Alabama's TREASURED Forests

Winter · 1988

STATE FORESTER'S MESSAGE

by C. W. MOODY

Most times I feel optimistic about forestry in Alabama and what we are able to achieve. After all, forestry is our number one manufacturing industry, and our forests support this industry as well as make significant additional contributions to Alabama. I could go on and list many other positive things about forestry, the efforts of the Alabama Forestry Commission, and action by TREASURE Forest landowners which are all beneficial to Alabama and tend to give reason for optimism.

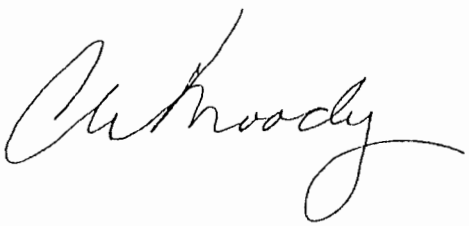
For the last seventeen years, it has been my duty to make an annual pilgrimage in search of budget support for the Alabama Forestry Commission. In each of the seventeen years, there has been some kind of funding crisis in the state. Whether related to prisons, medicaid, pensions and securities, highways, mental health, aid to dependent children, education, or teachers' salaries—I can't remember a *single* year in which we didn't have a crisis requiring attention and which absorbed all the available funding. We were not able to make the necessary commitments, as I saw them anyway, to forestry in Alabama. The more I think about this, the more I have the feeling that we have wound up with the *cart before the horse*! We have crises in social programs which demand funding necessary to alleviate these crises. Most of these crises resolutions do not, in turn, replace any of the funding to the state's wealth base as forestry would do.

My specific case in point is that we could be producing one hundred percent more timber in Alabama than we are currently producing if we had made the right decisions and taken the right steps during past years. I think there are no questions that forest industry seeks adequate supplies and that if we produce more timber, we will attract more forest industry. Forest industry provides jobs and generates wealth and taxes.

Greater investments by the state of Alabama in its forest resource, along with the private nonindustrial landowners who own 75 percent of the forestland, would have paid tremendous dividends. I'm not sure what our crisis will be this time, but had we adequately funded forestry programs, we would have more money to pay for it.

We are in the beginning stages of another budget pilgrimage. I shall try again to ensure that adequate attention is given to the protection and development of our forest resource wealth base. TREASURE Forest landowners have a right to such attention as they attempt to develop and watch over our forest resources for all Alabamians to receive the benefits. Join me in this battle. Let your voice be heard.

Sincerely,



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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: Occasionally snow comes to Dixie as shown in this photo taken in Cullman County by Coleen Vansant.

Alabama's TREASURED Forests

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CONTENTS

DEPARTMENTS

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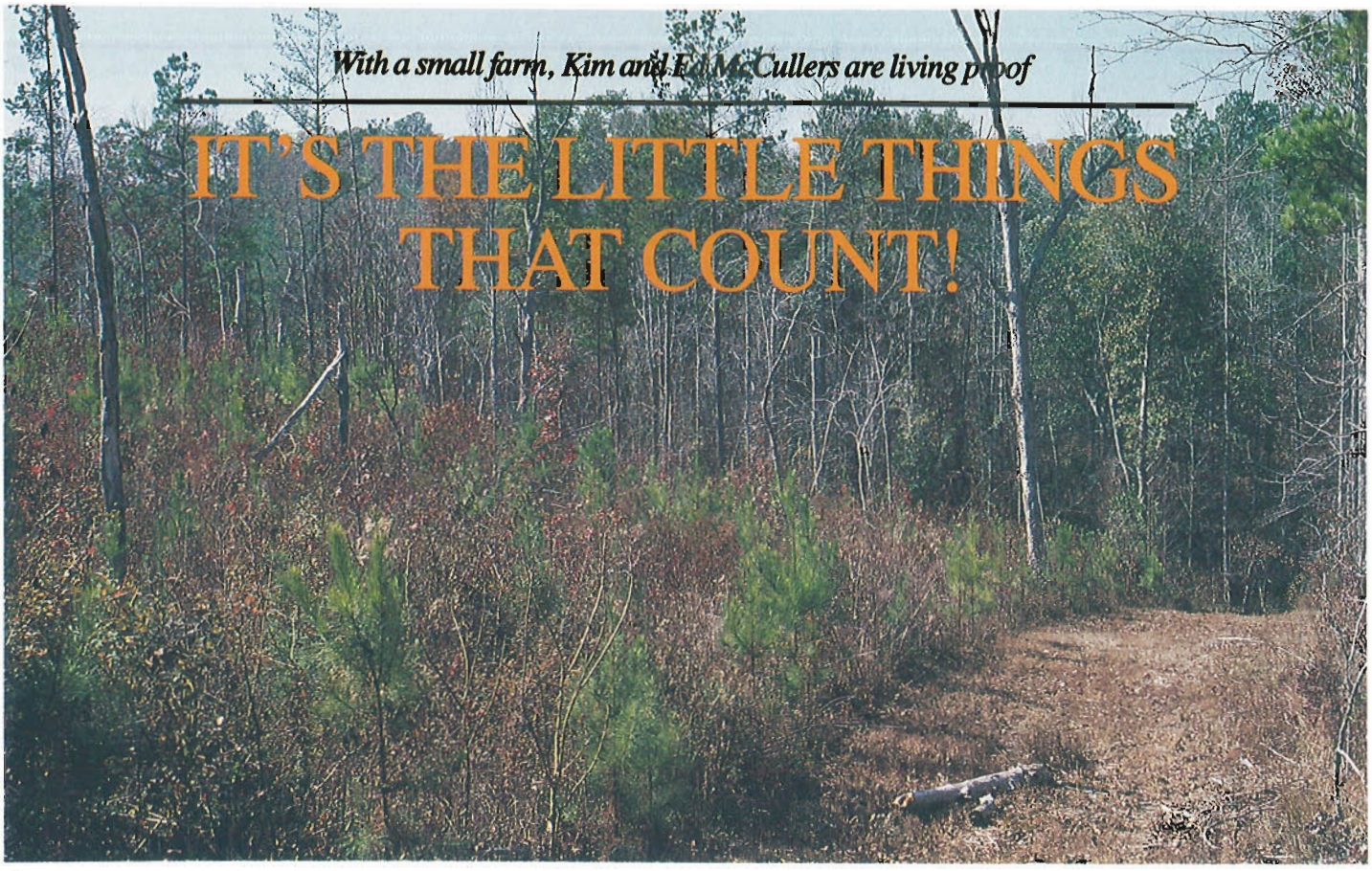
With a small farm, Kim and Ed McCullers are living proof

IT'S THE LITTLE THINGS THAT COUNT!



Fire lane protects young trees

Six year old pines—McCullers first plot

by COLEEN VANSANT, Contributing Editor

EDWARD MCCULLERS WILL BE WELL remembered by those attending the Fourth Alabama Landowner and TREASURE Forest Conference held recently in Birmingham. He's the gentleman that jumped straight out of his seat, let out a shout of joy, and zig-zagged his way around tables and chairs to the front of the auditorium when his name was called as the winner of the 1987 Helene Mosley Memorial TREASURE Forest Award.

He was a happy man, and he had due right to be. His 130-acre "Weoka Creek Farm" in Elmore County had just won the most prestigious award available to an Alabama landowner. He was now *the best of the best*.

Weoka Creek, nestled along a hillside in the Titus community of north central Elmore County, gets its name from the creek that runs near its northeastern boundary. For years the rolling acres of Weoka Creek was part of a 450-acre tract owned and farmed by McCullers' grandfather. Cotton, corn, and cattle were once raised along the rolling slopes, where thriving young pine timber now stands.

A Very Good Year

The 34-year-old McCullers acquired the land from his cousin in 1979—a year of good fortune he well remembers. During that year he bought his farm, married his wife Kim, and became employed as a fire fighter with the City of Montgomery.

Although he was raised on a farm nearby and familiar with farm life, McCullers realized he needed help in managing his property. After laying out for several years, the farm had virtually grown up and required a plan to make "every acre pay for itself." With assistance from his great-uncle Ray Carpenter (a retired Alabama Forestry Commission ranger) and Elmore County Supervisor Lynn Justice, McCullers began managing his farm under the Woodland Resource Analysis Program (WRAP) administered by the Tennessee Valley Authority and the Alabama Forestry Commission. Shortly afterward, his WRAP Plan was converted to a TREASURE Forest management plan.

This was only the beginning. By contacting every agricultural agency available, McCullers educated himself on what he needed to do to best manage his farm as well as what resources he could tap for technical and financial assistance.

A New Crop Is Planted

In 1981, with timber and wildlife as his objectives, McCullers began putting his new-found-knowledge to use by cutting much of the existing natural stands. Income from this was combined with government assistance and soon 10 acres of his property was dozer-cleared for his first seedlings.

Two years later 25 acres of pine seedlings were planted. This time instead of having a dozer site prepare his land, McCullers decided to experiment with a new form of site preparation by injecting undesirable hardwoods with ***TORDON.*** Pleased with his success, McCullers experimented again. In 1985 and 1987, seedlings were planted on acreage where ***VELPAR*** had been applied.

Since that first seedling was set, McCullers has planted every other year and is now managing approximately 60 acres of loblolly pine in various stages of growth. "It's not all going to be ready at one time," he notes. "It won't all have to be done at once." According to plans, thinning can begin in 15 years, and he's anticipating a "fence post cut" sometime in the future. In 30-35 years he should get his "final harvest."

Wildlife and Recreation

In addition to his pine timber, McCullers is also managing around 15 acres of natural hardwood he left to provide forage and cover for wildlife. Deer, turkey, squirrel, and quail are the prominent game species, and numerous bluebird boxes—built and installed by his great-uncle Ray Carpenter—provide a haven for nesting bluebirds. One of the most interesting creatures that inhabits the farm is a groundhog that frequents the McCullers' yard. For around two years the groundhog has made his appearance from time to time and McCullers admits to "talking to him like he was a dog."

Edward and Kim McCullers—Helene Mosley Winners

McCullers enjoys hunting but most of his hunting trips turn into walks across his land surveying the progress that has been made and making mental notes of what needs to be done in the future. He and Kim also think that its a great place to raise their two children—Andrew, 5, and Jenna Leigh, 2.

"There's one thing about having a TREASURE Forest," he advises. "A TREASURE Forest is never complete. If you ever stop doing all of the little things to make a TREASURE, it would disappear." Some of the little things on the McCullers place include grassed fire lanes and wood roads around the property, bluebird boxes, marked boundary lines, streamside management zones, and two stocked catfish ponds just to name a few.

And it's these little things that have lead Edward and Kim McCullers to achieving the success they have in such a short time. These things have caused their property to reach the status of Tree Farm under the American Tree Farm System, TREASURE Forest, and Helene Mosley winner.

Helping Hands

Since the beginning the McCullers have followed basically the same game plan—"planting as we could" and utilizing technical and financial assistance from every available agricultural agency, along with turning whatever income their property generates from timber cuts back into their land.

"Everything you see here we've gotten assistance from agencies to help do it," McCullers explained as he looked across his farm. "We've worked with all the agencies, not just one. There's plenty of good advice and plenty of help out there." He adds he couldn't have done "nearly as much or as quickly if it had all come out of my pocket."

"Most people think you have to be a timber company with hundreds of acres to be able to manage your land for a profit," McCullers added. He used himself as an example that a small landowner can practice good management on his land and come out a winner in the end.

"I'm real proud and glad a small landowner won the Helene Mosley Award," he added. "It showed a lot of people that a little tract can win an award and be managed as well as a large tract."

EDITOR'S UNDERSTORY

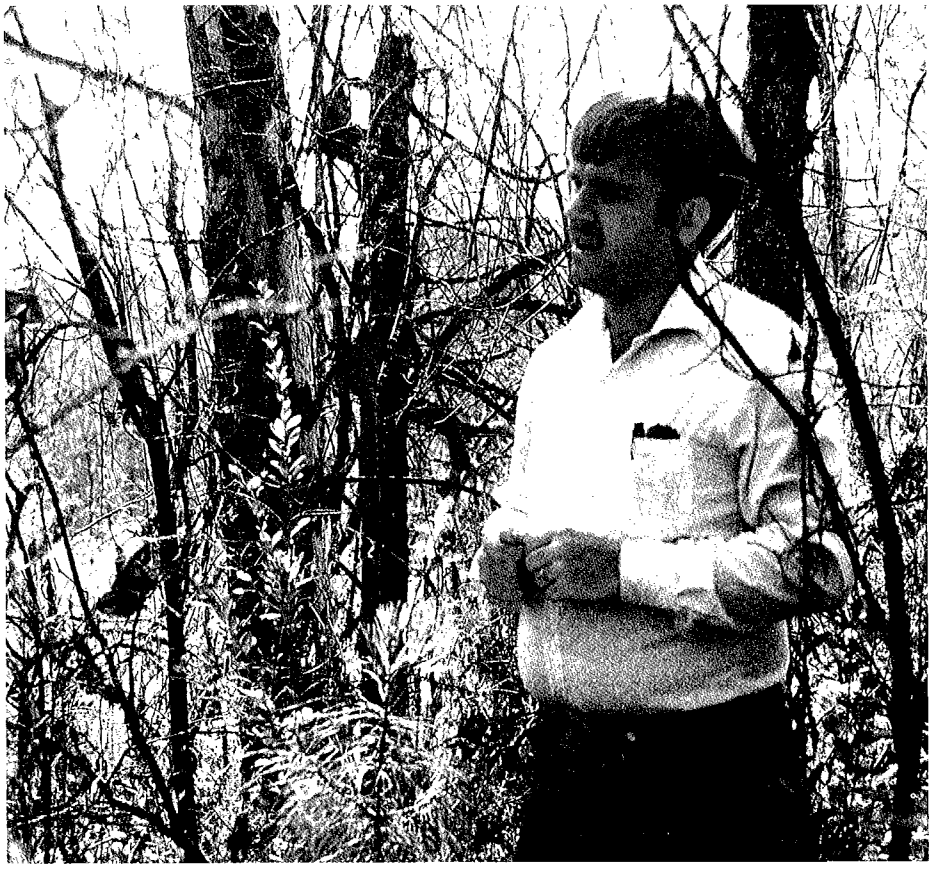
by COLEEN VANSANT, Contributing Editor

WINNERS ARE UNIQUE. It doesn't matter what they win in or what goals they achieve—there's always something a little different about them or in the way they do things. Maybe it's that little extra effort, determination, and innovation that are the things that help to put them over the top.

It was these little extra things that put Edward McCullers over the top in eight short years. These things saw him reach not only TREASURE Forest but also set him aside as one of *the most outstanding* TREASURE Forests with the Helene Mosley Memorial TREASURE Forest Award.

One of the things that stands out about Edward McCullers is the value he places on education—not only his views of education in forestry to other Alabama landowners, but also the value he places on personal improvement.

When McCullers first began to manage his land, he sought advice from all available agricultural agencies. By combining the help he received from professionals and the knowledge he obtained through reading, practical use, and attending seminars, he equipped himself with the tools needed not only to manage his land today, but to meet the goals he had set for the future.



Ed McCullers—Elmore County landowner

Through the channel of education, McCullers realized that in order to succeed he had to remain open minded about new methods of land management and the latest technology. Through the Elmore County Forestry Planning Committee, McCullers was able to obtain the assistance he needed. After using a bulldozer for the site preparation on the first tract he planted in seedlings, he decided to experiment with chemicals on his next effort. With this trial effort he became one of the first Elmore County landowners to work both ***VELPAR*** and ***TORDON*** into his management practices.

"A lot of people are afraid of new ideas," McCullers noted. "The first day I sprayed ***VELPAR***, I said to myself, 'They're kidding. A few squirts are going to kill all of these trees?'" But he resisted the temptation to stick with old practices, and by opening himself to new ideas he has set himself aside as one of the most outstanding landowners in Elmore County as well as the state.

In addition he's carried the idea of diversity to the selection of seedlings and now has tracts of his land planted in both bare root and containerized seedlings. Again subject to change, some were planted by machine and some he planted by hand himself.

Because of the outstanding accomplishments he's done on his property, McCullers' farm has become a demonstration site for the Planning Committee. Where else can landowners compare site preparation done by machine to that of chemicals; ***VELPAR*** to ***TORDON***; injection to ground application; bare root seedlings to containerized; and machine planting to that done by hand?

McCullers' "Weoka Creek Farm" has become a tool to introduce others to forest management. And because of the job he has done and the respect he's earned, McCullers is currently serving as chairman of the Elmore County Forest Landowners Association.

While attending a herbicide conference in Georgia, McCullers realized Alabama stands out above other states in their TREASURE concept of forest management. "TREASURE is a very special program," he explains. "Other states don't have anything like it. It's so unique, and I can't understand why other states haven't jumped on the band wagon and adopted it."

By serving as a bond between agencies and landowners, one of McCullers' goals has become to unite the two together as a team. To him the concept of TREASURE is very simply "people working together practicing good stewardship to put out a product."

Don't move into a home without it

FIRE PREVENTION PLAN

by WALTER VEST, Chief, Law Enforcement

WHEREVER FIRE BURNS it leaves definite and lasting effects on air, water, vegetation and wildlife. Landowners must manage their land wisely to protect these priceless land resources which have taken centuries to develop. Under certain conditions fire can help to restore habitats for renewed growth of plants and animals so that our resources may increase. At other times, however, fire spoils and destroys our resources. As you enjoy your outdoor activities, always keep in mind that you are responsible for protecting your land from harm. This article offers some general rules to follow and explains further the need for fire prevention.

The first place to practice fire prevention is in and around your home. A large percent of all wildfires in Alabama begins within 100 feet or less of someone's home. If you are burning debris around your home, try to follow the guidelines below.

Burn in a safe area. Clear the ground of all flammable material for at least 10 feet in all directions. Have adequate water and fire tools available in case the fire escapes. Don't burn on windy days. Have someone stay with the fire until it is completely out.

Clean roof surfaces and gutters regularly to avoid accumulation of leaves, twigs, pine needles, and other flammable material.

At least once a year, inspect and clean your chimney. Keep the dampers in good working order. A fuel break at least 30 feet wide should be established and maintained around all structures. Homes built in pine forests should have a minimum fuel break clearance of 75 feet. Wider fuel breaks are needed around buildings located on steep slopes. Each home should have at least two different entrances and exit routes. All roads leading to your property should be at least 16 feet wide to allow for easy entrance of fire fighting equipment. Also, bridges should be constructed to support a minimum gross vehicle weight of 30,000 pounds to accommodate such equipment.

Fire prevention must also be a part of your management plan for your forestland. Prescribed fire is a valuable prevention tool in the South with widespread use. Prescribed burning done by trained specialists consumes less material, resulting in the release of less pollutant material than that created by a wildfire. Prescribed burning also reduces the potential damage from wildfire by controlling fuel buildup. If you ever consider prescribed fire as a preventive tool you should ask yourself these questions.

Why burn? Do you have a heavy rough to reduce?

What to burn? Is your pine stand the right size? Will it stand a controlled burn? If the stand is good hardwood, *don't burn*.

When to burn? Is there a steady moderate wind? Has it rained recently?

How to burn?. Don't guess. Call your local Forestry Commission Office.

Don't burn without a permit. Call your Forestry Commission District Office toll-free number listed on the inside cover of most telephone directories in Alabama.

Constructing permanent firebreaks is another preventive tool. Pine stands should be broken into blocks no larger than 40 acres, and areas to be managed for hardwood separated from pine types. Permanent firebreaks should be carefully located and constructed to avoid erosion.

If incendiary fires are a problem in your area, a cooperative effort with your neighbors can frequently eliminate the source.

If your land is leased to a hunting club, you should explain in detail to the member that fire prevention must be practiced at all times.

Some landowners' per acre rate for hunting rights are based on club members cooperation in fire prevention and land management. This system has worked well for several landowners.

Remember, together we protect the TREASURE Forests that improve the earth and enrich the lives of future generations!

HOW SAFE IS YOUR HOUSE?

by RAY TUCKER, Chief, Rural Community Fire Protection

One of the more noticeable habits that I, and I suspect many fire chiefs, have attained from being around fires for such a long time is creating a fire safe environment in my friends' houses. While visiting with them at special times like cook-outs, birthdays, and anniversary parties, I just can't keep from making suggestions like, "When everyone leaves remember to empty the ash trays in a pail of water...don't you need a screen for the fire place?...please don't use that flammable liquid to start a fire!" I just can't help it! I've seen so many deaths, severe injuries, and large property losses due to fire, and I just want my friends to be safe!

Ironically, most fires I've witnessed could have been prevented by persons being less apathetic and observing a few safety rules. This article is being written out of that habit and a genuine concern for the safety and well being of all people.

During the 1950's and 60's our population was shifting in the United States toward major cities. People flocked to these areas in droves and why not? Jobs were plentiful with, for the most part, excellent pay. Cities have all the modern conveniences—transportation, television, shops, offices, and markets—all located in close proximity to one another making shopping, eating, working, and traveling as easy as *falling off a log*. Almost everyone could enjoy the *good life*.

As the cities continued to grow, however, many new problems developed—housing, crime, and taxes just to name a few. Many of the problems that occurred could only be solved by passing laws and regulations that dealt with the safety aspects of city living. A good example of this would be zoning laws that control where one can build a house, a shop, an office or a factory, along with what building materials can be used in the construction of these buildings. The height is regulated and the number of persons eating,

leeping, standing or sitting is regulated lepending on size, shape, and occupancy of the building. Every phase of city life must e regulated to maintain some form of order.

With the realization of these circumstances nany citizens began to become disillusioned bout their lives, their life styles, and the legree to which they wanted to be regulated. n many areas it became unsafe for persons o leave their homes at night. Unemployment nade a move upward. Inflation began to rise nd many people began looking for a new ndentity for themselves. These are but a few f the reasons for the population unrest that ccurred. These reasons may or may not be valid but suffice to say that for some reason during the late sixties, seventies, and eighties cities began to decline in population. Some by as much as ten percent. Migration was to he South, the West, Southeast, and Southwest; to the mountains, to the Gulf, and to the open plains.

Many sociologists such as Maslow believe hat man has a hierarchy of needs that drives him to a position where it is possible for him o achieve self actuation. Some of those needs are food, clothing, shelter, safety, and a sense of belonging. It is for the latter two reasons that I believe many people exited to rural America. An interesting phenomenon took place at that time, one that hasn't taken place in over 150 years. People were moving to areas where little or no zoning ordinances, building codes, and other safety regulations were needed, and indeed, if they existed at all, they were not enforced.

In these areas people have been and are building homes where they please. As many buildings as they want are put under construction. They use whatever building materials they want. Decoratively speaking, we have returned to the "natural look." A good example of this look is in the mountain home. Not only is it secluded in the mountains but it must have trees and underbrush as close to the house as possible. Indeed, many look as if they are camouflaged. The house must look as if it is "not there." Sometimes I feel that the camouflaged clothing fad that exists today is nothing more than an individual's attempt to achieve the "natural look." This "look" is true for the plains dweller's home as well as those that are built on the beach. Homeowners want their homes to blend in with the natural environment.

My concern, though, is not *why* people are moving nor *where* but rather whether it is a *safe* move. I strongly feel that with a little planning homeowners and home builders can have their "safety cake and eat it, too." Let's take a look at some construction measures that can help save your life, lives of your loved ones, and your property from the ravages of fire.

Foundation

Be certain of a solid foundation for your home. Do not cut corners here. Have the soil tested. Shifts in the foundation cause loose, cracked, or broken gas and water lines. It can also cause loose electrical connections and building collapse. You can't always tell the soil density with the naked eye. Once I added a fireplace at my residence without doing a soil test. The result after three months was a large crack appearing in the masonry between the chimney and the wall. No fire resulted but the chimney had to be completely dismantled, the soil tested, and a new slab and footing poured (this time with reinforced concrete). This mistake caused a waste of time and money.

Exterior Walls

Masonry construction of outside walls is advantageous for fire protection because it is more fire resistive than any of the other building materials. Wood, however, may also be treated or painted with fire retardant chemicals that make it fire resistive as well. Roof coverings may be purchased with a fire rating, however, many homes are using the cedar shakes. These slabs of wood are laid in an overlapping configuration much like roofing shingles. They are very decorative, but untreated they are highly combustible! Before you use them be sure you check with your contractor or building material supplier to be sure they have been treated with fire retardant chemicals.

Interior Walls

Inside the home Sheetrock® is an excellent fire resistive wall covering. Not only is it resistive to flame spread, but a one-half inch sheet can block heat for up to one-half hour. This means if fire starts on one side of a wall the wall will not allow enough heat to pass through it to start a fire on the other side for 30 minutes. This is very important, particulary in halls and along paths of exit travel.

Paneling is also a very popular wall covering. Some paneling is fire resistant but much of it is not. You must check for an Underwriters Laboratory (UL) test marking on the paneling itself to be assured of its fire resistiveness.

Electrical Wiring

It is my opinion that all electrical wiring should be with the same type of material—all copper or all aluminum, not a mixture of the two particularly at junction boxes. Example: copper and aluminum have different melting points. As these metals heat and cool together, the connections may become loose. This will cause overheating and arcing, a major cause of unwanted electrical fires.

Flooring

Flooring is not usually something that is a problem with fire. Floor coverings, however, are a different matter. Carpet and rugs can be purchased with a very low flame spread factor. In fact much of the carpet in use today is known as self-extinguishing. This means it will not within itself support a flame. A good example would be if sparks from an open fireplace fell on this carpet the material would melt but would not burn.

Premises

As to the outside of your home, you must keep the underbrush as clear and as short as possible, at least 50 feet in all directions. Excessive fuel buildup can cause an extremely hot fire, one that you nor anyone else could control with a small water supply. There are going to be woods and forest fires. Nature has planned it that way. So your home could be exposed to one of these fires. Remember, the more dense the brush, the more difficult the problem.

The Fire Marshall's Office in Montgomery is available to give you advice and suggestions in the areas previously discussed. They can't help if you don't call. Be safe and check with them before you build if your property is not regulated by a city, town, or subdivision that has adopted the Southern Standard Building Code and the parallel (NFPA) National Fire Protection Association's Life Safety Code.

One of the most important new construction features for home fire safety to come along in many years is the residential automatic sprinkler system. These systems are regulated by the National Fire Protection Association (NFPA) Code 13D. The system is not a small version of a commercial building sprinkler, but rather is a system that has some unique features of its own. These features allow the sprinklers to work at very low water pressure and to react quickly at low temperature. This concept is so important that automatic sprinkler safety systems are mandatory in most all new construction within the expanding city limits of Salinas, California.

We will try to address the use of these systems in a future issue of this magazine.

What is Alabama's FOURTH FOREST?

by L.LOUIS HYMAN, Chief, Forest Management

SINCE THE EARLY 1900'S THERE has been much concern about the supply of timber in the South and the need for regeneration of our forests after harvest. These concerns led to many resource studies over the years. The latest study, which was coordinated by the USDA Forest Service, projected the South's timber resources based on present trends.

Based on the high economic importance of forestry to Alabama and concerns about the regional projections in the Forest Service Study, representatives of federal and state agencies, forest industries, private organizations, and individual landowners decided that a comprehensive analysis was needed. This study, entitled *Alabama's Fourth Forest*, examined the importance of forestry to Alabama's economy and identified timber resource problems and opportunities in the state.

Alabama's Four Forests

Alabama has a long history of active forestry. Alabama's first forest was the virgin forest that was here when settlers arrived. It supplied the early development of the state and was the focus of the great lumber boom of the late 1800's and early 1900's.

Alabama's Second Forest grew from the offspring of that forest, helped by the natural productivity of the land and increased fire protection. This forest made possible the strong forest products industry of Alabama.

The new markets created by the pulp and paper industry, the plywood industry, and the expansion of other wood-using industries made forestry the good investment that it is today. This favorable economic climate, along with increased research, education, technical and financial assistance, helped shape Alabama's Third Forest. The timber being harvested from our Third Forest will supply the raw materials for our forest industry for the rest of this century.

As the Third Forest is being harvested, the next forest, Alabama's Fourth Forest, is being started. The Fourth Forest will carry our state into the 21st Century.

Alabama's forests have a major impact on the state. These forests have developed because of the high productivity of the land, and especially the favorable business climate of the state that enabled a strong industry and good timber markets to develop. These diverse forests have generated tremendous wildlife habitat and many recreational opportunities for the citizens of Alabama.

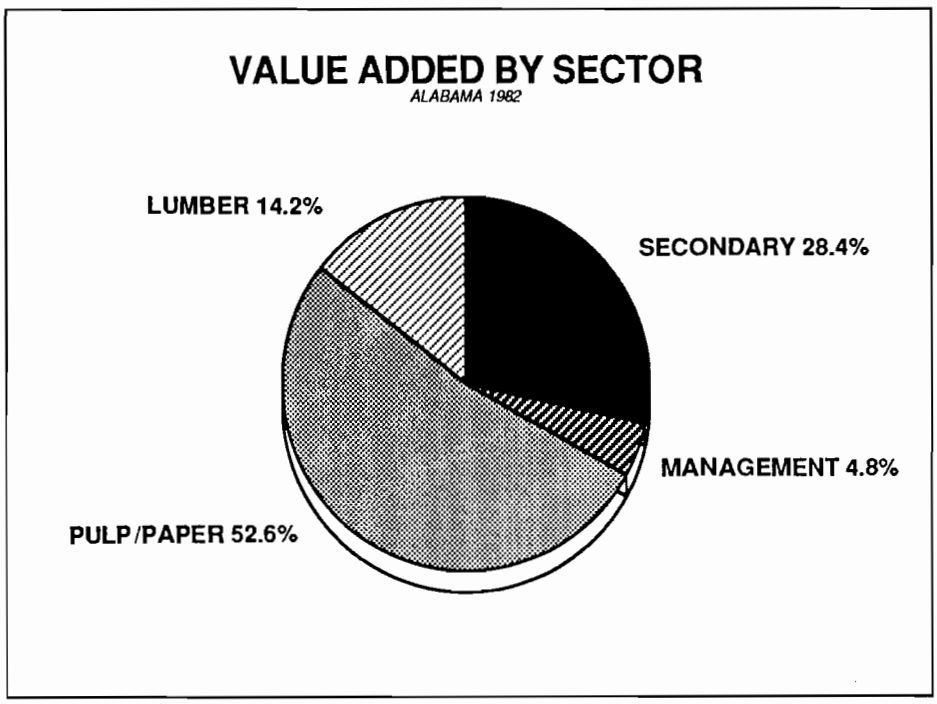
Organization of the Study

The Alabama Fourth Forest study was organized by the Alabama Forest Resource Center (AFRC), a non-profit organization based in Mobile, Alabama. The purpose of the AFRC is to study the forest resources of the state and to promote ways to improve their contribution to the welfare of Alabama citizens.

The AFRC convened a conference on the results of the South's Fourth Forest and its effect on Alabama on April 15, 1987, in Montgomery, Alabama. At that meeting, it was decided to do a smaller version of the study using Alabama data to make projections for Alabama. An Alabama's Fourth Forest Study Committee was organized and study subcommittees developed.

The Alabama Fourth Forest Study Committee was chaired by State Representative Allen Layson of Reform, Alabama, with Dick Porterfield of Champion International, Courtland, Alabama, as vice-chairman. There were five subcommittees under the umbrella of the study committee. These subcommittees and their membership are shown in TABLE I. Also included on the Study Committee were Senator Ann Bedsole of Mobile, President of the Alabama Forest Resource Center; and C. W. Moody, State Forester.

The study consisted of three parts: an evaluation of the present condition of Alabama's forest resource, the Fourth



Forest projection, and policy alternatives to improve forestry in Alabama.

Forestry—Alabama's TREASURE

Forests make up a large portion of Alabama's landscape. About two-thirds of the state's total land base is in forests.

The forests of Alabama consist of four major timber types—pine, pine/hardwood mix, upland hardwood, and bottomland hardwood. Each of these types has its own unique ecology. The pine type can be broken down, based on the principal species present, into longleaf, slash, and loblolly/shortleaf types. Upland hardwoods now occupy more land than pine types. Most of these upland hardwoods are located in the northeastern half of the state. In fact, upland hardwoods make up almost 61 percent of the forest lands in Alabama's Tennessee Valley region.

According to the 1982 Forest Survey, about 74 percent of the total timberland is owned by private individuals; 21 percent is owned by forest industry; and 5 percent is publicly owned. In a 1982 study by the Alabama Forestry Commission, it was found that there were about 223,538 landowners in the state.

Alabama has long been a leader in the planned regeneration of forestlands after harvesting. There has been an organized tree planting program in the state since 1928. Beginning in about 1982, many segments of the forestry community began to work together to increase reforestation. As a result, the number of pine plantation acreage is now at an all time high.

Reforestation has been a key emphasis in technology transfer within the state. Landowner assistance is available from over 100 consulting forestry firms and 18 industrial landowner assistance programs, as well as from the Alabama Forestry Commission and other state and federal agencies.

In recent years, nearly all pine tree planting in Alabama has utilized genetically improved seedlings. The use of improved stock will lower future mortality by disease and will increase tree growth.

Alabama has a state funded cost share program known as the Alabama Resource Conservation Program (ARCP). This program helps landowners with erosion control, water quality, tree planting and timber stand improvement projects. In 1986, ARCP assisted 803 Alabama landowners with forestry work on 27,050 acres.

Timber Inventories

The forests of Alabama are diverse and

TABLE I

ALABAMA FOURTH FOREST SUBCOMMITTEES AND MEMBERSHIP

RESOURCE DATA SUBCOMMITTEE

L.Louis Hyman	AFC, Chairman		
Bill McKee	ACES	Jack Warren	Forest Farmers
Harry Murphy	Consultant	Keville Larson	Consultant
Robert Frese	Ala River Wood.	James Spears	Consultant
Vernon Knight	Kimberly Clark	A.D. White	Scott Paper
Gordon Ahrens	T.R.Miller	Steve Guy	ALFA
Stan Anderson	AFC, Staff		

FORESTRY INCENTIVES AND MARKETING SUBCOMMITTEE

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Thomas Cambre	AFC	Jim Gober	AFC
Keville Larson	Consultant	Leonard Breeman	Consultant
William Sahlie	Bama Wood	Walter Mills	Consultant
R.C. Wakefield	Kimberly Clark	Richard Porterfield	Champion Intl.
Gordon Ahrens	T.R. Miller	Mark Beeler	AITC
Robert McKain	Container Corp	William Jones	AFA
Janet Seaman	Seaman Lumber	Ray Sandretto	Consultant
J.L. Sledge	Mead Corp.	William Wood	Ala. River Woodlands
Stan Anderson	AFC, Staff	Morris Seymore	James River Corp.
		Gary Faulkner	AFC, Staff

FOREST PROTECTION SUBCOMMITTEE

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R.C. Wakefield	Kimberly Clark	J.G. Hamner	Union Camp
Frank Jones	T.R.Miller	Phil Sasnett	Gulf States Paper
Dan James	Landowner	Lewis Kearney	USDA Forest Service
Janet Seaman	Seaman Timber	Jim Hyland	AFC
Hugh Mobley	AFC, Staff		

RESEARCH, EDUCATION AND TECHNICAL ASSISTANCE SUBCOMMITTEE

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John Haygreen	Auburn Univ.	Earnest Todd	USDA, SCS
P.W. Brown	Tuskegee Univ.	Steve Nix	AFC
Harry Murphy	Consultant		

MULTIPLE USE FORESTRY SUBCOMMITTEE

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Doug Schofield	Ala Wildlife Fed.	Bill Padgett	AFC
Vivian White	Landowner	Joe Brown	USDA Forest Service
Cecil Tanner	Landowner	Bobby Bledsoe	USDA Forest Service
Bill Jones	AFA	James Easley	Consultant
Robert Water	USDA SCS	Rhett Johnson	Auburn Univ.
Neil Letson	AFC	Larry Hedrick	USDA Forest Service
James Davis	ADCNR	Chester Billie	ADCNR
Howard Clonts	Auburn Univ.	Jon Strickland	ADCNR
Steve Jenkins	ADEM	Mike Golden	Auburn Univ.
Bettye Anne Payne	CERS, Troy	Mike Mullen	CERS, Troy State
Earl Cosby	USDA SCS	Douglas McGinty	Huntingdon College
Michael McCrander	Univ. of Ala.	David Hoge	AFC, Staff

healthy. They contain many different wood products, such as pulpwood, sawtimber, poles, and veneer blocks.

The total timber volume in Alabama's forests has been increasing since the Great Depression years. The growth in pine volumes was very rapid until about 1976, at which point it leveled off. Hardwood volumes also increased over this period, but at a slower and steadier rate.

There are about 3,064,100 acres of premerchantable (less than 12 years old) plantations in Alabama. This is about 1 out of every 7 acres (14.2 percent) of Alabama's forestland.

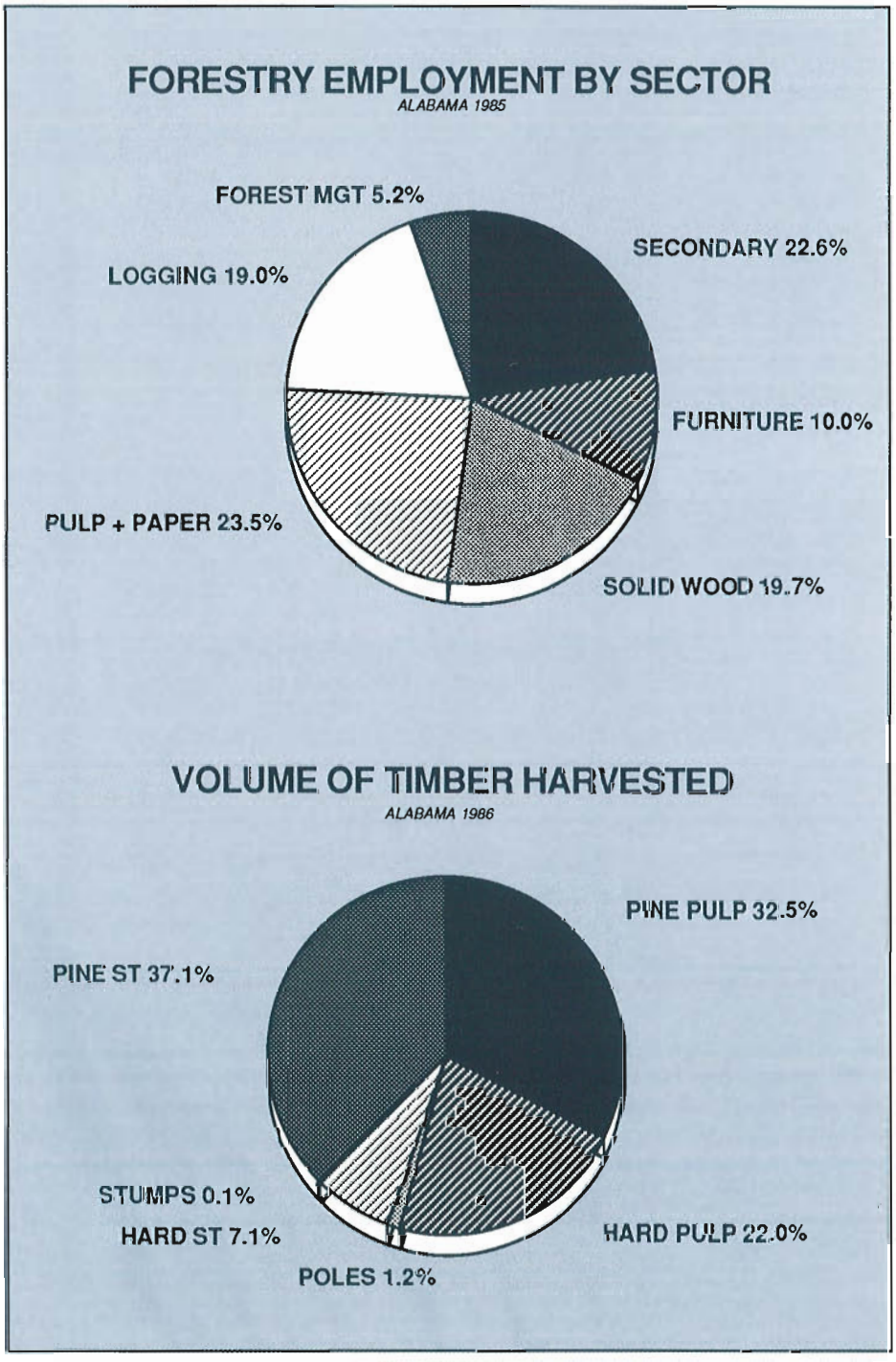
The timber stands in Alabama have matured and increased in density. These older, denser stands have slower net growth rates. The forests of Alabama are presently at their highest stocking levels ever, containing an average of over 1,018 cubic feet of growing stock per acre.

The Economic Impact of Forestry

Alabama's abundant forest resource fuels the number one manufacturing industry in the state. The forest products industry is located in every county in Alabama and has a major impact on the economy of the state.

The raw material for this industry is the number one agricultural "crop" in Alabama. Historically, Alabama had a predominantly rural economy. Row crops, such as cotton, corn and soybeans have been the key income producers. In 1985, however, the value of timber harvested was more than double the next highest agricultural crop.

The forests of Alabama produce a wide variety of products. The largest production category in 1986 was pine sawtimber followed by pine pulpwood. Because of its higher value, pine sawtimber is also the dominant product when these volumes are converted to dollars.



Profile of Alabama's Forest Industry

The forest industry of Alabama is diversified and very active. In 1985, Alabama contained 14 active pulp mills, 284 sawmills, 28 veneer mills and 67 pole mills. In addition to these primary processors, there were 481 secondary manufacturers in the state who used wood in their product.

The value of an industry to a state's economy can be measured many ways. The two most common measures are the "value added" of its products, and employment.

Value added is the difference between the value of a product and the cost of goods used to produce that item. This figure is generally considered to be the best estimate of the contribution of an industry to the economy. The value added for the forest products industry has increased rapidly since 1972. The bulk of this value is added by the pulp and paper industry. Forest products dominate Alabama's economy, with the highest value added of any primary manufacturing industry.

The expansion of the forest products industry during the last 25 years can also be seen in the rapid increase in forest products employment and payroll. In 1986, the Alabama Forestry Commission surveyed all Alabama manufacturing companies that use wood. Based on this study and other data, there were about 64,300 wood products related jobs in Alabama.

The value of forestry employment to Alabama can be seen by comparing payrolls. In 1986, forest products accounted for 18 percent of all manufacturing payrolls. This is about 50 percent higher than the primary metals industry, the next highest payroll.

The role of an industry in the whole state economy can be described using econometric input-output models. These models show how change in one industry

can affect the entire economy. The level of these interactions can be shown by economic multipliers. Based on these analyses, the forest industry can be said to directly and indirectly support about 151,800 jobs in Alabama, with a related income of about $3 billion for the people of the state.

Non-timber Forest Resources

The forests of Alabama produce more than just timber. They also supply wildlife habitat, recreational opportunities, clean water, and fresh air. These benefits have economic impacts to the state as well.

Alabama has an abundant wildlife population. The Game and Fish Division of the Alabama Department of Conservation and Natural Resources (DCNR) estimates that in 1985 Alabama's forests contained about 1.4 million deer, 35,000 turkey, and a healthy population of small game animals. In addition, these forests contain many non-game species such as songbirds and reptiles.

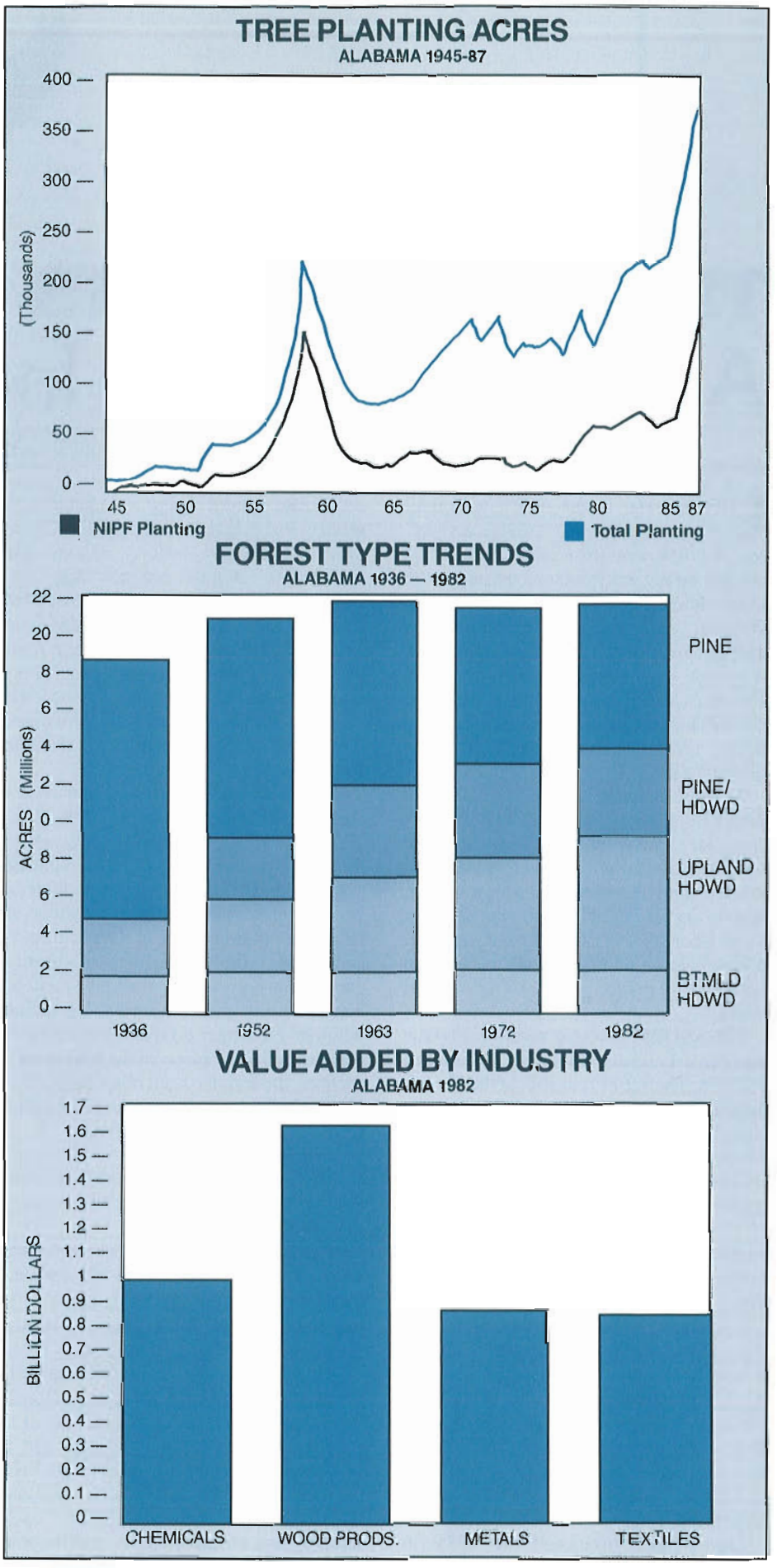
Game species produce a tremendous economic benefit to the state. People who hunt or fish spend money on licenses, equipment, and travel. Many hunters are leasing hunting rights from landowners. DCNR estimated the total economic impact of hunting and fishing in the state to be over $500 million in 1980. In 1985, more than 850,000 people purchased hunting or fishing licenses in Alabama.

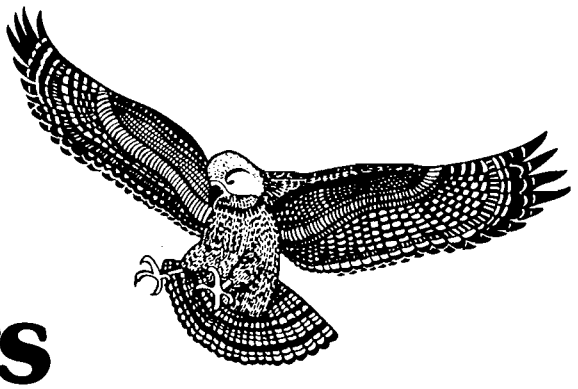
Non-game species also are of great benefit to the people of Alabama. These species are helpful in controlling pests and in improving the environment and the quality of life. These species serve a recreational purpose for many people through nature study groups such as bird watchers, wildflower societies, and garden clubs.

Recreational uses of the forest, as well as forest beauty, are important to the citizens of Alabama. One of the major reasons why the general public is concerned about game wildlife is the recreation involved in hunting, which is a major activity in Alabama. The people of Alabama also use their forests and nearby waterways for fishing, camping, picnicking, and hiking.

The forests of Alabama stop soil erosion and improve the quality of the water in the state by slowing water movement, filtering runoff, and trapping sediments.

We will continue this segment on Alabama's Fourth Forest in the next issue, when we examine the future of the forest resources of Alabama and look at what can be done to increase the benefits of this TREASURE to all the citizens of Alabama.





TREASURE FORESTS
A Haven For Wildlife In Alabama

by NEIL LETSON, TREASURE Forest Coordinator

UP UNTIL THE EARLY 1970's, natural resource management "Alabama style" was no different than other states. The wildlife biologists stood on one side of the fence while the foresters were positioned on the other, each accusing the other of not understanding forest landowners' interests or, worse yet, of abusing the natural resource. The real losers of this battle were the landowners of the state who were seeking advice on management and the forest resource itself.

As is the case with most conflicts, both sides have at least some measure of truth on their side, and when both sides recognize this, then compromise occurs. In Alabama this is what happened, and as a result the opportunity for natural resource management which meets the needs of everyone has never been greater. The reason for this has been because of a program called TREASURE Forest.

TREASURE Forest is sponsored by the Alabama Forestry Planning Committee (AFPC). The AFPC consists of the head or director of thirteen state and federal agencies charged by law with providing natural resource management information and/or assistance to the general public. The member agencies are as follows: Alabama Department of Conservation and Natural Resources; Alabama Department of Education; Alabama Forestry Commission; Alabama Soil and Water Conservation Committee; Alabama Cooperative Extension Service; School of Agriculture, Auburn University; School of Forestry, Auburn University; Alabama Agricultural Experiment Station; USDA Farmers Home Administration; USDA Forest Service; USDA Soil Conservation Service; USDA Agricultural Stabilization and Conservation Service; and Tennessee Valley Authority.

The AFPC organized in 1971 to coordinate natural resource management services and programs to the public. Of the many cooperative efforts made, the TREASURE Forest program has and continues to be the most successful. Started in 1974, TREASURE Forest encourages and recognizes landowners who manage their forests for a variety of resource values. These values are spelled out by the TREASURE acronym: Timber, Recreation, Environment, Aesthetics, all as a Sustained Useable REsource.

Inherent in the program's aim, though not spelled out in the acronym, is wildlife. Though no figures are available on the effect TREASURE Forest has had on wildlife populations, its impact on the manner in which wildlife is considered is apparent. A landowner participating in the program is assured that the management assistance provided by the resource manager(s) will be based on his own level of interest, including wildlife. No longer do resource managers compete with each other for the landowner's attention. Instead, the team of specialists first learns the landowner's objectives and then provides assistance accordingly. It is interesting to note that of the 525 people certified as a TREASURE Forest landowner, 80% selected wildlife as either their primary or secondary objective.

What has happened to the natural resource manager and the type assistance provided to landowners is more interesting to note. The program requires local county forestry planning committees to cooperate when helping a landowner attain TREASURE Forest. When inspection time comes, though local specialists are invited to attend, it is required that a wildlife biologist and a registered forester complete the field examination. Through this encouraged and "forced" union of cooperation, each resource specialist has learned and become more sensitive to the other resource values of the forest. It is not uncommon in Alabama for foresters, soil conservationists, recreationists, and other resource professionals to include wildlife in their recommendations. In fact many "non-wildlife" agencies have incorporated wildlife into their landowner plans, assistance and publications. Within the last few years this phenomenon has spread into the private sector resource managers.

No type of cooperation, though, is meaningful to wildlife or other forest resource values if there are no landowners to help. Fortunately, landowners have responded to TREASURE Forest. By nature of its representing high ideals about stewardship of the land, it has attracted many landowners who seek encouragement, recognition, and a definition of their beliefs and values. Regardless of a landowner's objectives, he or she **must** consider wildlife. This concept is all inclusive and omits no one. With over 100,000 landowners in Alabama, the potential for reaching every acre for wildlife is apparent. No other such voluntary program exists anywhere.

As mentioned already, 525 people have qualified as TREASURE Forest representing 923,701 acres. Another 820 landowners have signed the landowner creed and are working toward certification. This is another 367,302 acres. The majority of these landowners have selected wildlife as a primary or secondary objective. Through the TREASURE Forest program, the habitat needs of wildlife will be met and the overall productivity and health of the forest improved.

LITERATURE CITED

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Litter In Alabama's Forests

by VICTOR A. RUDIS, Research Forester, USDA Forest Service, Starkville, MS

LITTER—DISCARDED MATERIALS associated with human use—detracts from aesthetics of forested landscapes. Litter can sour a recreationist's experience and enjoyment of forests.

Efforts are underway to inform the public about the problem, step up enforcement of existing laws, and stiffen penalties for violators. Spearheading the effort is a group called Alabama PALS (People Against a Littered State), a consortium of local beautification groups, garden clubs, public officials, and industry leaders, chaired by C. W. Moody of the Alabama Forestry Commission.

An anti-litter bill was introduced into the State Legislature last year which would suspend driver's licenses of violators up to 30 days. The suspension would be in addition to the maximum $500 fine currently in force; repeat offenders would be charged up to $2,000. Having died before being brought to a vote, the bill is being revised and will be submitted again this year.

How big is the litter problem in Alabama's forests? Recent surveys—including a 1982 inventory of Alabama's forests and forest recreation users—provide hard facts about the problem. The USDA Forest Service conducts surveys of private as well as public forested areas every eight to ten years. Quantitative bases are provided for decision making by resource planners, national and state agencies, forest industries, and citizens concerned with multiple use of forests.

Survey data are based on a sample of ground locations arranged systematically throughout a state. As part of more recent surveys, including the 1982 Alabama survey, field personnel have been noting the presence or absence of litter at sampled ground locations in timberland areas. Timberland is *forest land one acre or more in size, 120 feet or more in width, capable of producing crops of industrial woods, and is not withdrawn from timber utilization by statute or administrative regulations*. Most forest land is timberland; exceptions are designated wilderness areas and narrow forested rights-of-way along highways.

Based on a sample of some 3,700 locations, litter is present on 18 percent of the 21.7 million acres of Alabama's timberland! The majority of timberland with litter is found in the northern and eastern part of the state. Timberland with litter frequently occurs in counties where access is relatively good via roads or agricultural fields, and in counties with high population density. Timberland that is relatively inaccessible exists in counties with high population density (e.g., Mobile and Madison Counties) and do not have as much litter.

Surveys from other Southern regions (east Texas, southeast Louisiana) suggest that about two-thirds of the timberland with litter contains food and beverage containers. In the remaining third, the litter consists of discarded implements (oil cans, fertilizer and pesticide containers, and broken farm and logging equipment) and household garbage. Floating debris such as empty bottles, styrofoam, and other plastics from waterways and other sources also accumulate in timberland areas that are subject to seasonal flooding. In the future, trends in areas sampled will provide a basis for judging the effectiveness of programs or individual initiatives that reduce or remove litter from timberland areas.

According to the study of Alabama forest recreation users, the presence of old bottles, rusted cans, and garbage in forests is disliked more than the presence of logging activities (including clearcuts), user fees, or grazing by livestock. Recreationists that are interested in isolated or primitive recreational experiences are especially sensitive to the presence of garbage in forested areas.

One can conclude that timberland that is readily accessible (those near roads, agricultural fields, and populated areas) are generally more susceptible to litter accumulation. Efforts to clean up Alabama's timberland and reduce litter accumulation could be focused on those areas already with the greatest litter concentration. Public agencies, private industries, and individuals with large timberland holdings can consider limiting litter accumulation as one of their priorities when managing forest resources and make efforts to remove litter in isolated areas used for recreational activities.

Littering in Alabama's timberland is not a small problem and it is not likely to get better without active steps to curb such activity. Many of the artifacts found in timberland areas, such as glass, metal, and some plastics, do not decompose. With time, some litter becomes hidden or buried by vegation, but the vast majority of litter is unlikely to disappear by itself. Courses of action that might be effective include stiffer penalties for violators, alerting people to the problem, and promoting litter clean-up efforts in forested areas.

Data for the above are derived from a multiresource assessment of Alabama's forests, (**Resource Bulletin SO-9**, New Orleans, LA: Southern Forest Experiment Station, 1984, 55 pages), a detailed examination of dispersed recreation resources tied to timber surveys (in Proceedings: Southeastern Recreation Research Conference; Athens, Georgia, Institute for Behavioral Research, University of Georgia; 1985, pages 51-58), and a recently completed study of Alabama's forest recreation users to be published later this year

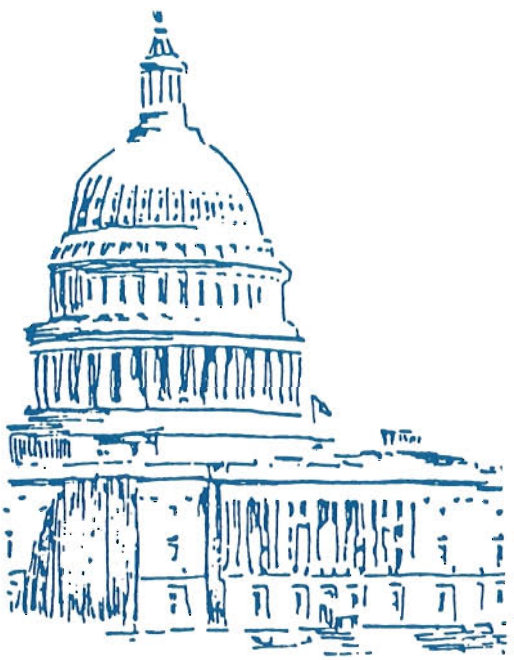
LANDO

LEGISLATIVE ALERT

NATIONAL

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

THE INTERIOR SPENDING BILL, which contains the funding for state and private forestry programs for Fiscal Year 1988 has passed both the full House and Senate. The two versions will now go to conference where appointed conferees will work out any differences. Alabama Congressman Bevill is a member of that conference committee. The Senate has included the $5 million necessary to establish the national marketing initiative plan for forest products. This is quite an accomplishment during such a tight budget atmosphere. However, the House did not provide for the marketing initiative in its version of the bill and may be convinced of the advantages of a marketing program during conference. This marketing program is needed to reduce and reverse the United States $5 billion deficit in forest products trade.



While Congress is making progress in finishing funding bills for Fiscal Year 1988 (which officially began on October 1), the implications of the revised Budget Deficit Control Act could delay final action. The House and Senate have completed their revision of the Gramm-Rudman-Hollings Budget Deficit Control Act and now must readjust their program levels to meet the $23 billion sequester (across the board reduction in spending). While the Reagan Administration has expressed objections to the act, they appear willing to accept the cuts (including defense) rather than raise taxes to provide new revenue. Representatives of the House and Senate are meeting with Administration officials to work out a compromise deficit reduction package due to the recent decline of the stock market.

The new act requires Congress to make the budget adjustments by November 20, 1987. Congress would have to raise $12 billion in "new revenues" (i.e. taxes) or take the cuts. If this target date is not met, OMB (Office of Management and Budget) will hold the sequester amount in escrow until Congress comes up with the reductions.

The Federal Government is now funded until December 15 with a Continuing Resolution (CR) at FY87 levels—this means that sequesters will occur from the '87 level or about 12% across the board in all domestic programs. The Forest Service and other Department of Agriculture programs that are primarily made up of personnel will be forced to furlough their employees to meet the cut. States can expect delays in federal funding.

House and Senate committees have approved a spending bill for agriculture programs, including the Soil Conservation Service (SCS), Agricultural Stabilization and Conservation Service (ASCS), Forestry Incentives Program (FIP), Agricultural Conservation Program (ACP), Conservation Reserve Program (CRP), and Rural Community Fire Protection grants (RCFP). House and Senate levels were the same for ACP, FIP, and RCFP and the Senate gave a slightly higher mark for the Soil Conservation Service.

Fiscal Year 1988 is the first year for a direct, specific appropriation for the Conservation Reserve Program. For the first two years of the program, the CRP was funded through the Commodity Credit Corporation. The Senate provided $1,388,000,000 for the Conservation Reserve Program, while the House only came up with $1,217,000,000. In addition, the Senate has included a provision for the transfer of $40,000,000 from the new CRP account to the conservation operations account of the Soil Conservation Service. The committee made this transfer to help carry out the provisions of the 1985 Farm Bill.

Several groups have expressed concern that the drop in funding levels from previously provided CCC funds could hurt the future of this successful program. The program has already enrolled 22,996,000 acres in its first two years—halfway to its mandated goal of 45 million acres. The main concern is the Federal Government's ability to pay farmers for future CRP contracts. However, because of the year lag time between sign-ups for the CRP and rental payments, the appropriated amounts may cover the enrollments. The amount needed will be equal only to the 50% cost-share on FY88 sign-ups and rental payments for acres enrolled in FY86 and FY87.

The enrollment of tree acreage in the CRP has not reached its goal of 12%.

WNERS

Legislation has been introduced to provide incentives to increase tree acreage. Congressman Hatcher (GA) and Senator Nunn (GA) have introduced companion bills which include provisions to add incentives for placing CRP lands into tree cover. Senator Heflin (AL) is a co-sponsor of the Nunn bill. The bills would also raise the allowable acreage to 65 million.

The Senate Agriculture Committee made several changes in the Farm Credit Bill that could affect landowners. First, the Senate bill would waive the three year ownership requirement to make land eligible for the Conservation Reserve in the case of any public or private lender. The $50,000 payment limit would apply. In addition, the bill allows the Secretary of Agriculture to transfer title of any FmHA land that is "surplus or suitable" to any Federal, State, or local land management agency. The bill changes the value of conservation easements to the amount computed on a basis of a difference between the loaned value of the land and the current value of the land. This allow farmers a higher payment.

The credit package also includes a $250 million buy down by the FmHA on farm credit loans or a lowering of the interest rates by 4% for eligible borrowers to purchase land. All conservation provisions in the Farm Bill must be followed before the loan is made.

The increasing hazards of fighting fires in developments in and near forested areas is gaining attention and forestry groups are demanding action to alleviate this growing problem. State foresters and several federal agencies recently testified before the subcommittee on National Parks and Public Lands of the House Interior Committee, emphasizing the need for either more money or stepped up cooperative efforts to battle the large fires and increased problems created by homes in forested areas. The problem exists nationwide as more and more people are migrating from urban residences to the solitude of nature. Fire fighters are being forced to combine techniques for both wildfire and residential fires and need increased training and technical assistance.

STATE

by FRANK SEGO, Legislative Liason, Alabama Forestry Commission

FEBRUARY 2, 1988—GROUND HOG Day—the day Alabama legislators come out of their winter habitat to take up the business of the 1988 Regular Session. Their off season was anything but a quiet one, however, as turbulence swirled around the 1987 session's method of appropriating funds to a number of agencies.

First came a suit filed by Senator Mac Parsons of Hueytown which contended that $177,813 was illegally allocated to several historical programs. Judge Mark Kennedy of Montgomery ruled that legislative act unconstitutional, stating that the bill contained more than one subject and that the subject was not clearly defined in the title.

The bill appropriated funds to a half-dozen historical sites and one historical commission, but Judge Kennedy pointed out that the title referred only to the six historical sites.

Then came the suit by Paul Hubbert, Executive Secretary of the Alabama Education Association, decrying the appropriation of $61 million in Special Education Trust Fund which had been aliocated to 19 agencies during the 1987 session.

In this case Judge Randall Thomas of Montgomery ruled that the money had to be spent for educational purposes and that the only appropriations for education within the education budget must be used for public schools. He declared any other appropriations to be unconstitutional and further ordered that any monies given to those agencies be repaid to the Special Education Trust Fund.

If there is a bottom line to these two rulings, it is that attention will be more closely focused on the constitutional requirements the legislature must follow in appropriating funds.

At any rate, the 1988 Session will be a busy one for forestry. The Forestry Commission is poised to reintroduce a bill calling for a constitutional amendment and a referendum to levy an assessment of 10 cents per acre on forestland. Presently, there is an assessment of either 5 or 10 cents on an acre in 39 Alabama counties. State Forester Bill Moody emphasizes that the only equitable solution to this "uneven method of collection" is to make the assessment uniform at 10 cents in all 67 counties. The funds are sorely needed to augment the Commission's forest protection program.

A Timber Theft Condemnation Act was passed in the 1987 Session. The AFC now looks to a similar measure which would authorize the seizure and condemnation of equipment maliciously used to start a woods fire. If passed in the upcoming session, it would be known as the Woodland Fire Condemnation Act of 1988.

ACTIVITIES

DISTRICT 1

The **Scottsboro Tree Commission** initiated a project to upgrade and maintain the trees and shrubs around **Jackson County Courthouse**. A detailed inventory was conducted by the Tree Commission and formulated into a plan. The plan was submitted to the **Scottsboro City Council** for assistance, and $2500 was obtained for the project. Indications are that money can be appropriated yearly for maintenance around the **Jackson County Courthouse**.

A brush firefighting seminar was held at **Cloudland Fire Department** in **Cherokee County**, hosted by Rangers **Johnny Roberts, Steve Wiseman**, Supervisor **Kevin Taylor**, and District Fire Specialist **Dan Fincher**.

Kevin Taylor assisted **Calhoun County Ranger Stan Cook** in judging the **FFA Lumber Jack Competition** held at **White Plains** in Calhoun County.

Two County Commission parks and lands were dedicated as TREASURE Forests. Former Cherokee County Supervisor **Stan Anderson** (now stationed at Montgomery Hdqtrs) and Ranger **Kevin Taylor** made the presentation to the Commission. Others attending were the **SCS, County Extension and Park Board members**.

The **Etowah County Forestry Planning Committee** met at Gadsden City Hall and presented the mayor and the city council with a plaque and certificate. This award was to certify that the Southern Red Oak located on the city property was a **"Living Witness Tree"** to the signing of the United States Constitution.

DISTRICT 2

Blount County Supervisor **John Rice** attended the Rural Development Committee Awards Luncheon August 18 in Montgomery where the **Blount County RD Committee** was honored.

On August 20, the **Walker County Forestry Planning Committee** held an educational session on the southern pine beetle for county landowners. Alabama Forestry Commission Entomologist **Jim Hyland** presented the program. The lecture included identification and treatment of beetle infestations.

Ricetown Volunteer Fire Department was honored recently as having District 2's brush truck of the year.

Cullman Ranger **Jimmy Moody** presented a program on Smokey Bear and forest fire prevention to 28 pre-schoolers on September 17 and 18.

Whitney Volunteer Fire Department in St. Clair County dedicated their new fire hall during open house festivities October 3. Included in the day-long event were a barbecue dinner, an appearance by Smokey Bear, and a demonstration by a sky crain firefighting unit.

The **Blount County AFC office** recently hosted a computer training day for all District 2 personnel. **Tommy Patterson**, computer section chief from Montgomery, instructed the course. The need for the training session came about when all District 2 counties obtained computers for the county offices.

District 2 welcomes three rangers who recently attended the 1987 fall session of the Forestry Academy. They are **Kenneth Hulsey** in Cullman, **Ricky Ryland** in Shelby, and **Charlie Carpenter** in Jefferson. Also completing the fall ranger academy were Ranger **Larry Clark** of Jefferson County and Information Coordinator **Coleen Vansant** from the District 2 headquarters.

Approximately 25 **Boldo Volunteer Fire Department** members met recently for an eight hour training course on wildfires. Walker County Supervisor **Charles Hall, Jr.**, was instructor for the course.

Jim Walker, Blount County ranger, headed the Blount County AFC's efforts at the Blount County Fair, October 13-17, where the AFC's booth won third place honors.

Members of the **Walker County Forestry Planning Committee** recently hosted a timber land appraisal for county landowners. The meeting included a barbecue dinner.

Between wildfire calls, rangers in **Blount County** have found time to make presentations to several civic organizations in the county. They include a presentation on Alabama Birds to the Ladies Civitan Club by Ranger **Steve Bowden**; a fire prevention course to the Blountsville Cub Scouts by County Supervisor **John Rice** and Ranger **Dennis Underwood**; and a slide tape program to the Blountsville Garden Club by Ranger **Dennis Underwood.** Over 100 spectators and exhibitors registered November 19 at the **North Alabama Forestry Expo** hosted by the **Cullman County Forestry Planning Committee**. "Reforestation—An Affordable Investment" was the theme of the program and speakers included AFC Forest Resource Division Director **Tim Boyce**, **Ron Blackweldeu** of Champion International, **Frank Roth** of Auburn Extension Service, and **Dr. Dick Porterfield** of Champion International. During the program presentations were made to four recently certified TREASURE Forest landowners. They included **Beatrice Cartron, J.F. Williams** accepting for **Camp Meadowbrook Conservation Camp; David Gamble** accepting for his father **Roy J. Gamble**; and **W. B. Stonecypher**.

DISTRICT 3

Over 80 students visited **Smith-Westervelt Tower and Nature Trail** as part of **Tuscaloosa County's** celebration of **Fire Prevention Week**. Smokey Bear was on hand to give out posters, rulers, and litter bags. Smokey also visited schools in **Fayette, Tuscaloosa, Pickens and Greene Counties** during Fire Prevention Week. **Cub Scout Pack 66** also toured the **Lamar County** tower site and visited with Smokey.

Close to 90 **4-H students** from **Hale and Greene Counties** met with Hale County Forester **Jim Junkin** and Greene County Supervisor **Earnest Edmonds** during Fire Prevention Week. Jim Junkin also met with the **Greensboro Rotary Club** and discussed Tree City, U.S.A., and our urban forestry programs.

District 3 also celebrated the signing of the U.S. Constitution by giving out seedlings to all the public schools in the district. A presentation was held on September 17, the actual date of the bicentennial signing of the Constitution, for the District's representative in the "Living Witness" tree program. This "Living Witness" tree was a large and healthy Southern Magnolia which was located in front of a very old antebellum home which has been recently restored by **Mr. Mo Swaim** of Tuscaloosa.

A forestry session was held in **Fayette County** at the Fayette County Park on October 12 with about 40 landowners in attendance. Featured speakers were **Jim Hyland**, AFC in Montgomery; Fayette County Supervisor **George Lowery**; **Dr. Frank Roth**, Extension Service; and **Lyndon McCavitt**, SCS.

A Tuscaloosa forestry tour was also held on the TREASURE Forests of **John Foster**, Coaling, Alabama, and his neighbor **Gulf States Paper Corporation**. Featured speakers on this tour were Tuscaloosa County Supervisor **William Moore**; **Cynthia Oliver**, U.S. Forest Service, Centerville; **Dr. Bob Mitchell** and **Dr. Jim Jenson**, both of Auburn University; District Forester **John Foster**, Gulf States Paper Corporation; and **Kent McCray**, Soil Conservation Service. One of the most interesting points on this tour was Gulf States' use of containerized seedlings. Pickens County Forester **John Sutton** recently appeared in the **Pickens County Herald** presenting a TREASURE Forest award to **Winston Ferguson**. Pickens County Forester **John Sutton, Management Specialist Pat Waldrop**, and foresters from **Mid-South Forestry Services** used **OUST** and **ROUNDUP** to release 2-year-old pine seedlings under severe herbaceous competition on the TREASURE Forest of **Steve Skelton** of Pickens County. This one acre test plot will be used as a demonstration site for a future tour. Test plots were also put out in **Fayette and Tuscaloosa Counties.**

Three forestry sessions were held last quarter in **Greene County** by Green County Supervisor **Earnest Edmonds** and Ranger **Hodges Smith**. The session in **Tishabee** concerned the use of natural regeneration; the session in **Eutaw** concerned the need for trees and methods of regeneration; and the session in **Union** concerned safety tips for cutting and burning firewood.

RCFP grant checks were distributed to the district's volunteer fire departments in July. Most of the legislators within **District 3** were present and assisted in the presentation of the checks. Like elsewhere in the state, District 3's volunteer fire departments lend a tremendous hand in helping with woods fires. Giving out the grant checks is always a pleasurable duty for County Foresters and Supervisors.

DISTRICT 4

There was an excellent response to the **Tallapoosa County Firefighters Association's** effort to honor the volunteer firefighters of District 4 at the **Third Annual Competition**. Over 1500 volunteer firefighters, their families, and supporters turned out at beautiful **Still Waters Resort** on Lake Martin for a full day of events for everybody.

There were 17 events with 1st, 2nd, and 3rd prizes. Some of the events were hose lay, bucket brigade, obstacle course, tractor competition (AFC event), cake baking, cake decorating, chili and stew making, horse shoes, tether ball, egg toss, brush truck judging, old fire truck judging, and the children's special essay event "Why My Daddy is the Best Volunteer Firefighter". There were 150 entries of teams and individuals in all of the events.

Barbecue was prepared and served by **Scott Phillips, Earl Smith, and Skip Turner** of AFC; **Mr. and Mrs. Scott Craig, Gaye Haggerty, and Bob Dothard** of Still Waters; **Clyde Daley, Ricky Caldwell, Mike Caylor, and Rodney Pless** of Dadeville VFD and **Judy Burgess**, EMT of Camp Hill.

Cleatus Ledford, General Manager of STILL WATERS; and **Ernie Moore**, District Forester; were Grand Marshalls of the Festival. **Bud Watts** planned and guided this to completion as he had done the several Barbara Mandrell shows a few years ago for the Alabama Sheriffs Boys and Girls Ranches.

Miss Dianne Sherrill and her band flew down from Nashville and completed the day with a program of Nashville music before flying back to Nashville for engagements there. Miss Sherrill, who is a native of Alabama, said she was happy to do this benefit show for the volunteer firefighters.

The awards were made in the evening at the time of the Nashville Show. **Mr. Ledford** was given one of Skip Turner's beautiful forest sculptures as Grand Marshall, and **Mr. Moore**, as Grand Marshall, was given an Emperor clock with chimes from the Emperor Clock Company of Fairhope.

Tim East, Daviston (Tallapoosa County) volunteer fireman, was nominated Volunteer Fireman of the Year and was awarded an Emperor grandfather clock, a fireman's helmet from North Alabama Fire Equipment Co., as well as a trophy.

The **McCollum family** of Clay County went 100% for winners. Norphlett, FRIII, won first place in the tractor driving contest (a trip to Gulf Shores) and a trophy; Paula won 2nd place in one of the cooking events; their twin sons Wade and Wesley won first place in the essay contest "Why My Daddy is the Best Volunteer Firefighter"—a year's supply of Meadow Gold ice cream.

Randy Ginn won second place in the essay contest. His father is a member of the Fruithurst VFD and his grandfather is retired Forest Ranger Horace Ginn of Cleburne County. **Felicia Smith** won third place (we have no VFD name at this time).

In the tractor competition (which was an AFC event), **Charles Sikes**, FRII of Randolph County, won second place; and **Ben Parrish**, FRII of Tallapoosa County won third place.

Guy Slayden, Tallapoosa County Forester, worked with **Bud Watts** for some six months to make this event a success. It was. The day ended at 7:30 with the final number of Miss Sherrill's performance.

Congratulations to Bud Watts, Guy Slayden, and all the people who worked so hard to make the day a memorable event. Just wait until next year!

On September 3, 1987, the **Services Subcommittee of the Alabama Forestry Planning Committee** approved 12 new TREASURE Forests in District 4: Chambers County—**William L. Callahan, Sr.**; Clay County—**R. B. Griffin**; Cleburne County—**Gladis Barker and Joe B. Hitt, Jr.**; Coosa County—**Doug Watkins, Ralph Kelley, William R. Prater, and Douglas McConnell, III**; Tallapoosa County—**Walter P. Mayfield, Jr.; Rosemary, Skip, and Bess Turner; and Columbus (Sonny) Roberts, III.** Congratulations to all these landowners! They have joined a distinguished group.

District Four's "Living Witness" tree is in **Clay County**. On September 14, **Blake Kelley and Earl Smith** (Clay County Forester) presented **Mrs. Ann Martin**, owner of the tree, a plaque. Mrs. Martin is very proud of her huge water oak which has certainly been around for a long time. Also attending the presentation was Mrs. **Williams** who

knew about the tree and recommended it for this honor. Mrs. Williams has become interested in the AFC Champion Tree program and has found another oak in Clay County that Forester Smith is checking on which will be nominated as a Champion if they find it qualifies.

Blake Kelley is the Coosa Valley RCD Forester and was responsible for a very good seminar at Cheaha on Wood Energy/Industrial Development. The seminar was well attended and a most informative program was presented. **Mr. E. D. Whiteside**, Chairman of the Coosa Valley RCD Forestry Committee, extended a welcome to the group, and **Blake Kelley** introduced **Jim Gober**, AFC Utilization Forester from District 2. **Ralph Stanford** of the Energy Division of ADECA spoke of the help available for businesses interested in conversion of energy sources to aid in cost cuts. **Gary Faulkner**, Chief of Industrial Relations and Utilization for the Alabama Forestry Commission discussed highlights of Governor Hunt's search for industry in the Far East. Gary was among those who accompanied the governor on this trip and offered challenging ideas and information concerning the possibilities of cooperation with Taiwanese, Korean, and Japanese industrialists, their needs, and their aims; he also showed a film clip made by **WBRC-TV** on that trip. **Tom Cambre**, State Hardwood Specialist with the AFC, spoke on hardwood trends and utilization; Tom offered much needed information concerning the advantages in landowners planting and managing hardwoods as opposed to the old "pine is it" philosophy. **Ron Bullard**, Speakman Oak Reproductions of Hartselle, spoke on the installation of a wood fired system at his company. He had an interesting slide program to illustrate the simplicity of the installations and the many advantages such a system had brought to the business. The most memorable fact was the saving of approximately $600 per month to have shavings and sawdust hauled off. Now, this waste material heats the business. There were approximately thirty people attending the seminar.

DISTRICT 5

The **Autauga County Forestry Committee** sponsored their annual **Forestry Tour** on October 21. Approximately sixty people attended. The **Union Camp Paper Mill** and grounds were toured. Other tour stops included forestry herbicide stops showing control of kudzu and bermuda grass in a young pine plantation. A barbecue lunch was held at **Cooter Pond Park** after the tour. **Neil Letson** presented **Mr. and Mrs. Randall Wolf** with the TREASURE Forest Award during lunch. The Wolf TREASURE Forest is located west of Billingsley.

On October 15, Forest Management Specialist **Tom Lang** was interviewed on radio station **WHBB** in Selma. Tom talked about the fire situation in Dallas County and the surrounding area. Forestry laws and litter laws were also discussed.

District 5 personnel have been busy suppressing fires during the extended late summer and early fall drought experienced by central Alabama.

On September 10 and 11, **Tobie Mayfield**, Chilton County Supervisor, attended the **4th Annual Landowner and TREASURE Forest Conference** held in Bessemer, Alabama.

On August 17, **Elliott Ford and Paul Wingard** participated in the **Wilcox County Auburn Extension Service's Wildlife Day** at Miller's Ferry, Alabama. A fire prevention program was given with a demonstration of a truck/tractor fire unit. The twenty-five students attending also toured the **U. S. Army Corps'** lock and dam and its stuffed wildlife exhibit.

On October 2, a fire prevention program was presented to fifty-two students at **Wilcox Academy** in Camden, Alabama.

On October 12, a fire prevention program was presented to the **Camden Exchange Club**.

On October 13, **Elliot Ford** presented a fire prevention program to seventy-eight students at the **Pine Hill Middle School**. A slide program on Alabama's birds was also shown.

DISTRICT 6

Due to the severe drought conditions this fire season, District Forester **Franklin McAliley** reports that **District 6** has experienced its most hectic wildfire season on record. For the month of October, District 6 had responded to 183 wildfires that burned 816.7 acres. Franklin wishes to commend all District 6 firefighting associates for holding the average wildfire size to 4.5 acres per fire so far!

With the CRP tree planting season just around the corner, **District 6** rangers and foresters are gearing up for many hours of inspecting and checking on approximately 23,000 acres of land.

Pike County Rangers Wayne Craft and Mike Stinson are proud to announce the certification of three additional Treasure Forest landowners—**William P. Stewart, Jay Johnson and Robert W. Holliman**.

Wayne Craft and Mike Stinson have recertified two new Treasure Forest Creed Signers hoping to become future Treasure Forest landowners.

Barbour County Forestry Worker David Gulledge was host to Smokey Bear at **Eufaula's Indian Summer Days Festival**. Smokey made new friends on the streets of the **Old River Town**. First and second graders at **Clayton Elementary School** were taught fire safety by **Ranger Edd Fenn** and **David Gulledge**. Sixty-four students sent hand drawn pictures to the **Barbour County** office showing what they had learned.

Speaker of the House **Jimmy Clark** attended a special meeting of the **Barbour County Volunteer Firefighters Association**. He presented the grant checks from the **Forestry Commission** and a special donation to the firefighters association. Also, Mr. Clark dedicated **Mrs. Mildred Kilinski's desert willow as the Alabama Champion** for that species.

Senator Danny Corbett presented the Treasure Forest certificates to **"Buck" Taylor, Robert L. Cody and family, and Hayward Helms** at a landowners' meeting sponsored by the **Barbour County Forestry Planning Committee**.

With the assistance of Coffee County Supervisor Wayne Roberts and **Forester Bob DeVaughan**, the **John Brunson Estates** and the **Boy Scouts Camp Alaflo** were recently certified as Treasure Forest landowners. Bob DeVaugahn is helping **Dr. Jim Paulk** become a future Treasure Forest landowner by completing a Treasure Forest plan on his proeprty.

Coffee County personnel are actively assisting creed signers by constructing firebreaks and burning for the upcoming planting season. Also, they have four additional Treasure Forest creed signers for potential Treasure Forests.

Houston County Ranger Thomas Harris and Smokey Bear (Radio Operator **Don Wilson**) made an appearance in Dothan during the **National Peanut Festival** in October.

On November 17, Houston County landowners **William and Paul Hughes** and **Jay and Jeff McCallister** were presented their Treasure Forest Award Certificate and caps by **Neil Letson**.

Henry County personnel have spent many hours constructing firebreaks and burning to assist future Treausre Forest landowners achieve their goals.

Henry County has increased their potential Treasure Forests by the addition of three new creed signers.

Fire Specialist Bruce Bowden and Smokey Bear appeared at the **Cub Scouts** monthly meeting at **Joseph W. Lisenby Elementary School** in Ozark. **Smokey** greeted and gave out fire prevention and safety materials to approximately 60 cub scouts.

Rangers Kenneth Blalock and Tommy Haynes wish to congratulate **Frances Smith** on her recent certification as a Treasure Forest landowner.

Dale County personnel wish to express their congratulations to **Luther Weed** for becoming a Treasure Forest landowner.

In honor of fire prevention week in October, **Dale County Supervisor Bruce Hancock, Forester Gordon Horsley and Smokey Bear** recently visited three elementary schools—**Mamie Thompkins, Harry N. Mixon and Fort Rucker Elemenetary School**. While Gordon talked about fire prevention, Smokey shook many hands and made many new friends.

DISTRICT 7

On October 13, 1987, a forestry tour was conducted on the **Foster Childress** property in **Conecuh County**. Conecuh County Supervisor **Victor Howell**, Ranger **Len Fialko**, District Forester **Robert Dismukes** and CFM Forester **Gib Burke** were present at the tour. A discussion of chemical application for control of kudzu and other undesirable vegetation was presented.

In early fall, employees of **Polyfelt** presented a program showing use of their products in the forestry industry. Those present included the **Conecuh County Forestry Committee, Gary Faulker, Victor Howell and Robert Dismukes**.

Conecuh County personnel **Victor Howell, James North and Robert Taylor** presented a program to approximately 200 Boy Scouts at the **Regional Jamboree** at the **Evergreen Airport** on November 14, 1987.

Approximately 75 people attended a tree planting demonstration in **Covington County** on November 13. **David Hoge, Bill Padgett and Gib Burke** worked with Covington County personnel to make this demonstration a success.

Covington County personnel burned approximately 1200 acres of longleaf for a seed catch during October, 1987.

Covington County Ranger **Dwight Rathel** attended a part of the Forestry Academy as an equipment instructor.

On September 26 **Smokey** and Covington County Supervisor **Albert Hardage** took part in a parade and **Armadillo Roundup in Red Level**. They report the armadillo stew was good.

Smokey and Covington County Supervisor Albert Hardage attended a celebration at **Swift Supply** on October 10. A photographer was on hand to make individual pictures of Smokey with those attending the celebration at no charge.

District 7 Headquarters is proud to announce the completion of their new hanger at the Brewton Airport. A special thanks is given to **Escambia County personnel** for their work on this project!

The **Covington County Fire Fighters Association** participated in the **Annual Covington County Kiwanis Fair** the week of October 24-30. Their theme was focused on fire prevention. The Association won a **Blue Ribbon** for promoting education.

Representing **Crenshaw County** at the **Association of Volunteer Fire Departments** at the **Volunteer Fire Fighters Training Conference** at the Madison Hotel in Montgomery August 21 and August 22, 1987, were firemen **Paul Creel** of Luverne and **Authur Thomas** of Highland Home.

The **Solon Dixon Forestry Center** hosted an equipment and fire plow demonstration on August 27, 1987.

A large white oak tree belonging to **Janis Odom** was selected as **Butler County's** Living Witness to the signing of the United States Constitution. Documentation and testimony by the owner and friends and relatives indicated the tree is over 200 years old. The recognition service was held on September 17, 1987. **Dr. J. H. Prigmorie**, History Professor at the University of Alabama, was the guest speaker. **State Forester C. W. Moody** was also present. **Probate Judge Calvin Steindorf** of Greenville welcomed everyone.

On September 17 Treasure Forest certificates were presented to **Steve Moran and David Crenshaw, Jr.** by the **Butler County Forestry Planning Committee**.

Union Camp entertained **District 7 personnel** and **Soil Conservation personnel** with a cook out at Cohasset on November 10. The supper was in appreciation of outstanding fire suppression efforts by the District 7 units which includes **Conecuh, Covington, Crenshaw and Butler Counties**.

DISTRICT 8

The **Baldwin County Chapter of the Wildlife Federation** had a Fish and Wildlife Day on September 19 in **Robertsdale**. Assistant County Supervisor **Lynn Booth** and Ranger **John Fenn** set up a display board. A Baldwin County transport and tractor unit was demonstrated.

Eight volunteer fire departments attended a meeting in Mobile on August 18, at which time grant checks were distributed to the departments. Those present were **Senator Ann Bedsole, Representative J.E. Turner, Mobile County Supervisor Steve Lyda, Assistant County Supervisor Jerry Dwyer, Ranger Jim Wade, Bobby McAdams, and District Forester David Frederick**.

Baldwin County Forester John Martin met with members of the **Silverhill Tree Board and Mayor Ewing** to discuss a root decay problem in the city's street trees and also how to correct pruning methods.

Choctaw County personnel met with the **Choctaw County 4-H Club** on August 12. The topics of discussions included forestry, fish and wildlife in Alabama. Posters were distributed.

Mobile County Ranger David Rogers visited the **Shiloh Christian School** on September 17. Twenty-six 3rd grade students attended. The subjects were fire prevention and control.

The Baldwin County Extension Council held its annual meeting on September 22 in **Robertsdale**. **Baldwin County Supervisor John Martin**, who is a member of the Baldwin County Forestry Planning Committee, gave a report on the Committee's achievements for the past year and ideas for new projects for the coming year. Over 100 people attended.

Mobile County Ranger Major Harris assisted in planning and setting up programs with the **4-H, Boy Scouts, and Girl Scouts** in honor of Youth Appreciation Day.

On September 27, **Baldwin County Ranger Ralph "Bud" Price** took the **Baldwin County Fire Chiefs Association's "Smoke House"** to Prattville for

the Volunteer Fire Fighter's Appreciation Day festivities. The uses and great benefits of the "Smoke House" were demonstrated to fire departments throughout the state, and the general public.

DISTRICT 9

District Nine submitted nine entries into the "People Against Litter" program awards competition. District winners were the **Lawrence County Chamber of Commerce; Dr. Dick Porterfield, Chairman, TROLL—Totally Rid of Loathsome Litter; Greater Shoals Area Chamber of Commerce; and Jerry Harrison of Decatur**. **TROLL** was selected to receive the **Helen Hunt Award** as the best project in the state in their category.

Danny Deaton, Colbert County Supervisor, has organized a clean-up committee for Colbert County. The organizational meeting included the Colbert County Sheriff, members of the County Commission, representatives from the volunteer fire departments, Northwest Alabama Regional Health Department officials and Alabama Forestry Commission employees. Their goal is to clean up waste dumps in Colbert County.

Mrs. Bertha Baisden of Florence represents Alabama as **Chairman of the Smokey Bear/Woodsy Owl Poster Contest**. She was recognized at the Deep South Meeting of Garden Clubs of America for her work during 1987. An Alabama student from Franklin County received the National Award in the Smokey Bear contest in 1987.

Louise Bone attended the **Florence Garden Club** meeting and reported on the progress of TREE CITY, USA in Florence. The **Florence City Council** has appointed a Tree Board which included **Ron Blackwelder**, Champion International.

District Nine honored their Living Witness Tree with ceremonies held in Sheffield. **Tammy Ellis**, staff forester, presented **Sheffield May, Renny Breazeale** with the handsome plaque honoring the **Colbert Ferry Walnut**. Neighbors came out to witness the ceremony. Some told how people drive by just to look at the tree, gather seed from the historical tree and even hold weddings underneath the tree.

Almost every school in District 9 participated in the tree planting project sponsored by the AFC, Governor's office, and State Department of Education to commemorate the signing of the Constitution. **Louise Bone and Tammy Ellis** assisted the **Mars Hill Anchor Club** in a tree planting project on the campus of Mars Hill School in Florence.

Lawrence County Forestry Planning Committee sponsored a tree planting demonstration in Lawrence County during October. AFC Foresters **Don Burdette, Tammy Ellis and County Supervisor Larry Lee** participated in the program. **Dr. Frank Roth** spoke to the group on the economics of pine management.

Gerald Steeley, Roger Nichols, Tammy Ellis, Louise Bone, Steve McEachron and Danny Deaton attended the Landowner Conference in Bessemer.

The **Colbert County Forestry Committee** hosted a tour of **Tennessee River Pulp and Paper Company** plant in Counce, Tennessee. **Gerald Steeley and Danny Deaton** represented the Alabama Forestry Commission.

Alabama Forestry Commission employees participated in County Fairs in **Morgan, Lawrence and Colbert Counties**.

The **Fourth Annual Forestry Camp** was held in District Nine in October. Forestry Camp started in 1984 when **Louise Bone** was awarded a grant from the **W. Kelly Mosley Environmental Awards Committee** to fund the **Forestry Career Camp**. In 1985, 1986 and 1987, the FFA Forestry Camps were funded by a grant to **Tony Avery** from the Mosley Awards program. The 1987 camp was directed by **Tony Avery and Kathy McCollum**. Staff Foresters **Tammy Ellis and Don Burdette** assisted as instructors. **Steve McEachron**, Lauderdale County forester; **Chuck Sharp**, wildlife biologist; **Gary Tidwell**, forester with Champion International; and **Joe Namie**, Itawamba Jr. College; served as instructors.

Steve McEachron, Don Burdette, Gary Rhodes and Vernon Young participated in the **Farm City Week** activities in Lauderdale County by leading a tour of the **Seth Lowe TREASURE Forest**. **Neil Letson** presented **Seth Lowe** with his TREASURE Forest certificate.

Tammy Ellis presented the **City of Red Bay** with the street tree survey. Red Bay has completed the requirements for Tree City, USA.

DISTRICT 10

Elmore County TREASURE forest landowner **Ed McCullers** has entered into an agreement with local officials for use of a small crawler tractor and equipment with which he plans to plow fire breaks for other small land holders like himself in his area who otherwise might not be able to afford that service. This all came about because other Titus community residents saw McCullers' enthusiasm for his 100-acre-size TREASURE and the benefits of pre-suppression fire line construction. Ex-AFC Supervisor **Ray Carpenter** is also a partner in this deal.

Planning Committee representatives from five east-central Alabama counties met in **Hurtsboro** on November 6 to set down details for their big TREASURE event on April 21, 1988. A **Natural Resources Field Day** will cover bottomland hardwoods, herbicides, wildlife and fish pond management, pine beetles and other subjects. Forestry chemical and machinery companies will sponsor the day to be held on the **George Watkins** property near Rutherford in Russell County. TREASURE-type landowners from all surrounding counties in Alabama and some from across the river in Georgia are expected to attend. **Don Bice**, Russell Extension Service chairman, (205) 298-6845, is the working coordinator for the event and is gathering all the details.

Serious thought and consideration is being given hardwood species in their own right across **District 10**, not as trees to occupy sites not suited to pine, but as trees to be grown on sites best suited to them. This is coming about in part because of the TREASURE emphasis on landowner interest, best use of land resources and the true application of multiple-use forest management principles. Economically and symbiotically the soundest recommendations for AFC advisors of the next 20 years may be hardwood production and the seemingly associated recreational benefits accrued from "bottomland" management.

Non-contractual agreements between landowners in **District 10** and AFC prescription burners are being used more often these days. All of an individual's property to be burned is divided into smaller handier plots, and these are fired at the best time for both the owner and the AFC. This method yields a long-term commitment to good forest management on the part of the landowner, is easier on his pocketbook and is more convenient for local AFC folks than all-acre burns. Of course, an actual contract signing is done for each time fire is prescribed.

CALENDAR

January 4—Cleburne County, 6:30 p.m. Forestry and Wildlife Association meeting. Call Glenn Berry, 463-2876.

January 5—Walker County, 9:00 a.m. Forestry Planning Committee meeting at Extension Auditorium on Airport Road. Call Charles Hall, 384-6344.

January 8-27—New Zealand. American Forestry Associa-tion tour. $3100. Call Bill Tikkala, 1-800-368-5748.

January 9-10—Marshall County. Eagle Weekend at Lake Guntersville State Park. Call Carlos Scardina at 261-3334 or 1-800-ALA-PARK.

January 12—Jefferson County, 7:30 p.m. Alabama Forest Owners Association. AmSouth Bank, Hoover. Timber Sales Contracts—the Landowner Can Be in Charge. Discussion by Sam Lewis, Lewis and Bagwell Forestry Consultants. Pre-program dinner at Shoney's, 6:00 p.m. Call 663-4138.

January 13-15—Athens, Georgia. Winning Tax Strategies with Dr. Harry Haney, VPI; and Dr. William Siegel, U.S.F.S. Call Andy Little, (404) 542-1585.

January 16-17—Marshall County. Eagle Weekend at Lake Guntersville State Park. Call Carlos Scardina at 261-3334 or 1-800-ALA-PARK.

January 23-24—Eagle Weekend at Lake Guntersville State Park. See listing above.

January 30-31—Eagle Weekend at Lake Guntersville State Park. See listing above.

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

MEMORIAL

Alvin Downing

Our hearts were saddened at the death of Alvin Downing, former district forester and regional forester with the Alabama Forestry Commission, on October 19, 1987. During the thirty-eight years that he worked for the Commission, he earned the respect of his associates and other professionals as well as the landowners in his district. His presence among us will be missed.

Florence Hall

Our condolences are also extended to TREASURE Forest landowner David Hall whose wife Florence passed away on September 19, 1987. Her love for her family was evident in all that she did. Many were touched by her gentle ways and deeds.

PLANTING TREES?
Standards Can Help Ensure Survival

by DAVID A. HOGE, Reforestation Specialist

The advent of the Conservation Reserve Program has stimulated a large increase in the amount of tree seedling planting occurring in Alabama. During the winter of 1986-87, over 370,000 acres were planted in our state with pine seedlings. It is estimated that forest industry planted over 190,000 acres. An additional 180,000 acres of non-industrial private land was also planted, with 67,000 acres of this being planted under the Conservation Reserve Program (CRP). Some 250 million seedlings were used in this effort. Alabama Forestry Commission nurseries supplied about 25 percent of the total seedlings planted. The amount of tree seedling planting in Alabama is expected to remain at high levels due to the continued conversion of marginal cropland to trees. An additional 105,000 acres of CRP land is approved for tree planting this planting season. Total acres expected to be planted this year exceed 390,000.

The Conservation Reserve Program, in addition to stimulating a large increase in the quantity of reforestation occurring in Alabama, has forced the Alabama Forestry Commission to pay closer attention to the quality of tree planting. A number of, how should we say, *marginal* tree planters have entered the vendor picture. Landowners, themselves, are frequently planting their own land without proper knowledge of seedling care and handling and correct methods of planting. In response to this, the Alabama Forestry Commission has developed stricter quality control elements for tree seedling planting in the state and will begin incorporating these standards into management plans developed for the forestry incentive (cost-share) programs used in Alabama.

Quality Control Planting Problems

A recent survey conducted by the Alabama Forestry Commission concerning seedling survival showed that over the last three years survival averaged 75 percent. While this appears an acceptable level of accomplishment, breaking the figures down further shows that industry survival rates are approximately twenty percentage points higher than that occurring on non-industrial private land. An additional study conducted by the Alabama Forestry Commission in conjunction with a regional study by the U.S. Forest Service showed that of the seedlings sampled only 45 percent were found to be correctly planted according to Forest Service standards. This study was limited to a sample of cost-share cases in four counties near Montgomery, but it is indicative of problem areas needing attention.

It appears that the biggest problem with tree seedling planting occurring on non-industrial private land is lack of proper supervision. This lack of supervision is most readily observed in the type of planting deficiencies discovered in the Forest Service study. These deficiencies included improper packing of soil around seedling roots, planting of cull seedlings, "J," "U," and "L" rooting, and excessive pruning of seedling roots. Improper care and handling of seedlings prior to planting was also observed. The cumulative effect of such planting deficiencies is reduced seedling survival. The Alabama Forestry Commission, due to its fire suppression responsibilities and other duties, is frequently unable to be at each site during planting; therefore, it is vitally important that the landowner or vendor exercise proper supervision of planting crews in order to ensure a quality job of tree planting is accomplished to provide the best chance of seedling survival.

Revised Standards Address Quality Control

In response to these studies and the obligations of the Alabama Forestry Commission to the cost-share programs, the Alabama Forestry Commission has revised its reforestation standards. The new standards differ from the old standards in that a number of quality control elements have been added. These new elements are concerned primarily with the care and handling of seedlings prior to planting and the definition of correctly planted seedlings for compliance under cost-share. Therefore, the ability of the Alabama Forestry Commission to enforce these standards will be limited to planting practices made under the Agricultural Conservation Program (ACP), the Alabama Resource Conservation Program (ARCP), the Conservation Reserve Program (CRP) and the Forestry Incentives Program (FIP). However, landowners and vendors planting without benefit of cost-share assistance are encouraged to exercise similar concern for quality of tree seedling planting. The revised standards are summarized as follows:

1. For an applicant to receive cost-share assistance for tree seedling planting in Alabama, 80 percent of the number of seedlings recommended in the management plan by the forest technician must be found to be alive and correctly planted at the time of inspection.
2. Only pine seedlings of Grade 1 or Grade 2 quality are to be planted. Seedlings with less than five inches of shoot length or less than five inches of root length are to be culled, with exception of longleaf pine. Seedlings lacking secondary needles or having visible defects should also be culled.
3. Seedlings must be transported and stored correctly and planted within two to three weeks of leaving the nursery.
4. Seedlings are perishable; therefore, it is vitally important to reduce the likelihood of lethal heating or freezing or desiccation (drying out) due to root exposure. Seedling roots must be kept cool and moist at all times.
5. Plant bare-root seedlings December through March, preferably on days when the air temperature is between 33 to 75 degrees Fahrenheit, the relative humidity is above 50 percent, the wind speed is less than 10 miles per hour, and the soil contains abundant moisture.
6. Plant seedlings only of species that are adapted to site. Never plant seedlings of species outside its natural range.

7. Planting recommendations are site specific; therefore total number of planted seedlings found on-site at time of inspection must be within 20 percent of the number recommended in the management plan by the forest technician.
8. When planting, be sure planting hole or trench is clean of debris.
9. Seedlings must be planted at the correct depth, with the taproot extending downward at least five inches below the root collar, and with at least three inches of stem and the terminal bud visible above ground (except longleaf).
10. Seedling roots must be straight in the hole, with no exposed roots and not twisted, balled or planted in a "J"-, "U"- or excessively "L"-shaped manner. A short "L" root occurring at greater than five inches root length is acceptable.
11. Improper angling of the root, defined as greater than 30 degrees from the vertical, is not acceptable. Stem angles greater than 45 degrees from the vertical are, likewise, not acceptable.
12. The soil must be firmly packed around seedling roots. Firmness of packing will be checked by the "four-needle test."
13. Compliance inspection for approval of planting practice under cost-share will be made by representatives of the Alabama Forestry Commission as soon as possible following notification of practice completion. Inspections will consist of a representative sampling of 1/100 acre plots distributed across the planted area.
14. Above and below ground observations of planted seedlings on each plot will be recorded on appropriate planting review forms. The review form will be placed in the applicant's file along with the referral form.
15. It is highly recommended that written contracts be executed to protect both the vendor and the landowner.

These standards were developed to improve the quality of tree seedling planting occurring in Alabama, and therefore, improve seedling survival. They also define a quality planting practice and establish a uniform method of inspection. Approval of planting practice under cost-share is conditional on at least 80 percent of seedlings planted being found to be alive and correctly planted at the time of inspection.

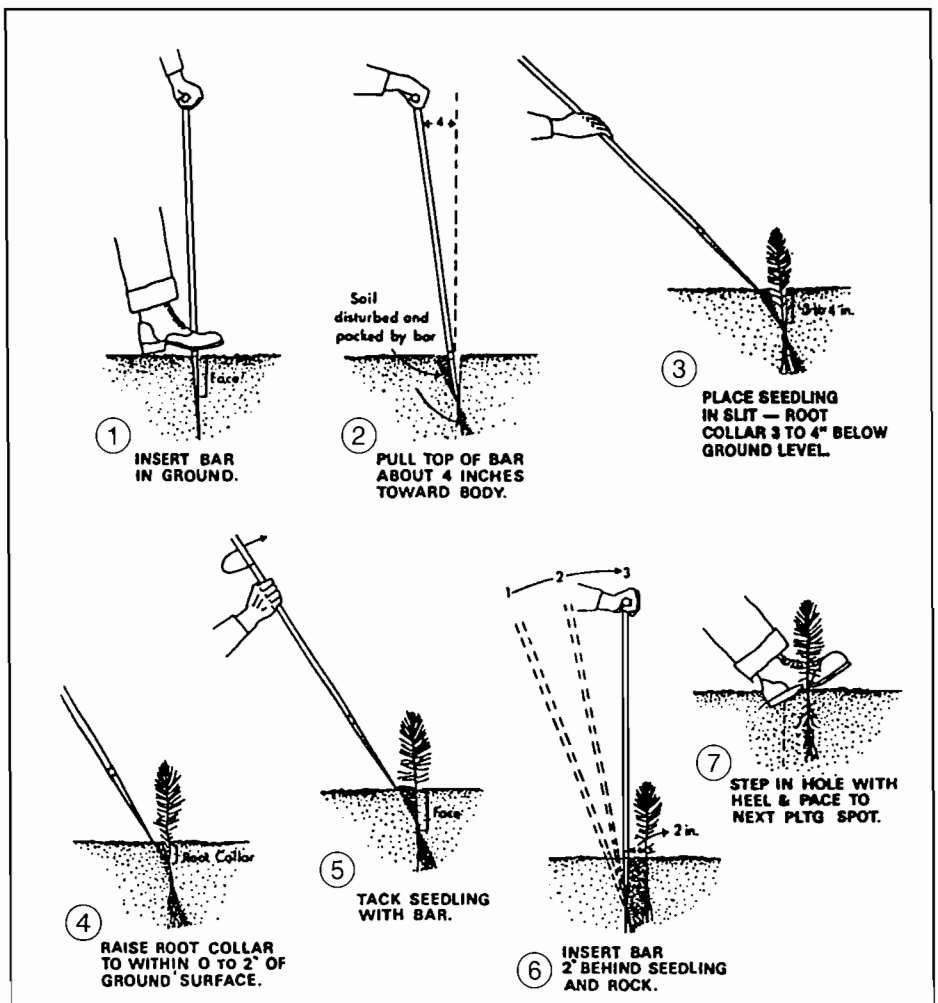
It is the intention of the Alabama Forestry Commission to phase in the new standards gradually over the next two years and to provide educational seminars for both landowner and vendor alike. The process is already underway, with a number of county sessions having taken place.

Conclusion

Barring unforeseen natural calamity, such as drought, a successful planting practice is dependent upon seedlings receiving proper care and handling prior to planting and seedlings being properly planted. The new reforestation standards address these issues, but successful tree planting is not the sole responsibility of the Alabama Forestry Commission. Our job is to provide quality seedlings suitable for planting from the state nurseries, to set the standards for tree seedling planting, and to check for compliance with cost-share obligations. Successful tree seedling planting is the primary responsibility of the landowner. The landowner must obtain good seedlings suitable for planting, properly care for those seedlings, and locate a reputable vendor to correctly plant them. The landowner and vendor alike are strongly encouraged to engage in a written contract detailing the responsibilities of each.

As with all matters relating to management of one's TREASURED Forest, landowners are advised to seek professional help from trained foresters experienced in the care and handling of tree seedlings and proper planting methods. Concerning written contracts, landowners and vendors should consult legal counsel.

The author wishes to thank Mid-South Forestry Services, Gordo, Alabama, for information used in the preparation of this article and to express sincere appreciation to Bill Padgett and to all of the personnel in the Nursery Section of the Forestry Commission for their valued assistance in the revision of the reforestation standards.



Proper Method of Handplanting Loblolly Seedling Using a Dibble Bar

EXHIBIT 1

Precautions Concerning Seedling Care and Handling During Transportation

- Inspect seedling bundles for shipping errors while loading.
- Haul in a refrigerated truck if available.
- Use a tarpaulin to avoid excessive exposure to sun, wind and freezing temperatures.
- Be sure seedling bundles are stacked properly with adequate ventilation to prevent overheating.
- Transit period should be kept as short as possible.
- Unload seedlings immediately upon arrival at destination and store properly.

During Storage

- If possible, place seedlings in cold storage; dormant seedlings can be kept in cold storage for up to ten weeks at 32 to 40 degrees Fahrenheit and high humidity.
- Tape up holes in packaging to prevent drying of roots.
- Concerning uncoated bare-root seedlings, water seedlings upon arrival and every other day thereafter; do not water seedling roots which have been treated with moisture retentive material as this will remove the protective coating.
- Store bundles in areas protected from sun, wind and freezing temperatures.
- Stack bundles loosely, not over three deep and use spacers between bundles to permit adequate ventilation.
- Stack bundles with one end higher than the other to permit drainage.
- Seedlings kept without benefit of cold storage should be planted within three weeks.

During Planting

- Avoid planting when the ground is hard, either frozen or dry, or when excessively wet and sticky.
- Allow frozen seedlings to thaw naturally in bundles before attempting to separate.
- Seedlings should be carried in protective containers or bags to protect the roots from exposure to sun and air.
- Remove only one seedling at a time from protective container and plant immediately.
- Place seedling in hole in such a manner as to assure proper root alignment.
- Check spacing periodically to assure proper number of seedlings per acre.
- When machine planting, be sure tractor speed is matched to that of the planter; tractor speed should not exceed two and one-half miles per hour.
- Check furrow depth when machine planting, or dibble length and depth of planting hole when hand planting to provide for the full length of the roots when straight.
- To check firmness of soil packing, grasp the tips of the top four needles of the pine seedling and pull upward; if the tree pulls out of the ground, it was not firmly packed, if the needles pull off the plant without uprooting the seedling, the soil has been sufficiently packed.

EXHIBIT 2

Sample Tree Planting Contract

THIS AGREEMENT, made this the _____ day of _____, 19____, by and between _____, hereinafter referred to as Landowner, and _____, hereinafter referred to as Contractor, witnesseth that:

WHEREAS, the undersigned Landowner owns the lands in fee simple as described: _____ in the County of_____, State of Alabama, containing _____ acres, more or less, a copy of said deed is attached as exhibit and incorporated as part of this agreement, and Landowner desires to have acreage planted with _____ seedlings; and

WHEREAS, Contractor represents that it is engaged in the business of forest development and has the personnel, knowledge and equipment necessary to carry on such a business; and

NOW THEREFORE, in consideration of the premises and the mutual agreements herein contained the parties hereto agree as follows:

1. Contractor agrees to plant said seedlings on the above described property at a spacing of _____ or trees per acre. Other specifications are: _____

_____

2. Landowner agrees to pay as total consideration for the work to be done the sum of $_____ to be paid as follows: _____. Landowner agrees to accept full responsibility for complete payment for work rendered upon completion.

3. Contractor agrees that eighty percent (80%) of the described number of planted tree seedlings will be free from planting defects such as looseness, "J"- or "L"-rooting, or other defects as described in the Alabama Forestry Commission Manual on Reforestation Standards.

4. Contractor guarantees survival of at least _____ seedlings per acre within twelve months after planting unless extreme weather in the form of drought, flood or freezing temperatures occurs or unless seedling defects are evident.

5. Landowner agrees to notify Contractor within thirty (30) days from completion date of any planting defects which were guaranteed against. Failure to notify Contractor within said time constitutes acceptance by Landowner.

6. Landowner, should he so provide seedlings, agrees to provide Contractor with viable seedlings suitable for planting.

7. Landowner warrants that he owns the property or has the right to plant seedlings on said property and agrees to provide Contractor with accurate maps of the area, and grants the right of ingress and egress to Contractor for the purpose of conducting work as described herein.

8. Landowner agrees to hold Contractor harmless from any claims of other third parties claiming an interest in the described property and to indemnify Contractor against such claims.

9. The terms of this contract are agreed to on this the _____ day of _____, 19_____, and shall terminate on the _____ day of _____, 19_____.

IN WITNESS WHEREOF, the parties hereto have executed this contract on the day and year described.

WITNESS:

_____

_____

_____

CONTRACTOR

BY: _____

ITS: _____

_____

LANDOWNER:

Weather or Not

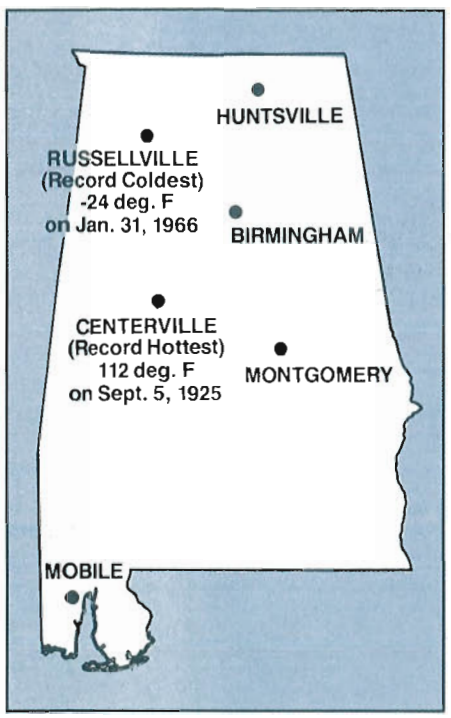
It definitely affects forest management

by STANLEY R. ANDERSON, Resource Analyst

Forests cover over 66% of Alabama's land base. Climate, perhaps more than any other factor, has influenced the type of trees and health of our timberlands. The weather related characteristics of our environment contribute significantly to the decisions we make when managing our forests. Most cultural and silvicultural activities are patterned in accordance to our seasonal or "normal" weather. Unseasonal or extreme weather conditions cause unpredictible situations and sometimes problems in our forests.

Weather and Climate

Our *climate* represents the average weather of a region over a long period of time. Because of the large variability of weather from day to day and year to year, many years of observations are required to accumulate enough data for computing acceptable climate statistics. Climatologists classify Alabama as having a subtropical, moist climate. This is an excellent situation for our growing forests. The record cold is -24 degrees Fahrenheit and record hot is 112 degrees Fahrenheit (see map.)



Weather has helped shape our culture, folklore, conversation and habits. Most of us adjust our seasonal and daily routines to the normal. The same is true for the way we manage our forests. The following sections of this article will give you some historical information about some weather related surprises which have affected Alabama's forestland. Some guidelines are offered on predicting problem areas and minimizing any negative consequences. All weather related effects will have varying impacts on our forest depending upon tree species, soil types, stand characteristics, latitude and topographic situation.

Tree Planting and Nursery Operations

Temperature and precipitation have significant impacts on reforestation activities from the time the seed is planted in the nursery bed until the tree becomes established in the forest. The "freeze" which occurred on December 25, 1983, caused tree losses in nurseries and recently planted forests throughout the South. In Alabama, the minimum air temperatures ranged from -4 to 11 degrees Fahrenheit and the soils throughout the state were frozen to a depth of 3 to 5 inches.

Freeze damage in state tree nurseries were estimated at 20.8 million seedlings. Damage was observed on both pine and hardwood seedlings. Longleaf pine seedlings suffered the greatest losses. In general, the most severe damage was observed on nurseries with fine textured soils, soils with high moisture content prior to freezing, and nursery beds with a northern aspect. Another contributing factor of this severe impact was the drastic change in temperatures. Just prior to this hard freeze, the air temperatures had ranged in the 50's and 60's.

High mortality usually occurs when seedlings are planted on exposed sites and under conditions of moisture stress such as dry or frozen soils, extreme air temperatures or low humidities. Frost heaving, a result of freezing ground spewing a seedling out of the soil, occurs on soils which hold pockets of water such as pebbly and shaley materials. Even if the tree is not lifted out of the ground, it is possible for the ground heave to cause bark damage near the root collar. However, planting schedules can be adjusted to avoid high risk based on short-term forecasts of such weather conditions.

Another way to minimize risks of harsh weather effects and soil related problems on bare-rooted tree seedlings is to plant containerized seedlings in the fall. Container-grown trees can add up to five months to the normal three-month bare-root planting season. Sites too wet to plant in the winter can be planted after flooding ceases. Also, because of fall planting and low transplant shock, container-grown seedlings can be interplanted six to nine months following original bare-root planting which might have suffered high mortality due to extreme weather conditions. Containerized seedlings should be acclimated prior to planting. For example, avoid moving trees directly from the greenhouse nursery to the field site (see *Plant Containerized Seedings*, **ATF**, Fall, 1986).

Drought or unusually long dry spells can cause mortality to recently planted trees. The drought of 1986, driest on record for

nost Alabama counties, contributed to eedling mortality such that statewide urvival rates were 6 to 14 percent below 985 levels. The American Forestry Association estimated that about 350 million eedlings were killed by the drought in the Southeast and Mid-Atlantic states in 1986.

Landowners and forest managers can ake measures to minimize this effect by nsuring quality tree planting. A poorly lanted tree is already under stress, and a ry season can easily cause it to die. Added rotection can be afforded seedlings by oaking or dipping roots in various slurries r other products of this nature on the narket. These dips reduce desiccation drying out) of roots, particularily on dryer ites and during drought conditions.

Wind and Ice

Icestorms usually hamper small and solated portions of Alabama's forests every ear. These storms are caused by freezing ains which leave a heavy icy coating on the eaves, needles and branches of trees. The esult of this accumulation is damage to rees and stands. Such damage usually consists of uprooted trees, broken branches, broken tops and bent trees. An additional complication is the fact that many trees fall across power lines and roadways.

Depending on the amount of damage, rees or stands should be harvested, salvaged r left to recover on their own. (Several tips n how to make this determination can be found in *After the Iceman Cometh*, **ATF**, Spring, 1985.)

Consideration should be given to the proper tree species to plant in areas with a history or susceptibility to ice damage. Slash pine can be severely damaged by ice; loblolly has some resistance; and shortleaf reists ice damage even better.

Frost damage to established trees can

occur in early spring or early autumn. Sudden occurrence of below freezing temperatures can severely damage unhardened tissues. This can result in damage or death to needles, leaves, buds or fruit. Entire crowns may be affected.

Hurricanes and *tornadoes* have periodically caused damage to timberland in Alabama. In September, 1979, Hurricane Frederic roared into Alabama hitting Baldwin and Mobile counties first, then spawning several tornadoes further inland. The value of lost and unsalvageable timber was estimated at $200.8 million. One of the worst tornadoes in recent history occurred in Brent and Centerville in the spring of 1973. Aerial photographs showed timber destroyed in a swath spanning almost a mile wide in places. Efforts to salvage these losses continued for over a year.

Weather and Other Forest Management Considerations

The timing and distribution of rain is very important to forest managers and affects many management decisions. The areas of *prescribed burning* and *wildfire control* are dependent on precipitation and other weather factors.

The use of fire is a complex procedure and requires people who are skilled and experienced to use it successfully. *Smoke management* is a very important matter especially in smoke sensitive areas where health and safety should be considered. Prescribed burning is done under carefully controlled conditions to achieve the desired results, whether it be hazard reduction, site preparation, disease control or wildlife benefit. Great care in planning requires making sure wind, temperature, humidity and other conditions are just right.

Wildfires which burn in hotter and drier weather usually cause more tree damage and mortality. Trees lose the margin of safety afforded by cooler bark insulation and lower foliage temperatures.

Insects and diseases are also influenced by the weather. Some typical examples in Alabama include the fact that littleleaf disease is more easily spread during times when soils hold water for long periods. Shortleaf pines are more susceptible to littleleaf on soils with poor internal drainage such as heavy clays.

The prevention of annosus root rot can be enhanced by the timing of pine thinnings or partial cuts in April through August when high temperatures destroy the causal fungus. For added protection, apply borax to freshly cut stumps.

During warmer and drier weather, southern pine beetle infestations spread much faster and salvage requires more effort. In colder weather, beetle infestations are concentrated in fewer trees for longer periods of time. Cold weather salvage can reduce the potential for spot growth or new spot development.

When *handling pesticides*, weather should be a consideration also. Caution should be exercised when mixing or handling any type of pesticide during windy conditions where dust or vapor might accidently enter the body by skin absorption, swallowing or inhalation. Warmer weather increases perspiring conditions and thus opens skin pores which increase absorption of chemicals. Movement of pesticides caused by wind or volatilization might cause contact with untargeted species.

Obtaining Weather Information

The forest manager frequently needs weather forecasts two to four days in advance to adequately plan the execution of prescribed burning, tree planting, nursery activities, herbicide application and logging. Such weather forecasts can be obtained from various local radio stations, TV weather channels, Agricultural Weather Forecasts and National Weather Service broadcasts.

The following is a list of Alabama public

TABLE I

WEATHER DATA FOR MAJOR CITIES IN ALABAMA FOR 1986

	TEMPERATURE (F) AVG.MAX	AVG.MIN	INCHES PRECIP. NORM.	+/-	MPH AVG. WIND
JANUARY					
HUNTSVILLE	51.2	26.5	1.32	-3.85	8.9
BIRMINGHAM	54.8	28.9	1.21	-4.02	7.3
MONTGOMERY	58.2	32.1	1.12	-3.08	6.9
MOBILE	61.3	38.0	2.67	-1.92	9.6
FEBRUARY					
HUNTSVILLE	56.8	37.0	4.43	-0.36	10.3
BIRMINGHAM	61.8	38.0	1.79	-2.93	8.4
MONTGOMERY	65.0	41.0	6.10	1.59	7.2
MOBILE	66.8	46.0	4.17	-0.74	10.4
MARCH					
HUNTSVILLE	66.4	40.2	3.26	-3.52	9.3
BIRMINGHAM	69.9	41.0	2.45	-4.17	8.1
MONTGOMERY	71.4	43.7	9.26	3.34	6.6
MOBILE	72.2	47.2	4.53	-1.95	9.9
APRIL					
HUNTSVILLE	76.4	46.5	0.42	-4.50	8.6
BIRMINGHAM	78.1	45.5	0.42	-4.56	7.1
MONTGOMERY	78.5	49.5	0.52	-3.86	6.5
MOBILE	79.0	53.1	2.16	-3.19	9.0

	TEMPERATUR AVG.MAX	AVG
MAY		
HUNTSVILLE	80.5	5
BIRMINGHAM	82.6	5
MONTGOMERY	84.5	6
MOBILE	84.4	6
JUNE		
HUNTSVILLE	88.4	6
BIRMINGHAM	89.7	6
MONTGOMERY	91.8	7
MOBILE	90.4	7
JULY		
HUNTSVILLE	92.9	7
BIRMINGHAM	94.1	7
MONTGOMERY	95.3	7
MOBILE	93.5	7
AUGUST		
HUNTSVILLE	87.6	6
BIRMINGHAM	88.6	6
MONTGOMERY	91.1	6
MOBILE	89.7	7

veather broadcast stations and frequencies:

Station Location	Frequency (MHZ)
Birmingham	162.550
Cheaha Mountain	162.475
Demopolis	162.475
Dothan	162.550
Dozier	162.550
Florence	162.475
Huntsville	162.400
Mobile	162.550
Montgomery	162.400
Texasville	162.475
Tuscaloosa	162.400

Forestry and Climate Interrelationships

Climatologists believe there may be a number of causes of climatic change. Among these are changes in the wind systems, air pollution, volcanic dust and accumulation of carbon dioxide (greenhouse effect) in the atmosphere. Widescale urbanization and deforestation are also thought to contribute. These effects are international. The United States, for instance, generates air pollution from power plants, smelters and motor vehicles that is deposited in Canada as acid rain. Germany imports acid rain from Great Britain and France and exports its own to Poland and Czechoslovakia.

Global deforestation is of major concern. Forests help clean the air, moderate the climate and purify the water. According to a **Los Angeles Times** article broadscale deforestation has helped create expansion of desert areas. The hardest hit is Ivory Coast in Africa with a yearly deforestation rate of 5.9%. The Sahara is gradually advancing westward.

Will similar losses affect the Southeastern United States? Annual losses of forests on our hemisphere include 3.7 million acres in Brazil, 2.0 million in Columbia, and 1.5 million in Mexico. According to United Nations estimates, Central America has lost 38% of its forests since 1950.

Summary

Alabama's forests are fortunate to have its mild subtropical climate. Perhaps you have heard that if you don't like the weather, hang around, it will change. This is quite true even though change seems to come slowly during periods of extended drought, rain, hot or cold spells. Weather helps make life a bit more interesting. Not only does it influence our habits and lifestyles, it has a definite effect on how we manage and appreciate our forests.

For most of us who have hiked, hunted, camped or worked in the woods, chances are the extreme weather; whether it be hot, cold, wet or dry; has been made less extreme by the atmosphere of the forest. Such pleasant experiences our TREASURED Forests make!

References and Suggested Reading

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Patterson, Tommy. *Prepare Now for Planting Trees This Winter*, **Alabama's TREASURED Forest**, Summer, 1983, pg. 9.

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World Resources Institute and International Institute for Environment and Development.

SOURCE: NATIONAL CLIMATIC DATA CENTER - NOAA - ASHVILLE, NC

CHES NORM.	+/-	MPH AVG. WIND		TEMPERATURE (F) AVG.MAX	AVG.MIN	INCHES PRECIP. NORM.	+/-	MPH AVG. WIND
			SEPTEMBER					
68	1.08	8.2	HUNTSVILLE	85.5	65.6	5.10	1.11	7.1
66	-0.87	7.2	BIRMINGHAM	86.8	67.0	2.52	-1.82	5.4
78	0.78	5.2	MONTGOMERY	89.5	68.5	5.03	0.31	5.0
18	-1.28	9.3	MOBILE	88.7	70.2	4.41	-2.15	6.9
			OCTOBER					
85	1.11	6.9	HUNTSVILLE	73.1	51.3	3.90	1.00	6.9
87	0.26	5.6	BIRMINGHAM	74.7	53.1	5.24	2.60	5.5
30	-2.15	5.6	MONTGOMERY	78.5	55.0	3.54	1.27	5.2
53	2.46	6.9	MOBILE	78.4	58.5	4.83	2.21	8.2
			NOVEMBER					
07	-1.98	6.6	HUNTSVILLE	63.5	46.1	7.87	3.63	8.9
61	-3.78	6.1	BIRMINGHAM	66.1	48.7	9.66	6.02	6.6
01	0.23	6.6	MONTGOMERY	70.7	53.2	10.18	7.20	6.6
13	-0.61	6.9	MOBILE	71.6	56.9	8.45	4.78	10.4
			DECEMBER					
81	6.70	7.3	HUNTSVILLE	50.7	33.8	4.86	-0.57	8.0
56	1.71	5.8	BIRMINGHAM	53.3	34.7	3.08	-1.87	3.4
67	-0.50	6.3	MONTGOMERY	56.2	39.1	3.02	-1.76	5.9
30	-1.15	7.2	MOBILE	58.9	43.2	3.68	-1.76	9.7

Advantages of Planting Improved Seedlings

YOU REAP WHAT YOU SOW

by BOB KUCERA, Chief, Tree Improvement

SINCE EARLY OCTOBER ALABAMA's forest landowners have been in the process of regenerating their timber lands—whether they know it or not! Early September is about when slash pine seed ripens in the cones prior to falling naturally from the trees in their stands. Loblolly seed began to fall in late October. The hardwoods are also sowing their seed now, and in the spring there will be other hardwoods dropping seed as well as sprouting from stumps to reinforce their ranks. Mother Nature is growing trees; developing the soil, water and air; providing wildlife with food and habitat; and making our forestlands more beautiful. She does this free of charge!

In spite of her generosity, however, there is a great activity centered on the forest tree nurseries in Alabama around December. Strategically located down this road and that throughout the state, these nurseries grow millions of seedlings to be planted in artificial regeneration projects. There is a cost to grow these seedlings, prepare their sites, plant and manage them. The landowners who make this effort have decided within their own economic framework that planting these seedlings on their land is their best investment.

There are innumerable regeneration options presented by combinations of soil, site, present stand, and the landowner's financial position and expectations. The extreme alternatives are to rely on Mother Nature's bounty at no charge or to control the stand's development at relatively high expense. The landowner must decide the best practice to follow on a particular site that will produce a sufficient amount and rate of return within his ability to invest in that particular practice. Natural regeneration usually implies low cost which can make a higher rate of return with less actual revenue. Artificial regeneration implies higher costs but may be attractive because of its generally greater chance of success, shorter time limits to reach product sizes and greater amounts of revenue generated.

Planting genetically improved seedlings is an excellent way to increase the success of artificial regeneration projects. Knowing the criteria for selecting the improved trees helps us to understand why. Improved trees are selected for straightness, growth rate, disease resistance, wood density and fiber length, and crown characteristics.

Straightness is an inherited trait which can improve the possibility of producing high-quality forest products such as saw timber and poles.

Growth rate currently is measured only as height growth. Diameter growth is influenced more by the amount of space in which a tree has to grow rather than genetic characteristics. Height growth is more directly associated with the genetics of a tree and is the major indicator of increased volume.

Disease resistance is obtained through selection originally of only disease free trees. Because selections were made in areas where there may have been little or no disease there is still a substantial element of susceptibility although disease resistance is better in improved trees. This asset is markedly improved when an orchard is rogued, leaving only the best trees as parents.

Wood density and fiber length are strongly inherited. Particular wood densities or fiber length can be an objective of a breeding program if there is a certain product which is favored by higher density or longer fibers. Too much emphasis on a single trait will detract from the ability to maintain an improvement in other important traits, so there is a limit to the degree of specialization that is advisable.

Crown characteristics include branch angle, forks, compactness, and self-pruning ability. Branch angle, forks and self-pruning stands grown from genetically improved seed will produce more and better quality products. In a Southwide study predicting the stumpage value of unimproved, improved, affect the quality of the trees, especially for saw timber. The ability to grow with a compact crown probably improves an individual tree's quality, but it is most important as it allows room for the crowns of other trees to increase the total stand volume.

Improved seedlings are grown from seeds collected in seed orchards. A seed orchard is a collection of trees selected because they appear to be better than regular trees. Further testing reveals which trees can pass along these improvements and even improve on them by cross breeding with the other improved orchard trees. The ones that do not are cut out in the roguing process which results in a further increase in the difference in improved seedlings and regular seedlings.

Although there are advantages in the nursery due to the generally better germination rate and uniformity, improved seedlings cost more than regular seedlings. But even at high estimates of the cost of improved seedlings over the cost of regular run seedlings this seems worthwhile compared to the potential for a greater amount and rate of return.

The rate of return will be increased if you consider that a product of a certain size will be grown in a shorter length of time. The amount of the return is increased because and rogued improved stands, gains of 18% by the improved and 32% by the rogued improved stands were reported[1]. This estimate is expected to be conservative because it is based on volume differences only without considering quality. The improved stands are estimated to have an increase after tax value of $242 and $434 for unrogued and rogued seed orchard seed respectively at age 25.

The availability of improved seedlings is one reason so many landowners are investing in artificial regeneration of their pine lands. This is an opportunity to restock the land with better genetic sources. Another means of improving the genetic quality of forest stands is direct seeding with improved seed, although this practice is considered to be difficult to do successfully.

There is such a variety of ways to regenerate forest stands that this objective should be planned for well in advance of the harvest. Each site should be evaluated. The value of genetically improved seedlings should be considered. They could make a big difference.

[1]Talbert, J.T., R.J. Weir and R.D. Arnold. *Costs and Benefits of a Mature First-generation Loblolly Pine Tree Improvement Program*, **Journal of Forestry**, Vol. 83, No. 3, March, 1985, pg. 162-166, 1985.

Will The Beetle Be Back?

by JIM HYLAND, Chief, Pest Control

THE SOUTHERN PINE BEETLE population and the timber resource are mimicking winter conditions. The beetles are attacking vigorously, but the pines are not exhibiting the yellowing to red changes. The extreme dry conditions over the past two or three months have essentially shut down the resin flow processes of the pines. This is seen in few pitch tubes being formed and green pines with inactive populations and loose or no bark. Far ahead of the red top pines are numerous green infested pines. Rainfall will bring a seemingly large increase in the number of spots and infested trees as seen from the air.

Detection

Thirty-nine of the fifty-one counties were flown in September. The number of spots in September was 1,485 and the

TABLE I

SPB COUNTIES WORST TO BEST–SEPTEMBER 1987

COUNTY	*TREES/M AC*	*COUNTY*	*TREES/M AC*
Colbert	28.59	St. Clair	2.06
Franklin	24.05	Elmore	1.85
Lauderdale	15.65	Shelby	1.38
Lawrence	15.33	Blount	1.31
Cullman	11.99	Crenshaw	0.87
Fayette	11.35	Marengo	0.81
Cleburne	10.27	Hale	0.70
Marshall	9.29	Chambers	0.62
Coosa	9.22	Greene	0.54
Marion	9.09	Dale	0.54
Pickens	8.55	Tuscaloosa	0.54
Lamar	7.13	Chilton	0.52
Talladega	4.69	Butler	0.46
Morgan	4.35	Montgomery	0.41
Limestone	4.29	Jefferson	0.22
Clay	4.23	Russell	0.19
Randolph	3.19	Sumter	0.13
Tallapoosa	2.81	Winston	0.11
Calhoun	2.38	Bullock	0.04
Walker	2.13		

SPB AIR DATA
SEPTEMBER 1987

TREES PER COUNTY	HOST	#SPOTS	#TREES	TREES/SPOT	1000 ACRES
District 1					
Calhoun	254.5	75	605	8.1	2.38
Marshall	180.0	107	1673	15.6	9.29
	434.5	182	2278	12.5	5.24
District 2					
Cullman	229.4	55	2750	50.0	11.99
St. Clair	281.3	14	580	41.4	2.06
Winston	315.1	4	34	8.5	0.11
Blount	168.8	13	221	17.0	1.31
Shelby	380.4	33	525	15.9	1.38
Walker	371.4	14	790	56.4	2.13
Jefferson	436.9	5	95	19.0	0.22
	2183.3	138	4995	36.2	2.3
District 3					
Greene	139.8	7	75	10.7	0.54
Hale	178.9	7	125	17.9	0.70
Fayette	273.5	36	3105	86.3	11.35
Lamar	227.2	39	1620	41.5	7.13
Pickens	395.4	17	3380	198.8	8.55
Sumter	301.2	1	40	40.0	0.13
Tuscaloosa	583.6	24	315	13.1	0.54
	2099.6	131	8660	66.1	4.12
District 4					
Chambers	268.1	10	165	16.5	0.62
Clay	314.6	33	1330	40.3	4.23
Cleburne	315.6	62	3240	52.3	10.27
Coosa	343.7	65	3170	48.8	9.22
Randolph	271.2	45	865	19.2	3.19
Talladega	263.3	32	1235	38.6	4.69
Tallapoosa	370.5	25	1040	41.6	2.81
	2147.0	272	11045	40.6	5.14
District 5					
Chilton	286.0	12	150	12.5	0.52
Marengo	287.2	15	234	15.6	0.81
	573.2	27	384	14.2	0.67
District 6					
Dale	185.2	1	100	100.0	0.54
	185.2	1	100	100.0	0.54
District 7					
Butler	351.1	7	160	22.9	0.46
Crenshaw	207.5	14	180	12.9	0.87
	558.6	21	340	16.2	0.61
District 9					
Colbert	170.7	172	4880	28.4	28.59
Franklin	249.3	184	5995	32.6	24.05
Lauderdale	82.1	54	1285	23.8	15.65
Lawrence	130.1	113	1995	17.7	15.33
Limestone	23.3	9	100	11.1	4.29
Marion	362.0	125	3290	26.3	9.09
Morgan	124.0	34	540	15.9	4.35
	1141.5	691	18085	26.2	15.84
District 10					
Bullock	232.7	2	10	5.0	0.04
Elmore	239.3	13	442	34.0	1.85
Russell	260.4	4	49	12.3	0.19
Montgomery	145.8	3	60	20.0	0.41
	878.2	22	561	25.5	0.64
	10201.1	1485	46448	31.3	4.55

number of infested trees was 46,448. The worst districts continue to be 9 (Florence), 4 (Dadeville), 3 (Tuscaloosa), and 1 (Huntsville). The epidemic counties in order of worst to best include the following: Colbert, Franklin, Lauderdale, Lawrence, Cullman, Fayette, Cleburne, Marshall, Coosa, Marion, Pickens, Lamar, Talladega, Morgan, Limestone, Clay, Randolph, Tallapoosa, Calhoun, Walker and St. Clair. (See map and **TABLE I**).

Salvage

The amount of salvage increased slightly in September with 8,426 cords and 1,299 MBF reported. Since January, 1987, there has been 35,989 cords and 1,962 MBF salvaged. This has a stumpage value of approximately $790,000. Compared to last year, salvage has drastically decreased (1986—7,179 MBF and 109,655 cords). See **TABLE II** and **TABLE III**.

Outlook

Fall leaf change has arrived. A few counties are being flown in October, but for the vast majority of counties the aerial detection phase of the southern pine beetle control effort is on hold until after hardwood leaves have fallen. We will continue aerial detection as soon as the observers can distinguish dying pines from the hardwood leaves. With cooler weather approaching, the beetle population's progress should slow, and control efforts can gain ground.

TABLE II

Salvage by District
January - September, 1987

District	*MBf*	*Cords*
1	0	380
2	215	5,005
3	1,007	11,097
4	286	10,785
5	209	1,977
6	0	0
7	0	0
8	5	2,708
9	195	1,332
10	45	2,675
	1,962	35,989

TABLE III

Salvage by Month
January - September 1987

Month	*MBF*	*Cords*
January	0	1,350
February	12	1,885
March	28	2,614
April	134	2,518
May	23	2,520
June	30	3,057
July	135	5,792
August	301	7,827
September	1,299	8,426
	1,962	35,989

For the do-it-yourself landowner

Tools That Make Forest Management Manageable

THE SMALL WOODLAND OWNER who has a yen to carry out some of his own forestry work and become closer, more involved with his forest is faced with a large choice of attractive hardware. Items can range from genuine biodegradable flourescent flagging tape ($1.20/roll) to a Relascop tree measuring instrument ($675) that almost talks.

The purpose of this article is to advise novice woodland owners on equipment they can use with relative ease and where to obtain it with a nominal investment. Items when first named will have an average price listed in parenthesis immediately following. A listing of forestry supply houses in this area will be found at the end of this article.

Safety and comfort should be the first consideration--being struck on the "noggin" by a fallen limb or being gradually eaten alive by ticks and redbugs is quite discouraging. A hard hat ($6.50) and a good tick/redbug repellant ($4-6) could prevent much discomfort. If a heavy growth of briars or blackberry canes is a problem that cannot be avoided, a pair of hunting pants with the double layer in front ($40-50) will save a lot of hide and blood. Even if you are not a "working" landowner but just strolling through your woods, the above named items will add to your enjoyment.

Now the work begins! The owner of any sizable forest tract should have a management plan. Assistance is available through several governmental service agencies—Soil Conservation Service, Extension Service, or Alabama Forestry Commission—at no charge. Field agents will work with you, explain the needs of the forest, how to accomplish your goals, and "show you the ropes."

This management plan will be tailored to your interest which may be wildlife habitat, esthetics, wood production, or a combination of goals, whatever will fulfill your purposes. Owners of larger tracts or those containing high value timber should consider the services of a consulting forestry firm to manage the property.

With the management plan in hand and the first year's steps in mind, you probably will need to establish some interior stand boundaries on the ground or locate other features from your plan map. A cruiser compass will be quite handy. Suunto now makes a cruiser compass (Suunto MC-1) with a built-in clinometer which measures the height of trees and degree of slopes ($29.95).

When running a compass line you will probably want to "mark" it in some manner so it can be found again. Paint spots or plastic flagging are cheap, easy to apply and will last some time. Any bright colored paint found on the bargain table will do very well for a small operation. It may be applied with a brush, rag-on-a-stick, or a squirt gun of some type—again depending on the size of the operation.

A squirt gun or paint gun in the smaller size can range from an Eagle gun ($9.90) to a DeVilbliss ($71). Marking paint is also available in aerosol cans, and you may wish to go that route to avoid the mess of shaking, mixing, and pouring even though the cost is higher ($2.95/1 Lb. can).

Any of the above methods of marking lines can be used to mark individual trees for removal or cutting. Cutting can be for thinning, sanitation, or financial harvest. The management plan will give instructions for such steps.

When planning a cutting operation, the landowner should understand that the diameter, height, and growth rate of individual trees and of stands will be critical. A small 6-foot pocket diameter tape (Lufkin Executive W606PD, $10.85) should be sufficient for today's smaller timber. Height can be determined with the combination compass/clinometer previously mentioned.

Growth rates can be determined using a small 6-inch Increment Borer (Suunto 6 inch, three thread, $74.80) and following a growth rate schedule. The number of growth rings in the outer 1 inch of the boring are matched with the tree diameter in the table to determine the percent growth per year. This could determine whether you would mark for cutting or leave for further growth. For example, a 16-inch tree growing 12 rings per inch might increase in value at the rate of 2.1% per year. From a strictly monetary standpoint this tree should be cut; the value invested in a bank would earn a greater return. An 8 inch tree growing 3 rings per inch making a 19.1% annual increase should be left unless there are other reasons for cutting.

This method works well when selecting individual trees in an all-aged stand. For even-aged management an average growth rate for the stand should be established by boring sample trees well scattered throughout the stand. Again, the management plan will be the key for procedure.

During all this line running, marking and general trapsing around, the landowner should keep a record, talley, or notes. A hard cover clip board is just the thing to protect notes and maps and keep them dry and legible. The 8-1/2" x 12" size is most suitable and can be obtained for about $18-20.

As you become proficient with the tools covered here you probably will add other tools to your collection as you develop a need for them, but these are the basics. Above all, however, **DON'T FORGET THE REPELLANT!**

FORESTRY EQUIPMENT SUPPLY HOUSES
(Send for Catalog)

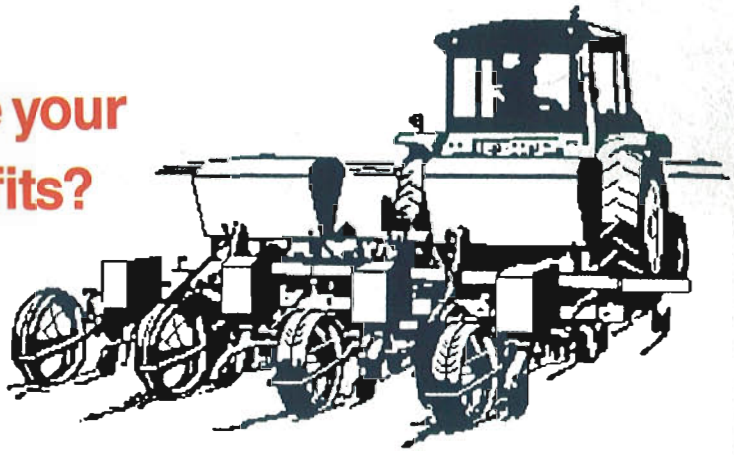
Alabama Forest Tools and Equipment
P.O. Box 1056
Haleyville, AL 35565

Forestry Suppliers, Inc.
P.O. Box 8397
Jackson, MS 39204

General Supply Corporation
P.O. Box 9347
Jackson, MS 39206

Ben Meadows Company
P.O. Box 80549
Atlanta (Chamblee), GA 30366

Can you afford to lose your USDA Program benefits?



Under the 1985 Farm Bill, Alabama farmers and landowners who farm highly erodible fields must have an approved conservation plan by January 1, 1990 and in operation by 1995 to maintain eligibility in USDA programs.

USDA Programs Affected

* Wheat, cotton, feed grain, and rice payments
* Commodity loans
* Farm Storage facility loans
* Tobacco price support
* Conservation reserve program annual payments
* Dairy indemnity payments
* Storage payments
* Wool and mohair payments
* Crop insurance
* Farmers Home Administration loans

Contact a member of your local Agricultural Stabilization and Conservation Service, Soil Conservation Service or Extension Service staff for full details on how the farm bill affects you. Chances are great that you'll need a plan for conserving soil on your farm by 1990 to qualify for continued government assistance.

The Alabama Food and Agriculture Council urges you to **ACT NOW! TIME IS RUNNING OUT.**

All USDA programs and services are available without regard to race, color, national origin, religion, sex, age, marital status, or handicap.

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