loss to the basis seems unfair. A naturally regenerated stand of hardwoods that is wiped out by a hurricane may have been worth \$2000 per acre before the storm and worthless afterwards. Because the stand was naturally regenerated, there is no basis. So instead of deducting the \$2,000 loss, the IRS rules that there is no loss.

The IRS logic is founded on how they handle stock market transactions. If you buy stock at \$10 per share and it runs up to \$60 per share before it crashes to \$0,

your loss is not \$60, but is limited to \$10. The logic is that you cannot lose more than you have invested.

The Alabama Forestry Commission encourages anyone with timber damage to salvage as much as possible, as quickly as possible. By doing a salvage sale, the landowner can receive some income from the property, as well as reduce the hazards of wildfire and southern pine beetle.

If a landowner does not sell any salvage, the casualty loss is simply the basis in the timber on the tract. If the landowner does sell the salvage, the casualty treatment is a two-step process. Step one is the casualty loss deduction, which is limited to the basis in the timber on the property. In the next step, the salvage sale is treated as a capital gains transaction, where it is taxed at a reduced rate. The gain is calculated by taking the salvage sale income and deducting all selling costs, but no basis.

Reinvesting Salvage Income

You have a disaster and lose your shirt. Then you sell the rags and have to pay taxes on the sale. Many landowners felt this was not fair. In 1980 the IRS instated the "Hurricane Frederick" rule to reduce this problem. Under this rule, now codified as Internal Revenue Code Section 1033, if a landowner uses salvage income to reinvest in similar prop-

erty, the capital gains tax is deferred until the new property is sold.

IRS rules state that the salvage income “gain” must be reinvested into a similar property within two years following the tax year in which the salvage occurred. So, timber salvaged in 2005 must be put back into forests before December 31, 2007. The definition of similar property includes either buying new forestland, or site preparing and replanting the damaged stand or another tract, or buying controlling interest in a timber company. The third option is not available to most

landowners. The salvage income can be used to site prepare and replant the damaged tract, OR buy a new tract of forestland, OR buy cutover land and reforest it.

The basis in the new property would be reduced by the capital gains reinvested. If the cost of reforestation equals the capital gain, the new basis is \$0. If the cost of the reforestation is less than the capital gain, the “excess income” would be taxed at capital gains rates. If the cost of reforestation is more than the capital gain, the extra cost becomes the new basis of the stand. This extra cost does

qualify for the reforestation deduction (see sidebar below).

Many landowners feel dejected when they look at the devastation following a hurricane. However, the forest will recover. By salvaging what you can and reinvesting in reforestation, the value of the forest investment can also begin to recover. Hurricanes are a fact of life in the southern coastal plain, but the productivity and beauty of our forests make the risks worthwhile. Reinvest; restore your “TREASURE.” ♣

Reforestation Tax Benefits Improved

Forestry is a long-term investment. People plant trees, looking for a return thirty to fifty years into the future. In forest management, short term is twelve years. Because of that, there are special tax rules that apply to forest management.

It is important to remember that the government wants you to plant trees. Many programs have been established over the years to encourage tree planting. In 2004, the federal government made a major rule change that directly benefits landowners who plant trees.

Let us begin by looking at the old rules. **Prior to** October 22, 2004, anyone who planted forest trees was eligible for an investment tax credit and amortization of the reforestation costs. The benefit was a 10% direct tax credit on the first \$10,000 of reforestation costs. In addition, the landowner was allowed to amortize 95% of the reforestation costs (up to a limit of \$10,000 per year) over seven years. Under these rules, the amortizable amount was deducted over 84 months: 6 months in the first year, 12 months' worth for the next six years, and the remaining 6 months in the eighth year.

Example: If a person spent \$10,000 to reforest a tract, he or she could take a \$1,000 tax credit, and then take a reforestation amortization deduction of \$679 in Year One and Year Eight, and \$1357 for Year Two through Year Seven. Any reforestation cost over \$10,000 per year must be capitalized and added to the timber basis. This excess cost would be recovered when the timber is cut many years from now.

However, Congress changed these rules last year. If a stand of timber was reforested **after** October 22, 2004, the landowner can **directly deduct** up to \$10,000 per year. This law repealed the reforestation tax credit. By allowing the deduction of the reforestation costs in the year in which they occur, the landowner gets an immediate return on his or her investment, instead of waiting over eight years.

Under the old rules, any costs over \$10,000 per year was put into basis and “locked away” until the first timber sale. Now, any costs over \$10,000 per year would be amortized over 84 months, using the same rules as under the old law. This is a direct benefit to landowners who have large tracts to reforest or high site preparation costs.

There is still a quirk in the law that sets the limit at \$10,000 per year per taxpayer. This requires a little financial planning for southern landowners. In most cases, site preparation work in the South is done in the late summer to fall, while tree planting is usually done between January and March. Even if the landowner has a “turn-key” contract, with one vendor doing both site preparation and planting, it would be better for the landowner to split the payment to spread the costs over two years. By paying for the site preparation before December 31, and paying for the tree planting when it is finished in February or March, the landowner can take the deduction in two tax years, thus deducting up to \$20,000 total (\$10,000 per year). Most consulting foresters and many vendors are aware of this tax benefit and would be glad to work with the landowner to make this happen.

The expenses that are eligible under this provision include all site preparation costs (including mechanical work, chemical treatments, and prescribed burning), the cost of the trees or seed to be planted, all planting labor, and the use of post-planting herbicides for herbaceous weed control. In order to take the deduction, you must show cash expenditures for these items. Planting the trees yourself is not deductible, but paying a family member to plant them is allowed. The deduction applies to both natural regeneration and tree planting, both pine and hardwood.

The regulations allow deductions for overhead costs, if you have a consulting forester managing the operation for you. Herbaceous weed control must be done during the first year to be included in this benefit.

One disadvantage of this system is that after the costs are deducted or amortized, the basis in the timber is used up. Later, when the timber is sold, the capital gains tax on the sale will be higher, because of no basis deduction from the sales price. Also, should a casualty occur later, the timber has no basis and thus the loss deduction would be zero.

After being slammed by three hurricanes within a year, many landowners are disheartened and reluctant to replant their damaged timber stands. This new tax break will hopefully encourage timber owners to reforest and maintain the TREASURE that grows in their Forest. ♣

IT'S ALL IN THE NUMBERS: *Reading a Fertilizer Label*

By Coleen Vansant, Public Information Manager, Alabama Forestry Commission

If you've ever gone to your local lawn and garden or farm supply store to purchase fertilizer, you may have been one of those people standing in confusion, scratching your head because of all of the selections. If you're like most of us you eventually grab a bag and go on your way, not really knowing what you just purchased.

Reading and understanding the elements of a particular fertilizer is intimidating, but with a little knowledge you'll look like a pro the next time you buy a bag of fertilizer.

What is N-P-K?

The three numbers on the front of a fertilizer bag represent the three primary ingredients contained in the mixture; all plants need one or more of these nutrients in varying degrees.

The first number represents **Nitrogen (N)**. All plants need nitrogen; it helps plants develop vibrant green **foliage**. The second number represents the amount of **Phosphorous (P)** in the mixture, one of the elements essential for plant growth. Phosphorous helps plants develop strong **root systems**. Finally, the third number stands for the amount of **Potassium (K)**, commonly referred to as "potash." It is also one of the primary elements for plant growth. Potassium helps plants develop beautiful, **colorful flowers**. The nutrient needs for different crops vary. For example, green leafy crops need two-to-four times as much nitrogen as potassium. Vegetables that produce fruit need more phosphorous. Rather than

catering to each of these individual needs, use a well balanced, slow-release fertilizer that contains a fairly equal amount of nitrogen, phosphorous, and potassium.

Additionally, there are two items on the label that are important to understand: the guaranteed percentages of nutrients claimed by the manufacturer (the guaranteed analysis) and the materials the fertilizer is made from (derived from.)

The "guaranteed analysis" tells the percentage of each nutrient in the fertilizer, while the second lets you know the source of the nutrients.

In the "derived from" section, the actual materials used in formulating the fertilizer are listed. Knowing what fertilizer is made of, and the characteristics of its components, helps you to better evaluate its value to you and its suitability for your particular situation.

What's in the Number?

All fertilizers have three numbers on the label which indicate the fertilizer analysis, or "percentage by weight" of nitrogen, phosphorus, and potassium, in that order.

A 50-pound bag of fertilizer labeled 20-10-5 would contain 20% nitrogen (10 pounds), 10% phosphorous (5 pounds), and 5% potassium (2.5 pounds). See the chart below.

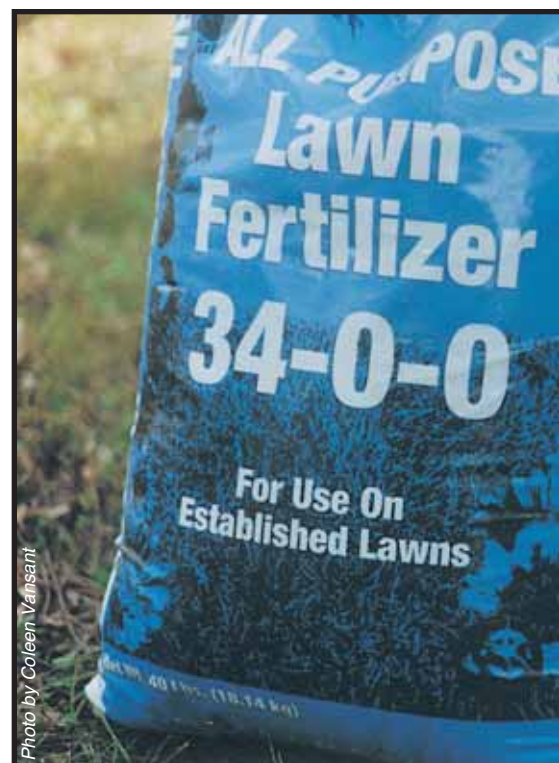


Photo by Coleen Vansant

A 50 POUND BAG OF 20-10-5 FERTILIZER =

20% nitrogen (.20 X 50 lbs = 10 lbs)

10% phosphorous (.10 x 50 lbs = 5 lbs)

5% potassium (.05 x 50 lbs = 2.5 lbs)

This product would be considered a “complete” fertilizer because all three nutrients are available. An “incomplete” fertilizer would have a label like 0-0-60, 46-0-0, or 0-20-20, since one or more of the elements is missing.

The higher the numbers on the bag does not necessarily mean a better product. It does mean the fertilizer will dissolve more quickly in water than one with lower percentage indicators. The quick solubility means that a good amount of the applied fertilizer is wasted, because it either leaches into the subsoil or runs off.

Fertilizer Ratio

Fertilizer ratio indicates the relative amounts of nutrients to each other. A 10-10-10 fertilizer is a 1-1-1 ratio, and a 20-10-5 fertilizer is a 4-2-1 ratio. You want to consider your needs when looking at the ratio. Example: vegetable gardens usually call for a 1-2-2 ratio, which would be something like a 5-10-10 or

10-20-20 fertilizer. Trees like a 2-1-1 ratio, which would be a fertilizer such as 10-5-5 or 20-10-10. Lawns usually call for a 3-1-2 fertilizer, such as 30-10-20.

High analysis fertilizers (those with larger numbers on the label) should be applied at a lower rate to yield the same results. For example, 5 pounds of a 20-20-20 fertilizer would yield the same amount of nutrients as 10 pounds of a 10-10-10 fertilizer.

Other Things to Consider

Fertilizer is available in two types – liquid and granular. Liquid fertilizers are fast-acting and require application every 2-3 weeks. Most are concentrates, mixed with water prior to application by a sprayer or watering can.

Granular fertilizers are applied dry and must be watered in. They are normally applied by hand or mechanical spreaders. They are produced in two different formulas, quick release and slow release. Quick-release fertilizer usually lasts for three to four weeks, depending upon the temperature and amount of rainfall.

There are two primary types of slow-release fertilizers, also known as water-soluble nitrogen (WSN) or field grade fertilizers. Sulfur coated lasts for about 8 weeks. Polymer coated lasts about 12 weeks.

Natural or Not?

Organic fertilizers come from plant and animal sources. These fertilizers have a slower release of nutrients as they need to be decomposed by soil microorganisms. They are a lot easier on plant roots. Harder to find than inorganic fertilizers and often more expensive, the best organic fertilizers are cottonseed meal, bone meal, manure, and chicken litter.

Inorganic fertilizers are inexpensive and are the most frequently used type for

trees. Inorganic nitrogen-based tree food sources are sodium nitrate, ammonium nitrate, and ammonium sulfate. General purpose fertilizers are usually complete with N-P-K. When using these fertilizers, be careful not to overdo. Inorganic fertilizers can come in slow-release, liquid, or water-soluble for foliar application.

To find out what is synthetic and what is natural, read the ingredients and check the percentages. If the numbers on the package equal 20 or more, there is a good chance it is synthetic. If the numbers are less than 20, the product is usually natural.

Be Safe

Excess product runoff from fertilized areas has to go somewhere. It can affect the water table or run off into nearby areas and have an impact on the local water supply or nearby stream.

Always follow the package directions in regard to proper attire, application procedures, and safety precautions.

Tips

1. Before purchasing fertilizer, have a soil test done to determine your fertilizer needs. Contact your local Extension Office for information on soil testing.
2. There is no “one size fits all” fertilizer. Fertilizer choice depends on the type of plant grown.
3. Decide what plant response you want to occur (foliage, roots, or flowers).
4. Apply the fertilizer only if your desired response is likely.
5. Fertilize only as necessary to give the desired response.
6. Observe fertilizer application to see if it gave you the response you want.
7. Always read the label and follow the manufacturer’s directions and recommendations. ♻️



Sources:

- <http://donnan.com/fert.htm>
- <http://forestry.about.com/od/silviculture/p/fertilizing.htm>
- http://gardening.about.com/od/gardenprimer/ht/fertilizerlabel_p.htm
- <http://hgvtv.com> (click on gardening, search: fertilizer)
- <http://www.lowes.com/FertilizerGuide.html>

CONSERVATION EASEMENTS

as Income Tax Deductions

By *Harwell E. Coale, III*

Photo by Coleen Vansant

Preservation of aesthetic, environmental, historic, and recreational values on private lands is difficult to accomplish. Government entities often do not have the funding to purchase and preserve these lands in an undeveloped state. Income tax incentives in return for the donation of conservation easements by private landowners provide a useful tool for accomplishing these preservation goals.

The Internal Revenue Code (hereinafter “the Code”) allows for income tax deductions for charitable contributions under Section 170. One type of these charitable contributions is a conveyance of a partial property interest, which qualifies under the Code as a “conservation contribution.” The most common form of these contributions is a conservation easement. Conservation easements were only relatively recently authorized in 1997 as a valid property interest under Alabama law. The charitable conservation contribution must meet specific requirements outlined in the Code and Treasury Regulations (hereinafter “the Regulations”) in order to qualify for the income tax deduction. A qualified conservation contribution is generally defined by the Code as “a contribution of a qualified real property interest, to a qualified organization, exclusively for conservation purposes.”

Statutory Requirements

The conservation easement (i.e. restriction on use of the property) is the most common type of qualified real property interest donated. It is best suited to landowners who want to retain certain uses of their property while restricting the property from future development and/or preserving certain characteristics of the property.

Generally, under the Regulations the qualified receiving organization must “have a commitment to protect the conservation purposes of the donation, and have the resources to enforce the restrictions.” The Regulations identify the types of organizations qualified to receive conservation contributions as governmental units, organizations receiving substantial support from a governmental unit, and tax-exempt publicly-supported charities qualified under 501(c)(3) of the Code.

The Code states that, “contribution shall not be treated as exclusively for conservation purposes unless the conservation purpose is protected in perpetuity.” Surface mining is generally prohibited. Further, the Regulations require the taxpayer to substantiate the condition of the property at the time of gift by providing the receiving organization with appropriate baseline documentation where a retained use may potentially impact the donated conservation purpose

in the future. The Tax Court recently interpreted this exclusivity requirement to also necessitate that a tax-exempt organization's formal exempt status purpose be related to holding the conservation easement, and that it be able to enforce its rights as such holder.

The conservation purpose requirement is more difficult to ascertain than the other requirements because every tract of land possesses a unique mix of conservation values. The Code identifies four general classes of conservation purposes:

- 1) The preservation of land areas for outdoor recreation by, or the education of, the general public;
- 2) The protection of a relatively natural habitat of fish, wildlife, plants, or similar ecosystem;
- 3) The preservation of open space (including farmland and forestland) where such preservation is – for the scenic enjoyment of the general public, or – pursuant to a clearly delineated federal, state, or local government conservation policy and will yield a significant public benefit; or
- 4) The preservation of a historically important land area or a certified historic structure.

The Regulations attempt to further define these broad categories and provide some specific examples; however, it is impossible to identify the infinite different circumstances which qualify as con-

servation purposes. The Regulations do identify that public access is required where the conservation purpose is for the preservation of land areas for outdoor recreation by, or the education of, the general public. Public access is not required to accomplish the other general categories of conservation purposes except where the lack of public access would frustrate the proposed conservation purpose.

Given the wide variety of individual circumstances that would qualify as conservation purposes, the determination is inherently a case by case analysis. The only certain way to determine whether a particular taxpayer's contribution will qualify for a conservation deduction is to request a Private Letter Ruling (PLR) from the Internal Revenue Service (IRS). The problem with requesting a PLR is that it is costly and time consuming. Additionally, the IRS will not rule on whether the valuation of the deduction (discussed below) is correct.

While requesting a PLR often is not an appropriate course of action for determining how to create a conservation easement that will qualify for an income tax deduction, analysis of past PLRs provides useful insight into how to structure the transaction. It should be noted that a PLR applies solely to the taxpayer who requested it.

Forty-five PLRs issued between 1982 and 2004 were found which directly addressed the issue of whether a particular easement constituted a qualified conservation contribution to provide the taxpayer an income tax deduction. The rulings involved a wide variety of conservation purposes, and were all determined to be valid conservation contributions pursuant to the Code. This high approval rate could be attributable to the fact that a taxpayer would not undertake the effort and expense to obtain a private letter ruling without presenting a strong case.

Further, it may reflect that the qualified organization receiving the easement helps ensure the significance of the donation. On the other hand, it may simply indicate a somewhat tolerant approach by the IRS in the interpretation of conservation purposes under the Code, given the volume of litigation in regards to valuation, as discussed below.

another common type found in the rulings. Other easements involved retained uses such as forest management and harvesting, mineral rights, outdoor recreation, water use, limited residential development, commercial campgrounds, summer camps, and guest ranches. Most of the rulings involve some combination of the above-listed uses. Frequently the subject property was located in close

proximity to a public recreation area and/or ecologically sensitive area such as a park, national forest, wildlife refuge, or public body of water. Other properties were located in areas that are experiencing rapid growth and development, or contained rare plant or animal species.

Easement Valuation

The value of the conservation contribution is the fair market value of the restriction at the time of the contribution. Such fair market value can be determined through a comparable sales appraisal approach using sales of similar easements in the area; however, such information is often limited. Therefore, the fair market value of the contribution will often be determined as the fair market value of the property prior to donation of the easement (its highest and best use) less the fair market value of the property after donation of the easement. The Regulations provide that such before-

and-after valuation "must take into account not only the current use of the property, but also an objective assessment of how immediate or remote the likelihood is that the property, absent the restriction, would in fact be developed, as well as any effect from zoning, conservation, or historic preservation laws that already restrict the property's potential highest and best use."

(Continued on page 18)



Photo by Coleen Vansant

Review of the PLRs showed that often the conservation easements involved contributions which asserted they fulfilled several of the broad categories of conservation purposes identified in the Code. The easements commonly involved agricultural/livestock farms or ranches. In general, these taxpayers proposed to restrict the land from commercial and residential development while continuing farming/ranching activities. Historic preservation easements were

CONSERVATION EASEMENTS

(Continued from page 17)

A deduction in excess of \$5,000 for a donation of a conservation easement must be substantiated by the submission of a qualified appraisal by a qualified appraiser. The intangible nature of conservation easements can lead to widely varying opinions as to value of the easement by equally qualified appraisers. Thus, large deductions for conservation easement donations seem to provide potential fertile ground for IRS audit. Last year, The Joint Committee on Taxation referred to such valuation difficulties in justifying its recommendations for significant revised limits on the allowable charitable deductions for donations of qualified conservation easements. Further, the IRS announced the targeting of abusive practices with conservation easement donations such as over-valuation and failure to enforce easement restrictions.

Indeed, as mentioned above, much of the past litigation in this area has been

regarding the valuation of the donation. In some cases, the IRS has taken the position that the easement donation was worth nothing, arguing that there has been no change in highest and best use of the property. Overall review of cases regarding conservation easement valuation indicates a general trend of the Courts to recognize at least some value for the conservation contribution, usually (but not always) somewhere between the extremes of valuations presented by the taxpayer and IRS experts.

A review of the cases listed in the adjoining table clearly demonstrated that the valuation of a conservation easement is a highly fact-based inquiry and largely dependent on expert



Photo by Coleen Varsant

Case	Taxpayer	IRS	Court
Browning v. CIR(1997)	\$254,000	\$0	\$209,000
Schwab v. CIR(1994)	\$900,000	\$0	\$544,000
Dennis v. U.S.(1992)	\$50,610	\$7,700	\$50,610
Clemens v. CIR(1992)	\$910,000	\$110,000	\$703,000
Schapiro v. CIR(1991)	\$595,031	\$388,000	\$595,031
Dorsey v. CIR(1990)	\$245,000	\$46,000	\$153,422
Higgins v. CIR(1990)	\$110,000	\$50,150	\$103,000
Griffin v. CIR(1989)	\$195,000	\$35,000	\$70,000
Richmond v. U.S.(1988)	\$150,000	\$59,000	\$59,000
Losch v. CIR(1988)	\$235,000	\$70,000	\$130,000
Fannon v. CIR(1986)	\$236,752	\$0	\$90,956
Symington v. CIR(1986)	\$150,000	\$0	\$92,370
Todd v. CIR(1985)	\$353,000	\$31,000	\$31,000

opinion. Proof of the change, due to the easement, in the highest and best potential use of the property has been shown to be instrumental in supporting valuations of the easement, and thus, the deduction taken by the taxpayer. ☛

NOTE: IRS CIRCULAR 230 Disclosure: U.S. Treasury Regulations require that the reader be informed that any tax advice contained in this article is not intended to be used, and cannot be used, to avoid penalties imposed under the Internal Revenue Code.

About the author . . . Harwell E. Coale III

Trey Coale practices law with the Mobile, Alabama firm of Coale, Dukes, Kirkpatrick & Crowley, P.C. He received his undergraduate degree in natural resources from the University of the South and his Juris Doctor from the University of Alabama. He also holds masters degrees in forest resources from the University of Georgia and environmental law from Vermont Law School. He recently completed his masters in tax law with honors from the University of Alabama.

HIDDEN



TREASURES

Continuing the Family Tradition

By James Jennings, Outreach Forester, Alabama Forestry Commission

A long tradition of owning forestland continued in the Agnew family when Tierre Agnew of Fayette County purchased 62.5 acres in 1995. Like his father, Delmus Agnew, Tierre wanted to own and manage forestland.

Raised in a close-knit family, Tierre Agnew spent his primary years on his parents' land in Fayette County. It was while growing up here that he had such wonderful childhood memories. After graduating from Hubbertville High School in 1981, he enlisted in the Navy. Remembering the serene atmosphere of his hometown, Tierre made a conscious decision that wherever his endeavors took him, he would ultimately return home to be near his family. That objective was eventually reached as planned. He served his country for over 22 years, and in March of 2004 Tierre retired from the Navy, returning home to Fayette County.

During his years in the service, Tierre had a life plan and his main aspiration was to purchase land. However, he did not wish to just own land, he wanted to manage it properly and enjoy it. After purchasing land from the Jenkins family, he contacted several natural resource agencies to learn about available opportunities. Still enlisted in the Navy and stationed in Florida, most of these contacts were handled by phone and mail. The Alabama Forestry Commission gave him information about management options and cost-share programs. As an absentee landowner, his management choices were



As his father did for him, Tierre Agnew hopes to instill the love of owning and managing forestland into his own son, Christopher.

limited. After reviewing the options, Tierre decided to manage a healthy forest for saw timber production to supplement income potentials, wildlife enhancement, and recreation. These objectives are ideal for absentee landowners because the practices are less intensive as well as financially feasible.

Tierre immediately started the process to bring about the necessary adjustments on his land. The property consisted of a total of 58 acres of forestland, 1 acre of wildlife openings, a 1-acre pond, 2.5 acres of power line easements, and a home site. During leave from the Navy, he and his father began making improvements. To make timber production more economical on the forestland acreage, the stands had to be harvested and re-established. In 2002, 36 acres of low-quality hardwood that had been high-graded were harvested for conversion into a pine plantation. The stand was chemically and

mechanically site-prepared. Next, second generation loblolly pine seedlings were planted on a scheduled rotation of 30 years. The tract also has an 11-year-old planted pine stand on 14 acres. A 7-acre stand of upland hardwoods will remain in its natural state for wildlife habitat. Finally, there is also an immediate plan to renovate and enhance an old cattle watering hole into a well-managed pond for recreational fishing.

After completing several management objectives, Tierre was recognized for his accomplishments. County Manager

John Harbison nominated him as a TREASURE Forest landowner in March of 2003, and he became certified that April.

Tierre Agnew accomplished his dream of returning home and being close to his family. He also accomplished another important goal, to continue the family tradition of owning and managing forestland. As with many projects, the work is never done . . . forestland management is a continuous process. Since he now has more time to work on his land, Tierre plans to make more improvements. His father also continues to assist him with management activities as his property is located just across the road. Perhaps this tradition will be passed down to Tierre's son. Will Christopher be the next generation of Agnews to own and manage forestland? 🌲

Legislative Profile

By *Coleen Vansant*, Information Manager,
Alabama Forestry Commission

Senator Zeb Little

**Democrat,
4th District**

*(Cullman, Lawrence,
Winston Counties)*



Even though he is serving only his second term as State Senator from District 4, Zeb Little of Cullman has earned his stripes in the ranks of the state legislature, having been named the Senate Majority Leader last summer. During his service to the State, Little has been a long time supporter of the Rural Volunteer Fire Departments and a friend to the forestry community as well.

The Senator was born in Cullman, Alabama and attended Cullman High School. He received his bachelor's degree from the University of Alabama at Birmingham before attending Cumberland School of Law at Samford University, where he earned his Juris Doctorate. In 1977 he began working with the law firm of Knight and Griffith in Cullman. He became a partner in 1999, and in 2003 the firm changed its name to Knight, Griffith, McKenzie, Knight, McLeroy, and Little. He is a member of both the Cullman County and Alabama State Bar Associations,

and the Bar Associations of the United States District Court for the Northern and Middle Districts of Alabama.

Although one of the youngest members of the Alabama State Senate, Little has earned respect at the State House. He was appointed Senate Majority Leader by the President Pro Tempore of the Senate. As Senate Majority Leader, he serves as a voting member of all senate standing committees except those pertaining to local legislation. Senator Little also chairs the Agriculture, Conservation, and Forestry Committee and has supported recent bills including legislation making it a misdemeanor crime to interfere with a volunteer firefighter during the performance of his duties. He also supported the Hazardous Duty Bill.

Senator Little and his wife, Deanna, live in Cullman with their two children, Zebulon Peyton, Jr. and Emily Britt. They are members of St. John's United Church in Cullman. ☛

For
current
information
on
the
Southern
Pine
Beetle
situation
in
Alabama,
visit
the
Alabama
Forestry
Commission
web page
at:
[www.
forestry.
state.al.us](http://www.forestry.state.al.us)



Is Your Home Firewise?

Part 2 in a Series

In the Summer 2005 issue of *Alabama's TREASURED Forests*, an article by AFC Wildland Urban Interface Specialist Gerald Steeley explained the increased fire risks associated with living in the "wildland-urban interface." Also, a "Wildfire Risk Assessment" was provided for homeowners. In this second installment on the topic, details are given to help landowners identify and address potential dangers in the construction of and landscape around the home (see pages 22 and 23).

For each of the factors listed below that may be contributing to the wildfire hazard around your home, actions are recommended that will reduce that hazard. (from the *Wildfire Risk Assessment Guide for Homeowners*, Univ. of Florida School of Forest Resources and Conservation)

Wildfire Hazard Reduction Actions

If house has wood shingles or deck:

- replace wood shingles with Class A shingles (asphalt, fiberglass), tiles or metal.
- install nonflammable skirting (metal screen, stucco or masonry) around wood deck if not already present.
- install a sprinkler system to cover roof and/or deck.
- convert deck to screened porch with metal screen.

If house has wood siding:

- clear flammable vegetation and mulch from a 3-5 foot zone around structure.
- create defensible space that extends at least 30 to 100 feet from home.

If house has open foundation and crawl spaces:

- clear debris and other flammable materials from under house.
- install nonflammable skirting (metal screen, stucco or masonry) around house.
- clear flammable vegetation and mulch from a 3-5 foot zone immediately around house.

If shrubs dominate adjacent wildlands:

- use prescribed burning, hand-held tools or herbicide applications to remove most natural-growing shrubs up to a distance of at least 60 feet from the house; islands of plants can be left in accordance with defensible space guidelines; shrub treatments may have to be repeated periodically.
- if on a hill, remove most shrubs within 100 feet of the house on the downhill side.
- in the area between 60 and 150 feet from the house, the density and continuity of shrubs and trees should also be reduced.

If significant woody debris (downed trees and branches) is present in adjacent wildlands, and defensible space is less than 60 feet:

- use prescribed burning or chipping equipment to reduce the amount of large woody debris in wildlands.
- pile and burn following local outdoor burning ordinances.

If grasses dominate adjacent wildlands, and defensible space is less than 30 feet:

- mow regularly to keep grass short in your defensible space.
- use goats, sheep, or cattle to keep grass short in adjacent wildlands.
- install sprinkler system in area from 0 to 30 feet from house.

In all situations, maintenance is a must:

- remove pine needles and other flammables that collect on roof, deck, and around foundation.
- prune shrubs and trees periodically to remove dead materials. ♣

Firewise Construction Checklist

When constructing, renovating, or adding to a firewise home, consider the following:

- Choose a firewise location.
- Design and build a firewise structure.
- Employ firewise landscaping and maintenance.

To select a firewise location, observe the following:

- Slope of terrain; be sure to build on the most level portion of the land, since fire spreads more rapidly on even minor slopes.
- Set your single-story structure at least 30 feet back from any ridge or cliff; increase distance if your home will be higher than one story.

In designing and building your firewise structure, remember that the primary goals are fuel and exposure reduction. To this end:

- Use construction materials that are fire-resistant or non-combustible whenever possible.
- For roof construction, consider using materials such as Class-A asphalt shingles, slate or clay tile, metal, cement and concrete products, or terra-cotta tiles.
- Constructing a fire-resistant sub-roof can add protection as well.
- On exterior wall facing, fire resistive materials such as stucco or masonry are much better choices than vinyl which can soften and melt.
- Window materials and size are important. Smaller panes hold up better in their frames than larger ones. Double pane glass and tempered glass are more reliable and effective heat barriers than single pane glass. Plastic skylights can melt.
- Install non-flammable shutters on windows and skylights.
- To prevent sparks from entering your home through vents, cover exterior attic and underfloor vents with wire screening no larger than 1/8 of an inch mesh. Make sure under-eave and soffit vents are as close as possible to the roof line. Box in eaves, but be sure to provide adequate ventilation to prevent condensation.
- Include a driveway that is wide enough to provide easy access for fire engines (12 feet wide with a vertical clearance of 15 feet and a slope that is less than 5 percent). The driveway and access roads should be well-maintained, clearly marked, and include ample turnaround space near the house. Also provide easy access to fire service water supplies, whenever possible.
- Provide at least two ground level doors for easy and safe exit and at least two means of escape (i.e., doors or windows) in each room so that everyone has a way out.
- Keep gutters, eaves, and roofs clear of leaves and other debris.
- Make periodic inspections of your home, looking for deterioration such as breaks and spaces between roof tiles, warping wood, or cracks and crevices in the structure.
- Periodically inspect your property, clearing dead wood and dense vegetation at distance of at least 30 feet from your house. Move firewood away from the house or attachments like fences or decks.

Any structures attached to the house, such as decks, porches, fences, and outbuildings should be considered part of the house. These structures can act as fuel bridges, particularly if constructed from flammable materials. Therefore, consider the following:

- If you wish to attach an all-wood fence to your house, use masonry or metal as a protective barriers between the fence and house.
- Use metal when constructing a trellis and cover it with high-moisture, low flammability vegetation.
- Prevent combustible materials and debris from accumulating beneath patio decks or elevated porches. Screen or box-in areas below patios and decks with wire screen no larger than 1/8 inch mesh.
- Make sure an elevated wooden deck is not located at the top of a hill where it will be in direct line of a fire moving up slope. Consider a terrace instead.

Access additional information on the Firewise home page: www.firewise.org



Firewise Landscaping Checklist



Landscaping



When designing and installing a firewise landscape, consider the following:

- Local area fire history.
- Site location and overall terrain.
- Prevailing winds and seasonal weather.
- Property contours and boundaries.
- Native vegetation.
- Plant characteristics and placement (duffage, water and salt retention ability, aromatic oils, fuel load per area, and size).
- Irrigation requirements.

To create a firewise landscape, remember that the primary goal is fuel reduction. To this end, initiate the zone concept. Zone 1 is closest to the structure; Zones 2-4 move progressively further away.

- Zone 1.** This well-irrigated area encircles the structure for at least 30' on all sides, providing space for fire suppression equipment in the event of an emergency. Plantings should be limited to carefully spaced low flammability species.
- Zone 2.** Low flammability plant materials should be used here. Plants should be low-growing, and the irrigation system should extend into this section.
- Zone 3.** Place low-growing plants and well-spaced trees in this area, remembering to keep the volume of vegetation (fuel) low.
- Zone 4.** This furthest zone from the structure is a natural area. Selectively prune and thin all plants and remove highly flammable vegetation.

Also remember to:

- Be sure to leave a minimum of 30' around the house to accommodate fire equipment, if necessary.
- Widely space and carefully situate the trees you plant.
- Take out the "ladder fuels" — vegetation that serves as a link between grass and tree tops. This arrangement can carry fire to a structure or from a structure to vegetation.
- Give yourself added protection with "fuel breaks" like driveways, gravel walkways, and lawns.

When maintaining a landscape:

- Keep trees and shrubs properly pruned. Prune all trees so the lowest limbs are 6' to 10' from the ground.
- Remove leaf clutter and dead and overhanging branches.
- Mow the lawn regularly.
- Dispose of cuttings and debris promptly, according to local regulations.
- Store firewood away from the house.
- Be sure the irrigation system is well maintained.
- Use care when refueling garden equipment and maintain it regularly.
- Store and use flammable liquids properly.
- Dispose of smoking materials carefully.
- Become familiar with local regulations regarding vegetation clearances, disposal of debris, and fire safety requirements for equipment.
- Follow manufacturers' instructions when using fertilizers and pesticides.

Access additional information on the Firewise home page: www.firewise.org



Don't Get Caught In The Storm

By Coleen Vansant, Public Information Manager, Alabama Forestry Commission

Most everyone at one time or another has been caught outdoors in an electrical storm. Whether you are cutting grass, camping, hiking, or working on your property, this can be a very frightening and dangerous time if you are not near a place of safety to wait out the storm. For any of you who may find yourself in that situation in the future, there are things you can do to limit your chances of being a lightning statistic.

Lightning

Lightning is an electrical discharge which results from a buildup of static electricity between the ground and the clouds, or between two clouds. It occurs with all thunderstorms, both in the storm area and out in front of the storm. Lightning is what causes those rumbles of thunder we hear off in the distance. If you can hear thunder before the storm, you are close enough to the storm to be struck by lightning.

Thunderstorms are most likely to develop on warm summer days and go through various stages of growth, development, and dissipation. On a sunny day,

as the sun heats the air, pockets of warmer air start to rise in the atmosphere. When this air reaches a certain level in the atmosphere, cumulus clouds start to form. Continued heating can cause these clouds to grow vertically upward in the

You can estimate the distance in miles between you and the lightning by counting the seconds between the flash and the sound of the thunder, then dividing by five.

atmosphere into towering clouds. These very tall cumulus clouds may be one of the first indications of a developing thunderstorm.

Lightning kills nearly 100 people every year in North America and causes

thousands more injuries. Although some victims are struck directly by the main lightning stroke, many more victims are struck as the current moves in and along the ground. Eighty-five percent of lightning victims are children and young men between the ages of 10 and 35 years who are engaged in recreational or work activities. Twenty percent of strike victims die, while seventy percent will suffer serious burns.

More Lightning Facts

- Lightning hits somewhere on the earth about 100 times every second.
- More people are killed by lightning than by any other kind of storm, including hurricanes and tornadoes.
- Lightning causes several hundred million dollars in damage to property and forests each year.
- Lightning results from the buildup and discharge of electrical energy between negatively-charged areas (bottom of the cloud) and positively-charged

areas (items on earth). It is static electricity on a huge scale.

- Your chance of being struck by lightning is estimated to be 1 in 600,000 each year.
- A lightning flash is estimated to carry 30,000 to 300,000 amps of electricity at 15 million to 125 million volts, for less than one second.
- The air near a flash is heated to 50,000 degrees F – five times hotter than the surface of the sun. The rapid heating and cooling of the air causes the shock wave we hear as thunder.
- Most lightning casualties occur in the summer months, during afternoon or early evening when people are caught outdoors.

Keeping Safe

No place is absolutely safe from lightning, although some places are much safer than others. Knowing these safe places and how to utilize them may prevent you or your family from being stranded in the storm with no place to go.

The safest location during lightning activity is a fully closed building with a roof, walls, and floor. Picnic shelters, sheds, carports, camping tents, or other partially open structures are not your safest bet. An enclosed building is safe because the wiring and plumbing, or outside telephone poles, help divert the electrical current from the flash. Typically the charge of electricity will travel through the wiring or plumbing and into the ground.

Safety Tips

If you cannot find shelter in an enclosed safe building, you can help protect yourself from being a victim of lightning by following these safety tips.

- Keep an eye on the sky . . . look for darkening skies, flashes of light, or increasing wind.
- If you are planning a day to work on your property, get an up-to-date weather forecast from your NOAA (National Oceanic and Atmospheric Administration) weather radio, or commercial radio or television station.
- As soon as you hear thunder, see lightning, or see dark threatening clouds, get to a safe location. If you can hear

thunder, you are close enough to the storm to be struck by lightning. Then wait 30 minutes after the last rumble of thunder before you leave the safe location.

- Lightning typically strikes the tallest object. Make yourself as small as possible by doing the “Lightning Safe Crouch” in the photograph below.
- Avoid any water, including water from faucets.
- Try to get into a house, large building, or vehicle (not a convertible). Avoid standing in small isolated sheds or other small structures.
- If you are stranded outdoors, seek shelter in a low area under a thick growth of small trees or shrubs. Remember – lightning usually strikes the tallest object. If you are in an open area, go to a place as low as possible such as a ravine or valley.

- If you are caught in a flat area – such as a level field – and you feel your hair standing on end, this is an indication that lightning is about to strike. Avoid contact with other people. If in a group, do not huddle together. Spread out at least 15 feet apart.
- Remove all metal objects from your body and clothes, including metal-framed backpacks, tools, etc.
- Stay away from metal objects such as antennas, electric wires, fences, and train tracks. The rails can carry lightning to you from some distance away.
- Avoid holding metal tools, fishing rods, guns, etc.
- Get off and away from machinery including lawn mowers, tractors, golf carts, ATVs, and bicycles.
- Have as little contact with the ground as possible. Do the “Lightning Safe Crouch.” (See photo.) ⚡

Sources:

<http://www.lightningsafety.noaa.gov/outdoors.htm>

http://www.usscouts.org/profbvr/lightning_safety/index.html

<http://www.safete.com/safetyarticles/weather/lightning.htm>



If you feel your skin tingle or your hair stand on end, do the “Lightning Safe Crouch.” Squat low to the ground on the balls of your feet and place your hands on your knees with your head between them. Make yourself the smallest target possible and minimize your contact with the ground. Stay in this position until the storm passes.



Alabama's forests offer their owners a multitude of recreational opportunities. Hunting, fishing, hiking, and similar activities provide countless hours of enjoyment. Another source of recreation, sometimes overlooked, is photography. The woodlands of Alabama have a great diversity and abundance of life that give the photographer ample chances for capturing great images. You will never have to worry about running out of things to photograph. In fact, you might ask, "Where do I start?"

A good place to begin your photography exploits is with the land itself. Take landscape photos of some of your favorite spots: a scenic overlook, a wooded slope, a stream or pond, a field, and so on. Repeat these scenic shots under varying conditions and times. Clouds or fog can add interest to an otherwise average vista, and seasonal pictures of the same area lend color and variety. Often, landscape photos can be improved by including something in the foreground to frame the scene and add a sense of depth.

Next, take pictures of plants you find on your land. Trees make great year-round subjects. Take images of them through the seasons as they produce flowers, fruit, and colorful leaves. Wildflowers, always a great subject, can be found from early spring until autumn. Try shots of shrubs, vines, and grasses as well. Do not worry if you cannot name a certain plant. Take the picture and identify it later in a field guide. When you see this plant again, you just might recognize it. You will be learning and having fun at the same time.



Photo by J.W. Hybart III

Enjoying Your Land - With a Camera

By Jim Hybart

In my experience, the most challenging camera work to be attempted in the forest is wildlife photography. To get good photos of wild game, you have to take the same precautions that hunters do, as well as considering several factors peculiar to photography. The amount and direction of the light, exposure settings, subject distance, camera support, and composition are prominent among these. Concealment plays a big part in wildlife photography. If you have game food plots with shooting houses that are used for hunting, these are excellent places to

try your luck. Ground shooting houses work best since pictures taken at the same eye level as your subject are the most appealing. Also, remember that wildlife includes other animals besides the ones you are accustomed to hunting. Pictures of non-game birds, mammals, and reptiles can be just as fascinating as one of a wild turkey.

Besides this menagerie of natural subjects, use your camera to document events that occur on your land as well. This not only includes pictures of successful hunting and fishing trips, but also

forestry-related activities. Take before, during, and after photos of logging operations. Take some shots before and after a prescribed burn. Shoot pictures of newly planted seedlings, then annual photos of the same trees to have a visual record of their growth. Such photographs may be of assistance when planning future site prep and planting work. You can also use your camera to document unfortunate occurrences such as storm damage. These pictures are helpful with insurance or casualty loss claims. As

(Continued on page 28)



Photo by J.W. Hybart III

Pictures of mammals, reptiles, and non-game birds such as this cardinal can be just as fascinating as one of a wild turkey.

time goes by, you will create a photographic history of your forest and you will be amazed when you look back at some of your first images to see how the land and timber developed over the years.

Which brings us to the big technical question - what photographic equipment do you need? The variety and quality of cameras and accessories have never been better. All types of cameras from com-

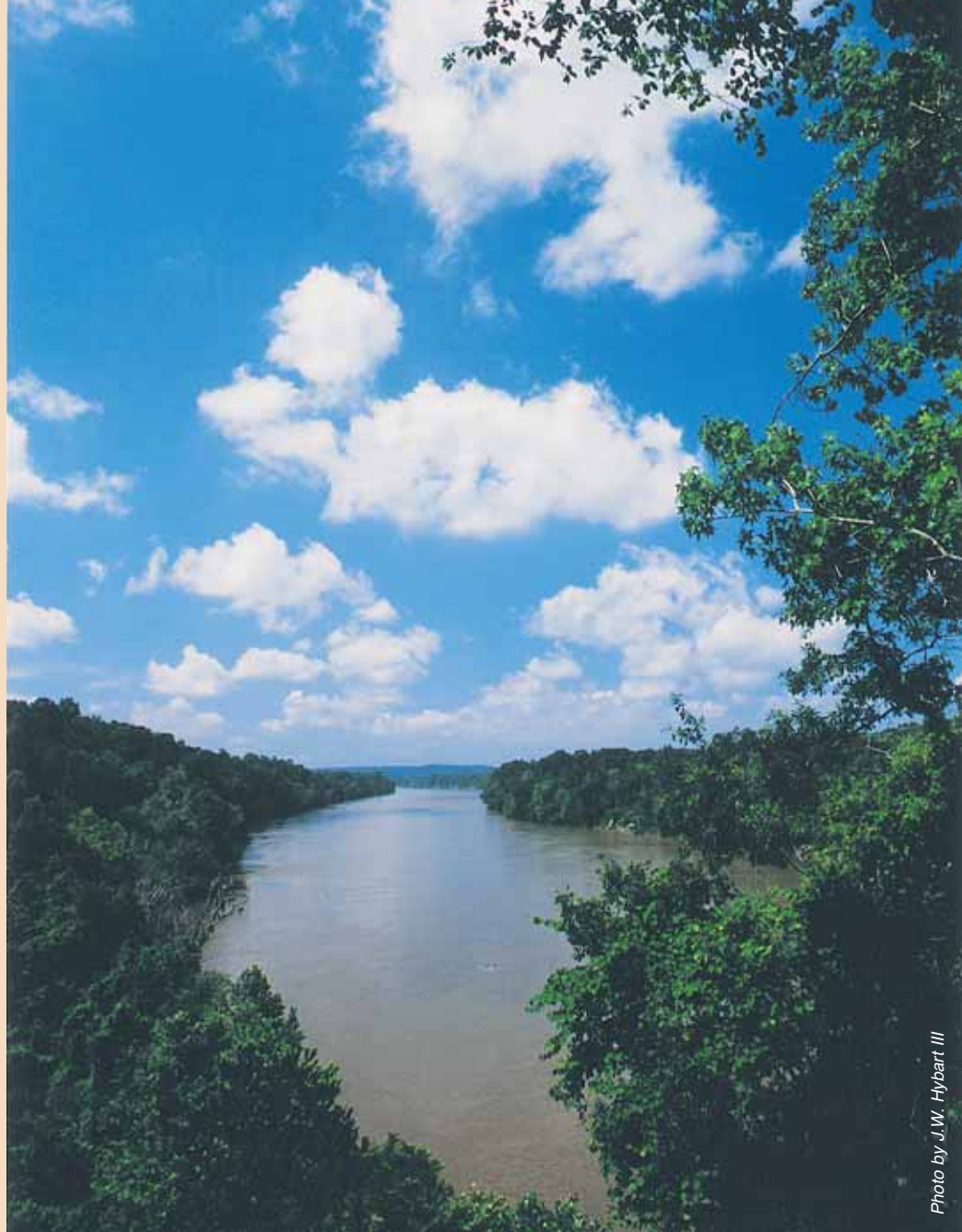


Photo by J.W. Hybart III

Above and left: Photos taken at different times of the year reflect the various colors of the seasons.



Photo by J.W. Hybart III

compact “point and shoot” models to large format field cameras are on the market. The digital imaging revolution that occurred almost overnight has created previously unheard of possibilities for photographers. The choices can be overwhelming, but the operative word to keep in mind when considering what to buy is versatility.

While point and shoot cameras are convenient and simple to use, stepping up to the next level will improve your chances for a greater variety of first rate photographs. The most versatile system is the 35mm single lens reflex (SLR) film camera or its digital equivalent. It is

Photo by J.W. Hybart III

(Right) Wildlife photography can be the most challenging camera work to be attempted in the forest.

(Bottom) Use your camera to create a photographic history of your forest. Take “before” and “after” shots to document forestry-related activities such as pine thinning.

indeed a system – not just a camera. SLR cameras have a wide range of accessories making them suitable for just about any type of photography.

The most important accessory is the camera lens. There is a large assortment of lenses designed for various uses. For instance, wide-angle lenses take in a large portion of the scene and thus work well for landscape shots. Telephoto lenses narrow the field of view while magnifying the subject and are the obvious choice for wildlife photography. Zoom lenses can vary their coverage and magnification and are suitable for a variety of pictures. There are also specialized lenses. One of the best is the macro lens, which allows for interesting close-ups of wildflowers or insects.

A host of other components is available. An add-on flash unit will offer more power and options than the smaller flashes built into most cameras. Teleconverters are attachments that go between the camera body and lens to increase magnification. Extension tubes mount the same way and aid in magnifi-

Photo by J.W. Hybart III



cation by shortening the minimum focusing distance of a particular lens. One other item that is indispensable for serious photography is a tripod. This will hold the camera steady, especially for close-ups and telephoto work.

Should you select a film or digital camera? It is really a matter of personal preference. Both types work extremely well. If you are computer savvy, digital might be your choice as imaging software programs provide ways to enhance your images. If you prefer traditional photography, do not hesitate to go with a film camera. There are makes and models to fit every budget. Shop around and

find something with which you are comfortable. You do not have to buy the most expensive gear. Remember the old axiom, “cameras don’t take great pictures – photographers do.” Having a clear understanding of such key photographic elements as light, exposure, and composition will reward you with more good photos than the costliest camera ever will.

I have spent many wonderful days with a camera roaming the woods and fields of our family property in Monroe County. My passion for photography has grown as I have become aware that it is more than just a recreational pastime. When searching for something to photograph, I find myself moving slower and observing more. I see things I never noticed. The camera has become more than an instrument for capturing images. It is a tool that is expanding my knowledge and appreciation of the natural world.

I hope you come to the same realization with your photography. 📷

*Editor’s Note: Jim Hybart is a freelance photographer and owner of Hybart Woodland Services, a property maintenance company in Monroe County. If you have questions or comments about photography or would like to share some of your photographic experiences, write him at:
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Fall 2005/Winter 2006

Alabama’s TREASURED Forests / 29



Random Monitoring: the Way to Encourage BMPs

By *Jeremy Lowery*, BMP Forester,
Alabama Forestry Commission

Because of increasing concerns about Alabama's Best Management Practices (BMPs), the Alabama Forestry Commission (AFC) has created a new position to address this issue. BMP Forester Jeremy Lowery will put more emphasis throughout the entire state on a constant review of BMP complaints and aerial monitoring. Each complaint is to be handled in such manner as to ensure Alabamians that the Alabama Forestry Commission is dedicated to this issue.

There are many rivers and waterway systems in Alabama, all of which need protection. The Alabama Forestry Commission intends to monitor these waterways through various means: the air, citizens of the state, the Alabama Department of Environmental Management (ADEM), and Commission employees.

Aerial monitoring is probably the most intensive of these measures. The state is divided into four regions, two of which will be flown each fiscal year. Initial flights serve to spot possible areas of silvicultural activity. For this year, 51 locations in the Northeast Region and 61 locations in the Northwest Region have been randomly selected for inspection.

Trained observers will complete the inspections using six basic criteria: stream management zones, stream crossings, forest roads, timber harvesting, reforestation stand management, and forest wetland management. If an inadequacy is noted for any of these six criteria and permission is granted, an on-the-ground inspection will be completed. If a problem exists, recommendations will be made as to how it can be fixed and a 30-day period will be allowed for the resolution of the issue. At this point, another inspection will then be completed to either close the

case, or if the problem has not been resolved, ADEM will take over to ensure that the issue is resolved. A Memorandum of Agreement between ADEM and the AFC allows the Commission to intervene to help landowners clear up issues without fine or prosecution of any sort prior to an ADEM inspection.

Complaints will also be received from ADEM, concerned citizens, and AFC personnel, which will be handled in the same manner as the aerial reports.

At this time, there are 22 complaints on file for the 2005-2006 Fiscal Year. Of these, ten required handling by ADEM, and twelve were resolved through cooperation with suggestions made by the AFC.

It is the goal of the Alabama Forestry Commission to educate everyone about BMPs in order to prevent problems before they happen. After all, it is up to us to protect the future of our state's waterways. ♣

Water Sprouts and their Application to Forestry

By *David Mercker*, Extension Forester, The University of Tennessee

As with all scientific disciplines, the science of forestry has fashioned a vocabulary that can be confusing to those outside the profession. Forester's vocabulary is an unusual mix of formal language and common expressions. One term that has confounded our efforts to educate forest landowners is water sprout.

When read side by side, the words "water" and "sprout" are an awkward fit. A water sprout is actually one of the many physiological responses of trees to disturbances. They are also known as epicormic branches. A water sprout, or epicormic branch, is a small shoot arising spontaneously from a dormant bud on the stem or branch of a woody plant. They are small branches, springing outward, leaving a viewer to observe an unnatural appearance of a tree, as if the

branches do not conform to the traditional crown and trunk structure.

In most cases, water sprouts are a result of a disturbance to a tree or to the tree's surroundings. Most commonly, water sprouts follow sudden exposure to increased light levels, for instance, after a forest has been released via thinning or selective harvesting. The number of water sprouts experienced by a tree is directly related to the degree of release and to the level of growth suppression prior to release. In other words, if trees are released too heavily, or if the release occurs on trees that were severely suppressed due to overstocking, water sprouts will more likely occur. They are more common with hardwoods than with pine. White oak trees are especially susceptible.

Water sprouts can result from other disturbances too, such as fire. Ground fire can temporarily affect the availabili-

ty of moisture and nutrients, triggering the formation of water sprouts.

Sometimes they will even develop on trees with no apparent sign of disturbance. However, such trees will normally be experiencing growth suppression, and the sprouts are a response to that suppression.

Water sprouts can have a profound effect on the quality of lumber produced in a forest. Newly formed water sprouts do not penetrate deeply into the interior wood, but if allowed to grow, can become sizable branches, significantly lowering lumber grade and value. When thinning and selectively harvesting forests, much thought should be given to the residual stocking. Only well-trained foresters should make the decision of which trees to harvest, and which should continue growing, thereby minimizing the likelihood of water sprouts. ♣

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Flatwoods Plum

(*Prunus umbellata*)

By *Fred Nation*, Educator, Baldwin County

Flatwoods plum is a small tree that is native to the American southeast, from North Carolina to central Florida, and westward to central Texas. In Alabama, it is scattered, sometimes fairly frequently, in the southern two-thirds of the state, where it is found in a variety of habitats, such as swamp edges, open roadsides, and pine flatwoods.

Unlike many of its relatives in the rose family, flatwoods plum usually does not form clumps or thickets. It often occurs singly, as a large shrub or small, irregular understory tree, to about 20 feet tall. The leaves are alternate, oblong, to about two inches long, with sharp-pointed tips, and many small teeth on the margins. Masses of showy white blossoms open in the early spring, on wood of the previous season. The flowers, with five petals and many stamens, are borne singly or in small groups of two to five. The fruits are oblong drupes, about one-half inch long, nearly black when ripe. Even when fully ripe, they are bitter and astringent, with a large, hard pit. Though unpalatable to humans, the fruits of *Prunus umbellata* are valuable forage for white-tailed deer, black bears, feral pigs, foxes, and many bird species. Flatwoods plum is a pioneer species, with efficient seed dispersal



Photo by Fred Nation

mechanisms for migrating into regenerating burned or clearcut areas.

The genus *Prunus* is large, with about 200 species worldwide, and it contains many economically important members. In addition to the plums, this genus includes cherries, sloes, peaches, nectarines, apricots, and almonds.

Flatwoods plum and many of its close relatives are quite ornamental, with masses of handsome white or pink flowers, and they are often planted as “flowering cultivars” in landscapes.

The plums and cherries have long histories of medicinal usage. An infusion or tea made from the bark has been used as an emetic to induce vomiting, and to treat coughs. The bark and leaves in the genus *Prunus* contain varying amounts of glycosides that are converted under some conditions into prussic acid, or hydrogen cyanide, which is extremely poisonous. Wilted foliage, especially, contains enough cyanide to be dangerous to livestock. Ripe plums and black cherries have been added to clear, newly-made corn whiskey, to give it an aged, finished color that takes several years to achieve in an oak barrel.

Other common or folk names for flatwoods plum are “black sloe” and “hog plum.” The Alabama state champion, located in Baldwin County, is 25.8 inches in circumference, 24 feet tall, with a huge average crown spread of 70 feet. 🌳



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