



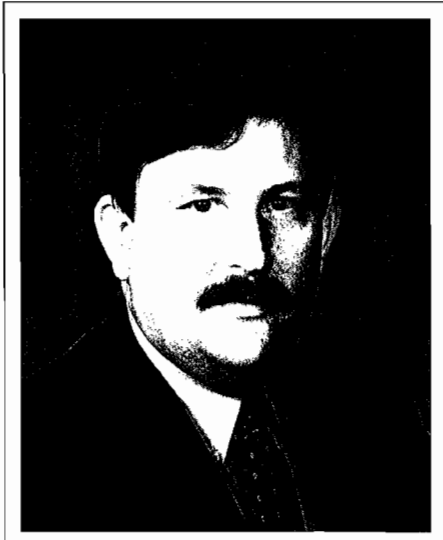
# Alabama's **TREASURED** Forests

SUMMER 1998

**Woodland Wildflowers  
Conservation Easements  
Boone and Crockett Club  
Estate Taxes**

# STATE FORESTER'S MESSAGE

by TIMOTHY C. BOYCE, State Forester



An often overlooked part of our organization is the Nursery and Tree Improvement Section. The job of the tree improvement part of this group is to provide pine seed of the highest genetic quality for use in our nursery. The Alabama Forestry Commission is a member of the North Carolina State Tree Improvement Cooperative, which oversees and provides quality control for our tree improvement program.

First and second generation Piedmont (North Alabama) loblolly seed are produced at our Thorsby Seed Orchard. First and 1.5 generation coastal (South Alabama) loblolly seed are produced at the seed orchard located at Geneva State Forest. Second generation coastal loblolly seed production will be available in the near future. Slash and longleaf pine orchards are also located at Geneva State Forest. The Alabama Forestry Commission is fortunate to have one of the few improved longleaf pine seed orchards in the Southeast. Each fall as the pine seed begin to mature the seed is collected by either picking the cones by hand from bucket trucks or by spreading netting on the ground under the trees to catch the seed when they fall.

Our E.A. Hauss Nursery is located near Atmore. For the 1998-99 crop year, we plan to grow approximately 46 million seedlings. Of that total, just over 39 million are pine seedlings and almost 7 million are hardwoods. Some of the hardwoods are being grown specifically for the production of wildlife food and habitat. Some examples of wildlife species include autumn

olive, chestnut, crab apple, dogwood, sawtooth oak, bicolor and thunbergii lespedeza, persimmon, plum, and redbud.

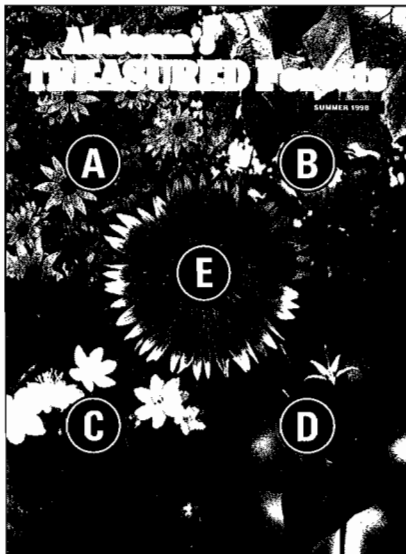
We are also undertaking capital projects to ensure that we continue to produce quality seedlings. In order to meet customer demand on a timely basis, a new 40' x 70' seedling cooler will allow us to store approximately 1.7 million seedlings. We also plan to build a 20' x 20' seed freezer this year. This new seed freezer will enable us to store valuable seed at 0 degrees Fahrenheit to protect the quality of the seed. Finally, we plan to put additional land under irrigation so that we can rotate our crops in order to maintain a high level of fertility in our nursery beds.

I encourage you to call Hauss Nursery at 334-368-4854 to order seedlings or to arrange for a visit to the nursery.

Sincerely,

A handwritten signature in cursive script that reads "T. C. Boyce".

Timothy C. Boyce  
State Forester



**COVER:** Wildflowers are one of our forest's greatest treasures. Read more about them on pages 24-26.

Photos by Caroline R. Dean  
<http://www.auburn.edu/~deancar>

- A** Black-eyed Susan  
*Redbeckia hirta*
- B** Mayapple  
*Podophyllum peltatum*
- C** Rue anemone  
*Thalictrum thalictroides*
- D** Indian pink  
*Spigelia marilandica*
- E** Indian blanket  
*Gaillardia pulchella*

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The Alabama Forestry Commission supports the Alabama Forestry Planning Committee's TREASURE Forest program. This magazine is intended to further encourage participation in and acceptance of this program by landowners in the state. Any of the agencies listed above may be contacted for further information about the TREASURE Forest program.

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# A Labor of Love

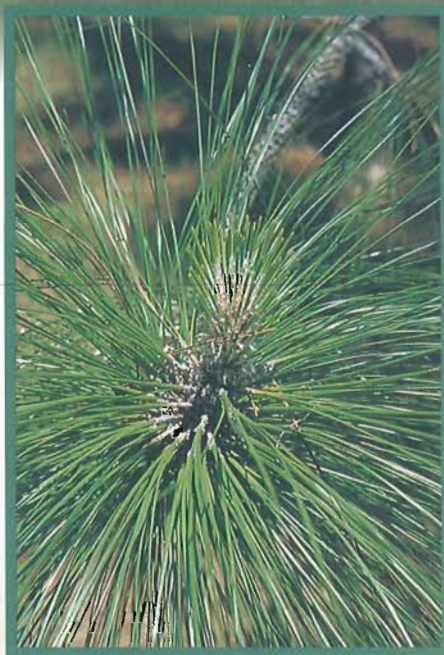
by **MADLINE HILDRETH, Forest Management Specialist,  
Alabama Forestry Commission**

*This is one of two ponds on the property.*

**W**hen Bob and Carolyn Brown each inherited property in Washington County from their families, it had not been managed well. Most of it was in either sweetgums or old fields. According to the Browns, some of the property was “just holding the world together.” Their first pines were planted 35 years ago as a 4-H project of youngest daughter Debbie. This was the beginning of their focus on forestry.

The Browns sought professional assistance early on, working with an industry’s landowner assistance program. The original plan still serves as a guideline for property management. They also work closely with the local Alabama Forestry Commission. Although most of the work is done by the Browns, they do not hesitate to ask for advice or get assistance when necessary.

When Bob and Carolyn first heard about the TREASURE Forest program, they wanted first-hand information. A day spent with Kelly Mosley touring his Marengo County property, the first certified TREASURE Forest, provided a memorable introduction to the program. They still have vivid memories of the time spent with the Mosleys and the encouragement they offered.



***The Browns have planted longleaf pine because of its resistance to fire.***



***Old fields have been planted to pines.***

## **Teamwork**

When Bob and Carolyn began to manage the property, they approached it as they did everything else, as a team. The Browns paired hard work and determination to make the land productive. “We knew that if the good Lord was willing, and we worked hard, we could have pine trees,” Bob explained. This attitude has prevailed through the past 35 years.

There have been setbacks, but their determination and love of the land never wavered. When Hurricane Frederic destroyed some of the original 4-H stand and other areas, they salvaged and replanted. A Southern pine beetle spot was too small to interest a logger, so Bob cut and hauled the wood himself.

Although outside sources give advice, the Browns make all the management decisions as a team. They attend landowner conferences and read forestry material to keep abreast of current management trends. Trying new ideas, and occasionally failing, is part of the learning process.

After the first stand of 4-H pines was planted, it was decided to plant other areas with pine seeds. One hundred dollars of

seeds were ordered. When the shipment arrived, Carolyn Brown loaded her pickup truck with buckets and barrels to hold the seed. She soon found out \$100 worth of pine seeds could fit in one small box! This was the first of many learning experiences.

Planting with pine seeds provided a low-cost way to forest some of the old field areas. Using a cyclone seeder, they were able to do the work themselves. Over the years, the Browns have been especially pleased with the stands planted from seeds. These stands seemed to grow even faster than areas planted with seedlings.

Since their sites were best suited for pine trees, getting rid of undesirable hardwoods was the most difficult task. The hardwoods were small and scrubby, with little timber value, and in the beginning, there was no market for the hardwoods. Each weekend in the summer meant family trips to Washington County to deaden hardwoods. When a market developed, the poor quality hardwoods were sold for \$1.50 a cord. Though not a large sum, it saved many days of hard work. Bob continues to fight undesirable hardwoods and underbrush. These days he prefers herbicides and a backpack sprayer. "We've had so many wildfires in this county, that I am afraid of fire," he explained. Carolyn, on the other hand, is sure prescribed burning is a cheaper, easier way to fight the competition. She feels confident they will begin a prescribed burning program soon. Wildfires have damaged some of the property's timber. Because of this, longleaf pine was planted in one area. If they were starting over, the Browns insist they would plant more longleaf.

After the pines were freed from competition, they grew vigorously. One stand that was originally suppressed has been thinned several times. Peeler logs and some pulpwood were removed, and a good stand is still growing well. The pines get special attention after a thinning. Bob checks each tree for logging damage. All injuries are treated with Lindane. Because of this special care, Southern pine beetle spots have been kept to a minimum.

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### Water Quality and Wildlife

Timber production still plays a major role in property management, but other aspects of the land are just as important. Excellent streamside management zones are left for water quality and wildlife



*A blackberry bush in bloom.*

benefits. Wildlife food plots are maintained, although there is very little hunting on the property anymore. The wildlife are sure to enjoy the bumper crops of blackberries, fertilized regularly. Bluebird boxes and martin houses dot the property. Since access is important, the roads on the property have been repaired and are kept in good shape. To provide additional food for wildlife, the roads are planted.

The area has several springs, and they provide the water source for the two fish ponds, as well as water for the nearby cabin. One fish pond was improved and stocked with bream and trout nearly 20 years ago. A catfish pond was built about 10 years ago. The ponds have produced great fish stories (especially the *big* ones that got away) and lots of fun for family and friends.

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### Sharing with Others

In spite of the fact that they do most of the work on the property, the Browns also found time to restore Bob's great-grandfather's home. Time had taken its toll on the old house, but after much planning, procuring and labor, the cabin offers a retreat into the past.



*Bird houses for bluebirds and purple martins are common on this TREASURE Forest.*

The restored cabin presented an opportunity to share the property with others. Sunday school classes, friends and especially 4-Hers have all taken advantage of the Browns' hospitality. The Browns decided their property was a great place for children. Since their daughter, Kathy, worked with 4-Hers, they invited a group for a weekend. No video games or television for the entire visit caused the children to appreciate the simple, country life. They had a great time catching, cleaning, cooking and eating fish. They hiked in the woods during the day and told ghost stories at night. The 4-H weekend easily turned into an annual event. The scrapbooks of pictures and letters chronicle the fun of the past 10 years.

The Browns have invested more than time and money in their TREASURE Forest. They invested their hearts. They agreed that much of the work proved tiring and difficult. They never considered quitting, though, because it was a labor of love. ♣

# Editor's Understory

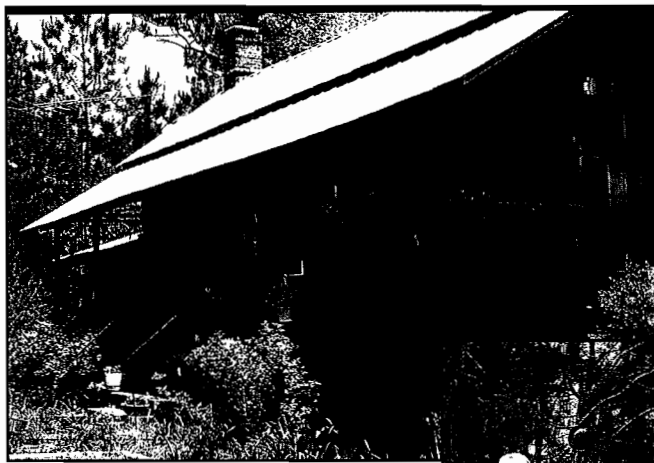
by MADELINE HILDRETH, Forest Management Specialist, Alabama Forestry Commission

**B**lending the past with the future is something Bob and Carolyn Brown do well. Their cabin is full of family and regional history. Their long hours of labor evoke memories of times when such a work ethic was the rule, not the exception. The cabin offers a chance to escape the hurried pace of today's world—for a little while, at least. The Browns' forest management philosophy is evidence of planning ahead; the desire to pass on their love of the land to their children and grandchildren is another example of planning for the future.

Although the Browns live nearly 70 miles away in the Mobile County town of Creola, they spend many days on their property in Washington County. Since retirement they are able to really enjoy the cabin they restored with much love and effort. In 1975, Carolyn thought about renovation and tirelessly researched the period to ensure authenticity. When they finally began the work in 1985, Bob was wonderful at procuring the perfect supplies. Time had taken quite a toll on his great-grandfather's home, but they salvaged everything possible. Because detail was very important in the renovation, it is impossible to tell what is not original.

After renovation was complete, the Browns decided they needed extra room. Additional living space was added to the downstairs area by attaching Carolyn's grandmother's house. It is one room, and blends beautifully with the original sitting area. The ceiling differs from the original

cabin, which has hand hewn beams. The added room has planks of various woods. Although quite appealing, Carolyn says this was not by design, but rather by necessity. "My grandmother never threw anything



away!" The ceiling, made from lumber scraps, was painstakingly reconstructed at its new site. The cabin, which took four years to refurbish, consists of a large open room, a bedroom and a bath downstairs. Thirteen steep steps lead to two attic bedrooms and a bath. These are the grandchildren's bedrooms. The front porch is inviting with its hanging baskets. Two of the planters are old hollow logs that were originally used as feeding troughs many years ago. The back porch is screened and allows a view of the many bird feeders. A swing, originally purchased by Carolyn's parents many years ago, offers the perfect place to relax.

Bob and Carolyn Brown continue to plan for the future. They made sure their children and grandchildren learned good

stewardship. They have two daughters, Kathy Jones and Debbie Paulk. Kathy's children, Jennifer Jones Miller and Adam Jones, always loved spending time at the cabin. Now grown, they carry with them an appreciation for the land. Both still enjoy visiting and working on the property. Debbie's daughter, Alex, is the newest grandchild. As she gets older, she will no doubt appreciate the legacy of the land. A "skip generation" trust will guarantee the property remains an important part of the grandchildren's lives.

The property was certified as a TREASURE Forest in 1984. Great efforts were made to attain certification, since the property they each inherited from their families had very little value — economic, aesthetic or recreational. Since certification, Bob and Carolyn have continued to improve their property as well as to serve as ambassadors for the program. The couple is determined to play a role in improving Alabama's forest. They attend landowner conferences, participate as county leaders in forestry, and are active members of the TREASURE Forest Association. Since they believe Washington County's forests have room for improvement, they hosted

a landowner tour in hopes of encouraging better forest management practices. Receiving the Helene Mosley Memorial TREASURE Forest Award in 1997 made them even more aware of their role in forestry education.

The Browns have definitely made a difference in the lives of many 4-Hers. Scrapbooks of the annual camp hold photographs and letters. One letter probably summed up the feelings of any visitor to the Brown TREASURE Forest. The letter read, "Dear Mr. and Mrs. Brown, Thank you for sharing your love." ♡



Bob and Carolyn Brown

# THREATENED & ENDANGERED SPECIES

## Sadie Price's Potato-bean

by CARLEN M. EMANUEL, Stewardship Ecologist, Alabama Natural Heritage Program<sup>SM</sup>

**C**an you name a native perennial vine of the pea family with beautiful purple blossoms and edible fruits and roots that were an important food source for native Americans, and, which very likely helped the pilgrims survive their first winter in America? This American vegetable is called *Apios*, more commonly known as potato-bean, groundnut, and Indian potato. There are two species of *Apios* in the United States, *Apios americana* and *A. priceana*. *Apios priceana* is named after its discoverer, Sadie Price, and is also known as Price's potato-bean and Price's groundnut. It is known only from Illinois, Kentucky, Tennessee, Alabama, and Mississippi.

*A. priceana* is a perennial herbaceous vine with twining stems produced from a single, large tuber. The compound leaves have 5-7 (dark green, above, lighter, below) leaflets and white and pink-purple-maroon, large pea-type flowers (similar to wisteria) that bloom from late June to mid July. The fruit is a dark green bean, very similar to a garden-variety green bean. Price's potato bean grows in open wooded areas, often in tree-fall gaps or forest edges, in clearings along streambanks, and on bluffs or at the base of ravines. Habitats include moist streambanks and floodplain forests, moist hardwood forests, semi-dry oak-hickory-cedar forests and bluffs. The soils are generally well-drained loams on old alluvium, or calcareous boulders.

Price's potato-bean was listed as a threatened species by the U. S. Fish and Wildlife Service in 1990 because of the small number of populations and destruction of its habitat. Tennessee, Illinois, and Kentucky list the plant as a state endangered species. *A. priceana* currently has 15 extant sites: three in Alabama, four in Mississippi, four in Kentucky, and four in Tennessee. The Illinois sites have not been relocated since 1990 and the plant is presumed to be


extinct in that state. The majority of sites contain fewer than 60 vines. The recent discovery of three more sites in Huntsville has resulted in eight known sites for



Alabama. Flowering, fruiting, and seedlings have been observed at these sites. Total vines are estimated at more than 200, making the Alabama sites a significant population. Current management involves protection of the remaining sites and monitoring. The Alabama Natural Heritage Program<sup>SM</sup> is monitoring *A. priceana* populations in Alabama.

The agricultural community is looking into the potato-bean as a potential vegetable crop and to also transfer some of its favorable genetic properties into potatoes

and soybeans. The fruit pods are similar to the garden variety green bean and can be used likewise. The tubers contain three times the protein of potatoes and taste like a cross between a peanut and a potato with a bit of sweetness. Price's potato-bean produces a single large tuber that resembles a sweet potato. Agronomists are looking to hybridize it with the common potato-bean (*A. americana*) to improve the crop potential. The potato-bean's other important value is its ability as a nitrogen fixer. The potato-bean is estimated to fix 100 pounds of nitrogen per acre, which has great potential for marginal and depleted agricultural soils.

As you roam the woods of Alabama this summer, look for this flowering vine in light gaps, clearings, and along streambanks. If you find it, reflect on its past importance to Americans, its future potential, and report the location to the Alabama Natural Heritage Program<sup>SM</sup>. 

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## Ginkgo

by TILDA MIMS, Forest Education Specialist, Northwest Region, Alabama Forestry Commission

**T**he ginkgo (*Ginkgo biloba*) is the only species to survive among of a group of trees that flourished 200 million years ago. Its primitive ancestry shows in its regular, dichotomous (forked) venation and the rudimentary method by which it is fertilized.

The ginkgo is only native to a remote part of China where it was adopted as a sacred tree by Buddhist monks who carried it to Japan. From there it was introduced to Europe and America in the 18 century. Specimens planted then still survive.

Its other name, “maidenhair tree” is based on the similarity of its leaves to those of maidenhair ferns. They are fan-shaped, alternate and leathery. The flowers are an inconspicuous green, with a mild, pleasant fragrance, and appear in spring.

The crowns of the trees can be as large as 40 feet across and vary from rounded to pyramidal. Male and female forms are available, with the male specimens preferred for planting. Females bear fruits which are slippery underfoot and have an offensive odor. The fruits are eaten in Japan, and the seeds are a source of oil used for cooking and burning in China. On existing female trees, MH (maleic hydrazoite) applied at 750 ppm (3 ml per gallon) at full bloom can reduce fruit set.

There are several male varieties available, including “Lakeview,” a compact variety, “Autumn Gold,” which has a rapid growth rate and

“Mayfield,” which grows to about 30 feet and is columnar and narrow. The trees are generally slow-growing, taking as long as 20 years to reach a height of 25

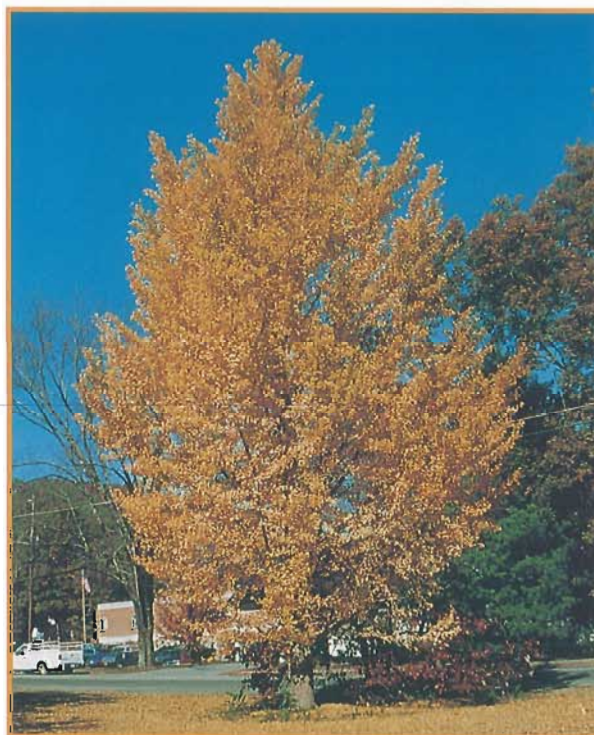
feet to begin flowering. However, under ideal conditions, the growth rate may reach 3 feet per year.

One of the tree’s main attractions is the bright yellow-orange fall color of the foliage. The leaves drop rapidly, sometimes all falling overnight. The bark is gray, somewhat fissured, and thick. The branches have a tendency to gracefully droop.

Originally the tree was named Salisburia, to honor English botanist Richard Anthony Salisbury. Salisbury introduced the tree into England in 1754. The earliest record of its appearance in the United States is a planting on a Philadelphia estate in 1784.

In 1785, botanist Andre Michaux brought some of the young trees to the United States as a gift from the French government. By the early 1880s, a planting in Queens, N.Y., had reached a height of about 50 feet.

Although an ancient tree, the ginkgo is an ideal choice for modern urban forestry applications. An immunity to air pollution and most pests and diseases make ginkgo ideal for towns. They tolerate a wide range of poor soil conditions, including alkalinity, and high temperatures arising from the sun’s reflection from brick and concrete. The delicate looking tree is also drought resistant and strong wind resistant. Survival as a species may explain its ability to overcome a tree’s greatest enemies—they’ve had time to work it out! 🌳





# Wildlife Openings in CRP Pine Plantations

by TIM L. GOTHARD, Forest Management Chief, Alabama Forestry Commission

Certain contracts for pine tree planting and established pine plantations accepted through the 15th and 16th Conservation Reserve Program signups will require that landowners devote portions of their acreage to wildlife openings and maintain them in that condition for the length of the CRP contract. When tree planting is the CRP practice, this will require that landowners do not plant trees on certain portions of their fields so that openings remain. Where trees already exist, landowners must harvest or remove trees so that openings are created. This article seeks to highlight points landowners should consider and the options they have in determining where and how their openings should be established. Since CRP sites are or at one time were agricultural fields, when the word "field" is used in this article it is intended to apply to both open fields and existing pine plantations enrolled in the CRP program.

## Location and Size Requirements

To better explain the options available to landowners when wildlife openings are required, let's look first at the basic criteria that must be followed:

- a) At least 15% of individual field acreage must be devoted to openings. Up to 20% may be placed in wildlife openings if the landowner so desires.
- b) Individual openings must be at least 1 acre in size unless the field is less than 7 acres. When a field is less than 7 acres in size, the opening will be whatever size 15-20% of the acreage provides.
- c) Openings must be at least 60 feet wide.
- d) Openings must not be located adjacent or parallel to a public road or within 35 feet of a stream.
- e) Once openings are established, one-third of that acreage must be mowed, lightly disced or burned each year on a rotating basis. For example, if you have 9 acres in openings, 3 acres will be treated the first year, a different 3 acres the next year, and a different 3

acres the next. The process will then start over on the first 3 acres treated. For CRP contracts where trees will be planted, mowing, discing, or burning must begin the first year after trees are planted. For CRP contracts that already support trees, openings will be established by removing trees. Mowing, discing, or burning on these sites must begin no later than the third year following the year the openings are created. This three-year lap is provided so that stumps can decay and pose less of a threat to equipment such as bush hogs and discs.

These requirements point out several important items to keep in mind as you consider how to arrange your openings. First, if public roads adjoin your field or pine stand, openings must be situated so that trees provide (or will provide as they grow) a visual screen between the road and the opening; this requirement is specifically in place to make sure that CRP openings do not invite poaching. Second, openings should not abut streams on or bordering your field. Third, since openings must be at least 60 feet wide, if you consider creating openings by remov-

ing rows during a pine plantation thinning or not planting rows during the tree planting process, several consecutive rows must be removed or not planted to achieve the minimum width. Lastly, considering width and length, individual openings must be at least 1 acre in size unless your field is less than 7 acres. If you choose to create openings by using the minimum 60-foot width, you will have to create a strip at least 700 feet long to achieve a 1-acre opening. Also, remember that you will have to mow, disc, or burn in the openings throughout the life of the CRP contract.

## Options

Even though there are certain requirements, many options are available regarding the location and arrangement of openings. Some specific placement options are completely left up to you. Provided that they meet the requirements just discussed, you may locate openings in the following areas and manners:

- a) Placed around the outside edge (perimeter) or the interior of the field.

*(Continued on page 10)*

Table 1. **Species Approved for Planting in Wildlife Openings under CRP Practices CP3 and CP11**

ANNUAL HERBACEOUS PLANTS	NATIVE WARM SEASON GRASSES	SHRUBS
Crimson/Annual Clover	Big Bluestem	Autumn Olive
Egyptian Wheat	Eastern Gamagrass	Chickasaw/Wild Plum
Lespedeza (common/Kobe/Korean)	Indiangrass	Crabapple
Millet (browntop/Proso)	Side-oats Grama	Lespedeza (bicolor/thunbergii)
Oats	Switchgrass	
Partridge Pea		
Rye		
Sorghum		
Wheat		

The annual plants listed above may be planted on the treated portion of CRP openings in the year treated. No more than 25% of the acreage devoted to CRP openings may be planted to shrubs. Individual patches of shrubs must be no larger than one-eighth of an acre in size. Bahia grass, bermuda grass, fescue, ryegrass, and corn are specifically **not authorized** for planting on CRP openings.

- b) Adjoining natural openings that exist on the contract acreage.
- c) They may be any shape—circular, linear, or irregular.
- d) It may be one or multiple openings.

In the portions of the openings that you must treat every year (mowing, discing, or burning), you have the option of letting the

## Determining Acres

The acreage of an area can be determined by multiplying the length in feet by the width in feet then dividing the answer by 43,560. For example, an area 200 feet wide and 600 feet long equals 120,000 square feet. 120,000 square feet divided by 43,560 square feet equals 2.8 acres. 43,560 is the number of square feet in one acre.

If an opening of a defined width (such as the 60-foot minimum for CRP) is known and you want to know how long it should be to equal a certain number of acres, multiply 43,560 by the number of acres you want, then divide the answer by the width you chose. The answer will tell you how long your opening must be. For example, you want an opening 60 feet wide and long enough to equal 3 acres. 43,560 times 3 equals 130,680. 130,680 divided by 60 equals 2,178. This indicates that you must have an opening 2,178 feet long and 60 feet wide to equal 3 acres.

If you choose to place your openings around the perimeter of a field, you can step off the length around the field and then multiply by various widths to determine how many acres it will equal. This will allow you the ability to determine how wide an opening to place around your field to meet CRP opening acreage requirements. For example: You have a 47 acre field and your CRP contract requires that you devote at least 7 acres to wildlife openings. You determine that the length around the outside edge of the field is 6,400 feet. You first try the minimum CRP opening width of 60 feet. 6,400 times 60 feet equals 384,000. 384,000 divided by 43,560 equals 8.8 acres. This tells you that you can create more than enough opening acreage with a 60 foot width around the perimeter of your field. In fact, you only need to place 5,080 of the 6,400 feet in openings 60 feet wide to make the 7 acres you need. The rest of your field perimeter can be left as is or connected with an opening width large enough to provide room for a firelane.

treated area grow back in natural vegetation or you can plant certain annuals or native warm season grasses. You may also plant certain shrubs on up to 25% of the acreage that must be devoted to openings. Approved annuals, warm season grasses, and shrubs are noted in Table 1.

Knowing both the requirements and options, consider your objectives and how the required openings can be established and located so that they meet CRP requirements, provide wildlife benefits, and compliment your planned management efforts.

## Openings with Timber Management Objectives

If timber management is the main objective for your CRP pine stand, keep several things in mind. Check to see if your CRP field contains more than one soil type. If it does and one of the soil types is less productive (lower site index) than the others, placing your openings on the less productive soils will ensure that you are maximizing the use of your best soils for timber production. As well, if you have natural openings in established CRP pine stands that are a result of natural mortality, you can use their acreage to help fulfill your opening acreage requirements. If natural openings are more than 1 acre in size and more than 60 feet in width, you can count their acreage toward the opening acreage requirement. If they are not, you can create additional open areas that join them so that collectively the natural and created openings combined will exceed 1 acre in size and 60 feet in width. This will minimize the acres in trees that you must remove to meet the opening acreage requirement and maximize the number of acres in timber production.

If you intend to begin an active prescribed burning program once your trees are of adequate size, it may be most beneficial to locate all or a portion of your open-

ings around the perimeter of your field. Doing so will give you the ability to lightly disc a firelane around the field, which will facilitate prescribed burning and meet your requirement for treating one-third of the openings annually. Since many burning rotations operate on a three-year interval, you can arrange your opening maintenance rotation and firelane needs so that they coincide. Placing openings around the perimeter of the field will allow you to use light discing to fulfill your annual maintenance requirement and also ensure a barrier to wildfires at all times.

The harvesting process should also be an important player in determining the location of openings. First and foremost, if timber production is indeed a primary objective, see if opportunities exist to place loading zones or log landings outside the CRP stand (adjoining non-CRP open areas, other areas where you may want or have trees harvested while the CRP stand is being thinned). This may or may not be possible depending on your specific situation. If it is possible, it may minimize the number of acres taken out of timber production and leave your CRP openings in a less compacted condition—a condition that will be beneficial if you want to plant wildlife cover later. If locating loading zones outside the CRP acreage is not feasible, the necessary openings that will be created to facilitate the harvest process can be used to help meet CRP opening acreage requirements, provided that they exceed the minimum size and width requirements. Most important, make a decision in this regard before harvesting begins and plan how logging slash will be handled. If trees will be delimbed at the loading deck, either have logging slash scattered evenly across the opening at the conclusion of the operation, or make plans for large loading zones with debris piled in the middle. Doing so will allow the debris to be burned at a later date without damaging nearby trees.

## CRP Contracts That Require Wildlife Openings

15th and 16th CRP signup contracts extended to landowners under Practice CP3 and CP11 where a 50 point N1a value was awarded require that a minimum of 15% but no more than 20% of the contract acreage be established to wildlife openings. If you are unsure whether openings are required under your contract, consult your Conservation Plan. If openings are required, it will be noted on the cover page of the CRP technical plan prepared by the Alabama Forestry Commission. Your local office of the Alabama Forestry Commission, Farm Service Agency, or Natural Resources Conservation Service can also help you determine if openings are required under your CRP contract.

## Openings with Wildlife Management Objectives

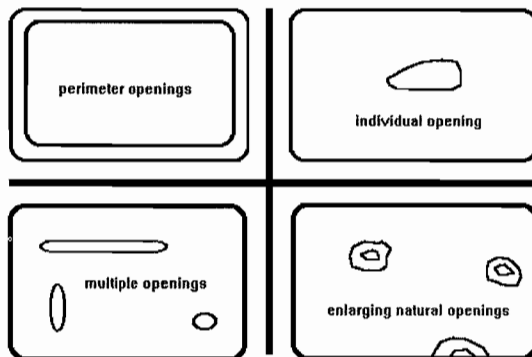
If wildlife management is the primary objective for your CRP field, or a close rival to timber production, you may want to consider other ideas for locating openings. Just like earlier when we looked at timber production, see if your fields contain more than one soil type. If so, instead of placing your openings on the least productive soils, place them on the soil type that is most productive. If you know that you will plant a certain type of annual or warm season grass from Table 1, place your openings on the soil type or condition that is best suited to your desired vegetation.

Food plots for game will no doubt be a desired use for CRP openings, especially for white-tailed deer and turkey. This can be accomplished by planting some of the approved annuals in Table 1 on areas lightly disced to meet the opening maintenance requirements that must be performed on one-third of the open acreage annually. If deer hunting will be important to you, the placement of openings can be based on how you would like to lay out the openings to facilitate safe hunting opportunities. You may desire to have one large opening so that you have a large food plot when you treat one-third of the acreage annually, or you may want to have several different openings that can support several safe hunting opportunities from shooting houses. You may want to locate them so that they are well secluded or simply are in the place you think you will like to hunt most. You can check with a wildlife biologist, or other wildlife enthusiasts such as yourself, and get ideas on how to place openings to meet your objectives. Consider things such as one or multiple openings, linear or irregular shapes. These options and choices are totally up to you, just remember the basic requirements mentioned earlier.

Many landowners will also want to use their openings to benefit quail. In fact, the opening requirements under CRP were designed in large part to attempt to benefit quail and other early successional wildlife species. CRP landowners have a tremendous opportunity to create quail habitat with little to no out-of-pocket expense. Why? Because you simply have to do no more than follow maintenance require-

ments to set up some of the basic habitat needed by quail. The requirement that one-third of the open areas be mowed, lightly disced, or burned on an annual basis sets

Examples of opening location options within a single CRP field



up both nesting and brood-rearing habitat, along with food opportunities, all in close proximity. Again, the locations of the openings are up to you, but long, linear openings seem to be preferred for quail.

Prescribed burning is a management tool that provides wildlife benefits in addition

to timber production and protection benefits. If you intend to initiate a prescribed burning program, placing all or part of your openings around the perimeter of a field may be the best alternative. It will allow a simple way to meet opening maintenance requirements, provide needed firelanes when burning is performed, and can be used to provide quail habitat and game food plots for deer and turkey.

## Summary

The CRP is a program that is probably known more for its requirements than its options. However, if the CRP requires that you create wildlife openings in new or established pine stands, you have a variety of options available. Take time, evaluate your objectives, and choose the location and arrangement of openings so that they help you accomplish your land management goals, whether they be timber production, wildlife management, or simplicity. 🌲

## Promote and Support the TREASURE Forest Program Join the Alabama TREASURE Forest Association

The Alabama TREASURE Forest Association is composed of people who practice TREASURE Forest management, people who encourage others to practice it, and people who believe that management of Alabama's forestlands according to the TREASURE Forest concept is good for both present and future generations.

Membership in the Alabama TREASURE Forest Association is open to certified TREASURE Forest owners (Full Members), any forest landowner who is not certified (Growing Member), and persons, companies, corporations, or organizations that do not own forestland (Associate Member), but want to support and promote the sustainable and wise use of our forest resource for present and future generations.

Yes, I would like to join the Alabama TREASURE Forest Association

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ County: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_ Telephone: (\_\_\_\_\_) \_\_\_\_\_

Check each category and fill in the blanks as appropriate:

- Associate Member
- Enclosed is \$15 annual membership fee
- Growing Member
- Enclosed is \$20 annual membership fee
- Full Member
- Enclosed is \$25 annual membership fee

primary objective \_\_\_\_\_

secondary objective \_\_\_\_\_

**Mail to: Alabama TREASURE Forest Association, P.O. Box 145, Chunchula, AL 36521**

For more information about the Alabama TREASURE Forest Association contact James Malone, Executive Director, at (334) 679-6087.

*Editor's note: This is the last in a five-part series on how federal tax laws affect forest landowners. The first four articles discussed timber sales, reforestation, casualty losses and management expenses. This article will discuss estate taxes.*

### The Scenario

Al McCoy owns 120 acres of mixed forestland in northeast Coosa County near the town of Goodwater. He had inherited 80 acres from his father in 1980, and purchased an adjoining 40-acre tract in 1987. Daddy's tract had been in the family for years and was forested when he died, and Al let it grow. The new tract was open field that Al had planted to pines in 1988.

Al is a retired lawyer living off his savings of about \$500,000 and his and his wife Jenny's Social Security, but no pension. He paid off the mortgage and owns his house. Two years ago Al sold the timber on the 80 acres he inherited from his father and found how capital gains treatment of timber sales was a benefit to all landowners. He then reforested the tract and learned about reforestation tax credits and amortization. He suffered a Southern pine beetle attack on the young plantation and learned about casualty losses. Most recently he learned about the rules concerning the deductibility of management expenses.

### A Sad Visit

Recently, Al ran into Sally, the daughter of one of his older friends that he had lost touch with over the years. He was saddened to learn that his friend had passed away almost a year earlier. To make matters worse, Sally was having to deal with the loss of the family farm as well. This was shocking to Al because he had always known this family's farm to be very successful and profitable. Sally confirmed this, but said that the farm had to be sold just to pay the estate taxes accruing after her father's death (her mother had died a few years earlier).

While the family had always lived modestly, they had amassed a few thousand acres of land in addition to the dairy farm. The death of Sally's father left the family with a profitable dairy operation that was being run by her brothers, 3,500

# A Year in the Life of a Taxpayer

## Part 5

by JOHN S. GILLIAM, Trust Officer,  
AmSouth Bank and  
LOU HYMAN, Deputy Director, Programs  
Division, Alabama Forestry Commission

acres of young forestland, a house and an estate tax bill of more than \$1.5 million.

Realizing that he might leave his own family in such a position, Al immediately called his cousin Vinnie, an accountant. While Vinnie had some experience filing an estate tax return, he did not feel comfortable developing an estate plan. He recommended that Al talk to an attorney in Birmingham who could help do some planning.

### Meeting with an Estate Planner

The first question the attorney asked was if Al had a will. "Doesn't everyone?" Al replied. "You'd be surprised," the lawyer answered. "When was it written?" "When my first child was born," said Al. The will gives all Al had to his wife and lists who the children's guardians should be and how to pay for their college education. "And how old are your children now?" the lawyer asked. "The youngest is 36," Al answered. "Well then, we need to begin by updating your will," the lawyer said.

When a will passes all the assets to a spouse, then he or she later dies, all those assets are taxed at rates of up to 55 percent.

The attorney suggested to Al that there were several ways he could arrange his assets to allow for a much lower tax bite and possibly none at all.

Starting with a ball park guess as to the value of Al and Jenny's holdings, the lawyer came up with an estate of about \$1.5 million. Al was shocked to find himself a millionaire, until the attorney broke down his holdings one by one.

Al's home had appreciated significantly in the years since it was built. Over the years, Al had made several improvements to the house. These improvements, along with the appreciation of the property that comes with a few decades of inflation, had caused the appraised value of a home that size in Coosa County to be worth almost \$200,000.

The investments that were providing Al's income were not a surprise, although Al had figured he would have to dip into the principal to live on as the years passed. The fact that this money and his timber sales could provide enough income to live on had been a pleasant surprise. It is likely that Al will be able to leave this money to his children.

The 40 acres Al had acquired in 1987 and planted to pines in 1988 were maturing nicely and the 80 acres his father had left to him are just now being reforested. Al had known that the land was valuable but had not counted on the increase in land values since the new Robert Trent Jones Golf course had been built by the Retirement Systems of Alabama only a few miles away. Unfortunately for Al, when the IRS determines a value for the assets in his estate, it will not matter so much what the land is being used for (currently timberland) but rather, what it could be used for—in this case some sort of development. The land could now sell for around \$5,000 per acre, valuing the total parcel at about \$600,000.

Al also learned that his life insurance policy, which had death benefits of \$200,000, would be included in his estate and taxable as well. The agent had told him that insurance would not cause his wife to have to pay income tax when it paid off, but Al had never even thought about whether Jenny or the children would owe any estate taxes on the policy proceeds.

The total resulting from this little exercise showed Al and Jenny's assets to be worth about \$1.5 million. With no action taken, the estate tax result would likely be something like this: Assuming that Al was to die first with all of the assets held in his name or in joint tenancy with right of survivorship (generally how property held between married couples is owned in Alabama), there would be no tax as long as everything passed to his wife (a common result). However, this would leave the full \$1.5 million in her estate to be taxed upon her death (unless she remarries and gives the property to her new husband).

While the tax code does allow for a portion of her estate to pass tax free (this is called the unified credit amount and it currently equals \$625,000), the estate would still owe taxes on the amount above the unified credit amount, about \$875,000 (a tax bill of around \$353,750). This would not require sale of the family land, like the unfortunate result that Sally's family was dealing with, but it would eat up a large portion of Al's life savings, investments that he had wanted set aside for his children and grandchildren. Essentially, the same would result if Jenny passed away first, all else being equal.

An estate plan could save Al most and possibly all of this tax bill, if he began to plan early enough. "The key to good estate planning," said the attorney, "is to not waste the Unified Credit." The unified credit mentioned earlier is available to both spouses, and provides a tax credit in the amount of the estate tax that would be payable on an estate value of \$625,000. By not planning, Al failed to take full advantage of these credits. The attorney explained that if everything is left to the other spouse outright at death, the second to die would still have the first's assets in his/her estate and the children would be taxed on them.

There are several ways to take advantage of estate planning to reduce taxes, including setting up trusts, gifting programs, life insurance trusts, and family partnerships.

### Setting a Trust

To avoid this result, and take full advantage of both unified credits while still providing for Jenny, Al's will could provide that assets equal to the exemption amount go into a trust. This trust provides for Jenny during her lifetime by giving her all the income generated by the assets. It also

allows for the trustee to give her some of the trust principal (the original \$625,000) if she needs it to maintain her lifestyle.

By using a trust in this manner, Al reduced the estate taxes owed by almost \$260,000. This result was reached as follows: When Al died, he had all the assets in his name. Since he can use the marital deduction to pass as many assets as he wants to his wife, he uses it to pass everything but \$625,000, which he uses to fund the trust. While this leaves \$625,000 in his estate, this amount can pass tax free because of the unified credit. This leaves \$875,000 to Jenny (though she gets almost the full benefit of the full \$1.5 million since the trust is administered for her benefit). Now, when Jenny dies her taxable estate is only \$875,000, and the unified credit will shelter \$625,000 worth of assets. This would leave Jenny's estate with only \$250,000 and a tax bill of less than \$95,000.

Al was pleased to learn that this \$625,000 would be increasing every year for the next 10 years until it reached \$1 million for each spouse. Conceivably, Al could use this credit shelter trust to shield their entire estate from taxes when the yearly increases are factored in (assuming they live long enough and their assets don't increase to more than \$2 million).

The attorney did point out to Al that he has to give up something to use the credit shelter trust's tax advantage. Jenny does not have free access to the funds in the

*(Continued on page 14)*

## Why Everyone Needs a Will

Upon meeting with the attorney, Al was surprised to learn that many people do not have a written will.

The lawyer pointed out that if someone dies without a written will, the state will give him one, but it may not be one that he likes. Without a will, the state also gives a person an estate plan. The state has a "one size fits all" plan that decides who gets what. The state "will" and estate plan would give Al's wife all that they own jointly, plus half of what is left, with the other half being evenly split among his children. If Al had children from another marriage, they would split evenly with Al and Jenny's kids.

While the state plan allows the first spouse to die to pass most assets to the spouse tax free, these assets will be taxed in his or her estate at death. The state plan only allows for a small sum to pass to the next generation tax free with the rest of the estate taxed at rates up to 55 percent.

A person with young children who dies without a will does not have a say in who will take care of them. The matter must go to court for the court to decide, with first preference being the grandparents. This action may use up a good portion of the estate value in court costs and lawyer fees.

Without a will, any heir can petition the court for a distribution of the estate. This could force the sale of all properties so that the cash can be evenly split. Many large properties are broken up by squabbles among the heirs.

**ANYONE WHO OWNS PROPERTY OUGHT TO HAVE A WILL.** Wills need to be updated every 10 years or so to make sure that they cover what is important in your life, especially as your family grows and your assets change. See your lawyer right away to get one made or get an old one updated.

## The Benefits of Using a Trust

A trust is a legal entity created to hold assets separate from the creator of the trust, with the assets being administered for the benefit of another. The assets are managed by a trustee, a person or company named in the trust document who has control over the assets. Trusts are one of the primary tools used by estate planners to move assets out of someone's taxable estate.

While there is some expense involved with getting professional help to set up and administer the trust, the costs are nearly inconsequential compared to the potential tax savings. There are also other, non-tax advantages of using trusts in an estate plan.

First, a trust can help provide spendthrift protection. It can protect the assets from creditors, whether it's from an accident that causes the beneficiary of the trust to be liable (in which case a lawsuit judgment could not touch the trust principal), or whether you just want the assets to be used to support someone without them being

able to spend it all on something foolish.

There is an advantage to having a trust with an independent trustee, such as a bank or other corporate entity instead of having a friend or family member handle this task. The corporate trustees can make the tough decisions without family repercussions. For example: when Jr. wants to use the \$30,000 college trust fund to purchase a Corvette. If Uncle Bill is the trustee, he immediately becomes the bad guy and there can be hard feelings. When the bank is a trustee or co-trustee, it takes the pressure off the family and there are no hard feelings towards family members.

Trusts also allow for centralized management. They are separate entities that need accounting, tax returns and management of the assets held in the trust (whether stocks, bonds, timberland or an operating company). These tasks can be done by individuals, but it is often better to have a bank or other professional whose employees work with trust assets daily to handle these functions.

trust; otherwise, it would be included in her estate. However, the trustee will automatically pay her all the income from the trust and may give her principal if she needs it to maintain her lifestyle. For most people, the tax savings are more than worth the lack of complete access to the funds.

Al then became concerned about what would happen if Jenny died first. The attorney assured him that Al must simply make sure that each has assets owned in their own name equal to the unified credit amount. These assets will be used to fund the credit shelter trust, no matter who dies first. The attorney pointed out that the retitling of assets between spouses would cause no tax liability.

Since it is not possible to determine now what Al and Jenny's estates will be worth at their deaths, the attorney thought that several other planning opportunities should be considered as well. If it appears that the combined estates will be valued at more than the unified credit amounts, some steps could be taken to reduce their estates before death.

### A Gifting Program

The first thing the attorney suggested was an annual gifting program. The tax code allows for an individual to give another person assets valued at up to \$10,000 per person per year without incurring any gift tax. (Gifts over \$10,000 are subject to the same progressive tax rate schedule as taxable estates.) Since Jenny can also use her gift tax exclusion, the two of them could give away up to \$20,000 per year to each child and/or grandchild, if they were so inclined.

For those assets that Al intended to give to his children or grandchildren anyway, this provides a way to remove these assets from his estate (thereby reducing the value of his estate and thus the taxes at his death). Considering that this can be done year after year and that the \$20,000 of assets would likely appreciate over time, the tax savings can be significantly higher than just removing the \$20,000 from the estate.

### A Life Insurance Trust

The next suggestion from the attorney dealt with the insurance policy that Al had purchased on his life. If Al owns this policy at his death, the proceeds will be included in his estate. Ownership of an insurance policy is determined by who

## Estate Tax Rates

<b>COLUMN A</b> Taxable Estates Valued At More Than:	<b>COLUMN B</b> But Less Than:	<b>COLUMN C</b> Tax on Amount in Column A:	<b>COLUMN D</b> Rate of Tax on Value over Amount in Column A:
\$ 625,000	\$ 750,000	\$ 0.00	37%
\$ 750,000	\$ 1,000,000	\$ 46,250	39%
\$ 1,000,000	\$ 1,250,000	\$ 143,750	41%
\$ 1,250,000	\$ 1,500,000	\$ 246,250	43%
\$ 1,500,000	\$ 2,000,000	\$ 353,750	45%
\$ 2,000,000	\$ 2,500,000	\$ 578,750	49%
\$ 2,500,000	\$ 3,000,000	\$ 823,750	53%
\$ 3,000,000	.....	\$ 1,088,750	55%

Note: This table includes the taking of the Unified Credit against estate taxes.

The amount of this credit will increase each year until 2006 at the following levels:

In 1998 .....	The first \$ 625,000 in Estate Value is untaxed	In 2002 and 2003 .....	\$ 700,000
In 1999 .....	\$ 650,000	In 2004 .....	\$ 850,000
In 2000 and 2001 .....	\$ 675,000	In 2005 .....	\$ 950,000
		In 2006 .....	\$1,000,000

has the right to name the beneficiaries of the proceeds. The way to avoid the estate tax on this policy is for neither Al nor Jenny to own it when he dies. This can be accomplished through the creation of an Irrevocable Life Insurance Trust (ILIT).

The trust owns the policy and pays the premiums. When Al dies, the proceeds pass into the trust and are not included in his estate. The trust can be structured just like the credit shelter trust, to provide benefits to the spouse and/or other beneficiaries (so it's almost like Jenny gets the proceeds, but with some restrictions). The proceeds of Al's policy could be used to cover funeral costs and pay the estate taxes. Putting the policy in an ILIT trust could alone result in an estate tax savings of \$86,000.

### A Family Limited Partnership

The last suggestion that the attorney made to Al involved transferring the land into a Family Limited Partnership. Al pointed out that he and Jenny were already partners because they share all the work and all the profits. The attorney said that while they might be partners in the practical sense, the IRS doesn't consider two people working together to necessarily be a partnership for tax purposes. While several steps must be taken to form a partnership that is recognized for tax purposes, the time and expense will usually be overshadowed by the tax savings and other aspects that help in the planning of one's estate.

The first such advantage is that the partnership's ownership units (like shares

in a corporation) allow for ease of transfer. In the context of gifting assets to get them out of your estate, it is far easier to give away \$10,000 (annual tax-free exclusion amount) worth of units in a partnership holding land than it would be to give away that same value in land.

If you gave one of your children land outright, you have to worry about whether he might sell the land or do something to split up the property you have acquired. The gift of the partnership interest does not allow for separating out the land that the ownership unit represents. Thus, it allows the person holding the majority interest in the partnership to effectively control the entire parcel held in the partnership. The partnership could also allow for all control to be held by one partner (called the general partner) regardless of the number of financial ownership interests held.

Another major advantage of a partnership is seen in the valuation of your estate. If you have gifted away some percentage of the partnership units, it is likely that the units you own will be valued lower than if you owned that same percentage of the land. Here is how the numbers would work: Assuming the parcel of land is worth \$600,000 and Al owned 60% of that original parcel, his estate would have an asset valued at \$360,000. However, if a partnership owned the land and Al held a 60% undivided interest in the land, his holding will certainly have a lower value because he

(Continued on page 26)

# CONSERVATION EASEMENTS

## *Are They for You?*

by HARWELL E. COALE, JR. and R. MARK KIRKPATRICK, Coale, Duke, and Kirkpatrick, P.C., Mobile, Alabama

Landowners have used conservation easements for many years to protect natural, environmental, recreational, scenic, agricultural and historic values of land. Income and estate tax incentives, which are discussed later in this article, have made the use of conservation easements even more attractive to landowners.

Conservation easements occupy an appealing niche in the array of land protection techniques, halfway between outright public or nonprofit ownership at one extreme, and government land-use regulations, which can shift with the political winds. At the same time, easements are tailored to the protection requirements of the particular property and to the desires of the individual landowner. Easements keep property in private hands and on the tax rolls.

ma Constitution, which was adopted in 1993. As you may recall, the Forever Wild Amendment basically created a state trust fund that could acquire lands and ease-

were more interested in acquiring fee title to lands. Although the Forever Wild Amendment did not specifically prohibit the donation of conservation easements to other public charities, it did not appear to specifically authorize such action either.

In 1997, the Alabama Legislature passed the Uniform Conservation Easement Act (the "Act"). With the passage of the new Act, it is clear that a private landowner can donate a conservation easement to a governmental body or charitable corporation that has as one of its purposes or powers the protection of certain enumerated conservation values.

Although the Act contains more specific definition, a conservation easement is basically a legal agreement between the landowner and the recipient of the easement to restrict the type and amount of development and other activities that may take place on the landowner's property.

The specific restrictions in the easement are generally negotiated by the landowner and the recipient organization and seek to protect some identified conservation values on the property. The owner

*(Continued on page 27)*



*Dr. Sam Eichold of Mobile (left), his attorney Harwell Coale (standing) and Dan Dumont, executive director of the Alabama Wildlife Federation, executing a conservation easement on Sturdy Oak Farm. Dr. Eichold is a TREASURE Forest landowner whose property is located in Escambia County.*

ments for conservation purposes. However, the Board of Trustees of the Alabama Forever Wild Land Trust did not seem to be willing to accept conservation easements donated by private landowners, but rather

### **The Uniform Conservation Easement Act**

Prior to 1997, the use of conservation easements in Alabama was limited to the "Forever Wild Amendment" to the Alaba-

#### **Conservation Purposes as generally defined by Internal Revenue Code §170(h):**

- The preservation of land areas for outdoor recreation by, or the education of, the general public.
- The protection of relatively natural habitats of fish, wildlife, or plants, or similar ecosystems.
- The preservation of open space—including farmland and forestland—for scenic enjoyment or pursuant to an adopted governmental conservation policy; in either case such open space preservation must yield a significant public benefit.
- The preservation of historically important land areas or buildings.

#### **Basic estate requirements of Internal Revenue Code §2031 as related to Conservation Easements:**

- The land is within a 25-mile radius of a national park, a wilderness area or a Metropolitan Statistical Area (typically an area with a population over 50,000) or within 10 miles of an Urban National Forest.
- The land was owned by the decedent or a member of the decedent's family for at least three years immediately prior to the decedent's death.
- The easement was donated by the decedent or a member of the decedent's family.
- The easement prohibits all but minimal commercial recreational use of the land.

# LANDOWNERS



## LEGISLATIVE · ALERT

### NATIONAL

by JAY JENSEN, Washington Office, National Association of State Foresters



**T**he legislative calendar for the 105th Congress, 2nd session is one of the shortest

on record and it is having a definite impact by limiting significant legislation. With the shortened timetable for legislative action, efforts are primarily being focused on appropriations issues, leaving significant changes and overhauls of non-budgetary items for another time.

The Senate passed its budget resolution in early April, but the House seems to be having more difficulty reaching agreement on its resolution, which sets Congressional spending priorities for future years. Sources assure that the 13 annual appropriations bills needed to provide funding for fiscal year 1999 programs will not be held up.

### State & Private Forestry Appropriations

There has been much controversy surrounding the USDA-Forest Service budget for FY 1999, but in the area of State & Private Forestry (S&PF), the situation is looking good for increases in many, if not all programs. With increasing demand being placed on private forested lands because of a declining Forest Service timber harvest (from around 12.5 billion board feet per year a decade ago to the latest reporting of around 3.5 billion board feet per year), these increases are greatly needed.

S&PF programs are designed to address this increasing demand, but the marginal budgets of the past have hindered the ability of these programs to meet their potential. State foresters have appeared before various appropriations committees in support of S&PF increases. Their testimony points out that mod-

est increases in funding will greatly help the implementing agencies accomplish their goals of improving forest health and productivity as well as add value to private property through incentive-based, non-regulatory approaches.

State foresters are focusing efforts to increase funding in four priority areas: Landowner Assistance (Forest Stewardship, Stewardship Incentives, and Forestry Incentives Programs), Cooperative Fire Protection, Urban and Community Forestry, and Forest Health Protection.

**Landowner Assistance**—With only about 10 percent of non-industrial private forest (NIPF) landowners consulting professional foresters when developing forest management plans for their properties, this area is an integral aspect of ensuring sound forest stewardship. The Forest Stewardship Program (FSP) and Stewardship Incentives Program (SIP) match funds for state and private foresters to draw up and implement Forest Stewardship management plans. State foresters hope to reach a goal of 50 percent of NIPF acres covered with some form of a professionally developed management plan by the year 2002.

An area of particular concern to state foresters is the administration's proposal to zero-out the Forestry Incentives Program (FIP). This incentives program encourages landowners to keep lands forested and help them begin the process of reforestation. FIP has been eliminated from the administration's FY '99 budget because of its perceived incompatibility with the strategic plan of the Natural Resources Conservation Service, which jointly oversees the implementation of FIP with the state forestry agencies. State foresters refute this claim, pointing out that FIP "is capable of helping keep large acreages of land in continuous forest cover, ensuring long-term

timber supplies while protecting soil productivity and enhancing water quality," which is the directive of the NRCS.

**Cooperative Fire Protection**—Two programs constitute the backbone of Cooperative Fire Protection: State Fire Assistance, which provides money to help link federal and state agencies' fire-fighting capabilities, and Volunteer Fire Assistance, which helps train and equip the volunteers who make up a good part of federal and state fire crews. Investment in these programs acts like "insurance" for the protection of lives, property and resources from destructive wildfire. Investments now would save money in the long run by reducing federal costs, protecting private property, and encouraging landowners to take their own steps to protect their homes and properties.

**Urban and Community Forestry**—With more than 80 percent of Americans living in urban and suburban settings, the money invested in U&CF programs has the potential to reach the greatest number of beneficiaries. U&CF accomplishes most of its goals through volunteers who undertake tree plantings, educational workshops, restoration efforts and resource maintenance activities. The benefits of U&CF programs include reduction of heating and cooling costs, improved air quality, enhancement of urban wildlife habitat, improved community economic stability, and a higher overall quality of life.

**Forest Health Protection**—State foresters' view on forest health is that it should be determined both by the ecological capabilities of the land and by the objectives of the landowner. The best way to take care of our forest resources is to apply active management, state-of-the-art monitoring and well designed suppression programs.



A problem area identified by state foresters is the administration's figures for the Slow the Spread Program, which addresses the spread of the European gypsy moth around the Lake States. This will be a major concern and problem if the situation is not addressed soon.

**Forest Extension**—The Renewable Resources Extension Act programs, overseen by the Cooperative State Research Conservation Service, provide resources and education to reach landowners, log-

gers and foresters through programs such as Logger Education to Advance Professionalism (LEAP). Since every timber sale must be done with a logger, but only about 10 percent of sales ever consult a professional forester, the LEAP program is essential to help educate loggers to conduct operations in an environmentally friendly manner.

Overall, current state forester numbers for S&PF reach just over \$180 million for all programs, but "could easily exceed

\$200 million" if overall demands for S&PF programs were met by appropriators. The importance of S&PF funding is getting more of the spotlight as of late partly in light of the recently released National Research Council report, "Forested Landscapes in Perspective," which details the importance of non-federal timber lands in this country and the lack of attention they garner. A summary of this publication appeared in the winter 1998 issue of *Alabama's TREASURED Forests*. ♣

## ALABAMA

by FRANK SEGO, Legislative Liaison, Alabama Forestry Commission



**T**his column is intended to provide an update on legislative affairs, but sometimes it's more of a "backdate" since the deadline and the delivery dates are so far apart.

Recapping the 1998 regular session of the Alabama Legislature could bring on a series of migraine headaches. Who were the winners? The special interest? The rank and file citizen? The legislators themselves? Or the governor?

The governor would be the first to tell you that he didn't fare as well as he had expected. When lawmakers headed for the exits on the night of April 27, his favorite voter identification bill was left to die in the House. Two floors above the House, the Senate laid to rest a \$700 million road and bridge bond issue. The governor had campaigned vigorously for its passage.

Add to this the fact that the Senate only passed half of the governor's proposed \$110 million bond issue to renovate the vast network of state parks. Senators failed to pass the enabling act that must accompany the constitutional amendment. Without the enabling act, there is no designation of how the money is to be spent.

### A Special Session?

All of this was enough to start the governor toying with the idea of a special session at some point during the summer. That brought an immediate hue and cry from a host of legislators who are seeking re-election (and most of them are doing so). They will tell you that they need every passing minute of the summer

to enhance their campaign within the respective districts. "Don't do it, governor!" could be heard from every corner of the state. But Governor James has a mind of his own and it was anybody's guess as this column went to press whether or not he would exercise his power to call a special session.

The man on the street, the woman in the supermarket and the politically informed college student gave the lawmakers mixed reviews for their work during the regular session. Some of the reactions were quite amusing. One response was: "You mean they were down there (in Montgomery) all this time?"

Some legislators had their own slant on the pluses and minuses of their own performance. As one return member of the House put it, "It's not always what you pass, it's what you help kill that matters most." It was his contention that 80 percent of legislation that passes is the product of special interest lobbying. To illustrate his point, he said he hasn't sponsored a bill that has passed since 1995 when he passed three.

### Forestry Commission Legislation

As we reflect on the successes and failures of the 1998 regular session, we must point to a level of success achieved by the Alabama Forestry Commission.

ACT 98-291 by Rep. Gerald Willis of Piedmont and 60 others: This act would provide civil immunity for those persons donating fire control property to the Forestry Commission for use by volunteer fire departments. This would include motor vehicles, firefighting tools and oth-

er supplies used in firefighting or for fire rescue purposes.

This allows the AFC and its commissioners immunity from liability for civil damages for personal injury, property damage or death resulting from a defect in equipment donated in good faith to certified volunteer fire departments.

ACT 98-603 by Senator Hap Myers of Mobile: This act amends the Code of Alabama 1975 relating to the Forestry Commission and the issuance of burn permits. It would provide that danger from smoke may now be considered by the state forester when issuing fire alerts, and that smoke may be considered in revoking a burn permit due to weather conditions.

ACT 98-496, the General Fund Budget by Senator Dewayne Freeman of Huntsville: It was here that the Forestry Commission fared somewhat better than a number of state agencies that either took a cut or will be level funded for fiscal 1998-99. The governor had recommended \$11,317,870, which would have been a drop from the Commission's actual funding of \$11,967,999 in the current fiscal period.

The bottom line incurred several changes as the budget passed through the Senate and House on its way to a conference committee. Actually, two conference committees handled it before giving final approval. The first committee raised the AFC figure to \$12,482,999. The second committee upped it another \$200,000 to a final total of \$12,682,999. This would reflect an increase of \$715,000 over the current year.

(Continued on page 30)

# The Boone and Crockett Club

## More than 100 Years of Conservation

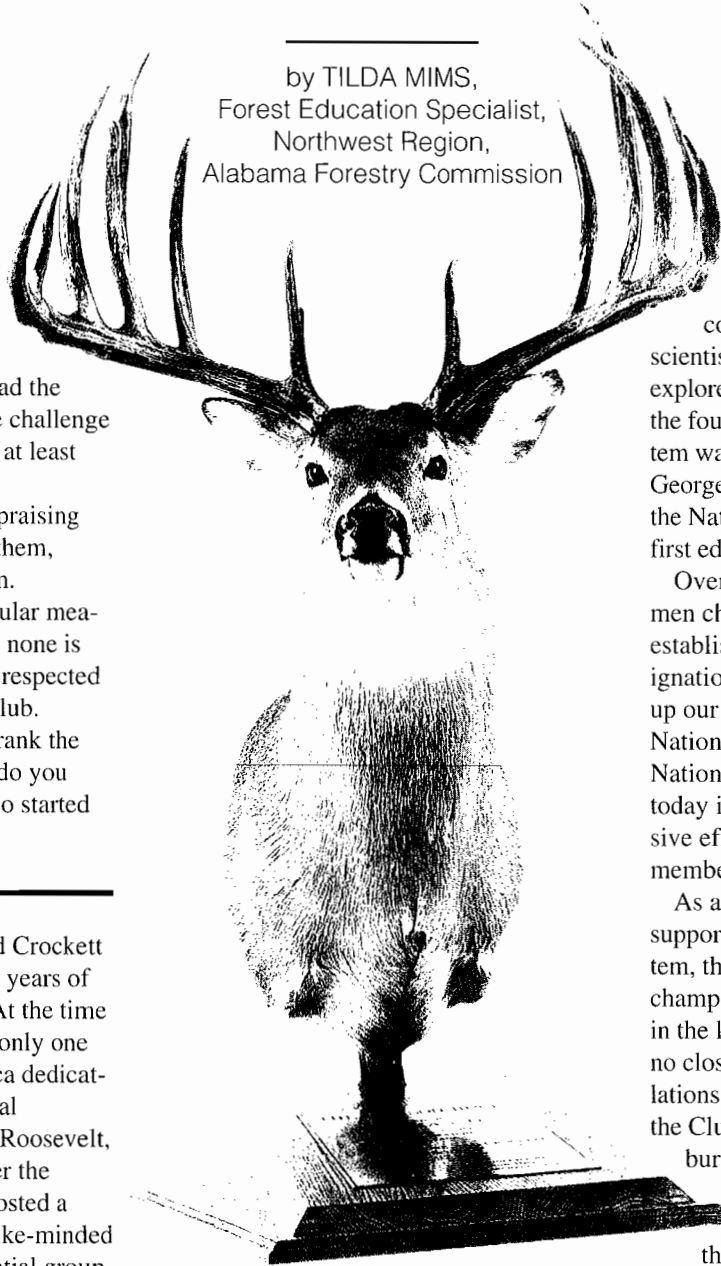
by TILDA MIMS,  
Forest Education Specialist,  
Northwest Region,  
Alabama Forestry Commission

**W**henever deer hunters gather, conversation often becomes a friendly debate of whose deer weighed the most and whose had the biggest rack. The winner of the challenge may be judged the best hunter, at least until the next hunt.

One enduring method for appraising big game trophies is to record them, using an official scoring system. Although there are several popular measuring scales to rank big game, none is more universally accepted and respected than the Boone and Crockett Club. Everyone knows it is a tool to rank the qualities of whitetail deer, but do you know where it came from? Who started it? And why?

### History

The history of the Boone and Crockett Club is a tale of more than 100 years of commitment to conservation. At the time of its founding in 1887, it was only one of two organizations in America dedicated to conservation of our natural resources. President Theodore Roosevelt, who was deeply concerned over the plight of America's wildlife, hosted a dinner in December 1887 for like-minded sportsmen friends. This influential group recognized that what happened to vast buffalo herds and millions of passenger pigeons could easily happen to other species unless efforts were made to control market hunting and provide wildlife the ability to coexist with man. That evening the B&C Club was founded with two major goals: the conservation of critical wildlife habitats and the principle of hunting in fair chase.



*World record typical whitetail deer scoring 213 5/8; taken by Milo Hanson at Biggar, Saskatchewan, Canada. Photograph courtesy of the Boone and Crockett Club Archives.*

President Roosevelt committed himself to restoring America's wildlands. Working with club members General William Tecumseh Sherman, Gifford Pinchot,

Henry Cabot Lodge, Aldo Leopold and other visionaries comprising outdoor sport enthusiasts, scientists, military and political leaders, explorers, artists, writers and industrialists, the foundation for our conservation system was laid. Included in this group was George Bird Grinnel, who later founded the National Audubon Society and was the first editor of its magazine.

Over the next several decades, these men championed the passage of laws, the establishment of institutions, and the designation of wildlands which today make up our nation's conservation system. The National Forest, National Park, and National Wildlife Refuge systems exist today in large part because of the extensive effort of the Club and its dedicated membership.

As a vital element of the foundation supporting our nation's conservation system, the Club began publishing and championing a "fair chase" hunting ethic in the late 1880s. At that time there were no closed hunting systems or other regulations on the taking of game. Early on, the Club spelled out certain acts, such as burning animals from their dens or "crusting" (running deer and other animals in the snow), as against the Club's philosophy. This is significant when you realize these acts were neither illegal nor unethical to the general public in those days.

### Record Keeping

The Club is perhaps best known for maintaining records of native North American big game as a vital conservation record in assessing the success of wildlife management programs.

***“To waste, to destroy our natural resources, to skin and exhaust the land instead of using it so as to increase its usefulness, will result in undermining in the days of our children the very prosperity which we ought by right to hand down to them amplified and developed.”***

Theodore Roosevelt, 1907, Founder of the Boone and Crockett Club

In response to public interest generated in 1920 by the Club's National Collection of Heads and Horns, and increased hunting by the general public, the Club proposed to establish an official measurement and scoring system for trophy animals.

Beginning in 1929, a committee began compiling records of game listing key skull, antler and horn measurements. The first formal recognition of outstanding North American big game trophies by the Club was in its 1932 records book. It involved relatively few specimens that were listed by simple criteria of length and spread of horns, antlers or skulls.

When the records book was published, it was the first one devoted exclusively to North American big game. Prior to publication, the scoring system was circulated to 250 sportsmen, biologists and others for their comments. Once adopted, the system quickly became established as the universally accepted standard for measuring native North American game.

Club members and others in the scientific community soon recognized that the system was an effective means of tracking the success of new conservation policies. Since first published these records emphasize that a thorough understanding of species biology and proper wildlife habitat management is necessary to ensure the future of all species.

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### **The Boone and Crockett Scoring System**

The original simple scoring system in no way reflects the detailed scoring system developed in the 1940s and copyrighted in 1950 by the B&C Club. The scoring system depends upon carefully taken measurements of enduring characteristics to arrive at a numerical final score of a category. By measuring only enduring characteristics (such as antlers, horns and skulls) rather than skin length or carcass weight, the measurements may be repeated at any later date to verify both the measurements and the resulting ranking.

B&C Official Measurers are not just for whitetail deer. Official records are kept for 35 categories of big game including bear, cougar, elk, deer, moose, caribou, pronghorn, bison, goat, muskox, walrus and sheep.

The system places heavy emphasis on symmetry, penalizing those portions of the measured materials that are non-symmetrical. This results in even, well-matched trophies scoring better and placing higher in the rankings than equally developed but mismatched trophies. For those antlered trophies with unusual amounts of abnormal material, non-typical categories were developed to give them recognition as they would be unduly penalized in the typical categories.

Official measurements cannot be taken until the antlers, horns or skull have air dried at normal room temperature for at least 60 days after the animal was killed. If the trophy has been frozen prior to cleaning, the 60 days begin once the cleaning process is complete. In the case of picked-up trophies, the 60-day drying period also applies.

In 1947, the Club held its first “competition” for outstanding trophies, ranking by a series of measurements refined in 1950 into the current trophy system. Since 1947 there have been 22 Awards Programs (formerly called competitions).

Trophy entry now occurs during a three-year period, followed by public display of the finest trophies entered in each category and an awards banquet. Only top trophies in each category are invited to final awards judging and only invited trophies remeasured by the judge's panel are eligible to receive awards. The current awards period runs from January 1, 1998, until December 31, 2000.

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### **How to Become an Official Measurer**

The B&C Club has 802 Official Measurers scattered strategically across the United States. As of this writing there are only 15 official Boone and Crockett Club measurers in Alabama. There are many

people who claim to be knowledgeable enough to rank deer in our state but to be official, and thereby considered for publication in the records book, the animal must be scored by a certified measurer.

These men and women are volunteers who offer their time and talents to score trophies for the records books. Competition for these appointments is intense. The B&C headquarters receives more than 2,000 applications annually for the 20 to 60 vacancies they fill each year. Official measurer appointments are only made upon completion of all aspects of training. To be considered for an invitation, write a letter to the Club's headquarters requesting an application. All applications are filed by state and when a workshop is offered in that state, the applications will be reviewed. Submitting an application does not guarantee an invitation to the workshop. Candidates are selected on their experience, and invitations are sent to individuals where the need is the greatest. To enhance your chances of being invited to a workshop, you may note and highlight in your letter that you are willing to travel outside your state for training.

The need to maintain and perpetuate wildlife habitats championed by the Boone and Crockett Club founders more than 100 years ago is central to the principles of the TREASURE Forest program. To the TREASURE Forest landowner a trophy animal is more than the size of antlers, horns or body. The unmeasurable quality is the joy of knowing that wildlife habitats are preserved for future generations.

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# SAFE TRACTOR OPERATION

by DAVID E. BAKER, Department of Agricultural Engineering, College of Agriculture, University of Missouri-Columbia

**M**any forest landowners operate tractors on a regular basis. No one deliberately has a tractor accident, but recent studies show that tractors account for two out of every five agriculture-related accidents. It makes sense, then, to review some safety tips for operating a farm tractor.

Overtums have the highest fatality rate of tractor accidents occurring on the farm. To decrease this death rate, the Department of Labor established the Roll-Over Protective Structure Standard, more commonly known as the ROPS Standard. The standard requires that all tractors manufactured after October 26, 1976, and used by employees must have Roll-Over Protective Structures. It also requires that employees receive training in the nine areas of safe tractor operation outlined in this article. Such training shall be given at the time of initial assignment and at least annually thereafter.

In 1985, tractor manufacturers voluntarily adopted a standard to sell all-new tractors with ROPS in place. This means, however, that there are still many tractors in operation today without this protective device.

## Safe Operation

The most important point of tractor safety is knowing your tractor. Know how the tractor handles and be alert to meet all potential emergencies. A good tractor operator has read the manual and practices the following safety habits:

### **1. If the tractor has a roll-over protective structure, securely fasten your seat belt.**

The seat belt is intended to hold you within the safety zone of the ROPS frame, or ROPS structure, if an upset occurs. The belt is there so that you will not be thrown from the tractor and crushed or receive additional injury. The ROPS structure is designed to take the total impact of upset and at the same time protect you, the operator.

Don't wear a seat belt if your tractor is not equipped with a protective structure.

If you do, you lose your chance of being thrown clear of the tractor in case of an upset. Buckle up and stay inside.

### **2. Where possible, avoid operating the tractor near ditches, embankments and holes.**

Avoid holes and depressions that are likely to cause a sideways upset. Reduce speed to minimize the possibility of a sideways upset.

To assure safety around ditches and river embankments, just stay away. If you must operate near a ditch or riverbank, stay as far away from the ditch as it is deep. When operating around a ditch, look ahead for holes, gullies and wash-outs.

Stay away from ditches and riverbanks where possible. If you can't, look and think ahead.

### **3. Reduce speed when turning or crossing slopes and on rough, slick or muddy surfaces.**

Slow down before making any turn. Centrifugal force is one of the major causes of tractor upsets. The centrifugal force tries to keep the tractor going in a straight line. As you double the speed of a tractor while turning, the danger of upsetting is increased four times.

Reduce speed when turning with a loader. As you turn with a raised loader, you increase the possibilities of a tractor overturn. Keep the loader as low as possible, and watch for ditches, holes and rocks that might cause an upset.

If a tractor begins to slide sideways in the direction of travel, you may tip over in a ditch or run into an obstacle and upset.

### **4. Stay off slopes too steep for safe operation.**

Steep slopes greatly reduce a tractor's stability. To increase stability, set the wheels at the widest setting suitable for the job you are doing. Drive slowly, avoid quick uphill turns, and watch out for holes and depressions on the downhill side and for bumps on the uphill side. If you are using side-

mounted equipment, keep it on the uphill side of the tractor.

Keep the tractor in gear when going downhill. This allows the tractor engine to serve as a brake. If in doubt about what gear to use, select the lowest-speed gear and shift before you start downhill.

Some tractors "freewheel" and provide no engine braking in certain speed ranges. If your tractor is one of these, travel downhill using those positions that provide engine brake action. Check your operator's manual.

### **5. Watch where you are going, especially at row ends, on roads and around trees.**

When coming to the row ends, slow the equipment down. Be alert to fence rows and make as wide a turn as possible. Apply a single brake in the direction of the turn. Only do this at a very slow speed. Quick, short, brake-assisted turns can cause upsets.

When operating on highways, tractor operators must follow all rules of the road. All tractors on Alabama highways must have a Slow Moving Vehicle emblem. No interstate travel by tractors is allowed.

Follow these driving practices on the highway:

- Maintain control of equipment.
- Stay alert.
- Wait for traffic to clear before entering the highway.
- Beware of blind intersections.
- Keep the approaching traffic lane clear.
- Don't allow traffic build-up.
- Use hand signals or turn signals.
- Obey all traffic signs.

### **6. Don't permit others to ride.**

Tractors are designed for only one operator and not passengers.

Children often plead for rides, but don't give in. If you must carry passengers, use a pick-up or other automobile.

## **7** Operate the tractor smoothly—no jerky turns, starts or stops.

When starting tractor movement, make sure no people or obstructions are ahead or behind. As you begin to move, engage the clutch slowly and evenly. Engaging the clutch suddenly or quickly shifting a hydraulic transmission to high speed could tip the tractor over backwards, especially when towing a load or starting up a slope.

Slow down before stopping or attempting to make a turn. Fishtailing or severe braking at high speeds can cause jackknifing and rollover. The safest procedure is to slow down by reducing engine speed before turning. Apply both brakes if braking action is required. Then turn as wide as you can with engine power pulling the load.

## **8** Hitch only to the drawbar and hitch points recommended by tractor manufacturers.

Hitching above the normal drawbar height may cause a tractor to tip over backward. Any time you are pulling a load with a tractor, the load is trying to pull the tractor over backward. The tractor tries to pivot around the point where the rear wheels touch the ground.


The hitch on the tractor has been designed to allow you to pull heavy loads without the risk of a backward-upset.

When the hitch point on a tractor is raised, the chance for a backward upset is greatly increased. Always hitch to the drawbar and keep it as low as possible.

Always use a safety-hitch pin for fastening a pulled implement to the drawbar of a tractor. The safety pin will not bounce out, let the implement loose and possibly cause an accident.

## **9** When the tractor is stopped, set brakes securely and use park lock if available.

If your tractor has a parking brake, use it. Don't depend on leaving the transmission in one of the driving gears to keep your tractor from rolling. If your tractor doesn't have a park brake, then shift the transmission lever to the park position. This locks the transmission with positive action, keeping the tractor stationary. Make this a habit every time you leave the tractor seat: Shut off the tractor, set the parking brake or shift to park, and remove the key.

A daily maintenance check on your farm tractor is also recommended (see box). Keep safety a priority when operating any equipment on your farmland. It could save your life. 

*This article was taken from Missouri University Extension publication 1960. Reprinted with permission.*

# ROPS AND SEAT BELTS CAN SAVE LIVES

Statistics compiled by the National Safety Council show that 55 percent of all tractor-related deaths in 1995 were associated with rollovers, and 27 percent involved people who were run over by tractors. Approximately one-half of the people run over were operators who were thrown from tractors. According to the University of Iowa Center for Agricultural Safety and Health (I-CASH), if a tractor rolls over that doesn't have a Roll Over Protective Structure, there's a 75 percent chance of dying. With a ROPS and a seat belt, and if the seat belt is worn, there is a 95 percent or greater chance of walking away from an accident.

In 1997 five tractor companies in North America began working together to encourage tractor owners to have their older machines equipped with ROPS and seat belts. AGCO Corporation, Case Corporation, Deere & Company, Kubota Tractor Corporation, and New Holland North America, Incorporated are involved in a program which makes it possible to purchase ROPS and seat belts at the companies' cost.

Depending on the tractor model, most ROPS kits cost less than \$600, plus freight and installation. Kits are available for most tractors manufactured in the mid/late 1960s up to 1985 (when ROPS and seat belts became standard). Tractor owners should contact their local dealer for more information on installing ROPS and seat belts on older tractors.

## DAILY MAINTENANCE CHECK

Practicing the safety hints, reading the owner's manual and performing the daily maintenance check will increase the probability of operating a tractor safely. The daily maintenance check should include:

1. Fuel supply—enough for the job.
2. Radiator water level—within 1/2 to 1 inch of cap.
3. Tire pressure—proper for work. Check operator's manual.
4. Check tires for cuts or breaks in the tread and sidewalls.
5. Water level in battery—into opening. Use clean water.
6. Transmission oil level—above add mark on dip stick. Check operator's manual for type to add.
7. Air cleaner—oil to mark. See operator's manual.
8. Check for loose parts, bolts and nuts.
9. Make sure all shields are in place.
10. Clean off platform of tools, mud, grease and any crop residue.
11. Check all lighting equipment and SMV emblems.
12. Check other items listed in operator's manual at intervals stated.

# The Importance of Water Quality in Herbicide Applications

by GARY C. WAKEFIELD, Forester, Miller Chemical & Fertilizer Corporation and  
TIM L. GOTHARD, Forest Management Chief, Alabama Forestry Commission

It is no secret that forest herbicides have become a primary management tool in the establishment and maintenance of forestland, whether it be for timber production, wildlife habitat enhancement, or the simple elimination of unsightly, unwanted, or invasive vegetation. It is also no secret that there are a myriad of herbicides and herbicide combinations (tank mixes) available to help meet these goals. People often use different herbicides, different tank mixes, and even different rates of the same herbicide or tank mix to tackle similar vegetation problems. This can be confusing, and the confusion is often compounded by mixed reports regarding the effectiveness of treatments that employed a common herbicide or tank mix at virtually the same rate. Applicators have reported instances where vegetation sprayed in the morning showed greater control than what was treated in the afternoon, oftentimes pointing to the herbicide or herbicide components in a tank mix as the culprit.

Forestry and forestry professionals in general have been using herbicides for only a short time compared to agriculture. Farmers have led the way in the use of many herbicides. These small businessmen discovered long ago that the performance of many compounds is heavily influenced by water quality. If you have ever wondered why a particular herbicide works well sometimes and performs poorly at others, the answer could very well be found in your water. Water quality in herbicide sprays is important because water makes them work.

## The Importance of pH

The pH of the water you mix with a herbicide is important because most herbicides function better in acidic water and may not do well in water that is alkaline. It is generally acknowledged that many pesticides are decomposed quite rapidly in alkaline water. Water in many areas of the United States has sufficient natural alkalinity to cause what is known as "alkaline hydrolysis" of herbicides. The herbicide will undergo a chemical reaction which reduces its effectiveness. The more alkaline the water, the more rapid the breakdown of many herbicides.

The acidity or alkalinity of water is measured by its pH. The ranges of pH are from 0 to 14, with anything below 7.0 being acidic. Lemon juice, with a pH of 2.0, is acidic. Milk of Magnesia, with a pH of 10.5, is alkaline. Distilled water is neutral, with a pH of 7.0.

Several years ago the Virginia Department of Forestry sent samples of water mixed with a particular herbicide to the herbicide's manufacturer for evaluation. The pH's of the samples ranged from 9.0 to 6.0. In all cases the herbicide remained effective. However, as the pH increased (became more alkaline) the herbicide became less effective. If the pH of your spray water is higher than 7.5, it's alkaline enough to affect some pesticides. A pH range of 5.0-6.0 is ideal.

The pH of herbicide sprays can also affect control in another way. Many chemicals are absorbed better in acidic solutions

than in alkaline solutions. Alkaline solutions have a high negative charge caused by a high concentration of hydroxyl ions, which carry a negative charge. In contrast, in an acidic solution there is a high concentration of hydronium ions, which carry a positive charge. Leaf surfaces carry a gross negative charge. Much like the repelling action that occurs when you try to put the same poles of a magnet together, the absorption of herbicide in an alkaline solution (negative charge) on a leaf surface (negative charge) is diminished or slowed. However, when a herbicide in an acidic solution (positive charge) is applied to a leaf surface (negative charge) the herbicide is pulled into the leaf tissue much more rapidly (opposites attract). This same law is the principle behind the specific use of a "non-ionic surfactant" with some herbicides when a surfactant is recommended. Non-ionic surfactants have no charge and will not react with the leaf surface.

You are rightfully asking, How can one feasibly and economically check and alter improper pH when your choice of water sources is limited? Pocket pH test kits, just like those for use with a home pool, are readily available, affordable, and can be used to test the pH of your water before you prepare a herbicide solution. If you need to adjust the pH, a variety of buffering agents can be purchased from the same places you purchase herbicides.

## The Effect of Soft vs. Hard Water

Most people know that water can vary in hardness; that's why we have water softeners. Just as soap may lather up better in softened water, many herbicides perform better in soft, acid water. The hardness of water primarily affects the ability to alter improper pH. Grains is the unit used to measure the hardness of water. Grains tells you the amount of dissolved solids in the water (17.2 parts per million equals one grain). The higher the grain, the greater the amount of dissolved solids and the harder the water. Soft water is considered water with less than 58 grains.

### Some Common and Commercially Available Buffering Agents

Product	Registered Trademark of
BUFFER-X	Kalo Laboratories
SPRAY-AIDE	Miller Chemical & Fertilizer Corporation
SORBA-SPRAY	Leffingwell, Inc.

### The Effect of pH on the Half-life of a Specific Pesticide (IMIDAN)

pH	Half-Life
10.0	1 minute
8.3	4 hours
7.0	12 hours
4.5	13 days

Source: Stauffer Chemical Company, Technical Information. IMIDAN is a registered trademark of Stauffer Chemical Company. Note: Pesticides include herbicides, insecticides, rodenticides, fungicides, etc.

(Continued on page 27)

# A Seed Planted

by Joel Glover, Wildlife Biologist, Alabama Department of Conservation and Natural Resources

**T**he rocky pine-covered hills and fertile valleys in the shadow of Flagg Mountain were a pleasant site to Clarence Varner upon his return home from the South Pacific. The family farm, located in the Mt. Moriah community of west central Coosa County, hadn't changed much since he left four years earlier to defend his country in World War II. While renewing his relationship with the land, Clarence planted several trees he had received from a nursery in Missouri. Many of those trees are still growing today on the old family farm, which is now the TREASURE Forest of his sister Ronnie (Varner) Zak and her husband George. The Zak TREASURE Forest was certified in 1995 after several years of hard work by the landowners. Wildlife is the primary objective on this TREASURE Forest. The Zaks have studied all available literature concerning proper wildlife management and have taken advantage of any opportunities to improve their knowledge of habitat management. The property consists of 154 acres, 76 of which are in hay fields. The open land component has been manipulated to enhance its usefulness for the targeted wildlife species of quail, wild turkey, wood duck, Eastern bluebird and other non-game birds.

The establishment of transition zones around the field edges afford the wildlife

some protection from avian predators while they feed and also provide nesting habitat. Many of the edge areas have been established in various species of lespedezas to provide food and cover. In addition, autumn olives have been planted to provide another food source. The secondary objective of timber management works hand in hand with their

and apples. The couple has also developed a nature trail they use for recreation and to educate their grandchildren in tree and plant identification.

Although there are many large trees on the property, one of the most impressive is the Chinese chestnut (*Castanea mollissima*) planted by Mrs. Zak's brother in 1945. The tree was recently declared a champion tree, meaning it is the largest of its species known to exist in the state. It easily surpassed the 1996 state champion specimen by over 40 points! This magnificent tree measures 124.8 inches in circumference, with a height of 57 feet and crown spread of 68.5 feet. This giant is the seventh state champion known to exist in Coosa County.

The primary goal of Mr. and Mrs. Zak is to pass on a love of the outdoors and a strong sense of proper management of our natural resources to their grandchildren. The new state champion Chinese

chestnut on the Zak farm is a good reminder that a seed planted in fertile ground can produce great results. Clarence Varner never imagined that the seedling he planted would one day be a state champion; however, the Zaks are trusting that the seeds they are sowing in the fertile minds of their grandchildren will bear tremendous fruit. Take your kids and grandkids out to your TREASURE Forest and plant some seeds today. ♣



Photo: Rick Porch

George Zak, Ronnie (Varner) Zak, and Clarence Varner with the state champion Chinese chestnut tree in Coosa County.

wildlife management efforts. The timber component is made up largely of longleaf pine, a fire-loving species. The prescribed burning program in place on the property is helping to meet both of the Zaks' objectives.

In addition to the accomplishments previously mentioned, the landowners are managing a lake on the property and have planted numerous tree species including sawtooth oaks, various pears

# Woodland Wildflowers

by KATHRYN FLYNN, Extension Specialist, Associate Professor, Forestry, Auburn University

It has been estimated that Alabama is home to nearly 3,000 species of native or naturalized flowering plants. Many forest landowners are interested in the wildflowers they encounter in the woods. As an introduction to these types of plants, let's become familiar with some terms.

Wildflowers can be classified into the following three groups based on their life cycle:

- **Annuals**—complete their entire life cycle in one growing season: a seed germinates, a plant is produced, the plant flowers, produces seed and dies. Some annuals produce flowers and seeds early in the year; others grow all season and produce their flowers and seeds in the fall.
- **Biennials**—require two growing seasons to complete their life cycle. In the first year a plant is produced from seed. In the second year the plant flowers, produces seed and dies.
- **Perennials**—longer-lived plants. These plants originate from seed the first year, die back to the ground at the end of the growing season, and resprout each spring until plant death occurs. Many, but not all, perennials spend the spring storing energy in underground structures (tubers, corms, bulbs, and rhizomes) in preparation for going dormant during the shady summer and fall seasons. Regrowth the following spring occurs from the underground portions of the plant.

Here are some other commonly used terms about plants:

- **Exotic introduced plants**—plants able to survive in their new home only if cultivated by humans.
- **Introduced plants**—brought, by humans, animals, or other means from other countries or regions into an area in which they were not previously present.
- **Native**—commonly refers to plants which were present prior to the arrival of European settlers.

- **Naturalized introduced plants**—most often refers to herbaceous flowering plants which occur naturally (without benefit of cultivation).

## History—Native or Naturalized

Wildflower enthusiasts often distinguish “native” wildflowers from “introduced” species. But many of the wildflowers we commonly see and assume to be native are, in fact, species that were introduced hundreds of years ago and which have become naturalized. The term “naturalized” means that these species have been able to grow and reproduce successfully in their adopted home without benefit of cultivation. In addition to the wildflower species which have been here for a long time, there are many recently arrived naturalized species and there will, without a doubt, be more new arrivals in the future.

One problem with making the distinction between “native” and “naturalized” is related to the history of North America. European explorers first arrived in the “New World” more than 500 years ago. When the first settlers arrived they brought seeds (accidentally and intentionally) from the “Old World.” Many of the wildflowers that generations of North Americans have grown up with are species that were introduced and were able to establish themselves in their adopted land. Examples include narrow-leaved plantain (*Plantago lanceolata*), common buttercup (*Ranunculus acris*), several types of clover, Queen Anne's lace (*Daucus carota*), yarrow (*Achillea millefolium*), and mullein (*Verbascum thapsus*).

As you can see, the issue of what makes one species a native, another an introduced species, and the impact introduced species have had on natives is not one upon which all people will agree. What is obvious is that some of the wildflower species loved and enjoyed by people are no more “native” than most of the people who now live here. We can enjoy them for

their beauty, provided they do not fall into the category of nuisance plants.

## Environmental Stresses

Wildflowers are an important part of the environment for many reasons—the least of which is the beauty they add to many of our favorite places. They are also important sources of food for many animals including butterflies, bees, wasps, and other insects, songbirds, wild turkey, quail, and mammals such as raccoons, mice, foxes and deer.

Like many things that surround us, wildflowers are often taken for granted. These attractive plants have often received very little respect, attention, or study. Gradually, people in many parts of the country and from different walks of life have begun to notice that wildflowers are disappearing from many places. This observation helped to focus some attention on the plight of wildflowers.

There are several reasons why wildflowers disappear from an area. Sometimes species disappear because the environmental conditions which are required by the species change as the surrounding vegetation changes—young forests become older, fires change soil and light conditions, a flood temporarily alters an area. This type of change has occurred throughout time and is either short-term, as in the case of a fire or flood, or longer-term as with the maturation of a forest. Either way, these types of changes allow for the regeneration of existing species or the arrival of different species more suited to the new environment.

There are other, more significant changes which are related to man's activities. These include development of urban areas, agricultural activities, timber harvesting, and large-scale collection of natural populations of wildflowers for retail sale. These activities can have a significant impact on wildflower populations on a local or even regional scale.

The U.S. Census estimates that the land





**Bloodroot** (*Sanguinaria canadensis*)

area of the suburbs doubled between the 1970s and the 1990s. It further estimates that approximately 400 square miles of new suburban areas will be added each year. Most of these new areas will be landscaped using traditional grasses, shrubs and trees. The wildflowers which existed prior to development will often disappear completely. There is some interest in the use of native plants for landscaping, but for many species of wildflowers, the environmental conditions present in landscaped areas are unfavorable for survival.

Agricultural activities which require large open areas for row crops or pasture probably have the same effect on woodland wildflowers as the establishment of suburban areas.

Timber harvesting also impacts the occurrence of wildflowers. Depending on the type and intensity of timber-related activities, some species may be able to re-establish themselves as the forest regenerates. Other species may be more sensitive to this type of disturbance and disappear from the area.

Establishment of pine plantations, especially as a replacement for hardwood or mixed hardwood, will result in changes in wildflower species composition due to the different conditions present in the regenerated forest. It is likely that the species that will recover most rapidly are those with small wind-blown seeds rather than those which regenerate primarily from below-ground tubers, culms, bulbs, or rhizomes. These types of structures would most likely be damaged by the movement of heavy machinery. However, if timber is harvested in small clearcuts, there is the possibility for gradual regrowth from the surrounding undisturbed forests.

Another often unrecognized threat to wildflowers is the removal of large numbers of plants from the wild for sale in

retail operations. As the interest in native plant landscaping has increased, the availability of some species of wildflowers has become a problem. Since many of these plants are difficult to propagate outside of their natural environment, collecting from the wild has been used to satisfy demand. This type of pressure can actually result in eradication of a species from a given area.

Plants which are particularly at risk from this type of damage are woodland wildflowers such as the trilliums, other members of the lily family, plants which produce few seed, and plants with very specialized environmental requirements such as orchids or bog species such as pitcher plants.

### Locations of Wildflowers

The physical structure and life cycle of a plant affects where and when it will be

found. Woodland wildflowers are able to grow, flower, and regenerate underneath trees. The types of wildflowers found in an area will be dependent on the type of forest occurring in that area.

In addition to life cycle and plant structure, environmental factors including such things as rainfall, nutrients, temperature, light levels, and soil pH affect where wildflowers are found. Many wildflowers have very specific environmental conditions which are necessary for successful growth. Others have very specific environmental requirements that must be met before their seeds will germinate. Another group of wildflowers are more liberal in their requirements and can be found across a diverse range of conditions. Our knowledge of the conditions required for growth and regeneration of many wildflowers is extremely limited.

(Continued on page 26)



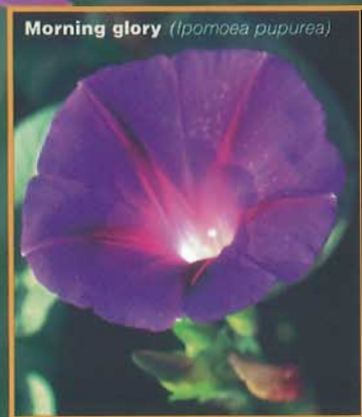
**Butterflyweed** (*Asclepias tuberosa*)



**Grass-pink orchid** (*Calopogon barbatus*)



**Wild geranium** (*Geranium maculatum*)



**Morning glory** (*Ipomoea purpurea*)

## A Year in the Life of a Taxpayer

Continued from page 14

only owns a percentage of the partnership, which is harder to sell than owning that land outright (liquidity discount). For this reason, the IRS will value the units at a discount (sometimes as much as 40%). Al could see that if the holding got only a 20% discount, it could save him at least \$26,000 and maybe more (20% of

360,000 = 72,000 x effective estate tax rate = savings). Thus, Al's taxable estate value would be decreased, resulting in fewer taxes owed.

Al's attorney said that many other things could be done to reduce the estate tax liability if Al decided he needed to do so. Some of these things include setting up other trusts to hold specific assets, make lifetime gifts to children or grandchildren or to make charitable donations. While Al did not feel that he would need to pursue

such things at this point, he was glad to know other things could be done if needed.

Al left the lawyer's office realizing that it would definitely take some time and money to get his estate plan started, but this investment should pay off exponentially for his family and other heirs for years to come. Al had worked too hard to allow the rewards for his hard work to go to the government when they could have gone to his family. ♣

*The End*

## Woodland Wildflowers

Continued from page 25

**Coniferous forests**—The trees in coniferous forests do not lose their leaves in the fall, which means that the forest floor is shady year round. Many wildflowers growing in this type of environment have thick, leathery evergreen leaves. They bloom in response to temperature and moisture rather than response to light. The evergreen leaves allow photosynthesis to begin early in the year and continue until the first hard frost. Patridgeberry (*Mitchella repens*) is an example of this type of wildflower. The leathery texture of the leaves helps these plants to withstand dry periods. By allowing temperature and moisture, rather than the availability of light, to dictate when flowering will occur, the plants maximize the chance for successful regeneration.

**Hardwood forests**—Many wildflowers within deciduous or hardwood forests grow and bloom early in the year—usually before tree leaves have reappeared. Many of these wildflower species sprout, flower, and produce viable seed very rapidly. This early growth allows full sunlight to be captured by the leaves and adequate water to be taken up by the roots without having to compete with trees that are still dormant. The forest floor becomes shady when the trees leaf out, making photosynthesis by wildflowers more difficult. In addition, the soil is usually much drier because of the water taken up by the trees. These conditions make the presence of foliage a burden rather than a benefit for many wildflower species.

## Enhancement of Wildflowers

If you are a wildflower enthusiast, there

are a number of things that you can do to help protect them. Many people are establishing wildflowers in their yards. Others, who own forestland, are either enhancing or protecting existing wildflower areas. If you own an area that has wildflowers, consider making protection and enhancement one of your management objectives, if it isn't already. Things to consider might include the use of prescribed fire to promote increased growth of wildflowers, removing special areas of wildflowers from timber management, and manual removal of thick woody undergrowth if it appears to be interfering with the success of your wildflower population.

Another option is the introduction of additional wildflower species into the area. If you are interested in wildflower cultivation, use wildflowers that are native to your area. In addition, try to ensure that any plants you buy from retail suppliers were propagated and not collected from the wild so that in establishing your wildflower area you did not inadvertently cause the destruction of another area.

If you have wildflowers growing in one spot and you would like to add them to another location, wait until the seed crop has matured and gather your own seed for planting. The book *Growing and Propagating Wildflowers* by Harry R. Phillips and others offers instructions for harvesting, cleaning, and storing wildflower seeds. Remember that many wildflower species have very specific environmental requirements. Try to match your choices with the environmental conditions present in your area. It is unrealistic to think that you can manipulate characteristics such as soil pH successfully without a great deal of effort and expense. Some plants do not respond well to high levels of some soil

nutrients; others will only grow in nutrient-rich situations.

Take a realistic look at your garden or forest and make wise choices based on what you can find out about the wildflowers you like. If you have access to an area which is about to be paved over and there are wildflowers there, try transplanting them into a suitable location. This should only be done if the area where they are growing is about to be destroyed. We should all use our love of wildflowers to protect them and not let that love actually result in damage to a valuable and beautiful natural resource. ♣

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*This article was taken from Alabama Cooperative Extension publication ANR-1071, "Woodland Wildflowers—A Primer." The publication contains additional information on wildflowers and may be obtained from any Extension office. Reprinted by permission of the Alabama Cooperative Extension System and Kathryn Flynn, Extension Forester, Auburn University.*

## Conservation Easements

Continued from page 15

then conveys the right to enforce those restrictions to a qualified recipient organization. The easement is a non-possessory right, meaning the landowner maintains possession of the property subject to the easement. The Act states that conservation easements can be granted for several purposes, including "retaining or protecting natural, scenic, or open space values of real property, assuring its availability for agricultural, silvicultural, forest recreational, or open space use, protecting natural resources, maintaining or enhancing air or water quality, or preserving the historical, architectural, archaeological, paleontological, or cultural aspects of real property."

### Conservation Easement Benefits

There are both non-tax and tax reasons to grant a conservation easement. For instance, a landowner who owns a parcel of timberland that is home to certain rare species of animal and plant life may wish to preserve the parcel of land for subsequent generations of his or her family in its natural, undeveloped state. Additionally, the landowner may be able to reduce his or her income and estate taxes by granting such an

easement if certain requirements are met.

**Income Tax Reductions**—The donation of a conservation easement is a tax deductible charitable gift, provided the easement is perpetual (i.e., continues forever) and is donated "exclusively for charitable purposes" to a qualified conservation organization or public agency. Internal Revenue Code §170(h) provides general definitions of "conservation purposes." The Treasury Regulations and IRS Private Letter Rulings offer guidance on what will qualify under each of the broad categories found in §170(h). Suffice it to say that there must be some real contribution to the environmental well-being of an area for the gift to be deductible and not just a "tax dodge." The amount of the income tax deduction is equal to the difference between the property value without the easement and its value with the easement.

As an example, assume a property owner has a parcel of land with a fair market value of \$1 million. The landowner donates a perpetual conservation easement to a qualified conservation organization. The easement restrictions reduce the value of the property by \$300,000. Assuming the easement meets the conservation purposes test, the landowner is entitled to a \$300,000 income tax deduction. Of course, the annual deduction is limited to

30 percent of the landowner's adjusted gross income, but the excess can be carried forward to subsequent years.

**Estate Tax Exclusions**—Generally, estate taxes are imposed on the value of the property owned at the time of death. If a property owner owns a parcel of land at the time of his death which is subject to a conservation easement that meets the requirements of Internal Revenue Code §170(h), and if the decedent's estate meets the requirements of Internal Revenue Code §2031(c) enacted under the Taxpayer Relief Act of 1997, then, in addition to the reduction in value already attributable to the easement, an executor may elect to exclude up to 40 percent of the value of that land (not structures located on the land or "development rights" retained) subject to a maximum of \$100,000 each year up to \$500,000 in 2002 and after.

### Is a Conservation Easement Right for You?

The requirements necessary to qualify a conservation easement for an income tax deduction or an estate tax exclusion are numerous and complex. Every landowner contemplating or engaging in decisions affecting ownership and use of property should do so only under the guidelines of the landowner's own legal counsel. ☐

## The Importance of Water Quality

Continued from page 22

Above 58 grains you will have difficulty using buffering agents to adjust pH. Ideal water for herbicide spray solutions is soft water (10-58 grains) with a pH between 5.0 and 6.0. Your local water softener company can help you evaluate the hardness of water when feasible.

### Summary

Water quality is important to the success of herbicide applications. Regardless of whether you are a commercial applicator spraying thousands of acres, or a landowner spraying small patches of private, it pays to know a few details about the part of the spray solution that doesn't come with a label. Check your water's pH. If it's too alkaline, the addition of a buffering agent is an easy and economical way to maximize the potential results from your herbicide application. ☐

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# The Cradle of Forestry in America

by DON BURDETTE, State Lands Resources Manager, Alabama Department of Conservation and Natural Resources

Normally *Alabama's TREASURED Forests* magazine encourages readers to visit the sites and festivities of our own beautiful state of Alabama. For a change, we are suggesting that you consider visiting a place in the Appalachian Mountains of North Carolina called the "Cradle of Forestry in America" to enjoy a special centennial celebration. The Cradle of Forestry is, first, a memorial to the beginning of natural resource conservation in America, but the USDA-Forest Service has also made sure that a visit to the Cradle will be a fun, beautiful and very pleasant experience for visitors of all ages and interests. In addition to many coordinated activities provided every year, special events have been added this summer and fall to commemorate the 100th anniversary of America's first school of forestry. Besides the Cradle, many other attractions in the area make a fun-packed Appalachian summer vacation worth the drive.

## The Beginnings of Forestry Memorialized

The Biltmore Estate was initiated in 1887 by a successful capitalist from New York state, George W. Vanderbilt. His little family hideaway eventually included America's largest and finest private mansion and 125,000 acres dedicated to diversified, scientifically managed, profitable and sustainable land management.

Vanderbilt hired Gifford Pinchot as America's first consultant forester to pioneer forest management on the Biltmore Forest in 1892. Pinchot was American born but trained in European schools of forestry. He developed a working plan for the forest that included timber stand improvement cuttings and tree plantings. The object of the plan was to return a profit to the owner while improving the forest. Pinchot later wrote, "Here was my chance. Biltmore could be made to prove



Entrance to the Cradle of Forestry

what America did not understand; that trees could be cut and the forest preserved at one and the same time." A copy of Pinchot's forest stand map for the Biltmore Forest is on display at the Cradle.

In 1895, Pinchot left the Biltmore Forest to serve as the first chief of the USDA-Forest Service. However, before he left, he was instrumental in hiring Dr. Carl Schenck, a German forester, to continue management of Biltmore Forest and promotion of the science of forestry to the public.

Dr. Schenck opened America's first school of forestry, the Biltmore Forest School, on September 1, 1898. The curriculum consisted of 12 months of combined classroom lectures and field work, followed by a six-month internship in the timber industry and a paper written about the experience before a Bachelor of Science degree in Forestry was awarded to graduates. The cost of attaining this degree was a whopping total of \$960, with \$120 of this expense being for the care of the student's horse. Students learned to use scientific methods in the intelligent management and use of forest-related resources. They also developed an ethic to conserve, perpetuate and improve timber, wildlife habitat, soil productivity, water and mineral resources for future generations. The school graduat-

ed its last class in 1913. Out of more than 365 attendees, 300 completed the required courses. One graduate became an associate forester of the United States under Gifford Pinchot; 24 became Forest Service regional foresters or forest supervisors; 12 became state foresters; and most of the other students made their contributions to society through private timber companies, forest surveying, consulting forestry and wood preservation.

George Vanderbilt died in 1914. Mrs. Vanderbilt sold some of the family's land to the U.S. Government, which eventually became part of the Pisgah National Forest. In 1964 the Forest Service dedicated 6,500 acres of the Pisgah Ranger District to the birthplace of American forestry and natural resource conservation. This area, The Cradle of Forestry in America, was established as a historic site by an Act of Congress in 1968.

## A Destination Worth the Trip

The Cradle of Forestry is about an eight-hour drive by car from Montgomery, Alabama. It's located in the Pisgah National Forest in the western tip of North Carolina. Although it can be reached more directly from Greenville, South Carolina, the drive along the Blue Ridge Parkway from Asheville, North Carolina is much more interesting because of the beautiful views, Catawba rhododendrons and spruce forests. Either way, the drive will involve traveling over and through mountains until you reach the Cradle nestled within the "Pink Beds Valley" on U.S. Highway 276. Visitors are greeted at the entrance to the Cradle by a large, brightly colored sign hewn from logs and timbers.

## Things to See

The Cradle of Forestry in America is a historic site full of scenic beauty, Southern Appalachian culture and fun activities for all ages.

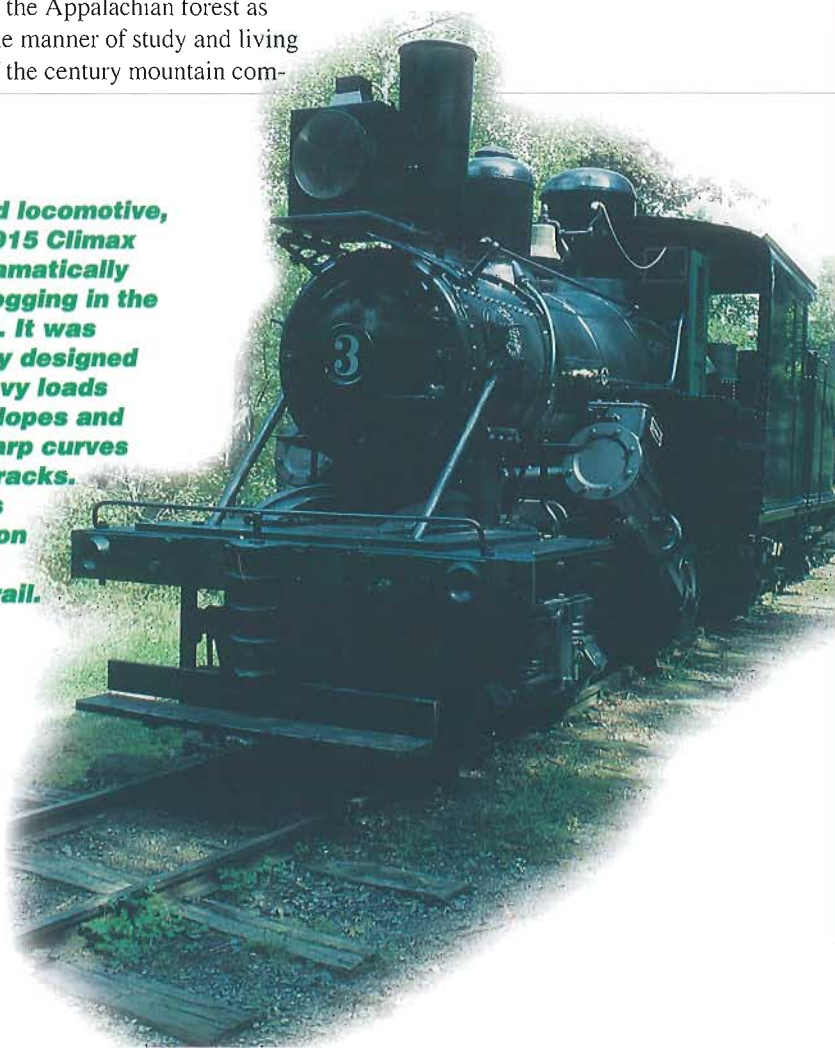
*The Forest Discovery Center* is a magnificent stone and timber exhibit hall. The entertaining exhibits describe how our nation's view of forest resources has changed drastically from the pure exploitation of the mid 1800s to the sustainable, multiple-use management tradition of today. Many of the exhibits are interactive and designed to appeal to young children, teens, adults and seniors alike. Exhibits show the progression of tools and technology, the water cycle, wildlife habitat, outdoor recreation, the changing forest (by natural and human factors), forest management decision-making, forest products and fields of study/employment in natural resource management. A couple of the more popular attractions are the simulated helicopter ride (for a firefighting flight) and a hands-on activity center that provides opportunities to explore a forest through all of the senses. Collectors will find the accumulations of antique tools and Smokey Bear paraphernalia fascinating. The volunteer personnel who operate many of these attractions are exuberant hosts who help create a pleasant and friendly atmosphere within the center.

*The Biltmore Campus Trail* is a pleasant stroll through the Appalachian forest as you retrace the manner of study and living in this turn of the century mountain com-

munity. Rehabilitated and reconstructed log cabins and clapboard shacks are brought to life by living historians who demonstrate subsistence skills of the men and women of the area at that time. The smell of wood-fired stoves and the clang of a hammer against an anvil will imprint memories of a nearly forgotten standard of living. The story of human development and progress are blended extremely well with the natural elements of unique mountain vegetation and wildlife.

*The Forest Festival Trail* is a tribute to the foresight of pioneers in natural resource conservation and management. Numerous forestry demonstration plots are laid out just as they were in the early 1900s. Experiments by Dr. Schenck and the students in seedling nurseries, tree planting, selective harvesting, timber stand improvement and trout farming are recreated for your inspection. A complete tramline logging train, a steam-powered sawmill, and an ox-drawn road grader are set up for you to climb aboard. Again, all of these outdoor exhibits are backdropped by stands of mixed spruce/pine/hardwood trees, ferns, rhododendrons and scampering chipmunks.

**The geared locomotive, like this 1915 Climax engine, dramatically changed logging in the mountains. It was specifically designed to pull heavy loads up steep slopes and around sharp curves on crude tracks. This one is displayed on the Forest Festival Trail.**



## More Information about the Cradle

The Cradle is open from 9:00 a.m. - 5:00 p.m. Eastern time, April 22-November 1.

Admission is \$4 for adults, \$2 for students 6-17 years old, free for children 5 or younger. Special rates are available for Golden Age Passport holders and groups of 15 or more.

For more information, contact:  
Cradle of Forestry in America Interpretive Association

100 S. Broad Street

Brevard, NC 28712

Phone: 704-884-5713

(after 10/98, area code 828)

E-mail: cfaia@citcom.net

Web site:

<http://www.CradleOfForestry.com> 

## Schedule of Events

The Cradle of Forestry in America always has a full schedule of free activity programs. A few new programs added for the summer and fall of 1998 include:

**August 8, 1998:** Smokey Bear's Birthday Party—A celebration of Smokey's 54th birthday with skits, games, music, a puppet show, birthday cake, firefighting equipment demonstrations, and of course, Smokey Bear!

**September 1998:** Centennial of the Biltmore Forest School—Call for schedule of events.

**October 3, 1998:** Forest Festival Day—Over 50 crafters, exhibitors and entertainers gather at the Cradle of Forestry to celebrate the richness of our Southern forest heritage. College forestry students will compete in a "Woodsmen's Meet" (lumberjack competition).

## Nearby Points of Interest

If you are interested in a family trip to the Cradle this summer, you might want to take in these other fine sites: Appalachian arts and crafts shops of Asheville, the Biltmore Estate, Blue Ridge Parkway including the Pisgah Inn, recreational areas of Pisgah and Nantahala National Forests including Sliding Rock Recreational Area, the Cherokee Indian Reservation, the Great Smokey Mountain National Park and white water rafting outfitters in extreme western North Carolina. Have a great time!

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# Mobile to Host 1998 Forest Landowner Conference “Neighbors Helping Neighbors”

**F**orest landowners and others with an interest in conservation are invited to attend the Alabama Landowner and TREASURE Forest Conference October 1-2, 1998, in Mobile. The conference, now in its 15th year, continues to be the premier event in the state each year for landowners to acquire technical information on how to better manage their forestland. It also offers an opportunity for landowners and those who work in the field of forestry to meet each other and share knowledge and experiences.

The first day of the conference will take place at the Mobile Clarion. A luncheon hosted by the Alabama TREASURE Forest Association will begin at 11 a.m. Following the luncheon will be the indoor sessions, which begin at 1:15 p.m. Conference attendees will choose four sessions to attend from the following topics:

- Herbicide Recipes for Tough Vegetation Problems
- Black Bear Initiative in Alabama
- Considerations Before Constructing a Pond

- Perspectives on the Future Demand for Solid Wood vs. Fiber
- Getting the Most Out of Genetically Improved Seedlings
- Roles and Benefits of County Forestry Planning Committees and Alabama TREASURE Forest Association County Chapters, a Panel Discussion

A silent auction sponsored by the Alabama TREASURE Forest Association will also take place Thursday. Bids will be received during the day and items awarded to the highest bidders that evening. Items to be auctioned will include handmade crafts and forestry-related items. If last year's auction serves as an example, there will be items of interest to everyone.

A banquet on Thursday night will honor some outstanding TREASURE Forest landowners and county forestry planning committees. It will also take place at the Clarion.

Friday morning participants will take a tour of several interesting sites near Mobile, with specific emphasis on the longleaf pine ecosystem. The tour will make stops at property owned by the

Mobile County School Board, International Paper and James and Joan Malone.

The tour also offers an opportunity to step back in time. The Malone TREASURE Forest blends modern timber and wildlife management practices with old-fashioned principles. A replica of a turn-of-the-century homestead will be the center of activities that will show how people lived before modern amenities were available. “Neighbors Helping Neighbors” will be the theme, with a smokehouse, syrup cooker, springhouse, quilting, candle-making, and wash pot canning on display.

Lunch will be served following the tour, which is accessible by bus only. Buses will transport conference attendees from the Clarion and return them after lunch.

Registration for the conference is \$40 per person if postmarked by Sept. 23. This includes the indoor sessions, breaks and banquet on Thursday, and both the tour and lunch on Friday. The luncheon on Thursday is an additional \$18 per person. After Sept. 23 the registration fee increases to \$60. Please use the form on page 31 to register for the conference. ☪

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## Alabama Landowner's Legislative Alert

*Continued from page 17*

Earlier, the Legislature had passed an 8 percent pay raise for state employees (Act 98-134). Coupled with an amount equivalent to one-quarter of the cost of the salary increase, the AFC general fund appropriation should make it possible for the salary increases.

In other action relative to forestry in Alabama, a constitutional amendment will appear on the November ballot authorizing the issuance of bonds in the amount of \$52 million to finance capital improvements in forestry, agriculture,

poultry, and veterinary programs at Auburn, Alabama A&M and Tuskegee Universities.

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## Official State Flower and Wildflower

One measure that failed to slip through was an amendment to the Code specifying the camellia as the official state flower and designating the oak leaf hydrangea as the official state wildflower. The bill was on the special order calendar poised for passage when its sponsor, Rep. Gerald Willis, was stricken with a heart attack at his home in Calhoun County.

The Forestry Commission will assist the Alabama Wildflower Society and the Garden Clubs of Alabama in seeking its passage during the next legislative session.

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## Farewell to 10

Following adjournment at midnight on April 28, members of the House paid tribute to 10 of their number who will not be returning for another regular session. They are Speaker Jimmy Clark, Michael E. Box, Sam Collins, Tom Drake, Steve Flowers, Randy Hinshaw, Paul Parker, Tony Petelos, Lewis G. Spratt, and Pete Turnham.

Hinshaw will be seeking the Senate seat being vacated by Dewayne Freeman of Huntsville and Petelos was named director of the Department of Human Resources by Governor James.

With this we close the books on another session. Our next column will find us in the middle of the election campaign. 'Til then... ☪

# Fifteenth Annual Alabama Landowner and TREASURE Forest Conference

Clarion Hotel • Mobile, Alabama • October 1-2, 1998

## REGISTRATION FORM

Name(s) of Attendee(s):

#1 \_\_\_\_\_  
 #2 \_\_\_\_\_  
 #3 \_\_\_\_\_  
 #4 \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Will Attend Tour on Friday:

<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Yes	<input type="checkbox"/> No
<input type="checkbox"/> Yes	<input type="checkbox"/> No

**Bus transportation will be provided for the tour. No personal vehicles can be driven.**

CATEGORY(IES) OF ATTENDEES (Check one category only)

Total number attending Friday's tour \_\_\_\_\_

#1	#2	#3	#4	
___	___	___	___	TREASURE Forest Landowner
___	___	___	___	Government Agency/TREASURE Forest Landowner
___	___	___	___	Landowner
___	___	___	___	Government Agency/Landowner
___	___	___	___	Government Agency
___	___	___	___	Private Forest Industry/Consultant
___	___	___	___	Other

**Thursday, Oct. 1:** Luncheon begins at 11:00; Indoor session begins at 1:15 p.m.; Banquet begins at 7 p.m.

**Friday, Oct. 2:** Outdoor tour in the morning. Lunch will be provided after the tour.

I am attending the conference and am enclosing  
 \$40 preregistration x \_\_\_\_\_ attendees = .....\$ \_\_\_\_\_

I am attending both the conference and the TREASURE Forest Luncheon, and am enclosing  
 \$40 preregistration x \_\_\_\_\_ attendees, plus \$18 x \_\_\_\_\_ luncheon attendees = ..... \$ \_\_\_\_\_

**NOTE: Luncheon is by preregistration only.**

### CONFERENCE INFORMATION

- The first day of the conference is indoors. The second day will be an outdoor tour. **Please dress appropriately.**
- The registration fee includes indoor session and banquet on Thursday; tour and lunch on Friday.
- Registration will be from 10 a.m. until 2 p.m. Oct. 1.
- **Preregistration fee for conference per person if postmarked by September 23 is \$40.**
- **Preregistration fee for conference and TREASURE Forest Luncheon per person if postmarked by September 23 is \$58.**
- Luncheon is by preregistration only. Luncheon will be from 11:00-12:30.
- Registration fee for the conference after September 23 is \$60.
- Mail upper portion of form and fee payable to Alabama Forestry Conference to:  
**Fran Whitaker, Alabama Forestry Association, 555 Alabama St., Montgomery, AL 36104; 334-265-8733.**

### HOTEL INFORMATION

- You will need to make your own reservations.
- The Mobile Clarion is offering a special room rate of \$69 for up to 4 people. *To receive this room rate please specify that you are attending the TREASURE Forest Conference when you make reservations.*
- Check-in time is 3 p.m.

**Mobile Clarion, 3101 Airport Boulevard, Mobile, AL 36606; 334-476-6400**

- A registration confirmation, map, agenda, and complete list of area hotels will be sent to everyone who preregisters.

# Helene Mosley Memorial TREASURE Forest Award

## 1998 NOMINEES

The nomination period for the 1998 Helene Mosley Memorial TREASURE Forest Awards has closed. Regional Helene Mosley Selection Committees, composed of voluntary representatives from various agencies and groups of the Alabama Forestry Planning Committee, will be announcing this year's winners soon. We look forward to their recognition at the 15th Annual Landowner and TREASURE Forest Conference in Mobile. Regardless of the outcome, it is a significant accomplishment in and of itself just to be nominated. Each of us should take time and congratulate each of the 1998 nominees.

### NW REGION

**Duck Creek**—TF #918  
Lee Goar and Richard Burton  
Residence: Haleyville  
Land: Pickens Co.  
Acres: 529  
Objectives: Wildlife and Timber

**Pine Lake**—TF #15  
E.B. Richey Family  
Residence: Fayette  
Land: Fayette Co.  
Acres: 240  
Objectives: Timber and Wildlife

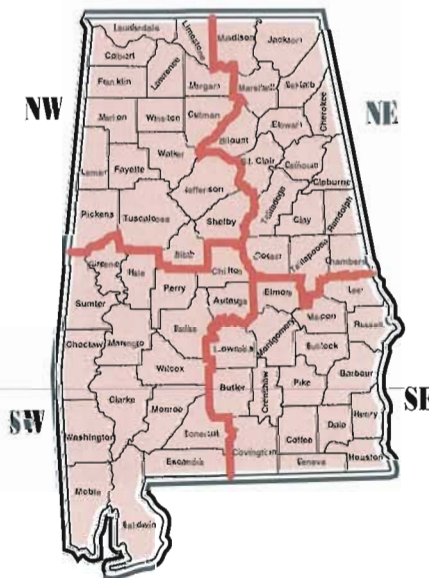
### NE REGION

**James T. Hendon**—TF #983  
Residence: Roanoke  
Land: Randolph Co.  
Acres: 127  
Objectives: Wildlife and Timber

**Frank Mason**—TF #163  
Residence: Mentone  
Land: Dekalb Co.  
Acres: 3,000  
Objectives: Wildlife and Recreation

### SW REGION

**David and Ruth Ball**—TF #996  
Residence: Mobile  
Land: Clarke Co.  
Acres: 228  
Objectives: Wildlife and Aesthetics/Timber



**Carl and Betty Booth**—TF #97  
Residence: Mobile  
Land: Baldwin Co.  
Acres: 480  
Objectives: Timber and Wildlife

**Mary Woods**—TF #688  
Residence: Monroeville  
Land: Conecuh Co.  
Acres: 945  
Objectives: Timber and Wildlife

### SE REGION

**Dr. Robert Parker**—TF #114  
Residence: Millbrook  
Land: Elmore Co.  
Acres: 405  
Objectives: Wildlife/Recreation, and Timber

**Johnny and Beverly Taylor**—TF #1039  
Residence: Goshen  
Land: Pike Co.  
Acres: 854  
Objectives: Timber and Wildlife/Recreation



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