

An aerial photograph of a lush green forested valley. A rocky stream flows through the center of the valley, surrounded by dense trees. The stream is filled with large, light-colored rocks, creating a series of small pools and rapids. The forest is a mix of deciduous and coniferous trees, with varying shades of green. The overall scene is a beautiful representation of a natural, undisturbed forest environment.

Alabama's TREASURED Forests

S p r i n g · 1 9 8 9

STATE FORESTER'S MESSAGE

by C.W. MOODY



TREASURE Forests are where landowners are achieving their objectives and making the world a better place!

I have recently been struck by the vast amount of news coverage that the subject of global warming has been receiving. As I understand it, global warming is caused when carbon dioxide and other gases trap heat in the lower atmosphere. The level of carbon dioxide and other gases has been rising steadily over the past century. This is caused by many things. Among the worst culprits are manufacturing plants which burn fossil fuels and expel vast quantities of carbon dioxide into the air. The condition is greatly exacerbated by the disappearance of vast acreages of forests around the globe.

There is much hand wringing over this matter in the press and by politicians. I am reminded of the old Chinese proverb, "Much noise on the stairs, but nothing comes down!" Press releases and political speeches in, of and by themselves will not make one iota of difference.

This brings us to TREASURE Forests and their owners. When a TREASURE Forest owner plants one tree or otherwise through a single action makes their forest healthier, he or she does make a difference! While you can make a good case that such an insignificant action makes very little difference on a global scale, I can make a good case for the fact that our global environment is the result of individual actions.

We have mentioned many reasons in the past why we appreciate TREASURE Forest owners and the contributions they make, and now we list another. Thanks for helping to keep more carbon in our trees and less in our air!

Sincerely,

A handwritten signature in cursive script that reads "C.W. Moody". The signature is fluid and extends to the right.

C.W. Moody
State Forester

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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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Cover Photo: Alabama has become known as the "State of Surprises." This photograph by Coleen Vansant captured just a small taste of what our state has to offer. This is one of the many magnificent views of Little River Canyon near Fort Payne. The canyon claims fame as being the deepest gorge east of the Mississippi River.

Alabama's TREASURED Forests

Volume VIII

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TREASURES Worth

by KIM GILLILAND, Managing Editor

Enjoying the pleasures of a TREASURE Forest is a satisfying experience for all who own them. There are two men in Baldwin County who not only enjoy their TREASURE Forests, but are allowing others to enjoy them, too! Ozier and Dozier Slay realize how much pleasure their TREASURE Forests give them, and knowing that, they are willing to share them.

The twin brothers own approximately 1,000 acres of adjoining land in Southeast Baldwin County on the Perdido River, which divides Alabama and Florida. Although they reside in nearby towns, Ozier and Dozier can be found on the property frequently, doing some management work or just enjoying the beauty of their TREASURE Forests.

The Slays rely on several agencies for technical advice and do their own prescribed burning, planting and maintenance. Both of the Slays have timber management as their primary objective, with aesthetics and recreation coming in second.

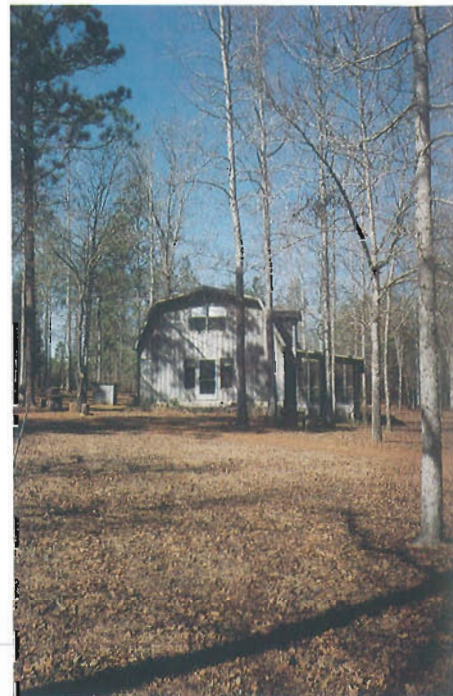
Although the twins have been linked together for various awards and recognition, each has a unique personality

and their TREASURE Forests are also unique.

A Sense of History

The land has a rich sense of history, and nowhere is this more evident than in a log that Ozier pulled from the banks of the river. He said foresters have estimated this log to be 258 years old at the time it was cut, therefore being a part of Alabama's "first forest." According to history, the "Hollingsworth Bridge," as it was called, was used by homesteaders to cross the river.

Also on Ozier's property is the site where the Slay family originally homesteaded. A log cabin once stood in a place which is now covered in slash pine. According to Ozier, once a family stayed on a piece of property for several years, they were issued the land by the president of the United States. "I have papers signed by Grover Cleveland that were given to my parents when the property legally became theirs," he said. Ozier wants this property to in turn go to his descendants. "I intend to keep it in the family."



Family and friends frequently gather at "the barn."



Naturally regenerated longleaf pine stand.

Management Techniques

A good example of yellow poplar regeneration is evident on Ozier's property. He left seed trees in the hardwood bottom to help regenerate after cutting undesirable trees and opening up the area. There are over 1,000 saplings per acre on this site.

The Slays prescribe burn to benefit wildlife and for site preparation. Ozier has just planted 1,000 loblolly pines while Dozier has chosen to plant 5,000 longleaf pines.

Both the brothers have longleaf stands on their property, and Dozier has several hundred acres dedicated to the species where natural regeneration is in full effect. The timber is thinned every 10 years, and according to Dozier, using controlled burns is one of the reasons for this prosperous tract of land. "To be successful in longleaf pine, you've got to burn," he said.

Sharing

Recreational Value

Dozier has built a lodge near the river that is known to all as “the barn.” The lodge is a gathering place for friends and family who come to visit. Near the barn is the old swimming hole, where the clear water is inviting to all who stand on the bank. Dozier not only cleared out a mile stretch of the river for canoeing, but also cleared a nature trail along the river for those who wish to walk the route. “We put quite a bit of emphasis on recreation, as you can see,” he said.

Groups of children and adults alike constantly gather at the Slay property for recreational purposes. Dozier has also built a skeet shooting range with accommodations for up to 100 people to sit and watch from bleachers.

The Slay brothers do not hunt, but are generous enough to allow others to do so. “I’ve never shot a deer or a rabbit or anything,” Ozier said, with a laugh.

Bluebird and duck boxes can be found scattered along the roads, which serve as access to different areas and as permanent firelanes. Wildlife food plots of lespedeza bicolor, partridge pea and browntop millet serve the different species present on the property.

Sharing with Others

The Slays are managing their land with the knowledge that it is bringing them more than an income. It’s bringing joy not only to them, but to others. Tour groups are always welcome at the Slays, who are generous with their time and their property.

Both the brothers expressed appreciation to people like Baldwin County Forester John Martin and Management Specialist Larry Grable for their advice and help. The Slays say they don’t know how they’ll ever be able to thank all the forestry people who have helped them along the way. But the Slays are the ones who should be thanked—for sharing their TREASURES with us. ♣



The Perdido River divides Alabama and Florida.

EDITOR'S UNDERSTORY

by KIM GILLILAND, Managing Editor

Southern hospitality and friendliness seem to be the norm in Alabama, but occasionally you meet people who epitomize these characteristics. This was quite evident on a visit with Ozier and Dozier Slay.

Accompanied by State Urban Forestry Coordinator Neil Letson, and District 8 staff members Melanie Curry and Larry Grable, I was ushered into "the barn" for cake, coffee and a genuine welcome as soon as I arrived.

We were each invited to sign the guest book. Dozier said that we were among the 500 plus visitors who have passed through the Slay property. Picking up the guest book, he said, "I can take this and remember about all the folks who have been here." A guest won't soon forget the visit either.

The Slay brothers were born on the property. Their father, Elvin Slay, came to Alabama from Georgia. He and his wife Mary built a log cabin and homesteaded on the original 40 acres. Ozier and Dozier were born on this site, where they lived with two older brothers and two older sisters. Another home was built in a nearby location soon after. As the years went by, the Slays continued to buy adjoining land until each had accumulated nearly 500 acres.

Ozier and his wife Ruby now live in nearby Spanish Fort, while Dozier and Marie Slay reside in Daphne. They have often thought of building a house on the property, but both of them agree that it's good to have a place to get away to, and

besides, they're on the property almost every day as it is.

The twins mirror each other in looks and it is difficult to tell them apart. They said that sometimes even their parents couldn't tell the difference. Both of them laughed as they told stories of how their identities have caused confusion in the past. "Girlfriends couldn't tell us apart, either!" Ozier said.

Both Ozier and Dozier worked at Brookly Air Force Base and retired after 25 years of service. Since then they have devoted much of their time to managing the property.

The Slay brothers have been certified as Tree Farmers since 1959 and were given TREASURE Forests 417 and 418 in 1986.

They have received numerous honors in recent years. Just last August they were presented with the Helene Mosley TREASURE Forest Award, and were concurrently given W. Kelly Mosley Environmental Achievement Awards. They came in second in the Regional Tree Farmer of the Year Competition in 1988, and in 1987 won the Alabama Tree Farmer of the Year Award. Their obvious contribution to the state of Alabama has come to be respected by many.

The brothers realize they have come a long way in a short time. "Why, three years ago, I didn't even know what a TREASURE Forest was," Dozier said. Ozier agreed with his brother that they were surprised to win the Helene Mosley Award last year.

But it's not a surprise to many. As we left the Slays, I couldn't help but think how nice it would be if everyone was as willing to share what they have with others as Ozier and Dozier Slay are. They are perfect examples of the good stewardship concept, and their generosity is to be admired and respected. ♣



L-R: Ozier and Dozier rest on a log that foresters estimate to be at least 258 years old.

Best Management Practices Update for Nonpoint Source Pollution

by TOM CAMBRE, Hardwood Specialist

In 1987 the U.S. Congress enacted legislation known as the Clean Water Act of 1987. Section 319 of this Act deals with nonpoint source pollution, a part of which includes silvicultural activities (harvesting, site preparation, and roads). Also included are activities in wetlands. This act requires each state to prepare a nonpoint source assessment report and a management plan to be submitted to the U.S. Environmental Protection Agency (EPA) for approval. The Alabama Department of Environmental Management (ADEM) is responsible for this report in Alabama. The Alabama Forestry Commission (AFC) has been designated as lead agency for silvicultural activities by ADEM.

The AFC's task is to submit an assessment of silvicultural nonpoint sources, to develop best management practices (BMP's) for wetlands, and redefine silvicultural BMPs. Keep in mind our overall concept is voluntary compliance of the Clean Water Act using an educational and monitoring approach (training sessions, brochures, videos, etc.).

The forestry part of the assessment was written and submitted to ADEM in March. One of the areas in the assessment was identification of known water quality problem areas. These were divided into formal complaints, AFC monitoring reports, and Water Conservation District reports.

Three formal complaints were the following:

All but the Blue Creek area have been resolved. ADEM is processing that complaint through its regulatory procedures. Excellent results have come by working with both the landowner and forestry sectors in correcting problem areas.

AFC Monitoring

The Commission monitors forestry operations routinely throughout the year. Ten of these reports had notation on not following BMPs.

County	Location	Category
Chilton	S34T24R13	Road, Harvesting
Elmore Fayette	S4T18R20 S27T17R12	Harvesting Road, Harvesting
Lowndes	S36T12R14	Road, Harvesting
Mobile Morgan	S5and6T1R1 S36T6R4	Harvesting Road, Harvesting
Perry	S3T18R8	Road, Harvesting
Washington	S18T3R1	Road, Harvesting

Soil and Water Assessment

Each Soil and Water Conservation District filled out a questionnaire on each stream and noted if there was thought to be a problem. Seventeen streams were

County	Watershed	Water Course	Category
Tuscaloosa	03160112070	Blue Creek	Harvesting
Bibb	03150202110	Coffee Creek	Harvesting
Crenshaw	03140301030	Conecuh River	Harvesting

listed as "logging erosion." The specific location and miles of stream affected were not clear. It was felt these areas would be covered when the areas were prioritized.

Identification of Potential Problem Areas

Another phase of the assessment was to prioritize areas. A system was used based on the Major Land Resource Areas (their soil erosion rates) and the quantity of forest activity. Generally, a higher erosion rate and higher forest activity (volume cut per year), the higher the priority. The high priority watersheds will be where the emphasis on training and demonstrations will be intensified.

The second phase of the ADEM contract was a management plan to address how we were dealing with the priority areas.

We will use two best management practice standards.

Silvicultural BMP's were developed in 1978 and were updated in 1988. These deal with harvesting, roads, and site preparation.

These are, generally, doing good forest management while keeping an eye open for and planning for practices that will enhance and not degrade water quality. They include the following:

- keeping debris out of streams
- crossing at right angles
- streamside management zones
- operating equipment in stream

The second BMP's deal with wetlands. Here we listed the major wetlands, their soils, and what can be done to enhance water quality. The wetland BMP's have been reviewed by AFA, Alfa, Wildlife Federation, Soil and Water, ADEM, and the Forestry Planning Committee.

The management plan gives a general description of plans for the future—monitoring, educational training, demonstrations, videos, articles, and generally getting the word out on good forest management.

ADEM will incorporate the Assessment and Management Plan into an overall report to EPA. A public review phase was held in December 1988, with meetings in Guntersville, Birmingham, Montgomery, and Mobile to get input as required by EPA.

Water is one of our most important resources, and through leadership in this area, we can help ensure a clean and healthy environment for future generations. ♣

How to Attract Non-game Birds



L-R: Savannah Sparrow, female Northern Cardinal, male Northern Cardinal.

by FREDERICK A. BUSCH, Wildlife Specialist/TREASURE Forest Coordinator

When Alabamians ask “What can I do with my land to attract more wildlife?” they usually mean game animals. Many people, however, truly enjoy having and seeing many kinds of animals on their lands, especially non-game birds. I suspect that few give any thought at all to managing for non-game birds because of a perception that birds are either present or they are not, and habitat conditions on small tracts of land make little difference.

Nothing could be further from the truth! Non-game birds have definite habitat requirements, just as all other animals do, and they will not inhabit a site that does not provide something that they desire. In order to make your property more attractive to non-game birds, let’s look at what might be done to improve habitat conditions both in your backyard and over an entire forested tract.

Backyard Improvements for Non-game Birds

In close proximity to houses and other man-made improvements to the land, options for creating better conditions for non-game birds are not limited to feeders and housing structures. Here in Alabama

we see many kinds of birds “passing through” while migrating to the North in the spring and the South in the fall. Because wintering, migrating and resident nesting birds have different habitat requirements, a good mixture of tree species, shrubs, vines and other plants can provide needed habitats throughout the entire year. Even small yards can be made attractive as places to feed, sing, court, nest or hide by the right choice of plantings.

Choosing Plants Attractive to Birds

Some of our most desirable nut, fruit and berry plants are highly sought by birds. A wide diversity of plantings will give birds a choice of foods—seeds, nuts and mast along with the insects and worms that are attracted to these plants. TABLE 1 lists some of the plants appropriate for non-game bird plantings in the South.

There are many designs to consider when creating a non-game bird conservation landscape. In small yards, plantings might be limited to just a few species. On a larger area, hedges, clumps and massed plantings of pre-

ferred species are especially attractive to birds. Plan your design so that these bird-attracting features can be seen from a deck or window. With a little planning and forethought, your backyard can provide a succession of attractive foods, nest sites and cover throughout the year.

Bird Feeders and Houses

On a residential housing site, it is not always possible to produce natural foods that will last all year. Supplemental feeding can provide a constant food source when others fail. Seed eating birds like sparrows, grosbeaks and cardinals will voraciously consume cracked corn, millet and sunflower seeds. Raisins and chopped fruit will appeal to catbirds, robins, jays and orioles. Suet, favored by woodpeckers, chickadees and nuthatches, is a high energy bird food that is especially desired in cold weather.

While many kinds of commercially made feeders are available, seeds and fruits can be offered on something as simple as a flat tray. Suet should be placed in a wire or a plastic holder, or stuffed into holes drilled in a rough board attached to a tree.

Artificial housing is another good way

to attract non-game birds to your backyard. Our most notable residents of man-made bird houses are purple martins and Eastern bluebirds. Both of these birds have very specific requirements regarding the configuration of housing, and instructions on how to build such houses are available from the Alabama Department of Conservation and Natural Resources and the Alabama Cooperative Extension Service. Be sure to follow these instructions closely when building bird houses, because a seemingly insignificant deviation from proven plans could well prevent a desired species from moving in.

Forestland Improvements for Non-game Birds

Improving forestland conditions for non-game birds basically means protecting and improving the diversity of plant life found throughout the forest. Specific practices needed to improve conditions for birds will differ among forested tracts, but here are some general suggestions.

Plants—Preferred woodland plants are attractive to birds for a variety of features, but a plant's form is often more important to birds than its species. Forestland plant management should follow the following:

- vines of all species
- plants that form dense thickets, like honeysuckle and blackberry
- plants with showy flowers and foliage
- berry, fruit and nut bearing plants
- mixtures of evergreen and deciduous trees
- standing dead and dying trees (5 to 10 per acre)

Herbaceous plants are also important, especially in open areas where insect and seed production are high. The most vigorous species of these kinds of plants should be encouraged over your entire forest.

Age-class diversity between stands—Modern intensive forest management can be made more palatable to birds by managing for a significant difference in age between adjacent stands of plantation pine. A good mix of growth stages is important because many non-game birds are "edge" species, and live at the interface of two differing plant communities. Such edges exist not only between pine stands of different age classes, but between meadows and brushy areas, between forest and field and between hardwood and pine stands. The variety of plant life is usually greater around an

edge and this variety means more food and cover.

Trails—Usable trails are the key to allowing people to enjoy birds in their woodland habitat. Proper trail planning and installation will enhance the utility of your management efforts by providing easy access to different terrain, scenery and habitats. Trails should meet these guidelines:

- be layed out so that no important site features are passed by
- accommodate people who might be unfamiliar with nature, so safety is a primary consideration
- provide for protection of the site from people who use the trail.

Properly marked walking trails may be quite primitive and do not require a large investment. Trail development in a swampy or marshy area may be desirable because the lush vegetation and fertile sites are usually very attractive to birds.

Summary

A general rule in developing habitat attractive to birds as well as many other kinds of wildlife is to strive for maximum diversity of plant life. A high degree of plant diversity ensures that your property offers nesting sites, sustained sources of food and cover for a wide variety of wild birds.

A field guide to birds will aid in identification while watching non-game birds. Once properly identified, the individual personalities of different species will become apparent. As you begin to see how each fits into your backyard, or woodland habitat, you will surely come to appreciate non-game birds more fully. ♣

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	Juncos	Sparrows	Towhees	Gold Finches	Purple Finches	Buntings	Cardinals	Tanagers	Orioles	Cedar Waxwings	Thrushes	Blue Birds	Robins	Brown Thrashers	Catbirds	Mocking Birds	Nuthatches	Titmice	Chickadees	Woodpeckers	Doves	
Autumn Olive	C			C		B				B	B	B	B	B	B	B	C	C	C			
Beauty Berry						C					C	C	B	B	B	B						
Cherries			C	A	B	B	B	A	B	B	A	A	A	A	B						B	
Crabapples			C	B	C	C	C	A			B	B	B	B	C	C	C	C	B			
Dogwoods	C			C	B	C	C	B	A	A	A	B	B	B							B	
Elder Berries	B	B		B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	C	B		
Hawthorns									A				C	C	C	C					C	
Hollies	C	C				C				B	B	B	A	B	B	B					C	C
Honeysuckles	C		C	B						B	B	B	B	B	B	B						C
Milletts	A	B	B	B	B	B											C	C	C	C	A	
Oaks	C	B	C											A	A	C	A	A	A	A		
Plums			C			C	C	C					B	B	B	B					C	
Pokeberries	C					B	B	B	B	B	B	B	B	B	B	A					C	B
Pyracantha	C			C		C				B	C	C	C	B	B	B					C	
Sumacs	C			C		C	C	C	C	B	B	A	B	B	B	B	C	C	C	C		
Sunflowers	A	A	A	A	C	A											A	A	A	C	B	

A = Preferred B = Eaten C = Occasionally Eaten

Timber Theft— an All Too Common Problem

by WALTER VEST, Chief,
Law Enforcement

Alabama forest landowners are becoming increasingly aware of just how serious timber theft really is. This crime is going on almost daily and, in most cases, unnoticed or not reported. Tree rustling occurs with two different methods. Someone goes in and steals trees off land you are not cutting, or someone is actually doing cutting that you know about, but tries to take a little extra. Absentee landowners often are the victims in such cases.

Some of the state's largest landowners, such as paper companies, have beefed up security measures because of timber thefts.

One of the best ways to catch timber thieves is for everyone in the community to report any cutting operation they spot to the proper landowners. When landowners sell timber, they should deal only with reputable contractors and check them out thoroughly.

There are three laws in the 1975 Code of Alabama that you can use to recover restitution if you have timber theft:

9-13-60. Unauthorized cutting, removal, transportation, etc. of timber or other forest products.

Any person or persons who shall

(1) Willfully and knowingly cut, kill, destroy, girdle, chop, chip, saw or otherwise damage timber or forest products not his own or without authority of the legal owner;

(2) Willfully and knowingly remove timber or other forest products other than his own or without authority of the legal owner;

(3) Willfully and knowingly transport

timber or other forest products which have been severed or removed in violation of subdivisions (1) or (2) of this section;

(4) Willfully and knowingly purchase or contract to purchase or otherwise obtain timber or forest products severed, removed or transported in violation of subdivisions (1), (2) or (3) of this section; and,

(5) Willfully and knowingly sell, contract to sell or otherwise dispose of logs, poles, piling, crossties, pulpwood, veneer bolts, staves, or other unmanufactured or semimanufactured forest products not his own or without authority of the legal owner shall be deemed guilty of a misdemeanor and shall be punished by a fine of not less than \$10 nor more than \$1,000 and may also be imprisoned in the county jail or sentenced to hard labor for not less than 10 days nor more than 12 months.

9-13-62. Liability of violators to owners of timber, etc., entitlement of defendants to exemptions.

Any persons who shall violate section 9-13-60 and any persons who shall aid and abet or assist any other persons in so doing shall be jointly and severally liable to the owner in double the value thereof of the timber and trees damaged or destroyed or cut and removed, to be recovered by an action, in the name of the state in case the same should be cut from the lands of the state or in the name of the corporation or person or persons owning the lands in case the same shall be so cut

from other lands, and the defendant or defendants in any case arising out of any violation under section 9-13-60 shall not be entitled to his or their exemption under the Constitution or laws of Alabama against any judgment obtained against him or them for such violation.

35-14-1. Generally; when owner of trees deemed owner of land; joinder actions.

(a) Any person who cuts down, deadens, girdles, boxes, destroys or takes away, if already cut down or fallen, any cypress, pecan, oak, pine, cedar, poplar, walnut, hickory or wild cherry tree, or sapling of that kind, on land not his own, willfully and knowingly, without the consent of the owner of the land, must pay to the owner \$20 for every such tree or sapling, and for every other tree or sapling, not hereinbefore described, so cut down, deadened, girdled, boxed, destroyed or taken away by any person, he must pay to such owner the sum of \$10.

(b) When one person owns the land and another person owns the trees standing thereon, the owner of the trees is the owner of the land within the meaning of subsection (a) of this section.

(c) Actions under this section may be joined with actions for trespass, for cutting, injuring or removing timber.

If timber theft does occur on your property, contact your nearest Alabama Forestry Commission office or your county sheriff. ♣

IN MEMORIAM



Homajean Grisham, a five-year member of the Alabama Forestry Commission, passed away January 28 at the age of 64. Mr. Grisham was first appointed as commissioner to the AFC in November, 1983 by Governor George C. Wallace. Only a month prior to his death, he was reappointed to a five-year term by Governor Guy Hunt.

As a businessman, forest landowner and farmer, he was an active member of the Alabama Farmers Federation and widely known and respected in Northwest Alabama political circles. His widow, Carol Jean Grisham, has been named by Governor Hunt to fill his vacancy on the Commission.



Colley E. Pittman, TREASURE Forest landowner and Tree Farmer in Coffee County, died September 23, 1988. Mr. Pittman was a founding member of the county forestry committee and was active in promoting forestry throughout his life. He was well known in the community and respected by all who knew him.

Forest Product Severance Tax— Another Change

by STEVE NIX, Resource Analyst

Act Number 88-842, sponsored by State Representative Allen Layson in H.B. 106, brought significant revisions in Alabama's severance tax law. Legislative approval was issued on September 22, 1988 during the "first extraordinary session" of the 1988 Legislature and became effective on December 1, 1988.

The amendment basically increases forest severance rates by approximately twenty-five percent (TABLE I) and includes a section expressly stating that all taxes on severing, processing, or manufacturing of forest products shall be "exercised only in a uniform statewide tax." No local government can tax forest products using local legislation.

If you sever timber in Alabama, be aware that the quarterly report called Forest Products Severance Tax Return, Form FPST-1, has been revised as of October, 1988. Using any previous return will be incorrect. Further information about report forms and payment can be obtained by contacting the Severance Tax Section, Miscellaneous Tax Division, Alabama Department of Revenue, P.O. Box 59, Montgomery, Alabama 36130, (205)261-2832.

Historical Perspective

In 1945, The Alabama Legislature passed the Alabama Forest Products Severance Tax Act. This act placed a tax on most forest products and was suggested by industry because of a critical need for forest protection from fire.

The money was designed to aid the state's forestry program and specifically to be used for fire protection in the county in which the product was severed or produced. For years, this tax was the single largest source of funding for the protection of Alabama's timber.

Not until 1947 did all 67 Alabama counties have some form of protection from forest fires. This severance tax was the catalyst behind total protection and, by law, 80 percent of the tax generated was to be plowed back into the county

TABLE I	
New Forest Product Taxation Rates	
As Taken from State Department of Revenue Form FPST-1, rev. 10-88	
Kind of Product	Rate of Taxation
Pine Lumber	\$.50 per thousand feet board measure
Pine Logs	\$.75 per thousand feet logscale (Doyle rule)
Hardwood, Cypress and All Other Species Lumber	\$.30 per thousand feet board measure
Hardwood, Cypress and All Other Species Logs	\$.50 per thousand feet logscale (Doyle rule)
Pine Pulpwood Bolts	\$.25 per cord (128 cu. ft.)
Hardwood Pulpwood Bolts	\$.25 per cord (128 cu. ft.)
Pine Pulpwood Chips	\$.25 per cord (5000 lbs.)
Hardwood Pulpwood Chips	\$.25 per cord (5000 lbs.)
Cross Ties	\$.015 per piece
Switch Ties	\$.025 per piece
Mine Ties	\$.125 per 100 pieces
Coal Mine Props	\$.125 per 100 pieces
Pine Ore Mine Props	\$.75 per thousand feet logscale (Doyle rule)
Hardwood Ore Mine Props	\$.50 per thousand feet logscale (Doyle rule)
Crude Turpentine	\$.15 per barrel (400 lbs.)
Stumpwood	\$.125 per ton (2000 lbs.)
Poles/Pilings	\$ 1.875 per thousand board feet (Doyle rule)

where it originated. These laws have changed somewhat, but the original intent is as true today as in the mid-forties. The Department of Revenue was to receive an amount to "pay the salaries, the cost of operation and management" and that this amount should "be deducted, as a first charge" from all revenue. They, in turn, would be the collecting and enforcement agency.

Recent Revisions

Severance tax laws have had many revisions since 1945. The law has been amended several times to allow for increasing protection costs and to meet the changing needs of both state government and the forest products industry.

Tax rates have changed over time. Change also included an additional privilege tax assessed on the secondary manufacturer (processor of primary forest products). This tax is equal to one half

the tax already paid by the severer and is levied against out-of-state processors and manufacturers using Alabama wood as well as manufacturers within the state.

Not even the government can evade severance tax regulations. Taxes are imposed on all commercial timber markets including products severed from lands owned by the State of Alabama and the United States of America.

It should be understood that individual owners of timber who *occasionally* cut trees from their own forest to be utilized in the construction or repair of structures are exempt from this taxation. They may use wood for home consumption and in processing farm products without worry of a tax obligation.

How Severance Is Used

The Alabama Forestry Commission (AFC) acknowledged in its Annual Report of Fiscal Year 1987-88 that sever-

ance and privilege tax is the second largest source of revenue for the Commission. Collected severance tax monies forwarded from October of 1987 through September of 1988 to the AFC was 4.3 million dollars. Only general fund transfers account for more.

By law, 85 percent of this severance tax will be expended for forestry protection. In reality, much more money is expended annually for forest protection in Alabama than the total annual severance collection raised.

Also by law, each individual county will be given *at least* 50 percent of the four year average of taxes collected on forest products severed within its boundary. In reality, all counties are given the 50 percent amount plus additional matching funds attached to tri-party agreements, county appropriations, acreage assessment and earned incomes including prescribed burning and firebreak plowing.

Barometer of Forest Productivity

The law again specifically states that the sevrer will report kinds and quantity of products produced and report the county in which it was severed. These figures are compiled and used in the assessment of forestry's impact on Alabama's economy by product (AFC's Cash Receipts Report) and in the documentation of data which indicates patterns of volume drain on Alabama forest lands (the Severance Tax Receipt Report—1987).

This should give you a little better understanding of our forest severance tax structure. Even though it might not make it any easier to pay, you now know how it is being put to work. The tax is necessary to the task of protecting Alabama's forests. ♣

References

Lynch, T. "Forest Product Severance and Privilege Tax—Helping the State's Forestry Program," **Alabama's Treasured Forests**, Special Tax Supplement, 1984.

Alabama Forest Products Privilege and Severance Tax Laws, March 1986, Alabama Department of Revenue.

Act no. 88-842, Amendment to Sections 9-13-82 and 9-13-84, Code of Alabama 1975.

Alabama Forestry Commission, **Annual Report, Fiscal Year 1987-88**.

PRODUCTION OF ALABAMA FOREST PRODUCTS BY COUNTY—CALENDAR YEAR 1988

COUNTY	PINE LUMBER MBF (BD. MEAS.)	PINE LOGS MBF (LOG SCALE)	HDWD LUMBER MBF (BD. MEAS.)	HDWD LOGS MBF (LOG SCALE)	PINE PULPWOOD CORDS (128 CU. FT.)
Autauga	12,388	4,219	3,501	0	45,43
Baldwin	39,636	2,606	2,363	1,134	128,80
Barbour	27,396	3,616	3,167	1,434	52,02
Bibb	62,051	6,556	10,670	2,572	81,84
Blount	1,999	1,201	115	403	60,99
Bullock	7,596	4,185	2,689	231	63,35
Butler	59,832	646	6,276	1,069	88,01
Calhoun	2,320	2,177	448	62	61,71
Chambers	21,596	987	1,203	112	67,30
Cherokee	1,143	2,444	455	269	68,54
Chilton	16,100	8,980	4,181	361	68,12
Choctaw	48,392	13,989	9,183	9,728	107,47
Clarke	53,615	9,267	5,421	7,271	217,56
Clay	4,701	4,576	4,151	525	45,35
Cleburne	4,592	3,722	0	52	45,58
Coffee	4,843	6,174	2,108	480	57,90
Colbert	2,640	914	4,529	2	40,29
Conecuh	26,798	2,094	1,079	1,178	72,61
Coosa	1,458	5,259	1,731	2,036	36,34
Covington	19,515	803	530	887	36,11
Crenshaw	25,138	3,616	13,956	809	46,67
Cullman	5,983	6,351	1,076	399	74,67
Dale	570	4,040	906	528	25,97
Dallas	9,010	10,970	5,541	675	51,81
De Kalb	1,163	1,976	336	533	38,00
Elmore	8,735	2,269	2,509	0	21,65
Escambia	35,201	357	741	789	69,56
Etowah	3,660	2,245	1,677	294	38,32
Fayette	12,045	3,532	1,918	30	51,16
Franklin	3,804	691	7,646	0	51,30
Geneva	1,203	2,672	617	279	14,65
Greene	16,611	44,142	5,082	2,948	39,81
Hale	3,535	9,590	5,576	0	20,45
Henry	3,107	4,125	4,127	880	38,24
Houston	569	5,037	1,891	731	24,65
Jackson	757	16	8,266	13,061	19,12
Jefferson	17,274	3,978	919	1,261	119,76
Lamar	18,763	3,337	3,364	144	98,99
Lauderdale	773	83	2,001	124	9,86
Lawrence	857	647	1,109	5	8,92
Lee	22,553	4,456	2,192	1,870	64,69
Limestone	1,635	41	2,010	0	6,46
Lowndes	16,691	554	3,526	934	62,28
Macon	2,971	1,436	639	76	39,55
Madison	550	491	757	2,469	9,44
Marengo	48,036	4,907	41,127	1,291	86,82
Marion	53,457	946	4,691	68	73,21
Marshall	578	285	2,024	665	38,27
Mobile	10,232	831	2	0	62,57
Monroe	46,217	8,790	2,154	7,319	239,63
Montgomery	8,146	9,483	7,318	123	52,08
Morgan	2,439	138	425	319	14,88
Perry	25,446	5,974	1,260	4	47,97
Pickens	59,102	6,383	19,035	139	56,43
Pike	2,541	5,911	2,703	1,303	71,34
Randolph	8,378	505	2,154	275	57,18
Russell	5,109	5,592	1,004	118	85,99
Shelby	8,030	9,894	74	7,086	80,60
St. Clair	292	5,535	428	523	53,14
Sumter	26,372	6,546	4,141	3,342	58,64
Talladega	41,127	7,304	1,890	172	152,77
Tallapoosa	8,577	2,835	1,473	774	68,21
Tuscaloosa	51,029	24,693	15,915	155	87,74
Walker	3,327	28,759	1,746	625	115,61
Washington	25,158	12,142	1,962	420	106,24
Wilcox	49,733	7,447	16,616	6,027	123,04
Winston	17,503	10,440	3,335	3,546	114,11
TOTAL	1,132,598	366,407	273,659	92,939	4,338,11

COMPILED BY THE ALABAMA FORESTRY COMMISSION AS DETERMINED FROM FOREST PRODUCTIVITY REPORTS

R 1987

DWD WOOD ORDS CU. FT.)	PINE GREEN CHIPS CORDS (5000 LBS)	HDWD GREEN CHIPS CORDS (5000 LBS)	CROSS TIES (PIECES)	SWITCH TIES (PIECES)	MINE TIES (PIECES)	COAL MINE PROPS (PIECES)	CRUDE TURPENTINE 400 LBS (BBL)	STUMP WOOD (TONS)	POLES & PILINGS MBF (DOYLE)
45,001	54	13	1,050	14	0	0	0	0	0
19,025	23,613	1,678	0	0	0	0	0	1,066	3,975
28,327	36,829	5,627	0	100	0	0	0	0	0
42,908	42,180	29,068	0	0	0	0	0	0	0
25,941	1,170	78	0	0	0	0	0	0	0
32,483	28,525	4,293	0	0	0	0	0	0	44
96,874	86,750	977	0	0	0	0	0	0	249
5,732	9,441	55	0	0	0	0	0	0	0
39,278	15,389	1,540	0	0	0	0	0	0	68
10,437	371	10,015	0	0	0	0	0	0	0
47,826	74,164	11,309	3,107	0	0	0	0	0	0
56,993	17,925	4,637	0	0	0	0	0	0	3,677
88,560	41,997	4,681	0	0	0	0	0	0	8,366
20,001	550	7,557	0	0	0	0	0	0	52
8,848	562	0	0	0	0	0	0	0	0
61,155	390	1,327	0	0	0	0	0	131	4
32,390	1,393	6,895	727	485	0	0	0	0	0
65,535	55,930	52,959	30,254	1,120	0	0	0	0	684
30,401	41,516	3,279	0	0	0	0	0	0	0
35,337	21,307	50,599	0	0	0	0	0	1,736	1,974
70,724	4,140	14,362	40,034	1,101	0	0	0	0	233
24,164	11,017	774	0	0	0	0	0	0	0
39,731	3,842	17	0	0	0	0	0	717	24
84,462	29,131	2,780	3	1,945	0	0	0	0	164
18,044	631	2,330	0	0	0	0	0	0	0
24,578	877	2,748	31,354	0	0	0	0	0	0
53,134	47,063	4,626	0	0	0	0	0	1,621	7,335
8,495	4,857	2,796	0	0	0	0	0	0	0
60,387	80,649	10,028	1,886	211	0	0	0	0	0
50,927	10,711	6,207	0	0	0	0	0	0	0
5,770	412	1,294	0	0	0	0	0	0	73
120,465	76,346	22,011	0	0	0	0	0	0	386
47,589	264	1,385	0	0	0	0	0	0	0
34,736	53,555	37,542	0	0	0	0	0	49	0
18,309	1,051	676	0	0	0	0	0	946	47
31,520	0	3,722	1,786	0	0	0	0	0	0
39,500	1,841	3,045	0	0	16	896	0	0	0
72,030	51,452	34,069	4,768	2,188	0	0	0	0	0
19,405	838	3,034	28,735	2,573	0	0	0	0	0
11,979	0	0	0	0	0	0	0	0	0
15,924	85,540	289	0	0	0	0	0	0	33
1,091	4,250	0	0	0	0	0	0	0	0
66,187	0	10	0	0	0	0	0	0	175
35,445	2,497	3,338	0	0	0	0	0	0	0
1,213	10	5,181	0	0	0	0	0	0	0
84,892	6,950	16,382	0	0	0	0	0	0	781
69,209	20,683	512	0	0	0	0	0	0	0
12,538	10	645	0	0	0	0	0	0	0
98,631	47,758	6,811	6	201	0	0	0	0	651
154,749	112,255	10,697	44,904	1,175	0	0	0	0	5,509
28,659	18,665	35,486	513	0	0	0	0	0	0
11,181	7,334	1,695	0	0	0	0	0	0	0
73,219	11	278	0	0	0	0	0	0	257
80,582	52,018	48,767	0	0	0	0	0	0	0
66,477	1,068	1,798	9,920	0	0	0	0	0	141
28,570	60,218	31,467	0	0	0	0	0	0	32
16,762	29,666	1,444	0	0	0	0	0	0	0
22,609	43,562	7,399	0	0	0	0	0	0	0
15,177	42,702	203	0	0	0	0	0	0	0
56,489	29,329	3,240	4,681	229	0	0	0	0	2,450
27,850	43,833	323	0	0	0	0	0	0	25
51,575	21,409	0	0	0	0	0	0	0	35
90,628	118,396	19,524	7	206	0	0	0	0	263
41,982	47,961	8,967	236	0	9	12	0	0	0
87,199	17,851	4,685	0	0	0	0	0	0	5,627
203,971	0	1,674	0	0	0	0	0	0	863
37,118	29,719	8,950	0	0	0	0	0	0	0
408,928	1,722,428	569,798	203,971	11,548	25	908	0	6,266	44,197

EVERANCE TAX RECEIPTS

Project Learning Tree

ENVIRONMENTAL EDUCATION IN ACTION

by REI BOYCE, Alabama Forestry Association

One of Governor Guy Hunt's top priorities since he took office has been to improve public education.

Some of our state's leaders and educators feel that some formal environmental education should be built into his plan. Forestry agrees with them. Others feel, however, that in adding environmental education to the already packed curriculum, we'll be overloading the teachers with more work. Some think we will be detracting from teaching our children the basics.

You tell me. If the air we breathe, the quality of the water we drink, the soil we plant our crops in, or the forests that provide us with noise reduction, oxygen and unlimited products for our daily consumption are not basics—then what are basics?

Maintaining Resources

There is a tremendous need for environmental education in our schools. Children of this era don't realize how important and how much work is involved in maintaining our natural resources. They don't understand the relationship between trees in the forest and their pencils, paper, desks—the list goes on and on.

Where environmental education is concerned, forestry has the best of both

worlds: Project Learning Tree (PLT). Ten years ago, the American Forest Council commissioned the development of this award-winning program, which co-sponsors nationwide with the Western Regional Environmental Education Council. The Alabama Forestry Association shares the sponsorship with the State Department of Education in Alabama. Associate sponsors include Girl Scouts, Boy Scouts, the U.S. Forest Service, and the Society of American Foresters.

Project Learning Tree uses the forest as a "window" to teach children about the natural world and their relationship to that world. It allows teachers and students to explore all sides of resource issues and make their own decisions based on facts, not on emotion. Written and field-tested by teachers and resource professionals, PLT is a completely balanced and unbiased program which teaches children to think and make their own decisions.

Lesson Plans

Two resource volumes are broken down into two categories—Kindergarten through sixth grade and seventh through twelfth grade. These lesson plans are beneficial to teachers because they are not replacements for what is already

being taught in their classrooms. They are a supplement to enhance lessons.

It's an effective teaching tool for teachers because everything needed to teach is before them. Most supplies come from Nature herself.

PLT is an effective teaching tool because it is learning by hands-on activities. Students benefit in learning by experiencing, not just listening. They become involved in their own education.

The beauty of the program is that it can be used through the entire spectrum of students from those with learning disabilities through those who are gifted. PLT covers all subjects taught in the schools today from math to social studies to science, art, music, home economics, spelling—nothing is left out. It appeals to both teachers and students because fun activities are used for learning. Once you have handled something, rolled it around in your hand, and smelled of it, you will retain what you have learned about it. By the time we are middle-aged adults, we have passed the stage of listening to new ideas and readily accepting them at face value. That's where children come into the picture.

Start Early

If we are to educate the public properly about the vast natural resources we enjoy day to day without a second thought, we need to begin with them at an age when they are ready to listen and learn. The adage "You can't teach an old dog new tricks" can be eliminated if we begin our education program during the early school years.

The best way to ensure that good decisions are made for the future of this state and our natural resources, is for our youth to be knowledgeable about the environment and the interdependent role played between mankind and nature.

For additional information or information on workshops, contact Mrs. Rei Boyce, State Coordinator, Project Learning Tree, 555 Alabama Street, Montgomery, AL 36104, (205) 265-8733. ♣



Ross Hobbs, principal of Byrd Elementary School in Selma, has received national recognition for his participation in Project Learning Tree. He has been a leader in environmental education and even turned an area outside the school into a classroom/arboretum/play-ground. Hobbs is shown here receiving the Second Annual Special Achievement Award for PLT from Sue Shaddeau, Southern Region PLT Coordinator, American Forest Council, Atlanta.

ENVIRONMENTAL EDUCATION IN ACTION

Project WILD

by FRANK HANLEY, Department of Conservation and Natural Resources

The State of Alabama became the 41st state to incorporate Project WILD when the first facilitators workshop was held at Lake Guntersville State Park in April, 1988. Troy State University's Center for Environmental Research and Service (CERS) played a leading role and was instrumental in bringing Project WILD to Alabama. Conservation Commissioner James D. Martin, State Superintendent of Education Dr. Wayne Teague and Dr. Douglas Phillips, director of CERS at Troy State University provided the leadership to assure the beginning of a sound environmental education for Alabama students in grades K-12.

At that initial workshop, the Department of Conservation and Natural Resources accepted the leadership role in coordinating Project WILD in Alabama.

educational excellence for young people.

A supplementary, interdisciplinary, instructional program for teachers of kindergarten through high school students, Project WILD is a way for teachers to incorporate concepts related to people, wildlife and a healthy environment into all major school subjects and skill areas. Based on indoor and outdoor activities, Project WILD is a set of hands-on diverse and instructionally sound educational activities offered in the form of three guides for teachers. The Elementary Project WILD Guide spans kindergarten through the seventh grade. The Secondary Guide encompasses grades eight through twelve. The Aquatic WILD Guide emphasizes water and aquatic ecosystems and is applicable for grades kindergarten through twelve.

Project WILD's primary audience is teachers; however, this does not limit the usefulness of the project to formal education settings. Volunteers working with

young people in pre-school and after-school programs; representatives of private conservation, industry, and other community groups who are interested in providing instructional programs for young people and their teachers; and personnel involved in preparation of future teachers can all effectively use this program's instructional resources.

The primary goal of Project WILD in Alabama is to assist learners of any age in developing awareness, knowledge, skills and commitment—to result in informed decisions, responsible behavior and constructive action concerning wildlife and the environment on which all life depends.

For more information about how to get involved in Alabama's Project WILD Program, contact Project WILD Coordinator, Alabama Department of Conservation and Natural Resources, 64 North Union Street, Montgomery, Alabama 36130. ♣

Why Project WILD

Project WILD is based on the premise that young people and their teachers have a vital interest in learning about the earth as home for people and wildlife. Wildlife is emphasized because of its intrinsic ecological and other values, as well as its importance in understanding the fragile basis on which all life rests. In the face of pressures of all kinds affecting the quality and sustainability of life on earth as we know it, Project WILD addresses the need for human beings to develop as responsible members of the ecosystem.

What Is Project WILD

Project WILD is first and foremost people. It is people who care about quality education, and people who care about a healthy environment. It is people working together to learn about wildlife and its habitat. It is educators, wildlife professionals and concerned private citizens willing to transcend individual differences about issues to support a process of

Sixth Alabama Landowner and TREASURE Forest Conference

Civic Center
Montgomery, Alabama
August 10-11, 1989

PLAN NOW TO ATTEND!

*Details and registration form in the next issue of
Alabama's TREASURED Forests.*



by MELINDA COHEN, Legislative Liaison, National Association of State Foresters

On January 3 when the 101st Congress convened, 33 senators and 435 members of the House of Representatives elected on November 8, 1988 were sworn into office. **President George Bush and Vice President Dan Quayle** were sworn in on January 20.

Ten new senators were elected and one appointed to succeed Vice President Quayle. Democrats continue to hold a majority edge in the Senate, 55 to 45, after adding one new seat.

The Senate has also chosen a new leader. Perhaps signalling a desire for a fresh agenda, a relative newcomer, **Senator George Mitchell** of Maine, succeeded Senator Robert C. Byrd (WV) as senate majority leader. Coming from a heavily forested state with a large forest industry, Senator Mitchell has been very supportive of timber issues during his eight years in office.

The House of Representatives remains strongly in Democratic control with

33 new members. There are no major changes in the House leadership with Speaker **Jim Wright** (TX) and Majority Leader **Tom Foley** (WA) continuing in their positions.

Confirmation hearings on the nomination of USDA Secretary designate **Clayton Yeutter** were held February 2 by the Senate Agriculture Committee. Yeutter steps down as the Reagan Administration's U.S. Trade Representative, with a reputation as a solid advocate for free trade and gradual reduction of government subsidies for agriculture. Though he served as an assistant secretary of Agriculture during the Nixon/Ford Administration, his views on the federal government's role in forestry and soil conservation are not yet known. His nomination is expected to be easily approved.

The new political players won't change the "big" issues—reducing the \$155 billion budget deficit as required by the Gramm-Rudman Act and addressing problems of a \$2.5 trillion national debt.

Before he left office, former President Reagan sent his last budget to Congress. Funding requests for cooperative forestry programs and fire protection, forestry research, ACP, FIP, and Extension were all greatly reduced if not zeroed out completely. President Bush will send his own budget to Congress in mid-February, but there is expected to be little change in the outlook for forestry.

During the campaign, Bush indicated a willingness to lower the capital gains tax rate. The Department of Treasury is currently working on a study to determine the revenue impact of such a move and it is expected out early this year.

However, a proposal to reduce the capital gains rate will undoubtedly be difficult to market to congressional Democrats.

Senator Lloyd Bentsen, chairman of the Senate Finance Committee, has stated that a reduction in capital gains rates will not be considered unless Bush is willing to talk about other revenue increases as part of an overall deficit reduction plan.

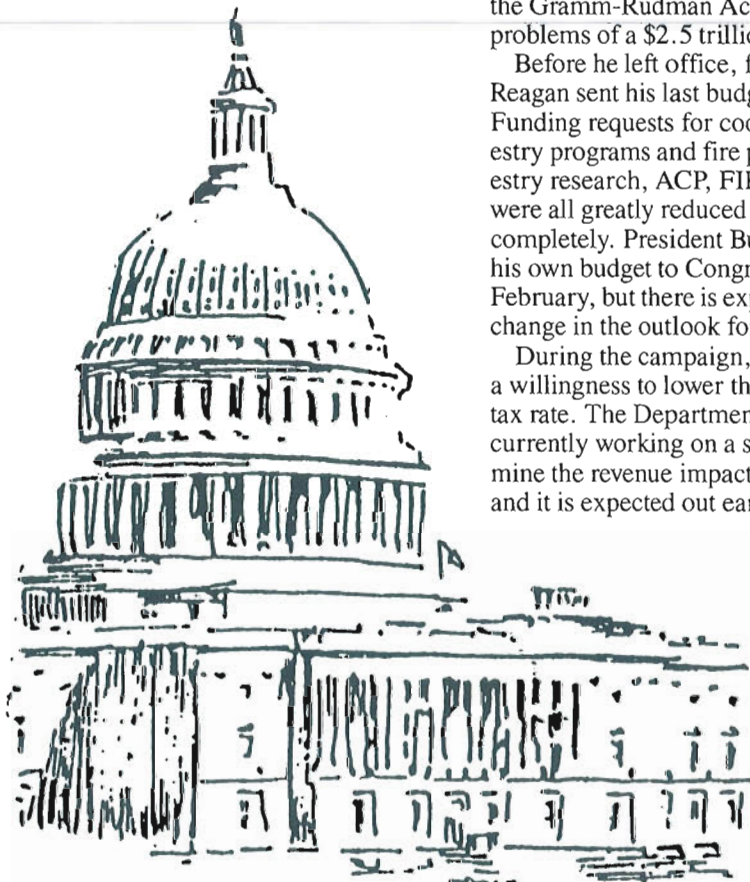
President Bush has also endorsed achieving the goal of 45 million acres in the Conservation Reserve Program. As part of this effort, USDA has broadened the criteria for the next sign-up, allowing cropped wetlands and scour erosion to qualify. Wetlands are to be planted with trees unless the field is unsuitable.

Congress held hearings on last summer's Yellowstone fires and the proposed fire policy changes recommended by an interagency task force. The new policy was open for public comment through February 13. A series of public sessions are being held around the country to solicit further comments on federal fire policy.

An interesting point of view expressed during the January 31 hearing was that of naturalist Alston Chase. Chase is author of "Playing God in Yellowstone," where he criticizes the way our National Parks are managed. The book has been out for over two years and points to the need for more prescribed burning in Yellowstone. The new Administration will probably need to rethink and further analyze federal fire policy.

Senator Howell Heflin has added a third committee—Energy and Natural Resources—to his work load. The committee has jurisdiction over public lands issues as well as energy.

Hearings on appropriations were scheduled for February. Those of you who feel funding for the Forest Service and other related forestry programs is inadequate should let your delegation know. The new administration and Congress have pledged to work together, so spring in Washington is full of hope and opportunity. Private landowners should make their concerns known to their elected officials. Remember, "if it is to be, it's up to me." ♣



by FRANK SEGO, Legislative Liaison, Alabama Forestry Commission

A distinct note of optimism prevailed as the Alabama Legislature took its seat to begin the 1989 Regular Session on February 7. Coming off a high note following Governor Guy Hunt's State of the State Address, lawmakers pledged to accomplish something rarely experienced in former legislative circles: "Pass the budgets before tackling any other legislation."

Skeptical observers said "Sure, they will." But behold, the Ways and Means Committee dove headlong into the proposed 1989-90 general fund budget for operation of state government in its initial meeting on February 8.

When the smoke of a long day of deliberation had cleared, the "money" committee of the House had approved a \$732 million document and sent it to the main floor of that body. Similar action followed on the education budget, but not until prolonged debate had transpired with amendments being added by education forces who routinely control the fate of this budget.

Forestry Legislation

While budgets were being considered, the Alabama Forestry Commission (AFC) was busy proposing its own legislative package. Top priority was given to a bill that would call for a constitutional amendment to provide for an acreage assessment of up to 20 cents per acre on forest lands within the state. The proposal would have to be passed by the legislature, signed by the governor, then approved by all voters in Alabama.

Once accepted by the voters in a state-wide referendum, this bill would levy a 10 cents per acre assessment on the state's forest lands. If approved in a referendum by the forest landowners of the state, the assessment could generate approximately \$2 million.

Representative Nolan Williams of Newton and **Senator Ann Bedsole** of Mobile sponsored the bill in their respective chambers.

At the time the bill was being introduced, only 39 counties were in the process of collecting this assessment by

virtue of local legislation dating back to 1955, when an enabling act gave counties this option.

The constitutional amendment provides for the repeal of existing legislation dealing with these assessments.

State Forester Bill Moody was strong in his emphasis for passage of a statewide acreage assessment measure. "It's not fair for one county to collect five cents per acre, while another collects 10 cents an acre, and 28 counties collect nothing at all," he explained.

Malicious Burning Attacked

The AFC also reintroduced a bill to establish a condemnation law for vehicles and equipment used in maliciously setting woodland and grassland fires. The bill further set forth a procedure whereby vehicles and equipment used in connection with such unlawful acts could be condemned by the proper authorities and sold or awarded by court order to the state forester for use or resale in the enforcement of Alabama's forest fire laws.

Representative Richard Laird of Roanoke handled the bill in the House. **Senator Don Hale** of Cullman was joined by **Senator Bedsole** in upper chamber sponsorship.

A similar bill condemning vehicles and equipment used for timber theft became law in the 1987 Regular Session of

the legislature. It is proving to be a deterrent for anyone who is caught in the act of timber theft in this state.

Wood Energy on Capitol Hill

Meanwhile, members of the Legislative Forestry Study Committee intensified their efforts to promote the use of wood biomass for energy in the State Capitol Complex. **Senator Perry Hand** of Gulf Shores, who chairs the 15-member Study Committee, said such a central energy plant would save energy costs, minimize operating and maintenance expenses, and "would reduce air pollution by eliminating the need for individual heating systems and their exhausts."

The Alabama Forestry Association (AFA) and the Alabama Farmers Federation endorsed the project and urged that the plan move forward as rapidly as possible. **John McMillan** of the AFA observed that long term savings and the creation of new jobs could result from the installation of this proposed central energy system. The University of Montevallo has used a wood-fired system since November, 1982 and found it to be highly successful and cost effective.

The 1989 Regular Session will end in May. A complete summary of all forestry-related legislation will be covered in your next issue of *Alabama's TREASURED Forests*. ♣

Vote Requirements of the Alabama Legislature

	TO PASS REGULAR BILL OR AMENDMENT	FOR SUSPENSION OF THE RULES	TO AMEND THE CONSTITUTION	TO OVERRIDE GOVERNOR'S VETO	TO VOTE CLOTURE	TO RECONSIDER PREVIOUSLY PASSED BILL BY SAME BODY
Senate	Majority of those voting	Unanimous consent of those voting	2/3 of elected members (21 votes)	Majority of elected members (18 votes)	2/3 of elected members (24 votes)	Majority of those voting
House	Majority of those voting	2/3 of those voting	2/3 of elected members (63 votes)	Majority of elected members (53 votes)	Not applicable	Majority of those voting

Herbaceous Weed Control –

by R.J. MITCHELL, School

Only recently has the forestry community recognized the competitive role that herbaceous weeds exert during the establishment stage of pine stands. Furthermore, interest in herbaceous weed control as an operational silvicultural treatment has increased due to the development of effective herbicides and our understanding the use of these products in a cost-effective manner. The development of various herbicides and application techniques provide an array of alternatives for the forestland manager. The objective of this article is to summarize the information pertinent to operation decisions regarding herbaceous weed control in pine management.

Herbicides Labeled for Conifer Establishment

Oustr, a Dupont product, is perhaps the most widely used herbaceous weed control herbicide in forestry. Oustr has a broad spectrum of activity, excellent pine tolerance, and will provide season-long competition control at reasonable rates. Oustr is formulated as a 75% active ingredient water dispersible granule.

Oustr is usually applied from early to late spring (March to May) in either a pre-emergent or early postemergent mode. Rates from 3-8 oz. of product per acre are commonly used. As with all herbicides, Oustr needs to be prescribed, alone or tank mixed with other herbicides, according to the weed complex on the particular site and with attention paid to sensitive areas and potential problems.

In regard to the weed complex, Oustr controls a wide variety of herbaceous plants frequently encountered in pine forest establishment. TABLE I lists several of the weeds that Oustr will control. In addition, species that can be controlled at higher rates and Oustr resistant species are listed. Generally, Oustr controls annual weeds exceptionally well. Thus, any site preparation treatment that exposes bare ground, such as disking, will generally improve the effectiveness of Oustr. Sites that have been left fallow for a year or longer will generally have more Oustr resistant or tolerant weed species.

Generally, Oustr resistant species can be controlled by tank mixing Oustr with other labeled herbicides. ROUNDUP-Oustr tank mix is a common herbaceous

weed control treatment. This tank mix is particularly effective in control of broomsedge, which is one of the most commonly encountered weeds on cut-over or abandoned land that has been cleared of trees or free of cultivation for more than two years. Broomsedge is completely resistant to Oustr, yet effective broomsedge control can result from adding 16 oz. of ROUNDUP to Oustr. ROUNDUP-Oustr tank mixes should be applied at 15-20 gallons total solution per acre. Since ROUNDUP has only foliar activity, this tank-mix must be applied only after the broomsedge has started active growth (mid-May to early June). With good calibration and application, this tank mix provides an extremely wide range of weed control and reasonably good pine tolerance.

A second popular herbaceous weed control tank-mix is Oustr-VELPAR. If Oustr-VELPAR tank mix is used to control weeds, the rate of VELPAR needs to be prescribed according to the soil texture and organic matter. Proper prescription calibration and quality application is required to achieve good weed control with this treatment without pine mortality. On extremely sandy soils, VELPAR is not recommended for over-the-top spraying of pine seedlings. A Dupont representative can assist in prescribing the rate for your particular site.

A third tank mix that is likely to receive increasing use in the future is Oustr-ATRAZINE. ATRAZINE herbicides are manufactured by several companies, and can be found in several formulations (3 oz. of Oustr plus 3 lbs. active ingredient ATRAZINE) will provide a broad range of species control, and also provide reasonable pine tolerance. ATRAZINE will improve the control of cocklebur, morning-glory, sicklepod, crabgrass, and lespedeza.

Bermuda grass is resistant to Oustr or Oustr tank mixes previously described. Yet with the increasing tendency to convert pastures to pine production, bermuda grass control is often desired. Two herbicides that give good control of bermuda grass have been recently labeled. FUSILLADE 2000 is labeled for non-food uses on tree farms, and POAST is labeled

TABLE I

Weed Species Susceptibility to Oustr

Susceptible ¹	Moderate ²	Tolerant ³
Panicum grasses	Goldenrod	Morning glory
Horseweed	Dog fennel	Broomsedge
Burnweed	Bahia grass	Bermuda grass
Boneset	Johnson grass ⁴	Wolly croton
Ragweed		Trumpet creeper
Poorjoe		
Dewberry		
Sunflower		
Fescue		

¹Controlled at 3 oz. active ingredient per acre

²Controlled at 5 oz. active ingredient per acre

³Not controlled

⁴Controlled only partially in a preemergent or early postemergent applications.

Application and Alternatives

stry, Auburn University

for grass control in conifer plantations (only in the following states: NC, SC, VA, WV, GA, AL, KY, TN). Both herbicides provide excellent postemergent control of grasses including bermuda grass at labeled rates. In addition, the POAST label includes a tank mix with GOAL herbicide to provide both grass and broadleaf weed control.

Application Techniques and Alternatives

Herbaceous weed control can be applied by broadcast, band or spot treatment. Band or spot applications can result in considerable cost savings when compared to broadcast treatments. For instance, broadcast application of 6 oz. of Ousr per acre would cost approximately \$42 in chemical costs. In a plantation with 10 foot rows, a four foot band application, at the same rate, would cost \$16.80, since only 40 percent of the plantation is treated. A four foot spot centered over 750 trees per acre, at the same rate of Ousr, would cost only \$9.08. Even though considerable cost earnings result, only a small to no loss in growth and survival benefits have been observed.

To some extent, the choice will depend on the equipment available. Many types of spray rigs have been modified to apply herbaceous weed control in pine plantations. One common machine is a four wheel all terrain vehicle designed with a spray rig that is pressure regulated by radar control. As speed increases, pressure increases so that constant calibration can be achieved.

Several units similar to the one I have described are being used by consultants, herbicide vendors, and timber companies throughout the South. Information regarding the advantages and disadvantages of the various systems can be obtained from your local Dupont representative or Montgomery Ag Sprayers, who sell this type of sprayer.

Although fairly high levels of production can be achieved per day with this type of equipment, the types of sites that this application technique can be used for

are fairly restrictive. The two areas most suitable are abandoned agricultural fields and bedded sites in the flatwood region. This equipment does not do very well on steep slopes or on cut-over areas with frequent obstacles such as stumps.

Backpack spray equipment such as a solo sprayer also can be used; however, calibration of backpack sprayers is slightly more difficult than merchandized sprayers. Rages per acre are determined by pressure, band width and walking speed for any given nozzle. Width can be controlled by changing the flat fan nozzle to a wider angle or increasing the height that the spray wand is held. Using TK 2.5 nozzle at a height of 12-15 inches above the ground will give a band width of approximately four feet. At 5 lbs. per in² approximately 2.2 pints per minute will be delivered. Assuming a walking speed of 2 miles per hour (900 ft. per minute), approximately 13.3 gallons per acre will be applied. If you were applying 6 oz. of Ousr per acre with a backpack sprayer and had a 50 gallon mixing tank you would need to add 22.5 oz. of Ousr to the tank mixture. With that 50 gallons, you would be able to treat 3.75 acres. Assuming a 10 foot spacing between rows and a four foot band, 9.4 plantation acres would be sprayed with 50 gallons total solution. Chemical cost per plantation acre would be approximately \$16.80.

An estimation of total costs requires that the productive working time per crew per day, acreage treated, crew size and labor costs, chemical costs, and other costs (which may include transportation insurance, supplies, equipment, and profit) be either or known as assessed. If a walking speed of 180 feet per minute, a band of 4 feet, and a productive working time of 5.5 hours per day are assumed, then each crew member will treat approximately 6.9 acres per man-day. Assuming again 10 foot rows, approximately 17.25 plantation acres per day will be treated per man. Furthermore, assume that the crew consists of four workers paid \$4 per hour with one supervisor at \$7 per hour, total labor costs per crew will be \$184. That crew

will treat 69 plantation acres; therefore, labor costs will run approximately \$2.67 per plantation acre. If you assume an additional cost per day of approximately \$200, an additional \$2.90 per plantation acre is needed. Thus a total cost per plantation acre is \$22.37.

Although many assumptions were needed to yield a cost figure, even more assumptions are needed to determine the economic efficiency of such an investment. First, assume a site index of 50 or 70 feet for a 25-year-old loblolly pine, \$30 per acre cost for weed control treatment, and a 25-year rotation with a thinning at year 15. To simplify the analysis, all revenues including the thinning are paid at the end of the rotation. Although obviously incorrect, this assumption will result in more conservative estimates. Furthermore, assume \$175 per board foot for sawtimber and \$25 per cord for pulp. Using the best yield data available for weed control suggests, in the long-term, that stands with weed control will yield about three years of additional growth compared to a non-treated stand. Finally, if a 6 percent real rate of return weed control is selected then approximately \$130 per acre additional revenue is needed at the end of the rotation. Using the assumptions and TVA growth and yield model, weed control added \$240 in additional revenue per acre on Site Index (SI) 50, and \$332 on SI 70 land. Thus, if these assumptions are even close, it appears that weed control is an economically sound silvicultural investment.

Many private non-industrial and industrial forest landowners are using herbaceous weed control to improve the growth of loblolly pine. Many questions and problems need to be resolved. Yet due to research of the Auburn Silviculture Herbicide Cooperative and others, the herbicides and application techniques needed to successfully control herbaceous vegetation are available. If you decide to use herbaceous weed control, remember to always read and follow label directions.

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Regeneration of the Forest—Naturally

by JIM HYLAND, Chief, Forest Management and
TOM CAMBRE, Hardwood Specialist

You have heard people say, “My forest just grew here; I cut the trees I could get paid for—now the rest will grow back.” This landowner may get trees (or bushes) back, but it is very unlikely he will ever have a forest.

A forest is more than trees. A forest contains timber, wildlife, quality water, recreation, aesthetics, and other things profitable to the owner. Cut-over or unmanaged land contains little timber value, restricted wildlife habitat, usually erosion/water quality problems, little or no recreation and nothing pleasing to the eye.

The best time to plan on regenerating a stand of pines is **BEFORE HARVEST**. Unfortunately, five out of six acres of forestland harvested in the South are not regenerated adequately by natural means, planting or seeding. The end result is usually a tract of land with little or no reproduction of desirable species. “Accidental” forestry seldom pays good dividends.

Natural regeneration involves more than simply letting nature take its course. Forests must be carefully managed for effective natural regeneration. If this is not done, the time lag between harvest and the establishment of a new crop of trees could mean loss of profits. An excessive number of seedlings could require precommercial thinning, wiping out saving in planting costs. A scarcity of new tree seedlings could under-utilize the site, robbing the owner of potential returns. Effective natural reforestation is seldom free; it does not “just happen.”

Management Systems for Naturally Regenerating Pine

If you decide to use natural regeneration for pines, a variety of all-aged and even-aged management systems are open to you.

After removing most of the poor quality trees in your stand, you may still have a good stocking of vigorously growing pine over much of the acreage. Therefore, you may want to manage for an all-

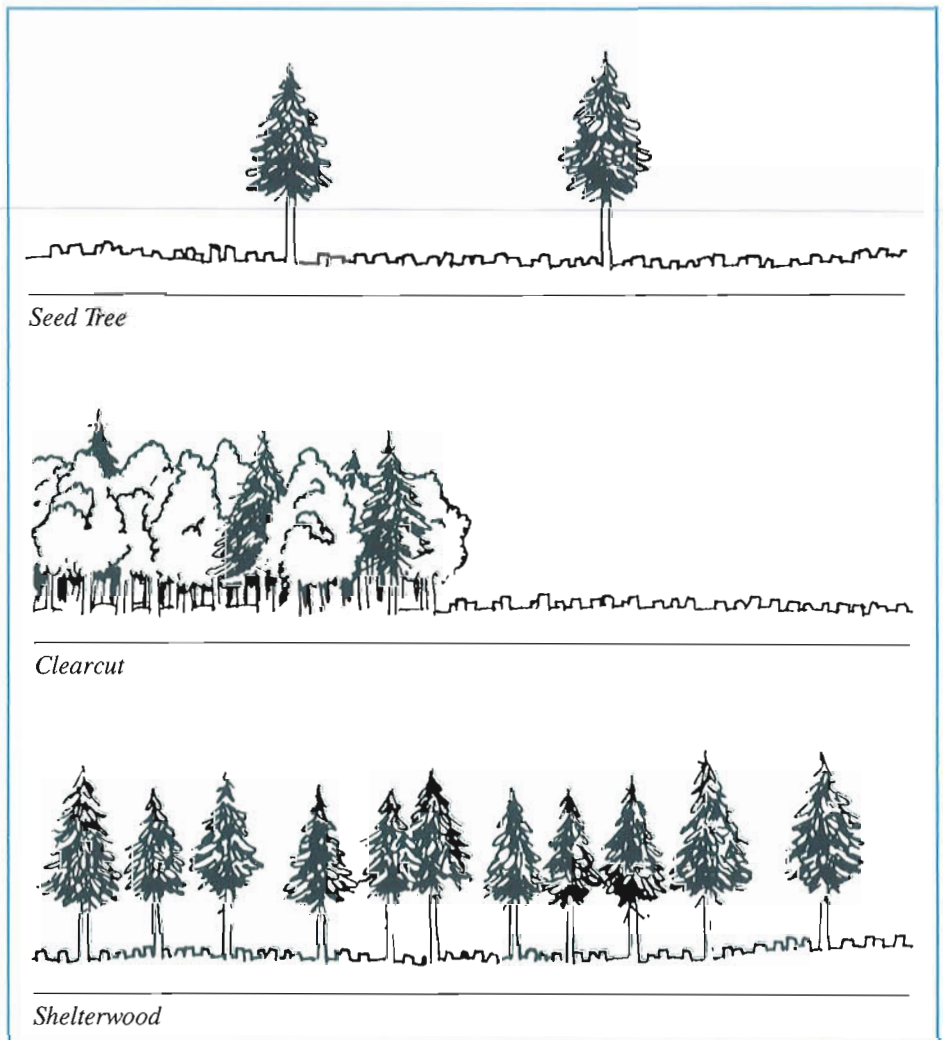
aged forest. Do this by periodically harvesting groups of trees, creating openings for natural regeneration. The result, in time, is a mosaic of groups or small stands of different-aged trees.

If you want to use even-aged management (all trees in a given area are regenerated at the same time), at least five methods are available.

1. *Seed tree* is the most frequently used natural regeneration method in even-aged management. The number of seed trees left depends upon size, species, cone-bearing characteristics, and site conditions.

2. *Clearcutting* in strips enables you to make periodic harvest cuts while managing even-aged units. The clear-cut strips may be of any length, but preferably about 200 feet wide. Strips should be perpendicular to the direction of prevailing winds to ensure good seed dispersal.

3. *Shelterwood* entails leaving many seed trees. Usually, about 25 to 40 square feet of basal area are left per acre depending upon the species. This is the equivalent of 23 to 37 14-inch trees (diameter at 4.5 feet) per acre.



4. *Seed-in-place* involves clearcutting the stand after the peak of seed fall, but before the start of germination. This method is best applied during a 4 to 5 month winter logging period. As with the seedlings-in-place method (described below) this technique can be used only when an ample crop of seed is available.

5. *Seedlings-in-place* involves clearcutting a stand during the summer following a good seed year. Using this method, you will lose some height growth when compared to the seed-in-place method because seedlings spend most of the first growing season in the shade of the overwood. However, the loss in height growth may be offset by additional volume growth of harvested trees. With the seedlings-in-place technique, you can be more certain of having a satisfactory actual number of seedlings following germination of the fallen seed.

Site preparation is generally desirable for natural regeneration. Longleaf and slash pines in particular require a seedbed of exposed mineral soil to achieve a satisfactory restocking of seedlings. The types or combinations of site preparation needed depend upon the expected seed crop and the species of pine. An important point to remember is that most natural pine regeneration in the South has resulted in too much stocking, not too little.

In some cases, soil disturbance occurring during the logging operation is sufficient to provide a good seedbed.

Two or more annual burns before harvest provide good seedbed conditions and a high degree of hardwood control. A single burn following harvest has the same result, but there is always the danger of burning up the seed trees if logging slash (broken limbs and other debris left after harvest) is unusually heavy. To minimize seed tree damage, remove all slash near seed trees. The after-harvest burn should be carried out no sooner than two months before seedfall. The area should be checked before burning, to be sure that adequate seed or seedlings are not already present.

Prescribed burning is a good tool for site preparation and, at the same time, improves wildlife habitat. Burning sets back woody plants, making new sprout growth available for deer. Burning also stimulates seed germination and growth of valuable herbaceous plants, making their seed more available to birds by removing litter accumulation.



Group Selection

Advantages of Naturally Regenerating Pine

When compared to clearcutting and planting, natural regeneration has numerous advantages:

- Lower establishment cost
- Less labor and heavy equipment required
- No problem with geographical origin of seed
- Reduced tip moth damage
- Better early root system developed by natural seedlings
- Selection management more practical with this system
- Less immediate visual impact
- Less soil movement

Management Systems for Naturally Regenerating Hardwoods

Natural regeneration of southern hardwood is relatively easy and inexpensive when compared to artificial means. Difficulty and expense become important factors when efforts are made to control the species and timing of regeneration.

Three major sources of regeneration can be used, depending upon the objectives in management and site capability. Natural hardwood regeneration results from seed, advanced regeneration, or from stump and root sprouts.

The Silvicultural Clearcut—This is a very efficient method of regenerating hardwood stands. There is a very important difference between a commercial clearcut and a silvicultural one. A silvicultural clearcut could be described as a commercial clearcut followed by site preparation.

Silvicultural clearcuts produce even-aged stands that favor intolerant, fast-growing species composition of the new stand. Silvicultural clearcuts should not be used as a means of regenerating fully stocked and over-mature stands of hardwoods. In this instance, the practice may

result in a total failure as a means of obtaining desirable natural regeneration.

Group Selection—This method is often recommended when impacts on wildlife and other resources should be decreased. The size of the area can vary, but generally should not be smaller than one acre. The average opening created when using the group selection method is probably between one and four acres. Site preparation requirements are the same as for silvicultural clearcuts. The major disadvantage of the group selection method is that many small stands are created that are difficult to map and administer.

Naturally regenerated stands must be protected from domestic cattle grazing and overpopulated deer herds.

Single-tree Selection System—This system is often recommended for landowners who have small tracts because it is believed the income from these smaller tracts should be spread out over a longer period. There could be some merit in this belief; however, removal of single trees **has not proven** to be an effective way to regenerate the hardwoods of the South. Openings created in the forest canopy by the removal of single trees are not large enough to allow efficient use of the site. The system fails to provide for quick, orderly removal of overhead competition and allows development of shade-tolerant species—many of which are not desirable.

A landowner should not let the logger dictate what his forest will look like in the future. Landowners should seek the forest management of a registered forester. Keep in mind the forester's advice should complement your objective for your forest. The natural management of a forest is not easy, but is the most rewarding economically and gives the most satisfaction to the landowner in knowing he is sustaining his forest resource. ♣

Reference

Managing the Family Forest in the South, USFS Bulletin R8-Mb1, 1986.

ACTIVITIES

DISTRICT

1

Over 32,000 loblolly pine trees raised in containers were planted by Marshall County landowners **Larry Smith** and his mother, **Gladys Smith**. This planting of "containerized" trees is the first for Northeast Alabama by private individuals using the CRP cost-sharing program. The Smiths contracted planting for 60 acres of cropland with a hand planting crew using special planting bars. Management Specialist **Brian Bradley** worked with the Smiths to provide technical guidance.

Currently the cost-sharing guidelines don't address planting of the more expensive containerized seedlings. With a seedling cost of about three times that of bare root seedlings, a special category would be advantageous. Specific situations like rocky soils and areas with unreliable hand labor need a new approach to planting, and containerized trees fit the bill.

Another first for Marshall County is the planting of hardwoods by several landowners. Primarily scared of pines due to personal experience with Southern Pine Beetles and heavy media exposure of SPB damage, these landowners will plant yellow poplar seedlings. Luckily, the CRP program reimburses landowners who plant hardwoods at the rate of 50% of the actual cost not to exceed \$95 per acre. This rate is greater than for pines and thus helps offset the higher cost of hardwood seedlings.

The **Jackson County Forest Industries Committee** was recently formed to promote industrial development in this heavily forested and mountainous county. County Supervisor **Ed Eldredge** and Economic Development Authority Executive Director **Richard T. Roberts**, have gotten the committee off to a fast start. During the first several meetings, a course was charted to target a specific secondary industry and develop a marketing strategy. Representatives from the Alabama Development Office, Tennessee Valley Authority, Alabama Forestry Commission (AFC), local forest industry and the Tennessee Valley RC&D Forestry Committee have all contributed to the effort. A marketing effort directed at selected manufacturers will begin in the late spring of 1989.

Recently, several forest landowners have become, or were recertified as TREASURE Forest owners in District 1. They are: **Tom Nicholson**—newly certified, **R.B. Brown**—newly certified, **Dekalb County**; **Louis Hanson**—recertified, **Cherokee County**; **James Bassage**—recertified, **Dekalb County**; **Camp Comer Boy Scout Reservation**—recertified, **Dekalb County**; **Richard Carr**—recertified, **Etowah County**; **Robert Manzell**—recertified, **Jackson County**; **Ruth Blackburn**—recertified, **Marshall County**; **Ray McClendon**—recertified, **Etowah County**. Congratulations to each landowner and a special appreciation to **Rick Busch** and **Ed Eldredge** of the AFC for their inspection efforts.

Research & Development Supervisor **Gordon B. White** with **Champion International Corporation** in Courtland conducted District 1 employees **Mark Sullivan**, **Ed Eldredge** and **Brian Bradley** on a tour of the company's hardwood management areas. White graciously shared his knowledge and experience of planting and growing hardwoods in North Alabama and Tennessee. Fifteen-year-old yellow poplar plantations, natural hardwood regeneration, various species of oak plantings and a remarkable stand of hybrid aspen were some of the highlights of the tour. As more and more landowners focus on hardwood management, it's reassuring to find a resource person like Gordon White who is rich in knowledge and so willing to teach others.

A Huntsville-based company, **Atlantic Aerial Surveys, Inc.**, has provided landowners in Marshall, Madison and Jackson Counties with an unique opportunity. Recent aerial photographs of exceptional detail have been taken of each county, primarily for tax appraising purposes. Currently, efforts are underway to develop a procedure in which landowners who are actively managing their land can purchase copies showing their prop-

erty. Other counties across the state also have updated photography, so it might be worth a call to your local tax assessor's office and inquire as to their availability.

Tennessee Valley RC&D Coordinator **Jack Harper** retired December 30, 1988 after 38 years of service with the Soil Conservation Service. Jack worked in the North Alabama area assisting the RC&D Forestry Committee and the AFC in promoting better forest management and improved timber markets. Ironically, Jack's brother, **Charlie Harper**, works as the Area 5 Conservationist in Southeast Alabama and is also actively promoting forestry and forest management. We wish Jack much happiness and peace in his retirement—he worked for it.

DISTRICT

2

Jefferson County Forester **Phearthur Moore** attended a Forestry Commission Field Day in Pickens County that included stops covering wildlife management and hardwood management.

Foresters **Jim Gober**, **Tom Kimbrell**, and **Phearthur Moore** attended a hardwood grading seminar held in Mobile.

State Director of Fish and Game **Charles Kelly** was the guest speaker at the November meeting of the **Walker County Forestry Planning Committee**. The topic of discussion during the meeting was wildlife.

District Information Specialist **Coleen Vansant** presented a PALS (People Against a Littered State) program to the **St. Clair Community Rural Development Committee** in November.

Over a dozen District 2 associates recently completed a chainsaw safety course held by the U.S. Forest Service in the Bankhead Forest. Those participating in the course were: **Phearthur Moore**, **Larry Clark**, and **Bryan Langford**—Jefferson County; **John Thompson** and **William Owen**—Blount County; **Jimmy Moody** and **Kenneth Hulsey**—Cullman County; **John Kimbrell** and **Wayne Ward**—Shelby County; **Dennis Underwood** and **Tim Davis**—St. Clair County; **Tunney Markham** and **Terry Aaron**—Walker County; **Danny Dodd** and **Steve Rogers**—Winston County; and **Larry Wright** and **Coleen Vansant** from the District Office.

Phearthur Moore conducted a general forestry presentation for a Forestdale Cub Scout Troop recently.

The **St. Clair Forestry Planning Committee** sponsored a three-day tour of the **International Forest Seed Company**, located near Branchville, Ala. Over 450 sixth grade students and teachers from St. Clair County Schools participated in the tour. Students toured the seed plant, seed testing laboratory, and the nursery section. Each student was given a pine seedling, pine cone, and a pine seed packet.

Winston County Supervisor **David Frost**, Forestry Worker **Steve Rogers**, and Information Specialist **Coleen Vansant** participated in the Haleyville Veterans Day Parade. Winston County's new JD-550 crawler tractor and transport was one of the main attractions of the parade, as well as **Smokey Bear**, who rode on the back of the transport.

In November, Jefferson County Forester **Phearthur Moore** and Ranger **Bill Hamner** conducted a fire prevention program featuring **Smokey Bear** for two area Cub Scout Troops.

Several of District 2's county and district staff recently completed the Information and Education segment of Advanced Ranger Training. They included **Larry Clark** of Jefferson County, **Kenneth Hulsey** of Cullman County, **Dennis Underwood** of St. Clair County, **Bobby Matthews** of Walker County, **Danny Dodd** of Winston County, and **Coleen Vansant** from the District Office.

During the week of December 12, St. Clair County Rangers **Tim Davis** and **Dennis Underwood** presented a program at all St. Clair

County schools called "Grow Your Own Christmas Trees." Over 700 third grade and Head Start students received seedlings. Children at each school were instructed on how to plant and care for their trees. In addition, a Christmas tree was planted at each school. The program was sponsored by the St. Clair Forestry Planning Committee and International Forest Seed Company.

Phearthur Moore and **Bill Hamner** met with the Mayor of Cardiff to review the town's fire station, which is currently being constructed, and to discuss ways to make the community safer from wildfires.

Walker County Supervisor **Dan Jackson** was one of many guests at the annual Farm-City Breakfast sponsored by the Alabama Farmers Federation. Dozens of business, agriculture, and community leaders in Walker County attended the event.

Information Coordinator **Melanie Curry** (District 8), and **Sharon Clark** (forester and information coordinator in District 10) have both spent time in District 2 reviewing the information and education program here.

Rangers in the Winston County office of the AFC are adapting to their new home at the Fairview Work Center, located east of Double Springs. The center is larger than the old office, which was located in downtown Double Springs.

Walker County AFC personnel have been working closely with Productivity Forester **David Hoge** in the management of Walker County Public Lake. Beetle wood has been harvested and sold from the lake property.

The **St. Clair Forestry Planning Committee** was the winner of the TREASURE Forest "Best Dressed Sign." The sign is located on highway 231 North of Pell City. St. Clair County's sign was selected from several entries from across the state. The sign has been adopted by a local Head Start class. Committee members won \$200 and a Granddaddy Sign for their efforts.

District 2 held a Christmas Open House again this year, with around 70 industry cooperators, fire department representatives, cooperating agency personnel, as well as District and county staff attending. Assistant State Forester **Charles Pigg** also visited during the day.

The **Walker County Forestry Planning Committee** sponsored school programs for all third grade classes in the Walker County and city schools. Planning Committee members assisted children in planting pin oak seedlings on the school grounds. **Smokey Bear** was also on hand to assist in the programs.

St. Clair Rangers **Tim Davis** and **Dennis Underwood** assisted motorists recently when they came upon a two vehicle automobile accident. The rangers were the first at the scene and their quick response saved both lives and time. Their quick action is attributed to the First Responder Course taught at the Academy.

District Forester **Bart Williams** and **Coleen Vansant** attended a two-day Information and Education Coordinators meeting held in Montgomery.

Walker County associates, along with several rangers and district staff members, attended a forestry herbicide seminar hosted by **Bill Bustin** of Forest Management Service.

Information Specialist **Coleen Vansant** was the guest speaker at the quarterly meeting of the **Cullman County Mayor-Council Association**. She presented a slide program and talk on the litter problem in Cullman County and introduced the mayors to PALS. Cullman County is in the process of organizing a PALS chapter in their county.

Forestry Worker **Sandra Jones** and Ranger **Dennis Underwood** were recently elected as officers of the **St. Clair County Firefighters Association**. Sandra will serve as secretary, and Dennis will be the group's training officer.

District 2 congratulates a new fire department in Walker County. **Barney Volunteer Fire Department** was recently formed. The group received their new truck in January.

Jefferson County Ranger **Larry Clark** displayed his John Deere 450E tractor unit and distributed fire prevention material to over 500 students and adults recently at the Homewood Fire Department.

Coleen Vansant and **Dan Jackson** presented a PALS program to children at **Carbon Hill School**. Around 525 children in kindergarten through the 6th grade were involved in the anti-litter presentation.

Cullman County Supervisor **Darrell Johns**, Ranger **Jimmy Moody**, Secretary **Louise McChaw**, and District Information Specialist **Coleen Vansant** were present January 10 at the swearing-in ceremony of the newly elected Cullman County Commissioner **Roy Gamble**. Commissioner Gamble is a retired career forester and is a TREASURE Forest landowner in Cullman County.

Jefferson County Rangers **Larry Clark**, **Bill Hamner** and **Brian Morgan** conducted a Smokey Bear program for 45 kindergarten students at Trussville.

PALS Executive Director **Spencer Ryan** and **Coleen Vansant** were the guest speakers at a PALS organizational meeting held at the Walker County Chamber of Commerce. A group of Walker County residents, businesses, and state and local agencies are in the process of organizing a PALS chapter in Walker County. Also attending the meeting were Walker County Supervisor **Dan Jackson**, Rangers **Tunney Markham** and **Bobby Matthews**, and District Forester **Bart Williams**.

County Forester **Phearthur Moore** attended a seminar on personnel management in Birmingham.

Cullman County Supervisor **Darrell Johns** and District Information Specialist **Coleen Vansant** attended the January meeting of the **Cullman County Rural Development Committee**. The meeting was hosted by Wallace State College in Hanceville.

DISTRICT

3

District 3 personnel enjoyed being entertained at a Christmas get-together by retired county supervisors **Dennis King** (Hale County) and **Billy Rumley** (Sumter County) with their fire fighting and tower construction "war stories." Their wives added much to this occasion, with their friendliness and dishes of delicious food. The AFC appreciates the continued support of all our retired associates and extends them a warm welcome to visit our offices at anytime.

State Forester **C.W. Moody** was guest speaker at the annual Farm City Banquet in Greensboro on November 22.

District Forester **Wayne Strawbridge** spoke to a group of forest landowners in Hale County during November. He spoke on what needs to be done to increase our productivity of forest products and fire control needs for Hale County.

Our congratulations goes out to the newest members of the District 3 TREASURE Forest family. Certified at the last services subcommittee meeting were **Max Larkin**, **Miles Mayberry**, **Bob Monette**, **Terry Tedesco**, **Murray Vedal**, **H.O. Walker**, and **Marjorie Yates**. All of the new TREASURE forests are from Sumter County. County Forester **Philip Dubois** reports that Sumter County is now second in the state for number of TREASURE forests.

Tuscaloosa County rangers and **Smokey Bear** participated in Farm City week activities with an exhibit at McFarland Mall in Tuscaloosa.

Smokey made six appearances over three days at 5 and 7 p.m. and one two-hour morning appearance on Kindergarten Day with over 1,500 children attending. District Headquarters staff assisting were **Ken Elmore**, **Charlie Squires** and **Patrick Waldrop**.

All sixteen District 3 law enforcement officers recently completed firearms qualification with an average score of 345 15X 96%.

District 3 associates wish **Kenneth Colburn** the very best in his new job at Thorsby Seed Orchard. Kenneth was assistant county supervisor in Tuscaloosa County.

DISTRICT

4

Chambers County Forestry Planning Committee held a plantation thinning demonstration for landowners in November.

Clayton Schwind, county forester, **Forest Ranger Ronny Ray**, and **Jeff Abney**, forestry worker, prepared a wood products display for the Alabama Welcome Center on I-85 at Lanett as part of Farm-City Week. The Farm-City Week banquet was held on November 22.

Chambers County personnel did several **Smokey Bear** programs in schools. **Ronny Ray** and **Jeff Abney** took **Smokey** to the **Bradshaw Chambers County Library** in Valley to visit with approximately 125 kindergarten children. In honor of **Smokey's** visit, **Joan C. Hodnett**, children's pro-

gramming librarian, selected a book with Ronny's and Jeff's names inscribed. The book is "An Introduction To Trees" by John Kieran and was, of course, placed in the children's section of the library. Ms. Hodnett also wrote a note of appreciation to Ronny and Jeff.

The Chambers County office assisted in the three-month Forestry Exhibit (October, November, and December) at the Cobb Memorial Archives of the Bradshaw Chambers County Library.

Clay County's most important activity was **Kacie Lynn Smith** born in December to Clay County Forester **Earl Smith** and his wife **Linda**. Kacie joins her big brother, **Tyler**.

The **Cleburne County Forestry Planning Committee** assisted in a field trip on tree planting for Cleburne County 4-H and FFA groups. **Glenn Berry**, county forester, assisted the County Extension Service in programs for planting trees during Arbor Week. They assisted grades 4-6 in the **Cleburne County Elementary School**, the **Ranburne Elementary School**, and the **Fruithurst Elementary School**.

Glenn attended the District 4 Volunteer Firefighters Association quarterly meeting in Lineville. Forester **Berry** has presented the information concerning the organization of **PALS** (People Against a Littered State) to the members of the County Forestry Planning Committee, the probate judge, the sheriff, and other county officials.

Coosa County has completed their new office in Hanover on Hwy. 231; County Forester **Blake Kelley**, and Rangers **Joel Neighbors** and **H.D. (Buddy) Acox** are putting the finishing touches on the grounds.

Talladega County held a landowner's meeting to discuss the Conservation Reserve Program. Thirty-four landowners attended. County Forester **John Tyson** and his staff—Rangers **David Rogers**, **Mike Highfield** and **Larry Thomas** were pleased with the results of their efforts. **Blake Kelley**, who was then District 4 management specialist, assisted the Talladega County office.

David Rogers and **Mike Highfield** spent several days with the AFC video crew; they taped footage for a presentation of the Talladega County **PALS** work. Talladega has had a most successful clean-up project operating for over a year. People Against a Littered State is a desperately needed program in Alabama. Judge **Derrell Hann**, Sheriff **Jerry Studdard**, Deputy Sheriff **Travis Ford**, **A.V. Davis** (who worked on a clean-up program as a concerned citizen for eight years—alone), **Delores Field** and many others are outstanding examples of what can be done. The **PALS** effort in Talladega has been greatly helped by a concerned newspaper, *The Daily Home*, which has provided able coverage. **Fred McKnight**, a retired cartoonist who works "with" the paper rather than "for," has done marvelous things with an acutely-tuned pencil by providing cartoons for the editorial page. **McKnight** reaches people who may not take time to read the articles. In 30 seconds he presents the very heart of an idea. He is 80 years old and has worked at his art in Chicago, Memphis, and Atlanta before retiring to Talladega several years ago.

District 4 personnel had the largest group at the December Advanced I&E training session in Selma. Attending the session were **Buddy Acox** (Coosa), **Kyle Desmond** (Tallapoosa), **Mike Highfield** (Talladega), **Bill Nixon** (Randolph), **Brian Osborne**, **David Rogers** (Talladega), **Jim Spradley** (Dadeville 9) and **Mary Tucker** (District 4 Hq.).

The annual Wood Energy Workshop at Cheaha, which is provided as a Coosa Valley RC&D project, was attended by a number of District 4 landowners.

The Forestry Exhibit at the Cobb Memorial Archives was one that the District feels pride in having done. Every county cooperated in the effort. It has been a rewarding experience in many ways. The Chambers County Museum in LaFayette lent a display of old tools used in forestry—**Mr. Kingrey** and **Mr. Blanton** were most gracious; **Carlton Whittle** of Evergreen; **Mr. Hurston**, **Mr. Wakefield**, and **Mr. Lyons** of Kimberly Clark; **Charles Jackson** of Georgia Pacific; **Eleanor Adams** of Capitol Veneer; **Bill Jones** and **Rei Boyce** of the Alabama Forestry Association; **Ed Lewis** of Champion; **Dan Sims** of USFS, Atlanta; **Bill Frazier** of Piedmont Foresters, LaFayette—all these

people were so helpful.

District 4 had two Champion Trees in 1988. One was a longleaf pine owned by **Alabama Power Co.** in Tallapoosa County. The other was a post oak owned by **John Goff** in Coosa County.

District 4 held a training session for forestry workers in February under the supervision of **Skip Turner**, protection specialist. The new employees were welcomed by District Forester **Charles Hall**. The material covered was fire line safety, location, initial stack, mop-up, and STR. In the afternoon, Talladega Ranger **David Rogers** instructed the group on fire shelter and hand tools; Tallapoosa Ranger **Ben Parrish** on transport/tractor operation as a helper and equipment maintenance; Radio Operator and Dispatcher **Linda McCord** on radio operation and fire reports; **Jim Spradley**, Dadeville 9, discussed fire detection; and **Skip Turner** discussed law enforcement.

Forest Ranger II **J. Doyle Foster** of Randolph County retired April 1 after a little over 25 years service with the AFC. He was county supervisor for a number of years. He said that he had enjoyed his work with the Commission and the association with all the District 4 people. **Doyle** feels that he and Mrs. Foster will enjoy their retirement (she retired last October); they plan to garden, fish, and travel. They began their travelling last summer with a trip to Hawaii.

DISTRICT

5

Smokey Bear entertained 250 kindergarden students in Prattville on November 15-16 during Autauga County Farm City Week.

A forestry tour was held jointly by the **Autauga** and **Dallas County Forestry Planning Committees** in Autauga County on November 4. The tour originated at Miller Nursery in Autaugaville. Everyone enjoyed an informative slide show and then continued on to several stops where different site preparation methods were discussed.

On December 3 **Smokey Bear** rode on a fire engine in the Selma City Christmas Parade. **Smokey** also made several appearances at Dallas County schools to stress the importance of fire prevention.

Perry County Ranger **David Stewart** and **Dr. Thomas Wilson** of the Marion Tree Commission planted 30 sugar maples and oaks on public property in Marion.

Perry County AFC personnel presented a program on urban forestry to several Perry County garden clubs.

Smokey Bear visited the **Marion Elementary School** and with help from **David Stewart** and **Tommy Aultman**, presented a program on fire prevention to 102 students.

On December 2 **Wilcox County AFC** personnel presented a program on the importance of forestry as a natural resource to a group of students at **W.J. Jones High School**.

Smokey Bear walked in the **Camden Christmas Parade** giving out fire prevention materials.

The **Wilcox County Forestry Planning Committee** held their annual Tree-Give-Away in Camden and Pine Hill on December 16. This year's species were shumard oak, nuttall oak, bicolor, autumn olive, persimmon and pine.

DISTRICT

6

Geneva County held a meeting on pine straw production in November. **"Pop" Miller**, from Georgia, was present to discuss straw production and baling procedures. The meeting was very informative and landowners from both Geneva and Houston County attended.

Geneva County also held their county wide Farm City Appreciation Supper in November with 186 landowners in attendance. During the meeting **Dr. Hoyt Childs** was recognized as this year's winner for the **Outstanding Forest Farmer in Geneva County**. The Childs family also had their **TREASURE Forest** recertified. Congratulations **Dr. and Mrs. Childs**.

District 6 recently held workshops in each of its seven counties to explain new reforestation standards to landowners who had signed up for the different cost share programs. District Forester **Franklin McAliley** and Management Specialist **Barry Lawrence** hosted the workshops that proved very informative.

Barry Lawrence hosted five income tax work-

shops throughout District 6 in November and December.

At the beginning of tree planting season District 6 held vendor training workshops—one in Geneva County and one in Pike County. These workshops were held to benefit landowners by increasing seedling survival and growth.

Supervisors and rangers from Pike, Barbour and Henry County attended a mixed stand management meeting in Russell County. Speakers included personnel from Game and Fish, **Graham Lockaby** from Auburn's School of Forestry and **Tom Cambre**, hardwood specialist with the AFC.

Henry County recently added another **TREASURE Forest** landowner to their family—**C.C. Vickery**, **Tim Kline** and **Will Maddox** were the certifying forester and biologist respectively.

Our condolences go to the family of **Mr. Colley Pittman**. Mr. Pittman, a **TREASURE Forest** landowner in Coffee County, passed away in September, 1988.

Recertifications in District 6 for the past quarter include **H.C. Jordan** of Dale County and **Henry B. Gray** of Barbour County.

Houston County landowners met in November to hear a presentation on "Subsoiling and Its Merits," presented by **Barry Lawrence**, district management specialist.

In Houston County, the property of **Buddy and Jean Huckaby** of Gordon was inspected in December and has become the most recent **TREASURE Forest**. Good luck Mr. and Mrs. Huckaby.

Dale County Supervisor **Bruce Hancock** and Ranger **Larry Doster** received an award for outstanding service towards FFA in Ozark; i.e. judging timber volumes, tree identification and wildlife habits.

DISTRICT

7

Brandon Burkett attended the **PALS** meeting in Montgomery November 10 where **Helen Hunt** presented awards. **Brandon**, along with **Madeline Hildreth**, also attended the **PALS** district chairmen's meeting on January 9.

On December 12, a meeting was held for landowners at the **Butler County Ranger** office. Planting specifications and survival checks for new programs were discussed. All **Butler County** personnel, along with **Gib Burke** from the District office, presented the program to 25 landowners.

Brandon Burkett presented a fire prevention program to sixth and seventh graders at **McKenzie School**.

On January 12, a Tree City meeting was held in Greenville. **Neil Letson** explained the new computerized tree inventory system. The committee voted to utilize the new system.

Brandon Burkett and **Madeline Hildreth** presented a program to the **Georgiana Garden Club** on January 12. The Tree City program was explained and a video on the subject was shown. Plans were made to meet with the city council to discuss Tree City.

Mike Farmer presented a program to **McKenzie High School's FFA**. He discussed the duties of the AFC and explained the **TREASURE Forest** program to 80 students on January 19.

Conecuh County Supervisor Victor Howell attended **Heritage Day** in Evergreen along with **Smokey** on November 5.

A landowners meeting was held on November 29 at the **David Burt Agriculture Building** in Evergreen. **Victor Howell**, **Leonard Fialko**, **Gib Burke** and **Eva Smelly** (ASCS) were on hand to discuss the new planting programs and guidelines.

Victor Howell and **Smokey** attended the December 17 Christmas Parade in Castleberry.

Victor Howell inspected and certified the Volunteer Fire Departments at **Brooklyn** and **Paul**.

James North and **Brandon Burkett** met with the **Evergreen Chamber of Commerce** in January to discuss the **PALS** program.

Victor Howell attended a meeting with Evergreen city administrators concerning recertification of Tree City.

A CRP landowner training session was held in Covington County on December 5. Cost-share programs, plans and practices were discussed. The AFC's role and planting guidelines were also explained.

On December 20, **Covington County Supervisor Tammy Ellis** presented the Tree City pro-

gram to the **Andalusia City Council**.

Covington County had two **TREASURE Forest** recertifications, **Bill Gider** and **Joe Rawls**.

On December 21 the **PALS** program was discussed with the **Andalusia Chamber of Commerce**. **Robert Dismukes**, **Brandon Burkett** and **Tammy Ellis** attended the meeting. **Tammy Ellis** also explained **PALS** to the mayor of Florida. **Dwight Rathel** attended annual **ASCS** meeting on November 15.

Tammy Ellis attended the **Opp** and **Andalusia** Christmas parades with **Smokey**.

Smokey, **Tim Money**, **David Kelley** and **Tony Chandler** were present at the **Highland Home Fire Department Appreciation Day** on October 8.

Tim Money, **David Kelley** and **Tony Chandler**, along with **Jerry Owen** from the **Covington County Fire Fighters Association**, helped with the **Dozier Ag Appreciation Day** on November 12. **Kenneth Cook** of **Dozier** won the chain saw competition.

On November 15, the **Crenshaw County Forestry Planning Committee** held a hunter education seminar at the **Agriculture Center**. Forty-three people attended the program where hunting regulations, safety and deer management were discussed. Assisting with the program were **Rhett Johnson** of **Solon Dixon**, **David Langhirst** of the **Alabama Wildlife Federation** and **James Thornhill** and **Tim Cosby** of the **Alabama Conservation Dept**.

Tim Money, **David Kelley** and **Tony Chandler** were at the **Farm City Kindergarten Tour** in **Luverne** on November 18. The 273 students and teachers got to meet **Smokey** and were shown the truck and tractor unit used for fire fighting.

On November 21 **Crenshaw** personnel and **Smokey** presented a program to 300 students at **Luverne Elementary School**.

On December 22 **Robert Dismukes**, **Brandon Burkett**, **Tim Money** and **Madeline Hildreth** discussed the **PALS** program with **Luverne's** city council president.

Escambia County Supervisor Robert Knowles worked with **Atmore** and **Flomaton** to complete their **Tree City** recertification.

Robert Knowles, **George Bolling** and **Smokey** presented programs at the **October 15 Fire Fighter's Appreciation Day** in **Porch** and **Atmore**.

Junior Stokes and **George Bolling** took **Smokey** to **North Brewton Elementary School** on October 29.

On January 10 **Robert Knowles** presented a program to the **Meadowbrook Garden Club** in **Brewton**.

On January 18 **Smokey**, **Ralph Barton**, **Richard Royce** and **Madeline Hildreth** gave a **Smokey Bear** program to kindergarten classes at **Rachel Patterson Elementary School** in **Atmore**.

Monroe County hosted a vendor training session in October. All **Monroe County** personnel along with **Gib Burke**, **Ruth Carden**, **Robert Dismukes** and **Robert Knowles** were present.

Gary Cole and **Steve Lloyd** attended the **Harvest Festival** in **Peterman** on November 19.

Steve Lloyd and **Johnny Kline** presented **Smokey** programs at two local kindergartens.

The **Monroe County Vocational Agriculture Forestry** students were taken on a tree planting check with **Monroe County** personnel. The class discussed how to check for proper planting.

A demonstration of the **Monroe County 4-wheeler** was given to the **Vocational Agriculture** students at the **ranger headquarters**. Fire fighting equipment was also presented.

A local **FIP** meeting was held at the **Monroe County Ranger** office. A tour of the office and an explanation of how it was built were included in the program.

Monroe County personnel are working with the **Agriculture center** to make a nature trail and outdoor classroom.

On January 9, **District Forester Robert Dismukes** left for a week at the **Alexander State Forest** in **Woodsworth**. He attended the **Southern Group of State Foresters Staff Development Training**.

St. Stephen's Preschool was given a program by **Robert Dismukes**.

The **District 7 Volunteer Fire Fighters Association** held its second meeting in **Evergreen** on January 13. The by-laws of the Association were finalized. President **John Hendricks** and Vice President **Grady J. Owens** presided over the meeting.

DISTRICT 8

During October two tree planting vendor training sessions were held in Baldwin and Mobile County. Speakers included David Hoge, Phillip Wilson, and Larry Grable

with the Alabama Forestry Commission and Grant Mattox, district conservationist with the AFC in Mobile County.

The Sixth Annual Southwest Alabama Forestry and Wildlife Festival was held November 5 in Jackson, Alabama. The Festival is sponsored by The Jackson Chamber of Commerce with Clarke County Forestry Rangers participating as judges in various forestry competitions.

Two Baldwin County TREASURE Forest landowners, J. Thomas Bradley and Smith Field Farms were recertified as TREASURE Forests on November 7.

Mobile County Forester Steve Lyda presented a "How a Tree Grows" program to forty 4th graders at Mary Valle School on November 7.

Melanie Curry, district I&E specialist, Charles Rawls, district fire specialist, and Lynn Booth, Baldwin County assistant county supervisor, attended the PALS quarterly meeting in Montgomery on November 10. Due to their interest in establishing a Washington County PALS Committee, Sarah Hazen, Washington County Extension agent and Hitover Hammac, solid waste officer in Washington County also attended the quarterly meeting.

John Haupt of Elberta was presented with his TREASURE Forest Certification on December 15 by Neil Letson, state urban forestry coordinator, Larry Grable, district management specialist, and John Martin, Baldwin County Forester.

John Martin worked with the City of Daphne in December to achieve Tree City, USA certification. This new certification brings the total to nine Tree Cities in Baldwin County.

A Tree Commission has been organized in Butler, Alabama; Mark Lowe, a forester in Butler, will serve as the chairman. Greg Kelseo, AFC forester in Choctaw County, along with Neil Letson, has been working with this group to establish long range goals, organizing tree give-aways, and coordinating Arbor Week activities.

During January, Choctaw County Ranger Raymond Skelton and Forester Greg Kelseo presented programs on the Forestry Commission's role in forestry to Tiger Cub Scouts and Weeblos.

DISTRICT 9

District 9's Annual Forestry Camp was held during November, 1988. AFC Biologist Rick Busch assisted Don Burdette, Tony Avery and Billy Rye instruct the students in multiple-use forest management. Other instructors were Bill Bustin, consultant forester, and Joe Namie, forestry instructor, Itawamba Jr. College. Calvin Farmer, district specialist with the State Department of Education, served as advisor. The camp was directed by Tony Avery, Kathy McCollum and Louise Bone.

Champion International Paper Company at Courtland has agreed to sponsor our 1989 Forestry Camp. Champion has made a generous donation to this educational project.

Charles Thompson, chairman of the Colbert County Commission and County Supervisor Danny Deaton attended the 1988 Helen Hunt Awards Program (PALS) in Montgomery, where Colbert County received the Helen Hunt Award in the state category.

The Colbert County chapter of PALS is cooperating with the Alabama Reunion and the Adopt-a-Mile program.

Danny Deaton, president of Pal of the Shoals, presented the President's Award for outstanding work in their community to the LaGrange Living History Association.

Three TREASURE Forest Awards were presented in Colbert County. Receiving awards were Dr. Howard Kelly, Dr. Jeff McCollum and David McVay.

District 9 employees have made a concentrated effort to promote the sale of seedlings grown in Alabama nurseries.

Productivity Division Director David Frederick, Productivity Forester David Hoge, and John Rice were in District 9 during January to review work in areas of productivity.

The Marion County office building has been completed. The office is on the site of the old building and will be called "The Hopkins Ranger Station" in memory of Hubert Hopkins.

Don Burdette and Steve McEachron have developed a program on global warming and the "greenhouse effect." This program was presented to students at Brooks School.

The Florence Garden Club is installing a central watering system in the wildflower garden at District 9.

Louise Bone, I&E coordinator, is serving on a Wildflower Society Committee working on landscaping the Hardee's Restaurant in Florence with wildflowers.

District 9 employees held a covered dish dinner as part of their Christmas Celebration.

Lauderdale County employees participated in the Christmas program held at Pope's Tavern, sponsored by the Florence Council of Garden Clubs, the Florence Garden Club and the Florence Historical Society.

Florence Tree Commission submitted their application for recertification (Florence) as a Tree City USA.

The Lauderdale County Association of Volunteer Fire Departments held its annual banquet and awards ceremony on January 10. Reggie Summerlin was the guest speaker. The fire-fighter of the year award was presented to Charlie Cook, chief at Underwood-Petersville VFD. Will Duncan, retiring chairman of the County Commission, received a plaque for his service and leadership to the citizens of Lauderdale County. H.H. "Jitterbug" Thomas, Oakland VFD, received a plaque for his years of meritorious service to his fellow workers and friends in the county and state.

Louise Bone attended a meeting in Red Bay where she talked about the "Trees for Trash" project, Tree City USA and PALS.

The Wal-Mart Stores in Florence and Muscle Shoals will participate in tree giveaway programs during Arbor Week. These programs consist of free trees, educational exhibits and educational materials for landowners.

Lee county AFC associates J.B. Coker, Randy Quick and Jimmy Kenney, in cooperation with the community of Farmville, held a meeting to form a new fire department in January. State Senator John Rice and State Representative G.J. Higgonbathum spoke at the meeting. Over 70 people attended.

Ten thousand improved loblolly pines were donated to the Elmore County Commission for the reclamation of a 12.5 acre landfield in the community of Central.

DISTRICT 10

Symposium on Management and Ecology of the Type. Meet at the Georgia Pacific Center. Call F. Thomas Lloyd, (803) 656-4683.

April 20—Barbour County, 6:30 p.m. Pinestraw Production and Marketing. Meet at the Clayton Courthouse. Call Don Van Houten, 775-3496.

May 10-12—Little Rock, AK. 48th Southern Forestry Conference and Annual Meeting of Forest Farmers Association, Excelsior Hotel. Theme: "The Future Outlook for Forestry in the South." Contact Forest Farmers Association, Box 95385, Atlanta, GA 30347, (404) 325-2954.

May 10—Little Rock, AK. Timber Tax Workshop for Timberland Owners, Excelsior Hotel. Sponsored by Forest Farmers Association and conducted by Dr. Harry Haney, Virginia Polytechnic Institute and State University. Contact

The 1989 Forestry Field Day in Bullock County at the Sedgefield Plantation is planned for April 18th. Subjects covered will be wildlife management, herbicides, duck pond management and forest tree management for the nursery until seedlings are self sufficient.

Montgomery County Ranger Tommy Wilson has been busy the past few months educating the students of Montgomery. He has given forestry programs at Bellingrath Jr. High, Goodwyn Jr. High, Floyd Elementary, Davis Elementary, Peterson Elementary, and Pintalla and Brewbaker Schools.

Elmore County Forest Landowner Association held a meeting in January to plan upcoming educational meetings and to set a tentative date for the annual TREASURE Forest tour. Upcoming events are TimberSale/Consultants, Lock Hunter, Timber Theft and Government Cost Share, Lynn Justiss, June 23; and TREASURE Forest Tour at S W Farms in Central Community. For more information, contact Elmore County Supervisor Lynn Justiss.

Lowndes County Ranger Juan Burnette spoke at Lowndes Middle School in Fort Deposit for Career Awareness Day.

PALS is in full swing. Five individuals have accepted county chairmanships. Edward H. Dennis, Jr., Elmore County; Mrs. Uralee Haynes, Lowndes County; Ruso Minnifield, Macon County; Janie Smith, Montgomery County; Peggy Weldon, Russell County.

The community of White Hall in Lowndes County adopted three miles of U.S. 80 as their part to help clean up Alabama under the Alabama Reunion Program, Adopt-a-Mile.

The Lee County Forestry Planning Committee annual breakfast was held Feb. 8. Newly certified TREASURE Forest Landowner Brian Blackburn was presented with his TREASURE Forest sign and certificate.

Montgomery County Ranger Johnny Mims gave a forest management program at Dunlap School.

I&E activities are in full swing in Bullock County. Radio PSA's on fire prevention, recreation, wildlife and water quality have been playing on a regular basis.

Tuskegee hosted the Farmer Conference February 15.

The Bullock County Landowner Association held a meeting on prescribe burning January 26. Speakers included AFC associates Robert Wiggins and Bruce Johnson and Dr. Peter Mount of Tuskegee University. Over 25 landowners attended.

Montgomery County Supervisor Bruce Johnson and county rangers Tommy Wilson and Johnny Mims attended the Montgomery County VFD Association meeting in December. Lee County Ranger Jimmy Kenney and his wife Jane presented an outstanding program on fire districts in Lee County. State Senator John Rice spoke at the meeting.

Bullock County Supervisor Otis French met with the Midway and Union Springs fire chiefs in January to establish a Fire Chiefs' Association.

Welcome to the new District 10 associates who filled the forestry worker positions. Carey King—Bullock, Billy Macgee—Elmore, Arthur Grant—Lowndes, John Parker—Macon, and David Adams—Montgomery. We are all glad to have them aboard.

Fire Specialist Cliff Cobb taught a basic fire behavior class to the new forestry workers recently hired.

Several District 10 associates attended a Pro-

ject Learning Tree facilitators workshop at Oak Mountain State Park in January. Attending were Bullock County Supervisor Otis French, Montgomery County Ranger Johnny Mims, and Macon County Ranger Charles Baldwin.

A Turkey Management Program was held in Phenix City at the Extension Office February 28.

Governor Hunt sent a Rural Development Initiative Task Force to Bullock County February 15-16 to study rural development needs. The Bullock County Forestry Planning Committee will meet with the Task Force to discuss forestry development.

Macon County Supervisor Jerry McGhee, Fire Specialist Cliff Cobb and RCFP Section Chief Ray Tucker spoke at a rural community fire protection meeting January 10. Subjects covered were 1989 RCFP grant requirements, proposed volunteer fire department radio system and how the AFC assists departments in organizing and in acquiring equipment. Attendees included Macon County fire chiefs, emergency management personnel, water authority managers, Commissioners Frank Lee and Albert Daniels, and other concerned citizens. Over 35 people attended.

District Urban Forester Sharon Clark attended a Maujet Tree Injection Seminar in Birmingham. Union Springs celebrated Arbor Day, February 21. Mayor Wayne Chancey, Union Camp representative Cal Avery, and TREASURE Forest landowner Aaron Sellers spoke at the ceremony held at the city park.

Tuskegee University hosted the Annual High School Woodsmen Competition March 4.

Fire Specialist Cliff Cobb has been certified as a handcuff instructor and attended a Use of Force Seminar at the University of Alabama.

Lee County recognized Opelika as its second Tree City February 21.

Smokey Bear has been busy lately. Smokey appeared in the Annual Montgomery Christmas Parade, presented a plaque to Represented Perry Hooper, Jr., spoke at Peter Crump Elementary and appeared on the 6:00 news.

The city of Montgomery celebrated Arbor Day on February 26.

TREASURE Forest landowners Ruth and William Land were recognized at the Annual Area Forestry Meeting in Russell County at Cedar Heights Plantation on November 9.

Cliff Cobb is busy working on three timber theft cases in Macon and Bullock Counties. He recently developed the District Law Enforcement Plan and Handbook for each county office.

District Staff Forester Sharon Clark and Training Section Associate Juanita Manning have been working on the new ladies uniforms. Hopefully, the women of the AFC will have a new, professional uniform in the next few months.

The Wetumpka Tree Commission held their Arbor Day ceremony February 23. The ceremony included the replacement of trees at previous planting sights which were lost due to last year's drought.

Lowndes County forest landowners Elliot P. Broughton and Rollins C. Broughton donated the Christmas Trees which stood in front of the State Capitol and the Governor's Mansion. Lowndes County Supervisor Bill Davis, Montgomery County Ranger Tommy Wilson, District Fire Specialist Cliff Cobb, District Staff Forester Sharon Clark and State Ground Horticulturist Danny Percival helped locate, select, cut down and get the trees to Montgomery.

The Montgomery County Forestry Planning Committee hosted a prescribe burn demonstration February 8 in the LaPine area. ♣

CALENDAR*

April 8-9—Fort Deposit. 18th Annual Calico Fort Arts and Crafts Fair, 9 a.m.-5 p.m. Contact Fort Deposit Arts Council, 277-8589 or Frieda Cross, 227-4411.

April 12—Madison County, 7 p.m. Landowner workshop at Stone Agricultural Building in Huntsville. "Integrated Forestry and Wildlife Management" with Forester/Biologist Rick Busch. Call Mark Sullivan, 532-3565.

April 18—Bullock County, 8:30 a.m. Natural Resources Field Day at Sedgefield Plantation. Lunch provided. Call Dr. Mount, 727-8809.

April 19-19—Atlanta, GA. Pine-Hardwood Mixtures: A

Forest Farmers Association, Box 95385, Atlanta, GA. 30347, (404) 325-2954.

August 10-11—Montgomery. Sixth Alabama Landowner and TREASURE Forest Conference. Plan now to attend. Registration form and more details in Summer issue of *Alabama's TREASURED Forests*.

October 24-26—Birmingham. Timber Bridge Conference to address problem of deteriorating bridges in rural Alabama. Sheraton Perimeter Hotel. Contact Jim Gober, 798-3227 or Dr. John Haygreen, 826-4050. ♣

Any member agency of the Alabama Forestry Planning Committee can be contacted for more information about listings in this section.



Trees and people can coexist in our cities. Each needs each other. Each depends on each other.

The City Forest Needs Managing Also

by NEIL LETSON, State Urban Forestry Coordinator

Recently, I was driving through an area of Alabama and began to notice the trees. It was obvious that many had been planted by the human hand. It was also obvious that many were planted by nature.

Yet another thing struck me about this forest. Most of the trees were very old. Each had reached its peak height and seemed now to almost touch the sky. As I looked closer, something else stood out. It seemed like nothing had ever been done to help these trees. They had been left on their own. The results of this were clear. One by one the trees were slowly dying.

Everywhere I looked were vacuums where a majestic tree had once stood. Because there was no active replanting program, this once magnificent forest was disappearing. It might not happen overnight, but in my lifetime, I knew it would be gone unless something could be done now.

The situation just described is true. But what may be surprising to many people is where this forest is located—not in one of our rural areas, but in one of our cities. In fact, this description would fit almost all of our state's cities.

The condition of Alabama's urban forests is on the decline. "But what is an urban forest? Forests are in the country, not in our cities," we often hear. This is a good question because one reason our cities' trees are in such trouble is that most of us don't associate a forest with a city. The feeling is that cities were built to replace the forest, not to coexist with it. But next time you fly over one of Alabama's urban areas, look below. You'll see a lot of green growing in that concrete jungle.

The key to a healthy, productive urban forest can be found in rural forestry principles. What are these principles? In a word—management. For generations man has managed the forest to provide

needed benefits. History has its share of man's abuse of the forest, but in today's world this concept has developed into such an art and science that properly done, our rural forests can produce a sustained yield of resource values indefinitely. The skillful management of our urban forests can do the same thing. Our cities can sustain an urban forest quite capable of improving quality of life. To do so means borrowing five elements from the rural forest management principle. These are planning, planting, maintenance, removal, and replacement.

Planning is the first step in managing the urban forest. It won't be as easy, however, as in the rural forest where there is usually only one person to make decisions. Our cities have large populations. Each person has his own degree of interest. The potential for conflict is enormous. The need for a representative entity to assume the role of planning is crucial. The best choice for this job is the city



Tree removal shouldn't end with a stump. A good tree program would have removed this stump and replaced it with a new tree.

government. City Hall has the resources, responsibility, and the authority to provide direction to an urban forestry program. Successful planning involves organization, goal-setting, inventories, plan writing, and evaluation.

Planting is the most popular city tree activity. Yet, our cities are not keeping up with planting needs. A nationwide study revealed that for every four trees taken down, only one is replaced. And only half of these survive the first five years. Successful planting involves site evaluation, species diversity, proper planting techniques, and follow-up care.

Maintenance is the most neglected management practice. There is a perception that trees can take care of themselves. As a result, most maintenance is done on a crisis basis. This results in a greater cost both financially and to the health of the tree. Preventive maintenance recognizes problems when the tree is young and easier to correct. Successful maintenance involves pruning, insect

In today's world of forest management,

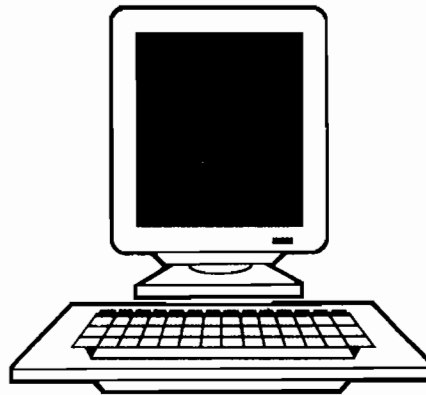
Computers Are Becoming Necessary Tools

by TOMMY PATTERSON, Chief, Forest Resources Data Processing

Microcomputers have become as common as calculators on today's business desk and are included on the list of necessary tools for most professional foresters. Foresters today are relied on to provide forest resource information to private, public and corporate forestland owners in much the same way a stock broker advises clients. The amount of information requested can be quite extensive and must be both accurate and timely. Thus the power of a computer has become essential to forest management.

The Alabama Forestry Commission (AFC) has made computers available to our foresters for several years. These machines are used like many other tools to assist in making forest management plans for our landowner clients. During that time, we have refined our use of various computer programs to become a comprehensive developmental forest management package.

Our foresters begin the task of developing a forest management plan by first



performing an inventory of the forest resource. Two different computer programs are used to record and analyze this forest inventory.

One of these programs is the TVA Inventory Processor. Following a timber cruise of the forest property, the forester enters the data collected from the cruise (i.e. tree species, heights, diameters) using Inventory Processor. Once the data is entered, various reports can be printed

that reveal the current status of the forest resource. These reports give information relating to timber volumes by species and sizes, timber density by species and size, volume and species by acre or stand or total acres, and can even estimate future growth rates.

The other forest inventory program we use is the Basal Area Cruise Program. This is a quicker inventory system since the forester collects and enters data relating only to forest stand density and not information about timber volume. This program will not produce timber volume reports and would not be used in timber sales, but will provide reports about how the timber is distributed on the property. This program is generally used to determine if a forest stand needs some sort of harvest.

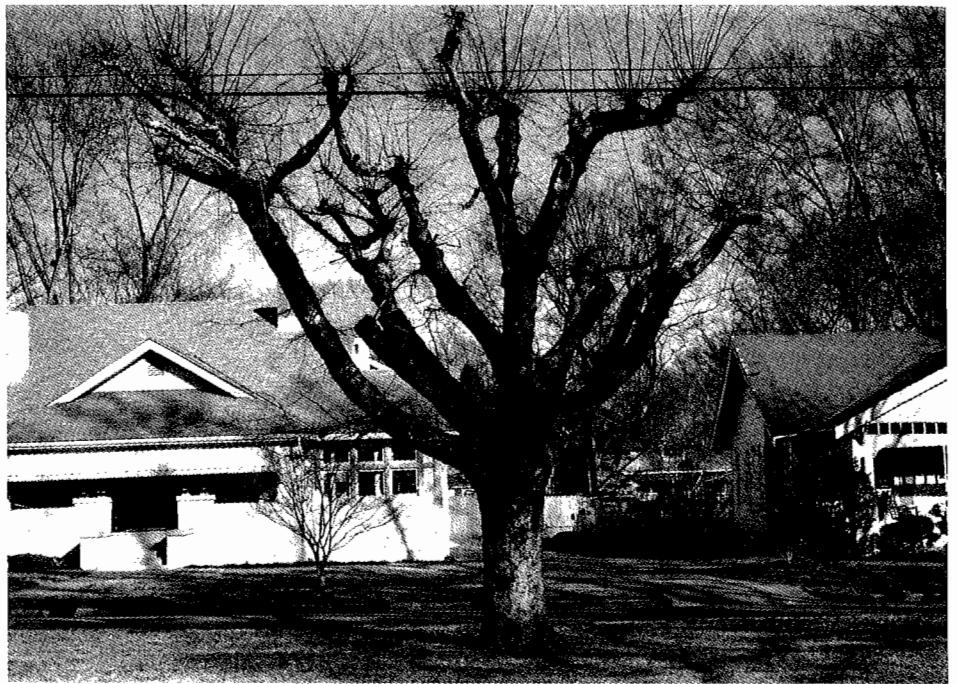
Once a forest inventory has been accomplished, two other programs are used to help the forester develop the best management recommendations. If the forest stand is of a pine species sus-

and disease control, damage control, and growth control.

Removal is another overlooked management practice. In most cases, it is done long after first needed. Many of our state's cities have trees standing that will never recover their shape, form, or vigor. They need to come down so that the next generation of shade trees can take over. Successful removal involves a decision making process, complete harvesting, utilization, and/or disposal.

Replacement completes the cycle of the urban forest. It takes us back to the first phase of a good urban forestry management program. It requires planning and follow through. Every tree removed should be replaced or else there should be a good reason not to.

Sixty-five per cent of Alabama's citizens live in our cities. Seeing that city trees are well managed will improve the quality of life for these people. Using rural forest management principles in the urban forest can make this happen. ♣



Some tree practices, like topping mature trees, can do more harm than good. This tree has lost its character, has a greater rate of decay, and may become a hazard.

ceptible to southern pine beetle infestation, then the SPB Hazard Rating Program is used. This program analyzes the forest stand as described by the forester and reports as to that stand's likeliness of being attacked by beetles. The forester will consider this rating when making management recommendations.

The second program used in developing recommendations is the TVA YIELD Program. YIELD is a financial and timber analysis program. Through YIELD, the forester describes the current forest stand conditions as were reported by the inventory programs. Items such as acres, species and density are entered to allow timber volume projections to be made. Local and current financial information is entered, such as timber sale prices, forest management costs, tax information, inflation rates and even alternate investment rates.

The forester is then given the opportunity to simulate different management recommendations through the program and see the results immediately. The abilities of this one program are probably more important than any other tool developed for foresters. Without this simulation program, a forester would have to wait many years just to see if his recommendations were correct. Now he can not only determine if his recommendation is correct, but also how correct. YIELD allows our foresters to play "what if" games with a forest stand. He can see the results of "what if I let this

stand grow seven more years?" or "what if I harvest a third of the stand now?" and make recommendations accordingly.

The financial analysis performed by YIELD allows the forester and landowner to compare a forest investment with any other type financial investment by reporting rates of return and cash flow. It also reflects the cost or income produced by changing management recommendations.

Once the forester has used these analytical programs to help determine the best recommendations for the landowner, a word processing program with a pre-created template is accessed on the computer. This template consists of many fill-in-the-blank forms where the forest management recommendations are placed. Using a standard template assures that the forester considers all aspects of forest management and assures a standard level of acceptance throughout the organization. The program allows the forester to easily add any comments or recommendations not usually covered in the standard template. When completed, this program prints a very readable and professional forest management plan customized for the landowner.

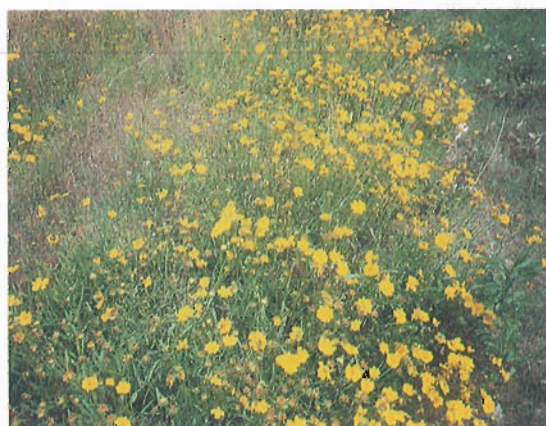
The forest management plan is designed to be as short and concise as possible so it can be easily read. Some plans require only brief statements about the recommendations. Others, however, may require detailed information concerning a variety of forest management topics.

To serve this need, the Management Information Message System was developed. This computer program has been referred to by some as the encyclopedia of forestry on disk. The program contains about 150 documents of one to two pages long concerning just about every phase of forest management. The program user can select from a menu any of the messages to be viewed or printed. The printed messages are added as an addendum to the forest management plan when needed, to provide additional or more detailed information about the recommendations.

Just recently, a new program has been made available to our foresters which allows them to create a computerized property map to include within their management plans. The program requires that azimuths or bearings and horizontal distances be known for all sides of the map to be printed. These measurements can usually be obtained from the property deed to map the boundary lines but must be measured when mapping individual forest stands within the property. The program allows the map to be annotated and computes acreage. This program is still in the testing stage to determine its ultimate usefulness.

The Alabama Forestry Commission is proud of the service our people are providing to the citizens of our state. We are ever striving to improve that service and believe that the use of the latest computer technology will help us achieve that goal. ♣

Wildflowers for Alabama



by RAY DICKENS, Department of Agronomy and Soils, Auburn University

Wildflowers are becoming increasingly popular throughout the nation, and Alabama is no exception. Their adaptability makes many wildflowers easy to establish and maintain, while some have very demanding environmental and ecological requirements and are not for beginners. Wildflowers come in a large range of colors, sizes and types.

We are currently evaluating numerous

wildflower species throughout Alabama as part of a research project funded by the Alabama Highway Department. Results of these studies should provide necessary information for making decisions concerning the possible role of wildflowers in the department's roadside vegetation management program. Preliminary results are very promising at this point.

I make no claim to be an expert in this

field, but the following are some suggestions based on our experiences and information gathered from the literature which may help persons attempting to establish wildflowers for the first time.

Where to Plant:

Wildflowers, like their cultivated counterparts, vary greatly, and species exist for most any location or environ-

ment. Some places to consider are roadsides, open pastures or meadows, in home gardens, or in a wildflower garden. In general, most wildflowers need full sunlight to do well, but some species do best in partial shade conditions.

When to Plant

Wildflowers can be successfully planted most any time that adequate moisture will be available for their germination and establishment. Fall planting has given the most dependable results in our tests. It gives many of the cool season species a chance to germinate and become well established before they encounter the high temperatures and drought we often experience during our typical Alabama summers. If planted late enough in the fall, the warm season species will not germinate until the temperature is suitable the following spring.

How to Plant and Manage

Mow the existing vegetation as closely as possible and remove the clippings. Do not attempt to establish wildflowers in stands of cool season grasses such as tall fescue. First, kill the grass with a herbicide such as glyphosate (**ROUNDUP**). The warm season grasses such as bahia grass and bermuda grass will not cause serious problems at this time because they will be dormant. The seed can be distributed by hand and raked into the soil by hand on small areas. On large areas the seed should be drilled into the soil with a minimum of soil disturbance. Thorough soil preparation usually causes an increase in the competition from other plant species,

Suggested Commercially Available Wildflowers for Alabama		
Species	Light Conditions	Seeding Rate Per Acre
Annuals		
Drummond Phlox	Full Sun	8 pounds
Plains Coreopsis	Full Sun	2 pounds
Indian Blanket	Full Sun	10 pounds
Cornflower	Full Sun/Partial Shade	4 pounds
Perennials		
Lance-Leafed Coreopsis	Partial Shade/Full Sun	10 pounds
Moss Verbena	Full Sun	6 pounds
Mexican Hat	Full Sun	2 pounds
Black-eyed Susan	Full Sun	2 pounds
Purple Coneflower	Full Sun	12 pounds
Ox-Eye Display	Full Sun/Partial Shade	5 pounds

and results in poor establishment of the desired wildflowers. It is important, however, that the seed be put in contact with the bare soil, and not left on the thatch surface.

Fertilization is usually not necessary, as most wildflowers compete most effectively with other plants under low to moderate fertility conditions. Also, too much fertilizer nitrogen may cause excessive vegetative growth at the expense of flower production.

Control of grassy weeds such as crabgrass or common bermuda grass can be easily accomplished by postemergence applications of selective grass control materials. See your local Cooperative Extension Service office for specific recommendations. ♣

Sources for Wildflower Seeds

Wildseed Incorporated
P.O. Box 308
Eagle Lake, TX 77434
1-800-848-0078.

Environmental Seed Producers, Inc.
P.O. Box 5904
Elmonte, CA 91734
(213) 442-3330.

Applewood Seed Co.
5830 Vivian St.
Arvada, CO 80002
(303) 431-6283.

YOU
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In Pictures!

The St. Clair County Forestry Planning Committee was the winner of the Best Dressed Sign Contest. This sign, located on Alabama Highway 231 north of Pell City, was adopted by the Headstart class at Coal City School. Pictured to the right are members of that class.



Alabama's First Forest—a Historical Reflection

by GARY M. FAULKNER, Alabama Forestry Commission

In pre-historic time, the area we now call Alabama was one of the more densely populated areas of North America. There was a maze of distinctly marked forest trails connecting the many Indian towns and villages, where formed interconnecting links in the complex foot-highways that reached the Eastern Seaway and the Great Lakes country.

Authority has it that "Alabama," when translated from Choctaw, means "the thicket clearers." This translation gives a clue to the first acts of man which affected the forested area of Alabama, and also of the South.

The Choctaws were farmers and hunters. Their crops consisted of maize, beans, squash, pumpkins, sweet potatoes, and tobacco. They had no knowledge of fertilizer and had no efficient method for clearing land in their primitive agriculture, except for fire. The aboriginal farming in the Southeast led to continued clearing of new lands and abandoning of old fields.

This land, if left undisturbed for a generation or two, would have reverted to forest. But the land was not left undisturbed. As previously mentioned, the Indians burned the woods for centuries before the Europeans arrived in North America. They commonly burned woodlands and the open tracts as well, which also became favorite hunting grounds. Based on old reports, burning was so common and widespread that it would have been very unlikely that anything cleared or abandoned had a chance to revert to forest. Severe burning kept the forest open and clear of underbrush which encouraged the growth of grass and other plants, browse for deer and other game.

There were also persistent reports, on the part of early travelers, of the "pale" of smoke which hung constantly over the entire Southeastern region. Both Indians and settlers burned the forests to allow for agricultural pursuits and animal husbandry.

Interestingly, the fields adjacent to the ancient Apalachula in Russell County were described by William Bartram as "stretching beyond the scope of sight."

It is very likely that the open country was steadily increasing, and this aboriginal deforestation had been in progress for a long time—for millenia rather than centuries. This open country must have constituted a considerable part of the early Southeast. The maximum amount of cleared land was probably reached at a time before contact was made between Indians and the Europeans and thereafter, as the Indians were relocated and displaced from many regions. Therefore, the burning decreased, causing a diminishing area of cleared land with reforestation.

Contrary to popular belief, there was undoubtedly much more "forest primeval" in 1850 than in 1650. From early records, it is a reasonable conclusion that much of the so-called virgin timber, outside the bottom lands, developed after the coming of the first European to America. While the early settlers did some burning, many areas of tree growth escaped in the ravages of fire, and provided a source of seed to reforest the open lands. Given some protection, these trees began to multiply and grow remarkably well. Thus the first forest of Alabama, parallel with the initial settlement of Europeans to America, emerged as an essential economic resource.

The territory of Alabama was blessed with a bounty of natural resources. Fortunately, early observations were recorded by explorers, geographers, educators, and the like. Early reports had several consistent observations. These men found two types of forest and encountered open treeless lands throughout the Southeast.

The first type of forest encountered was "high and dense." This forest was predominately mature timber and provided difficulty in travel by its heavy undergrowth. These were Alabama's virgin forests that were relatively undisturbed by man. The extent of these virgin forests are unknown and are inadequately recorded, but it is thought these forests were not widespread. The forest of this pre-colonial time apparently was not so universal as previously conceived.

The second type of forest was a sunlit

wood, or "open airy grove" as described by William Bartram. This forest type was clear of undergrowth and had spacious room between trees. This was described to the extent that a horse could freely gallop from "glade to glade."

There were many observers of the forests of Alabama. Among the earliest was DeSoto, the Spanish explorer, who traveled across the territories of Alabama and the Southeast. It is interesting to note that he encountered strongly fortified Indian towns. It is assumed that from this early account that the virgin forests were logged and utilized to some extent before the "white men" explored and settled this region. There is one report of Central Alabama in September 1686, from the expedition led by Marcos Delgado who traveled from Florida to a Creek Indian settlement on the Coosa and Tallapoosa Rivers. His journal tells of various land and vegetation in Alabama, such as "a plain of open pine woods," and "a thick swamp of large trees."

The most valuable 18th century report on forest types in the territories of the Southeast came from William Bartram. Bartram traveled extensively in Alabama from 1773 to 1778. He was a keen observer and an excellent writer. In his journal, there are as many as fifty descriptions of the forest such as "extensive savannas," "vast meadows," and "large grassy plains." Traveling from Mobile to the northeastern point of Montgomery County, he observed that the forest was no monotonous pinery and that there was plenty of open country. Bartram writes, "This forest consists chiefly of oaks, hickory, ash, sourgum, sweetgum, beech, mulberry, scarlet maple, black walnut, dogwood, Cornus Florida, Aesculus paria, Prunus indica, Plelea, and an abundance of chestnut on the hills, with Pinus taeda and Pinus lutea." The general character of the forest was also described. "During our progress over this vast forest we crossed extensive open plains, the soil generally producing few trees and shrubs or undergrowth." Bartram crossed one of the branches of the Escambia River in Mon-

roe County and observed the elevation perceptibly dropping to the gulf. He described the landscape "very different from what had been observed since leaving the Creek nation, and not unlike the low counties of Carolina, being in fact one vast flat grassy savanna and cane meadow, intersected and variously scrolled over with narrow forest and grooves." Bartram traveled up the river from Mobile approximately 30 miles and observed cypress of "astonishing magnitude." He noted that the magnolia grand flora (*Populus Magnolia*) "reigns sovereign of the forests."

Major Swan of the U. S. Army spent two months in the fall of 1790 with the Creek Indians and made a brief report of the country near the Alabama River in Montgomery and Lowndes counties. He writes "the land . . . was very beautiful with high clear fields along the banks. The soil being of dark brown color, producing most abundantly, and well-timbered with oaks, mulberry, poplar, wild cherry, wild locust, laurel, cypress, bay, gum, cedar, iron, and white oakwoods."

Mr. Stephen Elliott (1771-1830), who wrote *Southern Botany of 1824* (a sketch of the botany of South Carolina and Georgia), made the statement that the district with the finest forest in the U.S. is the "country which encloses the Alabama and its tributaries." The author visited Central Alabama in the summer and fall of 1818.

During the years 1818 and 1819, a man by the name of John Landreth was employed by the U.S. Board of Navy Commissioners to survey the live oak and red cedar. These species of wood have characteristics particularly useful in the construction of warships, essential to the shipbuilding industry at that time. Landreth's duties were to reserve sections of land where live oak and red cedar grew in abundance. The search for these species of trees took him to the southern part of Clarke County which then was part of Monroe County, where he found "large tracts of red cedar and elegant white oak."

Dr. Mohr, in his book *The Timber Pines of the Southern United States*, 1897, described the longleaf forests between the Alabama and Tombigbee Rivers as being unsurpassed within the range of species. He states "by careful estimates made upon a number of plots, selected at random, the yield of single acre will vary from 10,000 to 18,000 feet and above all merchantable timber . . . the lowlands of the flood plain of the Alabama and Tombigbee Rivers and of

their larger tributaries are heavily timbered. From estimates made in various districts it appears that fully 6,000 feet of merchantable timber (hardwoods) can be safely assumed as to the average yield per acre." Dr. Mohr described the cypress which grew in the bottomlands along the Mobile River and the Tombigbee and Alabama Rivers. "The mighty trunks rise to a total height of from 100 to 120 feet and over, with a diameter, measured above the buttresses which expand the bases, of from three to over five feet. The annual rings of growth are extremely narrow and difficult to count. On close investigation the age of full-grown trees can be estimated to vary between 300 and 500 years." Dr. Mohr also recorded valuable information concerning pine timber that proved to be an incentive for the lumber industry to develop and expand in Alabama during the late 1800's and early 1900's. He states that the



growth of pine timber, with respect to quality and quantity per acre, was remarkably consistent throughout the states of South Carolina, Georgia and Alabama. While Georgia took an early lead in pine production and utilization, hence the name "Georgia Pine," the average density, and probably quality of growth, increased to the west. Therefore, the Georgia forests produced

higher averages per acre than those of South Carolina; Alabama forests were denser than those of Georgia or northern Florida; Mississippi longleaf forests were heavier, and the western portion of the forests lying west of the Pearl River were still heavier.

Mr. Defebaugh, from his publication of the entire Southern pine region *History of the Lumber Industry*, published in 1906, made some interesting observations concerning pine timber in the South and its range. He writes, "The most valuable of all the Southern pines, though perhaps not adopted to the most diversified uses, is the longleaf pine: the famous American pitch pine of foreign trade, or the Georgia pine of domestic commerce up to the time when then the more definite term, longleaf pine, was adopted. This wood was principally confined to a belt about 125 miles in width roughly following the coast from the mouth of Chesapeake Bay to the Trinity River in Texas. The distribution of this wood was continuous from the first-named point to western Mississippi."

Many individuals have contributed to the description of Alabama's early forest history, and only a few have been mentioned. What observations we have reviewed paints a colorful portrait of Alabama's first forest resources.

Alabama's rich forestry heritage is important for every citizen in the state to appreciate and understand. A comprehensive documentation of her forestry contribution is needed for future generations of Alabama. Such a published document would ensure the preservation of Alabama's forestry inheritance. ♣

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Special Tax Note

Did You Receive CRP Payments?

Did you receive money from the Conservation Reserve Program last year? If so, the IRS has changed the rules again. This time, though, the change is actually in our favor.

If you planted trees under CRP, any payment you received is considered income and must be included in your taxable income.

If you are a farmer and file Schedule F, you are entitled to a special break. Farmers may treat expenditures for soil and water conservation as expenses rather than capitalize them. This includes all CRP costs. All tree planting costs are put on Line 15 of Schedule F and deducted fully against gross farm income. However, this deduction is limited to 25 percent of gross farm income.

If the cost is more than 25 percent, or if you do not use Schedule F, the non-deducted cost can be used to apply for

the reforestation tax credit and amortization. The tax credit equals 10 percent of the first \$10,000 of reforestation costs. This is reported on Form 3468. In addition, you can amortize, or write off, 95 percent of the cost over the next 7 years. These deductions are classified as adjustments to income and are claimed on the line for adjustments on the 1040 form.

To show how much these tax breaks can lower the cost of tree planting, let's look at a typical CRP case. Assume 40 acres of row crop land in South Alabama that needs to be bush hogged, machine planted to loblolly pine and sprayed for herbaceous weed control. Total cost would be about \$100 per acre or \$4,000.

The CRP cost share payment would be \$52 per acre or \$2,080. This payment must be counted as income, which would cost another \$582.40 in

taxes. If there is enough other farm income, the entire \$4,000 can be deducted on Schedule F, saving you \$1,120 in taxes. In addition, the farmer is still eligible for the tax credit of 10 percent for a direct savings of \$400.

So, the bottom line would be ~~\$4,000~~ in costs less ~~\$2,080~~ in cost share, plus \$582.40 in new taxes, less \$1,120 in tax savings, less ~~\$400~~ in tax credits. After all that arithmetic, the final out of pocket cost for the plantation would be ~~\$982.40~~, or ~~\$24.56~~ per acre. The first year CRP rental payment of \$40-45 would more than cover that cost.

If herbicide work was not needed, the after tax cost of a CRP plantation could be as low as \$17 per acre.

These are very low costs for a project that will bring your family benefits over the next 35 years. What a cheap way to build your TREASURE!



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