



**Alabama's
TREASURED
Forests**

S p r i n g · 1 9 8 8

STATE FORESTER'S MESSAGE

by C.W. MOODY



The TREASURE Forest Steering Committee met in February down in Atmore to review the Alabama Forestry Commission's nursery operations in that vicinity and to discuss other very significant matters. The Steering Committee is an outstanding group of people dedicated to the proposition of making Alabama a better place to live, work, and raise a family. Members of the committee are Phillip Sasnett, J. R. Crosby, Ed McCullers, Charles F. Lewis, John Rudd, Dan James, James Hughes, Robert L. Trotter, Barney King, M. H. Lee, Joe L. Smith, Clinton Whitten, Edward Allen, John Mathews, and Connie Wise.

James Hughes served as chairman of the group for that meeting. Some of their decisions increased the momentum of the contributions that TREASURE Forest owners are making toward the recruitment of other forest landowners to our cause.

One action was the naming of a committee to assume responsibility for the landowners' portion of the next Alabama TREASURE Forest and Landowner Conference. The committee will also serve on the overall Arrangements Committee. We will have a better conference as a result of these moves. The meeting of TREASURE Forest owners prior to the conference will also be under the direction of this steering committee—another step forward.

A subcommittee of these TREASURE Forest owners was named to serve as a steering committee on TREASURE Forest education. Chuck Lewis, Dan James, and James Hughes will function on the Editorial Board of the **Alabama's TREASURED Forests** magazine. They will also serve as members of the Forest Education Committee in the development of educational materials for forest landowners including video production.

We, the Forestry Commission, announced the decision to employ a forester-game biologist in a position being vacated by a departing forester. This person will serve to meet the needs of TREASURE Forest owners under the direction of the TREASURE Forest Steering Committee. You can see that several very important decisions were made and that we are gaining momentum in the TREASURE Forest movement as landowners are becoming more vocal and active in support of the program. Many thanks to the TREASURE Forest Steering Committee, all TREASURE Forest owners, and Creed signers.

Sincerely,

A handwritten signature in cursive script that reads "C.W. Moody". The signature is written in black ink and is positioned above the printed name and title.

C. W. Moody
State Forester

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

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Cover Photo: Dogwoods are a sure sign of spring in
Alabama.

Alabama's TREASURED Forests

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Planting trees was laughed at in their valley, but now the McClendons laugh.

We'd do it all over

by COLEEN VANSANT, Contributing Editor

FOR A PROPERTY OWNER, the decision on how to best manage farmland is sometimes very difficult. The ultimate goal is maximum returns on your investment. But considering all of the risks of farming, which road do you take? Decisions are difficult especially when one of your choices is converting to timber, a long-term commitment for return.

Looking to the Future

In 1955, Ralph and Eloise McClendon made their choice and planted part of their Etowah County farm in pine seedlings. Today, over 30 years later, that decision has grown and prospered into the couple's personal TREASURE, and the once unpopular decision doesn't seem so drastic any longer.

The McClendon's were married in 1933. At the time, she was teaching school for \$60 a month (collecting payment in warrants), and among other things, he was driving a school bus up and down the valley for \$1 a day.

The couple began their farming life together two years later when they purchased a 40-acre tract of land in the fertile valley of the Duck Springs Community, north of Attalla. Ralph and Eloise had been reared in the valley, where their fathers and grandfathers before them had farmed and prospered.

Working with a shovel, the first seedlings planted on the property came in 1937, when Ralph himself planted 1,000 longleaf pine. Looking back to the 30's, he remembers it took "two men all day to plant 1,000 seedlings with a dibble. Now you can plant 8,000 a day with a planter."

Aside from general row crop farming (in which cotton was the leader) and some livestock managing, the McClendon's made

their living from a sawmill. Ralph jokingly says, as he describes the 40-years he spent operating the mill, that in his marriage he not only acquired a wife but a sawmill as well. The mill was originally owned by Eloise's father.

From Row Crops to Tree Farming

Tree farming became the alternative to the pair in 1955 when boll weevils destroyed their cotton crop. Approximately 120 acres of loblolly pine were planted under the Soil Bank Program. In 1984, they reaped the benefits of a final harvest on a portion of that timber stand.



In the last 51 years, 660 acres of timber have been harvested.

Since the first seedling was put in the ground in 1937, approximately 1,120 acres of the McClendon's 1,753-acre farm has been planted with 896,000 trees! In that 51 years, an estimated 660 acres of timber has been harvested and 40 miles of fire lanes have been constructed.

A Step Beyond to TREASURE

Wildlife is one of their major concerns and because of that 150-200 acres of bi-color have been planted and four ponds constructed. They enjoy the bluebird houses that have been installed around their property and sometimes have two hatch-



The McClendons were among the first TREASURE owners in the state.

gain!

ings of chicks in the same house during a year.

For 39-years, the McClendon's had been managing their farm and timberland under what we now call the TREASURE Forest Program. There was no organized program at that time although their farm was a model to follow. In 1976 their property was certified as a TREASURE with timber and wildlife as their primary objectives. Their certificate indicates their farm is TREASURE Forest #9. Recertification was granted in 1981 and 1986, and in 1982 they were honored as District Helene Mosley Memorial TREASURE Forest Award winners. One of the very unique things about the McClendons is their enthusiasm in planting seedlings. Ralph is 78-years old and Eloise claims she is 75-years old and "proud of it." Their only child, Yancey, died of leukemia at the age of 10. Yet following their last harvest the acreage was replanted.

It makes one stop to wonder why they would go to the expense of replanting considering their ages and the fact they have no heirs. To them the answer was simple.

"The end is coming with us and we don't have people," Eloise explained. The couple has traveled extensively across the world, viewing and researching forestry and forestry-related practices in other countries. According to Eloise, through their travels they have come to an understanding that the "tree situation is acute around the world."

To Ralph, his timberland has been his livelihood. "We've not been out of work a day since it started," he explained.

To the pair their stewardship efforts comes from a shared "love for the forests" and an "interest in the future." They agree that not once have they "ever wished we hadn't done it." ♣



Ralph and Eloise McClendon—still contributing to their community and the state.

EDITOR'S UNDERSTORY

by COLEEN VANSANT, Contributing Editor

MOST PEOPLE HAVE SOMETHING IN their life in which they truly believe. That one cause they feel so strongly about stirs them deep inside. Yet there are so few of us that actually take the time and devote the energy to our causes. We believe in them, yes, but for some reason never actually dedicate ourselves to the effort.

For Ralph and Eloise McClendon their entire life has been devoted to their cause. Since 1933 when their lives together began, they have sacrificed *together* for it, worked *alongside one another* to nurture it, and finally they are *together* enjoying the benefits from it. That cause is their farm.

To understand their dedication, you have to understand a little of the background of their 1,753 acres of property nestled in the rolling foothills just north of Attalla in Etowah County. Portions of their land at one time belonged to their grandparents—not just one, but both sets on his and her side of the family. In 1935, after being married for two years they purchased their first parcel of land—40 acres. During their 55-years of marriage they have accomplished a little at a time. They did *what* they could, when they *could* afford it. Both Ralph and Eloise are very proud to say that they have “never gone into debt to buy land.”

Because of the love of their land and the importance they place on good stewardship, they have not only become active in their local community, but have become leaders in the state with their forestry efforts. In 1976 they were certified as a TREASURE Forest and in 1982 were district winners of the Helene Mosley Memorial TREASURE Forest Award—the highest award available to a TREASURE owner. But when you get to know the couple and see the progress they have made over the years, you realize they didn't come to know TREASURE.

TREASURE Forest came to know them.

The contributions they have made to their community sets precedent for generations to follow. In 1976 they were honored as private forest landowners by the Alabama Forest Festival Committee, the first award to be given by the committee. The Association of Soil and Water Conservation Districts named Ralph McClendon “Outstanding Conservation Farmer” in 1978. During that same year their farm was designated as “Century Farm” and “Heritage Farm” by the Alabama Department of Agriculture and Industries.

Ralph was awarded a 25-year certificate of service in 1981 with the Agricultural Stabilization and Conservation Service and a resolution from the Alabama House of Representatives has declared him an outstanding conservationist. He is also a life member of the Conservation Society of America.

In 1970, Ralph was one of the instrumental characters in the organization of the Duck Springs Volunteer Fire Department and has served continually as its fire chief.

Both McClendons have been placed in the voter “Hall of Fame” for their 40-years of attending the polls, and Eloise has served 50-years with the Etowah County Extension Homemakers.

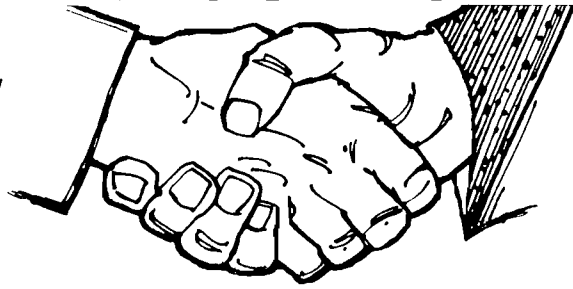
They have utilized their forestland to help educate others on forestry and forest practices. Their first forest tour was held in 1966 and since then three other tours have been held to assist the Future Farmers of America, Alabama Extension Service, Alabama Forestry Commission, Soil Conservation Service, ASCS, as well as local landowners. In addition, they attend all local and state forestry and landowner meetings, are active in the local Rural Conservation and Development Committee, Community Resource Development Committee, Farm-City Committee, and Etowah County Farm Bureau Forestry Committee.

Over the years, the couple has joined several tours to represent United States forest landowners in an exchange of ideas and technology with other countries. Some of their tours have included Poland, Russia, Germany, New Zealand, Australia, Mexico (where they attended the World Forestry Congress in Mexico City), Puerto Rico, Holland, Belgium, Scotland, and England.

The McClendon's have seen forests and forestry practices in other sections of the world and have earned a greater appreciation for their and our countries' forest resources. They stress the need to promote, develop, and protect our natural resources not only for themselves but for the generations that will follow them. ♣



PINE SILVICULTURE AND WILDLIFE HABITAT



by RHETT JOHNSON, Solon Dixon Forestry Education Center, Andalusia, Alabama

LIKE MANY NATURAL RESOURCE TOPICS, growing pine with a compatible wildlife habitat is a great deal more complex than it first appears. Pine silviculture is a fairly large and diverse field and professional careers are built on investigations of very minor portions of it. In the Southeast alone, there are a variety of silvicultural systems and practices in regular use. Although all are oriented toward the creation and management of even-aged stands, the methods of getting there and staying there are diverse.

Each management regime may result in a different plant community and, therefore, a different set of wildlife values. Therein lies a second set of complications. *Wildlife* is a generic term typically used to imply about a dozen game species, each with a different set of habitat requirements. In addition, there are about 40 non-game species for each game species in the region.

Management Options

In general, pine managers concerned with wildlife habitat should plan to maximize the diversity of forest types and age classes within those types to accommodate the widest variety of habitat needs. Most Southeastern wildlife species do not require large, unbroken expanses of any particular forest type. In fact, most thrive on the edges and among a variety of forest types and age classes.

Pine species, because of their inability to grow and thrive under shade, must be managed in even-aged systems. That is, entire stands, whether natural or artificial in origin, are typically all in the same age class. This characteristic limits managers to between-stand and not within-stand diversity. When planning harvests and future stands, pine managers should consider the relative ages of adjacent stands in a block.

For *edge-related* species, a checkerboard pattern of different-aged stands within a block will probably accommodate the widest variety of habitat needs. For

interior species (those requiring large homogeneous areas), a clockwise cutting pattern within a block will provide a continuum of age classes.

Biologists have long recognized the value of the transition zones which occur where two habitat types adjoin. This zone or edge contains more "niches," better habitat quality, and typically larger and more diverse wildlife populations than either of the two adjoining types. It is particularly valuable for species of limited mobility, providing at least three types in close proximity. Any management scheme which increases edge or the ratio of edge to interior is desirable for most Southern wildlife species. For instance, irregular stand boundaries, while encompassing identical acreage, provide far more edge per acre than do ruler-straight surveyed boundaries.

This effect is often achieved by managing along natural stand boundaries or contours rather than along square 40's (40-acres) or section lines. Rectangular areas have a larger edge-to-interior ratio than do square ones of the same acreage. A square 40 has 80 chains of edge and 2 chains of edge per acre. A rectangular area containing 40 acres with sides of 40 and 10 chains has 100 chains of edge and 2.5 chains of edge per acre, an increase of 25 percent.

Breaking harvests or stands into smaller units also creates proportionately more edge. One square 160-acre stand has 160 chains of edge. Two rectangular 80-acre stands contain the same acreage, but provide 250 chains of edge. Four square 40-acre tracts again contain 160 acres but have 320 chains of edge—twice that of the square quarter section. Of course, smaller stands also break up the forest, providing greater diversity. Managers must always consider the economics of scale, however, in land management planning. Beyond a certain size limit, further reductions in size of operating unit mean lower returns and higher management costs.

One further point to be made concerning size and shape applies particularly to clearcuts. Studies have shown that deer are

reluctant to venture more than 100 yards into a clearcut. The ideal situation to maximize deer use of clearcuts would be a width limit of 200 yards! That limitation, of course, seldom drives management decisions, but is an example of information that might be factored into those decisions.

Ecological Communities

Pine plantations go through several seral (ecological community) stages in their development. In the initial year of site preparation, small seeded grasses and forbs typically dominate the site, providing excellent habitat for small flocking birds and some rodents.

From planting until about age three, the young plantations are populated with large seeded grasses and forbs and are excellent habitat for quail, doves, rabbits, and rodents. Snags provide foraging sites for woodpeckers and homes for other cavity dwellers. Hawks often hunt these areas heavily. Deer like to bed in plantations in this stage, particularly on cold, windy, sunny days.

From about age three to seven or eight, the plantation is in the sapling stage and is generally dominated by shrubs, vines, and bunch grasses. Game birds and "brush birds" feed and nest there during this period. Rabbits, deer, and other small mammals also make use of plantations during this stage.

The next step in the life of a young stand, the pole stage, is of little value as wildlife habitat. In this stage, the young pines have begun to dominate the site, shading out most low vegetation and providing little or no food or cover for most wildlife species. The trees are generally too small to be thinned commercially and fire is a chancy proposition. Wildlife use might include some feeding on fungi by deer and passage through the stand.

First thinnings usually occur around age 13 to 15, and, coupled with careful fires, essentially reestablish succession on the



forest floor to a condition duplicating the seedling stage.

Final harvest of the stand resets the cycle. Each change of plant community is accompanied by a change in animal community.

After the Harvest

Most pine silviculture in the Southeast involves clearcuts and artificial regeneration. After the harvest, a number of choices must be made by the land manager, and many affect the quality of wildlife habitat.

The choice of site preparation method is critical to the plant community that follows. For instance, a double chop delays the onset of brushy vegetation up to a year longer than does a single chop.

The choice of herbicides in chemical site preparation determines what residuals are left to begin recolonization of the site. **HEXAZINONE**-based chemicals are ineffective against American beauty berry, many grasses, and broomsedge. **ROUNDUP** is relatively ineffective against waxy leaved species such as magnolia, yaupon, gallberry, and other hollies. Blackberry is resistant to many herbicides. Choice of chemical, then, can be used to shape the new plant community.

If raking is a part of site preparation, intermittent breaks should be pushed through windrows as passageways across the stand for deer, turkey, and other less mobile species. Although up to 10 percent of a clearcut may be taken up by windrows, leaving at least a portion of them unburned can greatly improve wildlife habitat. Despite best efforts, the inevitable deposition of top soil in the windrows makes them the most productive sites on the clearcut. The resulting profusion of food plants is ideal for wildlife species, and the unburned debris and new vegetation provide excellent escape cover.

Where drains cross large cutovers, streamside management zones provide edge as well as travel corridors linking forest types. Old home sites make excellent wildlife habitat as they become overgrown, providing cover and often food. Where feasible, they might become islands in large plantations. Where they pose no safety hazard, dead trees might be left standing for use by foraging woodpeckers and other secondary cavity users. In some instances, cull trees might be deadened by injection or girdling and left to serve the same purpose.

Many managers take advantage of site preparation to create permanent openings on their forests. The Solon Dixon Center (Andalusia) management plan typically provides for the setting aside of about five percent of all clearcuts as permanent openings until about five percent of the entire

forest area is so occupied. A strip about two disk furrows wide might be maintained around clearcuts where feasible to provide fire protection, access, edge, and food plot opportunity.

Planting

Planting seedlings on a fairly wide spacing delays crown closure, extending the early seral stages of a plantation. Stocking levels of 680 trees per acre (8' x 8') and 436 trees per acre (10' x 10') are examples of commonly used spacings where wildlife is of primary concern.

Release from competing vegetation with herbicides is gaining in popularity in pine management. Significant increases in growth and survival have been demonstrated with release in the first year or two after planting. In-row strips or over-the-top spots are effective and minimize impact on the site, cut chemical costs, and effectively create a series of mini-sites for a number of wildlife species. Ground feeding birds such as doves and quail have been observed using these sites for feeding and dusting.

Prescribed Burning

Fire is probably the most cost-effective tool available to the pine timber or wildlife manager. From a wildlife habitat perspective, fire correctly applied (prescribed burning) resets plant succession on the forest floor. It top-kills woody brush, stimulating resprouting and puts succulent browse down where browsing species can use it. Research shows that nutritional quality of browse is enhanced after a burn as well.

Fire exposes mineral soil making it receptive to the seeds of legumes and grasses, providing food for birds and other seed eaters. Succulent early "green-up" after a fire is favored by quail, turkey, deer, and rabbits. Access and visibility are improved, especially important to turkeys and, to some degree, quail.

The timing and intensity of fires are also important in wildlife habitat management. Late spring burns lead to quick "green-up." Where turkeys are desired, however, burning should be discontinued from late March through July to allow nesting and brood rearing. Quail habitat should be burned every two years in most cases. Repeated annual burns may deplete escape cover unless special protection is given to cover strips. Ring-arounds might be utilized to provide nesting, resting, and escape areas. Ideally, broadcast burns might be checkerboarded from year to year to increase diversity.

Late season summer burns can be very

effective in killing woody brush but intensity can be damaging to crop trees and wildlife. Most species can escape fire successfully, but some reptiles, amphibians, small mammals, and burrowing animals may be killed by especially hot fires.

Fire is also critical to the effectiveness of chopping or chemical site preparation.

Thinnings usually begin in pine stands at about age 13. Combined with fire, these intermediate treatments expose the forest floor to sunlight and the seeds of legumes, grasses, and other small seeded weeds. The low basal areas and stocking levels of seed tree and shelterwood regeneration systems are particularly conducive to quail management, but require fire to prevent choking by woody undergrowth. Ground level biomass yields may approach 4000 pounds per acre under open conditions and 100 pounds per acre under closed pine canopies. A 30% reduction in basal area in a pine stand can increase browse production by 300%.

Stocking Control

One of the common problems with natural pine regeneration methods is lack of stocking control. Specifically, when it works, it often works too well. Stocking levels may reach 20,000 seedlings per acre or more under some seed tree stands. These levels are undesirable for either timber or wildlife managers.

Precommercial thinning might be necessary to maintain vigor of the stand and to provide acceptable wildlife habitat. It is usually economically unattractive, but is often the only feasible option available, particularly with slash pine. Studies of precommercial thinning with herbicides and/or fire are promising. At least one major forest industry in the South incorporates precommercial thinning into its regular pine stand management.

Managers more committed to wildlife habitat improvement might consider other techniques. Retention of clumps of mast-bearing trees within the boundaries of pine stands is a concession to wildlife and some studies have indicated that increases in mast production might result from fertilizing and liming. Fertilizing of windrows and honeysuckle plots improve wildlife value. Curtailing salvage operations on small bug spots or lightning strikes in existing stands favors woodpeckers and other cavity dwellers.

Corridor management can be critical to the success of some wildlife species in some situations. Travel between habitat types in a widely dispersed home range can be greatly enhanced by the creation and maintenance of travel corridors linking those types. For instance, research has

shown that turkey hens may lose 80% of their broods in the first move from the nest site to the "bugging" area if adequate travel corridors are not provided.

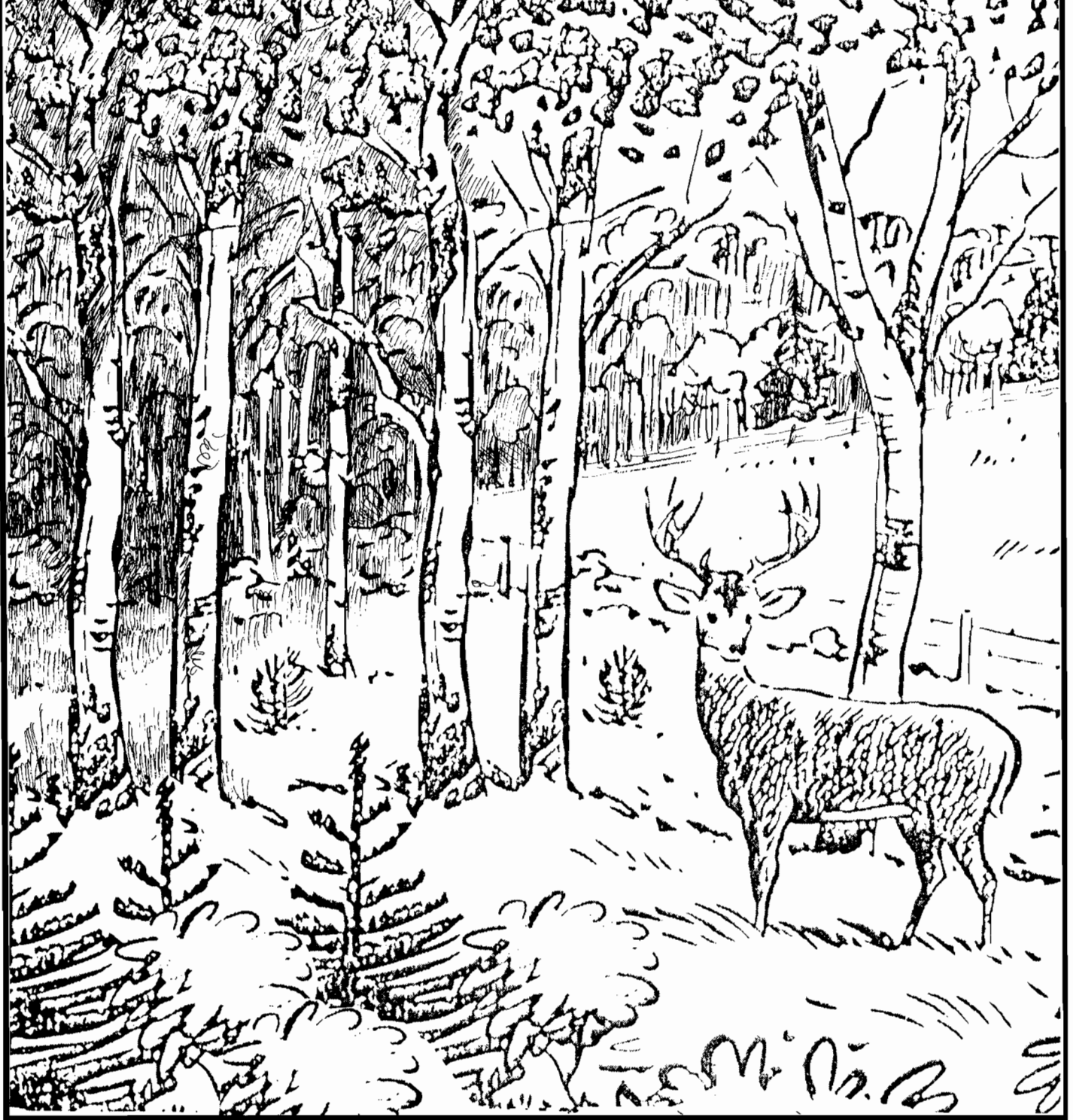
Cost

Wildlife management may exact direct and indirect costs from pine land managers. High deer populations may severely damage young pine regeneration, particularly on old field or fertilized sites. Rodents, birds, and squirrels can completely wipe out natural pine seed crops and impact heavily on direct seeded areas. **ENDRIN** treated seed, conversely, is deadly to quail and may kill turkeys.

The largest costs of integrating wildlife and timber management on pine lands are probably opportunity costs; for example, timber income foregone. One study estimated that on average loblolly pine sites (Site Index 60 at age 25) with average stumpage prices, intensive wildlife management incurred an opportunity cost of about \$4.95 per acre per year. Increased hunting lease values may be used to offset that lost income, and most forest economists agree that a combination of forest and wildlife management may return more to the landowner than either alone. ♣

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Mosley Awards Recognize Achievements in Natural Resources

by LARKIN WADE, Head, Extension Natural Resources, Auburn School of Forestry

“**A** CLASSROOM IN THE WOODS” is the tag that’s been put on a 4-H program for boys and girls in Coosa County, Alabama. It’s all being done according to

a plan worked out by Auburn University County Extension Agent Roger Vines. The land will become a model forestry-wildlife-conservation area.

Air Force Col. Jack Walls, a Coosa County native now stationed in Washington, D. C., gave the 4-H’ers a free long-term lease on the land. But Vines says the

real value is that the boys and girls are getting hands-on educational experience that leads to an appreciation for wildlife, forestry and conservation.

One 4-H'er commented, "I planted a pine seedling, and you know what? It lived!"

It's not by chance that Vines got interested in this "Classroom in the Woods" project. Alabama's W. Kelly Mosley Environmental Awards Program set him on fire to get something going by awarding a \$2,000 grant to develop the project. The program not only provides grants to advance knowledge and development of forestry, wildlife and related resources, but also provides \$500 achievement awards.

Chess McKinney, a conservation activist, received an achievement award for her life-long dedication to telling the story of conservation to any North Alabamian who would listen. At her awards recognition luncheon, she said, "Presentation of this award... brought attention to 86 people attending that with the privilege to own or live on the land goes the duty to preserve it and protect its priceless treasures. It has fanned my tiny spark into a flame to preserve our priceless heritage, the land and its treasures."

These sentiments, expressed by W. Kelly Mosley Awards winners, are the very ones Mosley had hoped to encourage when he first approached Auburn University in 1978 with his concern for the wise use of forest resources. After all, wise development and use of his forestland had brought him much joy and happiness, and he wanted to do everything he could to help others to have the same pleasure. He thought an awards program might be the best motivation to encourage Alabama landowners to conserve and manage natural resources. He was right!

Recognition lately has become a battlecry in the literature of motivation. Although modern behavioral scientists have managed to measure its effects in projects and studies, the knowledge of its potency is as old as mankind.

The psychologists and management experts of today are strong on "giving credit where credit is due." It is high on the list of wisdom that has been passed down to us over the ages. No reasonable person would deny the validity of this advice.

William James contended that the "deepest principle of human nature is craving to be appreciated." The same emotional force is at work in an office, on a factory floor, or among 200,000 Alabama landowners who need to increase overall levels of forest resources management by improving their awareness of multiple-use.

Motivational research has shown that recognition induces efforts that otherwise

would not have been made. Recognition encourages wise use of forest resources by spotlighting the achievements of those who are either outstanding practitioners of multiple-use forestry or whose work contributes to that practice. Recognition generates pride and publicizes people and their accomplishments so that they feel good about themselves. Awards help set a higher standard of behavior and establish role models for others.

The W. Kelly Mosley Environmental Awards Program, resting upon the preceding philosophical basis, has recognized those who use and encourage the use of sound forestry and multiple-use practices for almost a decade.

The program is financed by W. Kelly Mosley and the John and Mary Franklin Foundation through an annual gift to the Auburn Generations Fund. An Extension forestry specialist coordinates the program within the natural resources community. An 11-person committee, composed of university and non-university officials who represent natural resource organizations, meets quarterly, reviews nominations and confers awards.

The committee's actions are governed by a set of rules and regulations, bylaws, and criteria for selecting recipients. Three brochures, suggested news articles and other methods are used to continuously promote and make known the availability of the program to the natural resources community.

A total of \$15,000 is awarded annually to youth, adults, practitioners, professionals, technicians and individual citizens who work in the areas of forestry, wildlife and related resources. Awards for outstanding achievement are normally made in amounts of \$500. Awards have gone to biologists who helped

others adopt improved practices which enhanced wildlife habitats, an inventor of a tree planting machine which resulted in substantial savings of time and money, and a writer of an outstanding research report which made a significant impact on forestry, wildlife or related resources.

Monies for grant proposals range from \$500 to \$2,000, depending on the demonstrated need and the merits of the proposed activity. For example, a grant of \$1,000 was made to an organization to enable it to obtain an outstanding speaker for a resource management program which was beneficial to all citizens in Alabama.

What have been the results? Imagine looking back on eight years of Mosley awards recognition programs all put together. There would be 140 honored award recipients from 45 of Alabama's 67 counties. The audience would number about 25,000.

Each recipient would receive praise from a friend or colleague, a framed reproduction of a beautiful forestry-wildlife painting, a plaque recognizing his achievement, and a \$500 check. The press coverage the next day would number more than 425 news and magazine articles. There would be 150 radio and TV programs which would tell about the recipients and their natural resource achievement.

The Mosley Program offers a product that members of society seek—RECOGNITION! And the prospects of recognition can and does produce positive results.

Nominations must be submitted in writing and may be made at any time during the year. To obtain a copy of the application form, write to Larkin H. Wade, Head, Extension Natural Resources, School of Forestry, Alabama Cooperative Extension Service, Auburn University, AL 36849-5627.



Luther Holt (second from left) received a Mosley Award for his achievements in forestry. Also pictured are Frances Hale, Randy Quick, and State Forester C. W. Moody.

TIPS FOR FOREST

by LARRY M. BISHOP, Forest Management and Taxation Specialist

THE TAX REFORM ACT OF 1986 (TRA86) made some sweeping changes in the Federal income tax system. As a result, most taxpayers are uncertain about what changes were made and what tax rules remain unchanged. If you are a forest landowner, here are some tips to keep in mind when you prepare your Federal income tax return for 1987. This information is current as of January 15, 1988.

Reforestation Tax Credit and Amortization

You may have heard that investment tax credits were eliminated by TRA86. This is only *partially* true; the reforestation tax credit and 7-year amortization were retained. This means that if you reforested during 1987, you can claim a 10% investment tax credit for the first \$10,000 you spent for reforestation during the 1987 tax year. In addition, you can amortize (deduct) 95% of your 1987 reforestation



costs (up to \$10,000) over the next 7 years (actually 8 tax years).

Here's how it works. Assume you spent \$10,000 to reforest a cutover tract in 1987. You can claim a \$1,000 tax credit (10% of \$10,000) for 1987. You can also deduct 95% of these reforestation costs over the next 8 tax years. Due to a half-year convention you can only claim one-half of the annual amortizable portion for 1987. This means that, on your 1987 tax return, you can deduct one-half of $0.95 \times \$10,000$ divided by 7, or \$679. For the

next 6 tax years you can deduct $0.95 \times \$10,000$ divided by 7, or \$1,357, and the remaining \$679 can be deducted in the 8th tax year.

Reforestation costs are an adjustment to your gross income. Enter your deduction on Form 1040 on the line for adjustments rather than on Schedule A under miscellaneous deductions, which are now subject to a minimum limit of 2% of adjusted gross income.

Any reforestation costs exceeding the \$10,000 annual limit should be capitalized (entered into your timber account) and recovered (deducted) when you sell your timber. Finally, a word of caution, *certain recapture provisions do apply if you dispose of your trees within 10 years of planting.*

Capital Gains

You may have heard that capital gains were eliminated under TRA86. This is not quite correct. What was eliminated was the 60% long-term capital gains exclusion from income tax. For the 1987 tax year, long-term capital gains will be taxed at the ordinary tax rate not to exceed 28%. (Short-term capital gains will be taxed fully as ordinary income, up to 38.5%).

If you sold timber, or had any other long-term capital gain during 1987, you will probably want to report it as a long-term capital gain rather than ordinary income for several reasons. For example, you may be in an income tax bracket that is higher than the 28-percent maximum tax ceiling for long-term capital gains. Too, you do not have to pay the self-employment tax for capital gains, as you do for ordinary income.

Cost-Share Payments

If you received cost-share assistance under one or more of the Federal or State cost-share programs during 1987, you may have to report some or all of it as income. If you do include the government's payment as income, you can recover your own share of the costs plus the govern-



ment's cost-share payment through the amortization and reforestation tax credit described above. Some people may do better if they chose another option—exclude some or all of the government payments from income if these conditions are met:

1. *The cost-share program has to be approved for exclusion by the Secretaries of Agriculture and the Treasury, and*
2. *The maximum amount excludable per acre is the greater of the present value of (a) \$2.50 per acre, or (b) 10 percent of the average income per acre for the past 3 tax years.*

The second requirement above can be complicated because you must determine an appropriate interest rate to use to compute the present values. Generally, though, if you harvested the tract within the last three years, probably all of the cost-shares received can be excluded from income.

In most cases, landowners with high incomes would be better off to exclude

LANDOWNERS

cost-share payments from income. Middle to low income landowners may be better off not to exclude cost-share payments and, instead, claim the tax credit and amortization. The important point here is that **you must report cost-share payments**. If you decide to exclude, attach a statement to your return that tells specifically what cost-share payments you received and that you choose to exclude some or all of them, and how you determined the excludable amount.

Conservation Reserve Program

If you planted trees during 1987 under the Conservation Reserve Program (CRP), you must report your annual payment as ordinary income. If you received CRP cost-share assistance funds for planting your trees, you must also report these as ordinary income. As of the date of this writing, CRP cost-share payments have not been approved by the Secretary of the Treasury for exclusion from income. However, CRP cost-share payments can be claimed as part of the reforestation expenses reported for the reforestation tax credit and seven-year amortization.

Casualty Losses

The rules for casualty losses remain unchanged under TRA86. A casualty loss must result from some event that is (1) identifiable, (2) damaging to property, and (3) sudden, unexpected or unusual in nature. In 1987, the Internal Revenue Service (IRS) issued position statements on southern pine beetle losses in timber stands, and losses of planted seedlings due to drought. In both cases the IRS stated that, generally, neither circumstance qualifies for casualty loss deductions because they fail to meet the suddenness criteria. It may be possible, however, to take a business or investment loss deduction for both types of damage. For those other events that do qualify for casualty loss (wildfire, storms), no more than the adjusted basis less any insurance or other compensation can be deducted.

Passive-Loss Rules

The real "bombshell" for many forest landowners will be the new passive-loss rules under TRA86. This subject is too complicated to describe in detail in this article. However, here is a very brief summary. Under the new passive loss rules, a forest landowner can be classified in one of three categories: (1) investor, (2) passive participant in a trade or business, or (3) active participant (i.e., materially participating) in a trade or business. Most forest landowners will want to be in the last category because all management expenses, property taxes, and interest on trade or business indebtedness are fully deductible each year, as incurred, from income from any source.

Congress indicated that a taxpayer is "materially participating" if his/her involvement is regular, continuous, and substantial; however, a low level of activity is adequate if that level is all that is required

to sustain the trade or business. This means that record keeping is now more important than ever.

To show material participation, landowners will certainly need to keep records of all business transactions related to managing their timber stands. Likewise, it would be a good idea to keep records of other business-related activities such as landowner meetings attended, odometer readings to and from meetings, cancelled checks for registration fees, and copies of meeting agendas. Under TRA86, it will behoove most landowners to be actively involved in the management of their timber lands.

Management and Maintenance Expenses

Generally, your annual expenses for the management and maintenance of an ex-

(continued on page 14)



TIPS

(continued from page 13)

isting stand of timber can be expensed or capitalized. In most cases, you would be better off to expense those costs during the tax year they are incurred, rather than capitalizing them. If it is not your advantage to itemize deductions for 1987, you should capitalize these expenses. If you choose to itemize deductions, you can deduct these expenses, but the passive-loss rules (discussed above) apply. Therefore, it is advantageous to be "materially participating" in your timberland management because these annual management and maintenance expenses would be fully deductible; otherwise, they may not be.

Conclusion

In summary, here are several points to remember when you file your 1987 Federal income taxes.

1. If you had reforestation (stand establishment) costs, take advantage of the 10% reforestation tax credit and 7-year amortization.
2. If you sold timber during 1987, you may be able to benefit from the long-term capital gains provisions; i.e., the 28% capital gains ceiling and the fact that you do not have to pay self-employment tax on capital gains.
3. If you had cost-share assistance during 1987, you must report it to the IRS. You may choose to exclude some or all of it if certain qualifications are met, but you still must report it.
4. If you participated in the Conservation Reserve Program, your annual payments must be reported as ordinary income. Likewise, if you receive cost-share assistance funds, you must also report them.
5. Keep good records! This includes receipts for business transactions, diaries, landowner meeting agendas, etc. Be an "active participant" in your timber land management activities.
6. Get help—both for forest management planning and tax planning. Proper tax planning is as important as the cultural techniques employed to grow a profitable timber crop. For help, contact a professional tax advisor, the Cooperative Extension Service, or your local Alabama Forestry Commission office. ☐

Commission As

ALMOST 50 ALABAMA FORESTRY Commission employees from county, district and state offices came to the aid of North Alabama poultry growers in January when approximately 178 chicken houses crashed to the ground under the weight of snow and ice.

Officials with the AFC were contacted by the Alabama Emergency Management Agency (EMA) after chicken farmers in northern counties awoke January 7 to find roofs of poultry houses collapsed under snow and ice that ranged from two to eight inches in some places.

Cullman County was hit the hardest with three-fourths of the collapsed houses having fallen in that county alone. Other counties suffering damage from the snow storm were Limestone, Morgan, Winston and Blount.

According to State Forester C. W. "Bill" Moody, AFC associates and equipment were called on to assist in the cleanup efforts after EMA and the Alabama Poultry and Egg Association made preliminary investigations into the situation. An estimated 2.5 to 3 million chickens were crushed underneath the rubble with those surviving having to be destroyed because of the possibility of sickness in the chickens.

Because of the threat to public health, the AFC was responsible for digging trenches to bury both dead chickens and fallen debris from houses.

Work began January 14, with much of the area still covered with a white blanket of snow. Bitter cold temperatures and winds hampered efforts during the first days of activity. On January 19, AFC associates worked through rain and thunderstorms that eventually spurred a tornado later in the afternoon which swept a 10-mile path a-

cross Cullman County causing millions of dollars in damage.

Following the rain, temperatures rose into the 60's before plunging once again to below freezing temperatures and wind chill factors in the low teens and single digits.

Debris and chickens from the final house were cleared on January 27 and forestry personnel spent the next two days washing and repairing equipment.

Because of efforts that went "far beyond the call of duty," explained Moody, participants in the chicken cleanup were invited to a recognition ceremony and luncheon at the AFC state headquarters on February



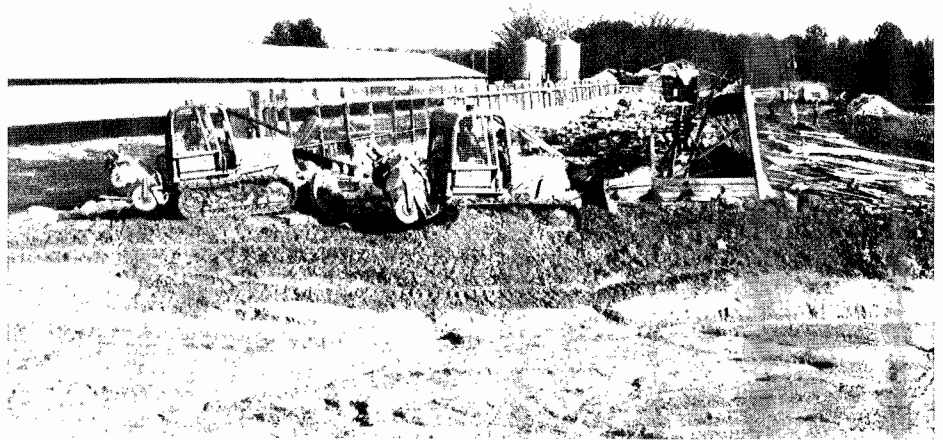
A blanket of snow still covered the ground and temperatures were below the freezing mark on the first day of the chicken cleanup. Here a Cullman County AFC unit digs a trench to bury debris from fallen chicken houses.

sts in Poultry Cleanup

11. Following the luncheon, the group moved to the State House where Governor Guy Hunt congratulated them for their community service work.

Areas sending associates and equipment to aid in cleanup efforts included Cherokee, Dekalb, Etowah, Marshall, Cullman, Jefferson, Blount, Winston, Jefferson, Walker, Tuscaloosa, Pickens, Clay, Cleburne, Chilton, Marengo, Morgan, Franklin, Lawrence, and Montgomery Counties; Huntsville District Headquarters; Birmingham District Headquarters; Florence District Headquarters; Montgomery District Headquarters; and State Headquarters in Montgomery. ☐

Units from Chilton and Marengo work together to dig large pits to bury several thousand dead and decaying chickens from this destroyed house in the Berlin Community of Cullman County.



LANDO

LEGISLATIVE
ALERT



NATIONAL

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

CONGRESS HAS RETURNED from its January recess ready to begin the second session of the 100th Congress. Faced with an increasing national deficit and the second year of the Gramm-Rudman-Hollings Budget Deficit Control Act, Congress will have some difficult funding decisions before them.

Once again, Congress raced to recess before the holidays and failed to act on the thirteen standard appropriations bills for fiscal year 1988. For the second year in a row, the funding bills were rolled into one spending bill, or Continuing Resolution (HJ Res 395), which contains numerous non-appropriations related measures. Congress stretched out its consideration of funding bills for several months, forcing them to pass four continuing resolutions as emergency measures to keep the government running when it did not meet the September 30, 1987, deadline for fiscal year 1988 funding. The President and several members of both the House and Senate have indicated that they will support a veto of further "omnibus" spending bills.

The length and lateness of the appropriations measure delayed the delivery of the President's proposed budget for fiscal year 1989. The proposed budget is normally delivered to Congress in January, but was pushed into late February. In addition, Congress set a short legislative calendar to accommodate the elections. The combination of a late delivery and shortened schedule will push Congress to enact funding measures in a much shorter period of time. Hearings on the President's budget request and recommendations were set to begin in late February and early March.

Although the President's budget proposal was not expected to be released until later in February, it was expected to ask for continued reductions in many domestic

programs, including those providing cooperative assistance to the states to carry out assistance programs for private lands and for controlling fire, insects and diseases. In addition, the Administration is likely to request cuts in other traditional forestry programs, such as the **Forestry Incentives Program (FIP)**, **Agricultural Conservation Program (ACP)**, and the **Rural Community Fire Protection (RCFP) Program**. The National Association of State Foresters and other forestry groups will be urging Congress to at least retain fiscal year 1988 levels for these important programs.

Forestry Funding for FY 88

Fortunately, **State and Private Forestry** programs were not directly cut by either of the deficit reduction bills (HJ 395 and HR 3545). In fact, State and Private Forestry programs managed to hold the line on their 1987 level and received an increase for an innovative **forest products marketing program**. **Fire protection, wood utilization, and urban forestry programs** all received modest increases from 1987 levels. The forest products marketing initiative is designed to help U.S. forest producers regain an edge in the competitive world market and reduce the estimated \$2.5 billion annual trade deficit for forest products.

Tree Planting Boost

The Secretary of Agriculture announced changes in the **Conservation Reserve Program** to increase tree planting in time for the sixth sign-up period. Congressional representatives, along with forestry groups, urged the Secretary to make the changes to help tree planting reach its legislated

goal of 12%. Prior to the sixth sign-up, trees accounted for only 6% of the ground cover totals for the CRP. **Representatives Bevill, Callahan, and Flippo** of Alabama signed a letter from 47 House members to Secretary Lyng asking for these badly needed incentives. **Senator Heflin** (AL) signed a similar letter from 10 senators requesting similar changes. Both letters pointed out the economic advantages of tree planting—the average costs for CRP programs are lower than traditional farm subsidy programs, and the CRP will save the federal government millions of dollars in annual rental payments. In addition, the letters emphasized the likelihood of lands remaining in trees beyond the 10-year CRP program because they are not as easily "plowed out" once the program payments end.

The changes included in the eligibility requirements include the following: 1) 2T erosion criteria for tree planting only; 2) 1/3 required field predominance for tree planting only; 3) allowance of waiver requests for trees after hitting the 25% county enrollment cap; and 4) allowance of filter strips along rivers, lakes, reservoirs, and streams without meeting erosion criteria. Your Alabama representatives should be thanked for their efforts to increase tree planting.

Conservation Reserve Review

Hearings have begun to examine ways to improve the 1985 Farm Bill and the Conservation Reserve Program. Senator Fowler's (GA) Subcommittee on Forestry of the Senate Agriculture Committee has held one hearing in Georgia and plans another hearing in Washington. Other congressional representatives and com-

WINNERS

mittees will be holding oversight hearings this spring on the Farm Bill.

Environmental groups are opposed to any legislative changes in the bill, but forestry groups should be prepared to act if the bill is reopened. Specifically, there is concern that changes will be made in the "sodbuster" and "swampbuster" provisions to prevent farmers from planting new crops on highly erodible lands or wetlands.

Labeling Program Delayed

When the Environmental Protection Agency unveiled its new labeling program

to protect endangered species last spring, it met with opposition from virtually every group affected. As the program was finalized it grew in unpopularity and several groups threatened legal action and got Congress involved. The program, designed to meet compliance requirements of the Endangered Species Act, had not been subject to a formal public comments process; had out-dated range maps; set an unrealistic schedule for label changes; and proposed to use forestry as a test cluster. Several forestry groups met with EPA officials to stress the importance of a public comments process so that the plan would reflect programs that could be re-

alistically instituted in the field. The forest cluster would like to comply with the regulations, but they should be based on the most current information, technologies, and practices.

The Senate, realizing the implications of this make-shift program, managed to insert language in its huge appropriations bill to halt the EPA program until September, 1988. This will give agriculture, environmental, forestry and pesticide user groups more time to assist EPA in formulating a workable program. ♣

by FRANK SEGO, Legislative Liaison, Alabama Forestry Commission



ONLY TIME WILL TELL WHETHER the ground hog's prediction of spring was accurate. One thing was certain, however, about Ground Hog Day in Alabama—the legislature returned to Montgomery and set up shop for 30 working days of the 1988 Regular Session.

Another certainty was that the Alabama Forestry Commission embarked on the most ambitious legislative program ever to be undertaken by the state's forestry agency. Primary focus of the legislative effort was to provide the Forestry Commission with adequate funding for its forest fire prevention and protection program, and to gain needed assistance for Alabama's volunteer fire departments.

State Forester C. W. Moody minced no words when he declared, "Those 28,000 volunteer firefighters are going to get the

help they deserve, and we are going to find a way to help them." To this end he enlisted the support of House Speaker Jimmy Clark for a method of giving support to both the volunteer fire departments and the Forestry Commission. A bill was defeated to levy an additional five cent privilege tax on a pack of cigarettes.

\$16 Million For VFD's

It was estimated by the Revenue Department that the cigarette tax increase would bring in about \$20 million. Eighty percent of this amount (\$16 million) would be earmarked for the volunteer fire departments and 20 percent (\$4 million) would go to the Forestry Commission. The bill (H-341) was introduced by Representative Richard Laird of Roanoke

with 58 co-sponsors. Funds would be designated for any approved volunteer fire department to expend for any purpose except salaries.

The Forestry Commission also renewed its efforts to enact a constitutional amendment allowing forest landowners to vote for a 10 cents per acre assessment on their forestlands. Currently such an assessment is being collected in 39 counties. A state-wide assessment would levelize this method of funding for forestry protection in a fair and equitable manner.

Representative Laird is handling this legislation in the House. Senator Ann Bedsole is taking the lead in the upper chamber (S-309 and S-310.). The bill has the endorsement of Forestry Association and Farm Bureau officials.

Still another funding vehicle was being

readied for introduction as the legislature went into session in February. This measure would provide for a 25 percent increase in the severance tax on forest products. Receipts from this increase would be disbursed as needed for the Commission's statewide forestry program. This bill also received the support of the Forestry Association.

Woodland Fire Condemnation

Condemnation of vehicles and equipment used in setting forest fires was also addressed in a bill that would establish a Woodland Fire Condemnation Act similar

in concept to the Timber Theft Condemnation Act of 1987. The act (S-171) would establish procedures for seizing, confiscating, and condemning equipment and vehicles used in violation of Alabama's forest fire laws.

Another forestry related bill (S-61 and H-26) would amend the Code of Alabama to include only the name of the landowner and the county from where forest products are acquired. It simplifies the present record keeping process where a report of the section and township are required of the landowner. It also stiffens the penalty for failure to report such information.

Anti-Litter Legislation

The Forestry Commission is joined by a host of statewide organizations and individuals seeking to strengthen Alabama's criminal littering law. The amendment (S-172 and H-376) would make a person accountable for any litter being dumped or deposited on any public or private property without permission. It would also be unlawful for any cargo to be transported by truck or other vehicle unless such cargo is covered to avoid blowing off and causing a litter problem. ♠

ACTIVITIES

DISTRICT

1

The **Jackson County Rural Development Committee** and other interested groups (i.e. County Commission, District Attorney, County Health Department, etc.) have banded together for a major push attacking the county litter problem. **Ed Eldredge**, county supervisor, stated that roughly 25% of their forest fires come from dumpsites which have been torched. Combining the fire hazard with the obvious visual blight, it's easy to understand something must be done.

Developing a visual "portfolio" of all the dump sites in the county is the first step. The portfolio will include photographs matched with the location and ownership of known illegal dumps within the 717,000 acres of land in Jackson County. The group hopes to broaden its base of support by involving landowners who have been victimized.

After identifying the extent of the problem, the findings will be presented to the **County Commission, Rural Development Committee** and a special subcommittee—the **Law Enforcement Committee**. A course of action will then be outlined.

One option is developing a letter to notify persons that his or her name was found in garbage dumped on the side of a road. The letter will advise the person of possible legal action if the garbage is not cleaned up and gives him 15 days to contact the **County Health Department** and explain their intentions. The support of the local district attorney and judges is crucial to the program's success according to Ed. Potential penalties include a \$500 fine and/or 3 months in the county jail. It appears that a state bottle bill would also help reduce the amount of litter not only in Jackson County but throughout the state.

Marshall County Supervisor **Larry**

Parker devised an innovative way to promote community spirit through forestry. The City of **Guntersville**, which recently became Marshall County's first Tree City, USA, was the site of the activity. Larry obtained two pounds of loblolly pine seed which he deposited into a large glass container and located in a prominent place in the City Hall. Everyone who came by was given a chance to guess the number of seed in the container. The prize was an 8-foot tall ball and burlap white pine donated by a local nursery.

As you can imagine, the range of guesses was wide from 1,000 up to the winning guess of 30,100 seeds. Actual number was 31,500. The winner was a local high school boy described as a chess and math wiz. He explained to Larry that he mathematically figured the volume of the container, then measured the size of one seed and computed the total! Sounds easy enough.

DISTRICT

2

The beginning of November brought emergency fire conditions to **District 2**, resulting in 456 forest fires reported and 79,603 acres burned during the month. An AFC unit from **Baldwin County**, three units from the **South Carolina Forestry Commission**, and crews from the **Alabama National Guard** were dispatched to assist in fire control efforts in **Jefferson and Walker Counties**. During the month District 2's county fire statistics looked like this: **Jefferson**, 122 fires—58,252 acres; **Walker**, 107 fires—12,609 acres; **Shelby**, 65 fires—4,661 acres; **St. Clair** 51 fires—2,458 acres; **Winston** 25 fires—1,012 acres; **Cullman** 28 fires—428 acres; and **Blount** 58 fires—182 acres.

District Forester **Bart Williams**, Blount County Supervisor **John Rice**, and District

Information Coordinator **Coleen Vansant** attended the quarterly steering committee meeting of Alabama People Against a Littered State (PALS) on November 18. During the meeting **First Lady Helen Hunt** personally presented the first **Helen Hunt Anti-Litter Awards**. **The Southern Democrat** of Oneonta was recognized as the winner of the media award and **Harbert Corporation** of Birmingham was honored as the state's corporate winner.

The **St. Clair Forestry Planning Committee** hosted a prescribed burn demonstration for landowners on December 5.

Jefferson County Supervisor **Phearthur Moore** was a guest on Channel 13's *Today in Alabama* where two forestry segments were taped. The first spot, relating to fire prevention, aired on Christmas Eve; and the second segment, including the **TREASURE Forest Program** and Christmas tree production, aired on Christmas day.

During December and January almost 400 **St. Clair County sixth grade students** visited **International Forest Seed Company** (IFSCO) in Brantleyville. The tour was sponsored by IFSCO and the **St. Clair Forestry Planning Committee**. In addition, Planning Committee members visited third grade classes where tree seedlings were distributed with demonstrations on how to properly plant and care for pine seedlings.

Blount County AFC associates have been involved in many information and education efforts recently, including a course on fighting brush fires being taught to the **Blountsville Volunteer Fire Department** by Ranger **Dennis Underwood**; County Supervisor **John Rice** presenting a slide/tape program *Alabama Birds* to the Blount County Conservation Club; and Ranger **Steve Bowden** instructing a course on wildland fire suppression to volunteer

fire departments in Blount County.

Ranger **Dennis Underwood**, Blount County, completed the Prescribed Burning Course held at the Dixon Center.

During January, Blount County Forester **John Rice** attended the Volunteer Fire-fighter Conference held in Montgomery.

The month of January saw **Cullman County** as the host of approximately 35 Alabama Forestry Commission associates from across the state who assisted in the **chicken cleanup details** in Cullman. The two-and-one-half week effort was a result of an ice storm on January 7 which collapsed the roofs of approximately 178 chicken houses. Units aiding in the cleanup in Cullman included the following counties: **Walker, Cullman, Blount, Jefferson, Winston, DeKalb, Cleburn, Cherokee, Clay, Montgomery, Tuscaloosa, Lawrence, Chilton, Marengo, Pickens, Etowah, and Franklin**. Assistance also came from **District 2 Headquarters**, and **State Headquarters personnel**.

DISTRICT 3 District 3 offers its heartiest congratulations to the new members of our TREASURE Forest family which is still the largest in the state in both acreage and number (80). Our three new members are **J. B. Dollar** of North Tuscaloosa County, Timber and Wildlife; **Craig Sizemore** of Sizemore and Sizemore Farms in Lamar County, Timber and Wildlife; and **George Lowrey** of Fayette County, Timber and Recreation. We are especially proud of George since he becomes the first District 3 AFC employee to have his land certified as a TREASURE Forest. George can honestly say he practices what he preaches and we know he will.

Pine beetle detection flights were resumed after a brief delay due to fall color. Flights were very encouraging as **District 3 landowners** seem to be doing a great job of cutting out the spots.

Harold Jordan, ranger in Lamar County, recently made a presentation to the **South Lamar County High School FFA** on TREASURE Forest.

The **Tuscaloosa County Forestry Planning Committee** has been very active recently sponsoring a tour with six speakers on the TREASURE Forest of Tuscaloosa County Commissioner **John Foster** and his son, Gulf States Forester **John Foster, Jr.**; an Income Tax session on February 9 featuring **Lou Hyman**; and an herbicide session in March. The **Hale County Forestry Planning Committee** and **Pickens County Forestry Planning Committee** are working on the final details for March herbicide tours in their respective counties.

District 3 Forest Management Specialist and District PALS Chairman **Patrick Waldrop** recently presented PALS anti-litter awards to the **Fayette County Volunteer Fire Department Association** (Volunteer), **Celeste Burnum** of the **Tuscaloosa Beautification Council** (County), and **Jon Warner**, chairman and chief operating officer of **Gulf States Paper Corporation** (Business and Industry). We are especially proud of Mr. Warner since he is in the forest industry and also the chairman of the state's largest TREASURE Forest.

Smokey Bear has been making many appearances recently in the District. In **Tuscaloosa County** he has visited with some 1200 students and ridden in the **City of Tuscaloosa's Christmas Parade**. In **Pickens County** he visited with local Cub Scout packs and helped Pickens County Forester **John Sutton** and **Pickens County rangers** with a fire prevention presentation.

DISTRICT 4 The **Lafayette Sun** has carried articles concerning a Tree Farm award; **Smokey Bear** program; tree planting seminar attended by 35 people; and Farm-City Week. **Clayton Schwind** has done one **Smokey Bear** program at **Chambers Academy**; one **Homemaker's Club** program on tree planting; a school program at **Chambers Academy**; one **Smokey Bear** program at **Lanett Elementary School** for 150 students.

An **RCFP Association** meeting was held in **Clay County** during the quarter to develop a District 4 RCFP newsletter. The plans were completed and the first issue of the newsletter was published.

Earl Smith attended an Emergency Board Meeting at the **ASCS** office in Ashland to determine the need for emergency assistance for farmers due to the drought. He also attended 10 VFD meetings in Clay County during the winter quarter.

W. N. McCollum taught 40 hours of basic firefighting at **Shiloh VFD**.

Earl Smith and **Wayne Johnson** attended 16 hours of hazardous materials training in Ashland.

Smith and **McCollum** also assisted the **Clay County Hospital** staff in planting an Eastern red cedar for the Christmas Tree of Love.

Blake Kelley and **Joel Neighbors** presented a program on fire prevention to 30 **Cub Scouts** at Rockford Methodist Church. **Smokey Bear** gave out rulers and coloring books.

Blake Kelley assisted in judging the Pine Wood racing event for Cub Scouts in Coosa County during January.

Ralph Wooley attended six Volunteer

Fire Department meetings.

Bill Nixon had a **Georgia Kraft** forester present a tree planting demonstration using industry techniques. The forester was assisted by the **Georgia Extension Service**.

Nixon assisted in the presentation of a TREASURE Forest certificate to the **Roanoke Lions' Club**. Twenty-five people attended.

A letter of thanks from Nixon to the volunteers who assisted during the wildfire emergency was published in the local newspaper.

Nixon and **Smokey** did a program for the **Rock Mills Boy Scouts and Cub Scouts**.

Nixon also organized a forestry demonstration for landowners with hands-on seedling planting demonstration.

Charles Sikes and **Mary Tucker** set up a booth at the **Randolph-Roanoke Vocational School** where juniors and seniors from all over Randolph County attended a career day.

Bill Nixon wrote a fire prevention article for the **Frog Level paper**. **Nixon** and **Smokey** also did a program for the **Roanoke kindergarten** and **Wedowee first grade**.

The **Camp Hill Community Club** held their November meeting at **District 4 Headquarters**. **Mary Tucker** conducted a tour of the building's offices and dispatch center and explained the agency's total program of forest management and fire suppression. Following a fish dinner, the new TREASURE Forest video was shown.

DISTRICT 5 The **Perry County Forestry Planning Committee** is planning its Spring Tour. The theme for the tour will be "Managing Land for Wildlife." The tour will be held in late April or early May.

The **Dallas County Forestry Planning Committee** held its fall tour on December 5. Topics covered on the tour were proper handling and planting of pines, weed control, planting black belt soils and intermediate stand management. Speakers were consulting foresters **Walter Mills, Al Schober** and **John Bradley, Jr.**; **Dr. Frank Roth, ACES**; and **David Hoge, AFC**. Approximately 30 people attended the tour.

Congratulations to **District 5 PALS Anti-Litter Award Winners** for 1987! They are **Patsy Sumerall**, Mayor of Thomaston; **Rosa Whitt** and the **Beloit Community** organization; the **Wilcox County Commission** and **Maleieve Breeding** of Selma. Ms. Rosa Whitt and the Beloit Community organization received the Helen Hunt Statewide Award in the Volunteer Category.

December 11, 1987, **Wilcox County**

Forestry Committee had its annual tree-give-away program. Hardwood and pine seedlings (5,500) were given away in **Pine Hill** and **Camden**.

County Supervisor **Harold Cleveland** spoke to the **Prattville Lions Club** on **November 11, 1987**, about the forestry program in **Autauga County**.

On December 6, State Forester **C. W. Moody**, **Ray Tucker** and **Chilton County employees** were present for the memorial service held for **Virginia Bolton**, a volunteer fire fighter who died in the line of duty. **Tobie Mayfield** presented a memorial plaque to Mrs. Bolton's family in her honor. The service was held at the **Gap of the Mountain Volunteer Fire Department**.

DISTRICT
6

At the last **Dale County Landowner Association** meeting, **Luther Weed** was presented his **Treasure Forest Certificate** becoming Dale County's seventh **Treasure Forest** recipient. Also, District 6 **Forest Management Specialist Barry Lawrence** presented a seminar on proper seedling care and planting techniques to help landowners increase planting survival.

In December, 1987, **Francis Smith** was presented a certificate as a **Treasure Forest landowner** in **Henry County** by Alabama Forestry Commission Ranger **Tommy Haynes**.

On February 16, 1988, the **Houston County Landowner Association** meeting was held at Mr. J's Steak House in Dothan. **Fred Voyles** was the guest speaker and discussed pole timber management.

Supervisor **Wayne Roberts** and Forester **Bob DeVaughan** of **Coffee County** are conducting a prescribed burning demonstration on **Gladys Pittman's Treasure Forest**.

Don VanHouten, **Barbour County** supervisor, presented **Treasure Forest certificates** to **Buck Taylor** and **R. L. Cody** for their excellent stewardship of their land.

DISTRICT
7

On February 7, 1988, District 7 **Fire Specialist Lesley Williford** and **Escambia County Ranger George Bolling** presented a program on fire prevention to approximately 20 children at the **Brewton YMCA**. **Smokey Bear** was on hand to assist with the program.

Butler County Supervisor Brandon Burkett is pleased to announce that **Greenville** has been certified as **Tree City, USA**.

Escambia County Supervisor Robert Knowles and **District Forester Robert Dismukes** made a presentation on February 24, 1988 in honor of **Atmore** being certified as **Tree City, USA**.

An **Arbor Day Proclamation** and tree planting ceremony was observed in **Evergreen** on February 25.

Castleberry also signed an **Arbor Day Proclamation** in February.

Conecuh County sponsored a tree give-away on February 25. Several thousand trees were given away that week.

Smokey Bear and **Covington County Supervisor Albert Hardage** participated in the **Rattlesnake Rodeo** in **Opp** on February 27, 1988.

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**.

DISTRICT
8

On December 12 **Steve Lyda**, **Mobile County Forester**, presented **TREASURE FOREST certificates** to **Harriet G. Kelly**, and **Marie and Gerald McLeod**. These **Mobile County landowners** were recognized for good stewardship of their forestland and sound multiple-use forest management practices.

Choctaw County Rangers Peter McInnis and Raymond Skelton held fire prevention programs for 610 school children at **East Choctaw, Shady Grove, Gilbertown, Butler, Lisman and Silas Elementary Schools**. The children enjoyed the film, speech, pamphlets, and story books that were used in the program.

On October 19, **Baldwin County Forester John Martin** met with representatives from all **Baldwin County incorporated Tree Cities** to discuss the development of the **Urban Forestry Planning Committee**.

In November, **Clarke County Forester Benji Elmore** presented **TREASURE FOREST certificates** to landowners **David Chastain, Herman Garrick, and Melton Dubose**.

Mobile County Ranger Jim Wade gave a class to 15 members of the **Bayou La Batre Fire Department** in map reading to familiarize the department with section, township and range concept in fire control.

In a combined effort between the **Baldwin County Forestry Planning Committee** and agricultural agencies, with the assistance of **Baldwin County Forester John Martin** and **District 8 Management Specialist Larry Grable**, a seedling planting demonstration was held in **Loxley** on December 1 for cost-share landowners, vendors and industry. **Woodfield Company** of Georgia demonstrated a tree planter. **AFC's Bill Padgett** and **David Hoge** talked about nurseries, seedling care and handling, and cost share programs. **Tim Barnhill**, landowner in **Baldwin County**, supplied a tractor and assisted in the planting demonstration.

Smokey Bear, alias **Bobby McAdams**, a **Mobile County forestry worker**, with the assistance of **Ranger Major Harris**, was a huge success at the **Mobile Bel Air Mall** during **Fire Prevention Week**, **November 20-25**.

DISTRICT
9

Tony Avery, **Marion County forester**, will receive the **W. Kelly Mosley Environmental Award for Achievement**. Tony was nominated by **Louise Bone**. This is Tony's second **Mosley Award**, with the first being a grant to fund **District Nine's Annual Forestry Camp**. This is the **12th Mosley Award** for **District Nine**.

Volunteers from the **AFC** assisted with the winter storm clean up in **Morgan and Lawrence Counties**. **Neal Taylor, Kyle Desmond, Roger Nichols and Larry Lee** assisted farmers in cleaning up the poultry houses damaged by the winter storm.

During the drought emergency **District Nine's fire suppression crews** moved swiftly from one county to another assisting with fire suppression and law enforcement. One of the crews heard most often was the **Morgan County crew** as they moved over into adjoining **Lawrence County** to assist **Larry Lee**.

Among the State employees recognized during "State Employee Week" were **Tony Avery, Flavil Logan and Vernon Tucker**. This group was featured in special publicity in **Marion County**. **Louise Bone** was recognized at a **Lauderdale County breakfast** held at the **Lauderdale County Courthouse** and a special dinner attended by the mayor and local celebrities. Local businesses put up special **Salute to State Employees** signs.

Tree City, USA applications have been submitted for **Florence, Red Bay, and Hartselle**. **Florence** recently appointed its tree board. **Steve McEachron** and **District Forester Gerald Steeley** are working closely with this group. **Champion International** has contributed trees to the **City of Florence** for their special **Tree City, USA Arbor Day program**. **Tammy Ellis** is working with other **Franklin County personnel** in promoting **Tree City for Red Bay**. **Cathy McCollum and Roger Nichols** are coordinating with the **City of Hartselle**.

Colbert and Franklin Counties' anti-litter projects continue in full swing. **Danny Deaton and Rick Banks** spearhead these projects.

Four **Franklin County landowners** received the **Treasure Forest Award** for outstanding multiple use management. **Tammy Ellis, Rick Banks and Tim Gothard** presented certificates to **Glenn Clement, Tommy Epperson, Luther James, and Joey Oden**.

Three **Champion Trees** were certified in **Morgan County**.

Mrs. Hammie Stamps presented the **Marion County AFC employees** with one of the "nature art" wall hangings for their new office.

Louise Bone has nominated **Mrs. Stamps** for the **Chevron Conservation Award**. Winners will be announced in March, 1988. The winners receive \$1,000 and an expense paid trip to Washington, D. C. for the award ceremonies.

Fire prevention programs were held in all counties in **District Nine** in October. An outstanding example was in **Morgan County** where approximately 2000 children heard fire prevention programs. **Lawrence County Supervisor Larry Lee** and **U. S. Forest Service personnel** presented fire prevention programs to all school children in **Lawrence County**.

FFA Forestry Judging Contests were held in all counties during October and November, 1988. **Don Burdette** assisted **Greg Wood** with the **Limestone County** contest.

The **Lauderdale County Farm Bureau Federation** recently appropriated funds to give all 14 **Lauderdale County VFD's** a contribution of \$200 each.

The **Rogersville Town Council** adopted a resolution praising the volunteer fire departments and eight of its members who placed high in competition during the **Alabama Association of Volunteer Fire Departments Competition**.

The **Lauderdale County Volunteer Fire Department Association** held its annual banquet and awards program in January. This year **Sam Newton** of the **Lexington VFD** received the "Fire Fighter of the Year" Award. A special award was given to **Lauderdale County Ranger R. Vernon Young** for his many years of "service and dedication" to the **Lauderdale County VFD's**. Association President **Butch Tucker** presented Vernon with a plaque and a rod and reel. The rod and reel will be very useful when Vernon retires in April.

DISTRICT 10 TREASURE Forest landowner **John Rudd**, Russell County, has been charged with leading the statewide TREASURE Forest Planning Committee thinking of ways to promote more general use of multiple-use forestland management practices. He gave some of his preliminary views during that group's gathering in February, "Wildlife makes up a major economic resource on our central Alabama woodlands, and their contributions to farm-family income in the future may grow to become primary in management deci-

sion making. TREASURE Forest planning groups need to be leading the thinking among resource users competing for positions in our forests."

March 5 is the tentative date set for the annual high school youth competitions in forestry-related skills to be held on the campus of **Tuskegee University**, according to **Dr. Peter Mount** and other members of the **Macon County Forestry Planning Committee**. This will be the second year the contests have been held with judging in several areas of forestry practice and wood utilization and attended by representatives of schools and youth groups from throughout the area. Personnel from the **AFC** and other forest-related agencies and **University Extension** will officiate.

Also in March, a wildfire crisis/alert assembly was scheduled for the hot district around **Macon, Bullock, Russell, and Lee Counties**. Planning Committee members have scheduled awareness reports of wildfire dangers and costs, fire history, and environmental impact for citizens of the area.

Farm City Week activities in **Lee County** were successful again this year (1987) with several thousand locals visiting exhibits, viewing displays and attending presentations in and around the **Ag Center in Auburn**, and on the **University campus** during mid-December.

On January 14 the **Lee County Forestry Planning Committee met and laid out its schedule for 1988 activities**, including evening short courses, and some field trips. Participation in at least one special cooperative event with other area counties is also planned for the spring, according to Supervisor **J.B. Coker**.

Lee Forester Randy Quick also announced that the **City of Opelika** has recently officially appointed its Tree City Board, with an ex-local legislator serving as a very interested chairperson. Full status as a TREE CITY is next in Opelika's future.

Dr. E.L. Foster, past president of **Tuskegee University**, hosted a prescribed burn January 30 on his demonstration forest northwest of his old campus in **Macon County**. A dozen or more local residents watched the burn, performed by the **USFS** and the **Extension Service**. The **Pleasant Springs** area where Dr. Foster's forestland is located is a leader in the number of wildfires in Dist 10. The attendees needed to be shown the difference between prescribed fire and wildfire.

The **Farmers' Conference at Tuskegee University** was a huge triumph again this year, with the message of multiple-use and TREASURE getting to hundreds of regional landowners on February 17, under the co-sponsorship of the **Forestry Planning Committee**. ♣

CALENDAR

April 5—Macon County, 8:30 a.m. Tour of U.S. Forest Service George Andrews Forest Science Laboratory. Meet at Extension Service Office on East Oak Street, Tuskegee. Call Dr. Peter Mount, (205) 727-8809.

April 5—Walker County, 9:00 a.m. Forestry Planning Committee meeting at Extension Office on Airport Road. Call Charles Hall, (205)384-6344.

April 6—Blount County, 7:00 a.m. Forestry Planning Committee meeting at Round-the-Clock Restaurant. Call John Rice, (205)274-2231.

April 13-15—Asheville, NC. Opportunities and Issues of the Southern Forest: Annual Meeting of Forest Farmers' Association. Call B. Jack Warren, (404) 325-2954.

April 19-22—Baldwin County. Forest Growth Process Modeling of Responses to Environmental Stress. Call John Blakes, (205)826-4050.

April 20-May 12—China. Tour sponsored by People-to-People. Write to Donald F. Crossan; Dean, School of Agricultural Sciences; University of Delaware, Newark, DE 19717-1303.

April 22-26—Orlando, Florida. Annual Meeting of National Rifle Association of America. Call Gary Anderson, (202) 828-6000. NRA may have available insurance for its members which covers them and the owner of the land on which they hunt.

April 22-23—Tifton, Georgia. Timber Harvesting Expo Southeast '88. Equipment displays, live woods demos, educational sessions, and entertainment. Call Joe McNeal, (912)386-3418.

April 25-26—Oktibbeha, Mississippi. Prescribed burning shortcourse at Mississippi State University, Starkville. Call Dr. Tom Monaghan, (601)325-3150.

April 30—Shelby County, 9:00 a.m. Alabama Forest Owners Association Annual Meeting at Alabama 4-H Center, Lay Lake, 30 miles southeast of Birmingham. Morning workshops on forest regeneration, afternoon workshops to cover income tax, mineral leasing, and wildlife management. Concurrent outdoor exhibits and demonstrations will include chainsaw safety. Video exhibits will run all day and will include 13 segments of Great American Woodlots. Advance registration will save you money. Register now!

June 26-July 2—Sterling College, Craftsbury Common, Vermont. Wildbranch Workshop in Outdoor, Natural History, and Environmental Writing. For more information call David Brown, 1-800-648-3591. ♣

THE CONSERVATION

HERBICIDES

by JAMES R. HYLAND, Chief, Forest and Pest Management

PART OF THE Conservation Reserve Program (CRP) deals with the removal of erodible cropland from production and placing this acreage in trees. Generally, a forester does a site specific plan for each area approved for CRP funding. This means determining the correct tree species for that site and soil. A plan is drawn up to detail tree species, number needed per acre, and measures needed to ensure survival.

On some of these areas, soil characteristics and grass or weed competition dictate the use of herbaceous weed control measures (use of a site specific chemical herbicide treatment). With the agreement of the Soil Conservation Service (SCS) and the Agricultural Stabilization and Conservation Service (ASCS), the Forestry Commission has adopted a policy of mandatory use of herbaceous weed control under the following conditions:

- (1) *When the seedling mortality rating for a soil is moderate or severe, or*
- (2) *If there are grasses present that will affect survival*

Seedling mortality ratings indicate the degree to which the soil affects the mortality of tree seedlings. Plant competition is not considered in the ratings. The ratings apply to seedlings from good stock that are properly planted during a period of sufficient rainfall. A rating of *slight* indicates that the expected mortality is less than 25 percent; *moderate*, 25 to 50 percent; and *severe*, more than 50 percent.

Ratings of *plant competition* indicate the degree to which undesirable plants are expected to invade where there are openings in the tree canopy. The invading plants compete with native plants or planted seedlings. A rating of *slight* indicates little or no competition from other plants; *moderate* indicates that plant competition is expected to hinder the development of a fully stocked



RESERVE PROGRAM

stand of desirable trees; *severe* indicates that plant competition is expected to prevent the establishment of a desirable stand unless the site is intensively prepared, weeded, or otherwise managed to control undesirable plants.

Each Forestry Commission office and

forester will have a list of the soils in Alabama and whether herbaceous weed control is mandatory for that soil. The soil on the CRP area and grass competition is determined by on-the-ground inspections.

Specifications on six different herbicides have been developed for use in the CRP plan.

The one for each site is based on the weed control needs of that individual area. All six herbicides are applied over the planted seedlings. These recommended herbicides are **OUST**, **OUST** and **ROUNDUP**, **OUST** and **ATRIZINE**, **OUST** and **VELPAR**, **POAST**, and **FUSILADE**.

TREES VERSUS GRASS

by DR. FRANK ROTH, Auburn University Extension Service

WILLIAM B. HUGHES, Agricultural Economist

SCS/JERRY JOHNSON, State Staff Forester, SCS

IN ORDER TO COMPARE TREE PLANTING, pasture establishment and hayland establishment under the Conservation Reserve Program (CRP), a discounted cash flow analysis was performed for each enterprise. The period of analysis used was 25 years. The analyses were constant dollar analyses (no inflation) with a real discount rate of 8 percent. Annual costs of \$1 per acre for ad valorem taxes and annual CRP payments of \$45 per acre for the first 10 years were used for all enterprises. Establishment costs used in the analyses are the average costs incurred under the CRP in Alabama to date, and cost share payments are 50 percent of the establishment costs in each case. Each enterprise will be described separately.

site index used was 85 feet on a 50 year base. The timber stand was to be thinned at age 15 removing 13.14 cords of pulpwood per acre, with a clearcut at age 25 removing 28.74 cords of pulpwood per

acre and 2,810 board feet of sawtimber per acre (Scribner scale).

The stumpage values used were \$15 per cord for pulpwood and \$125 per thousand board feet for sawtimber. Prescribed burn-



Tree Planting

The Tennessee Valley Authority's **YIELD** 1.4 computer program was used to estimate the timber yields from the tree planting enterprise. Loblolly pines were to be planted at a 6 by 10 foot spacing, about 726 trees per acre, at a cost of \$66 per acre, based on Agricultural Stabilization and Conservation Service (ASCS) records of actual planting costs to date. The

ing was to be done at ages 12, 15, 18, 21, and 24 at a cost of \$6 per acre each time. The cost used for marking and marketing the timber was 7 percent of the harvest values.

Pasture Establishment

Livestock budgets for a cow-calf enterprise were used to evaluate the costs and returns of utilizing the grass on CRP lands during the 15 years beyond the CRP contract period. The cost of establishment

of the grass was \$84 per acre based on ASCS records of the actual costs to date. An annual maintenance cost of \$8 per acre for mowing was included for each year of the contract period. No additional fertilization was included since no vegetation would be removed during the contract period. A fencing and water development cost of \$50 per acre was included in the eleventh year in preparation for the livestock. The livestock budgets included a 90 percent calf-crop and an average calf weaning weight of 400 pounds.



Hayland Establishment

Forage budgets for coastal Bermuda grass and Johnson grass were used to determine the costs and returns of hayland establishment. An establishment cost of \$150 per acre was used because of the typically higher cost of establishing a sod for hay production. An annual maintenance cost of \$8 per acre for mowing was included for each year of the contract period. Hay yields were estimated beginning in the eleventh year after the end of the contract period. Annual yields were estimated to be 5.5 tons per acre at a price of \$60 per ton.

Results

The three enterprises under review were compared based on the three accepted measures of economic value benefit—cost ratio, annual equivalent value, and present net value. TABLE I shows that tree planting is the preferable alternative by all three economic parameters.

Planting pine trees yields the highest annual equivalent value of \$39.22 per acre compared with \$32.83 per acre for hayland and \$24.03 per acre for pastureland. This means that growing trees on CRP land will return the landowner \$6.39 per acre more each year for 25 years than growing hay, and \$15.19 per acre more each year for 25 years than growing grass for a cow-calf operation. Landowners who are seeking to maximize returns should choose tree planting as their alternative. Other advantages to the landowner are (1) *lower initial investment*, (2) *less labor required*, (3) *fewer risks* and (4) *flexibility in marketing*. One disadvantage is the long time until final harvest which limits cash flow after the CRP payments have ended.

The benefits to society can be measured by the present net values and benefit to cost ratios. The present net value of tree planting is \$418 per acre, which is \$67 per acre better than hayland and \$161 per acre better than the cow-calf operation. The marginal benefit of the tree planting alternative multiplied over millions of acres can have a significant impact on jobs as well as local, state and federal tax revenues in Alabama. The tree planting alternative also provides the best benefit to cost ratio of \$8.02 to \$1. This far exceeds the ratios of \$1.28 to \$1 for hayland and \$1.21 to \$1 for pastureland. The reasons for these discrepancies are the lower initial costs and lower annual maintenance costs of tree planting. ♣

TABLE I

ECONOMIC COMPARISONS OF ALTERNATIVE ENTERPRISES UNDER THE CONSERVATION RESERVE PROGRAM

Enterprise	Benefit: Cost Ratio*	Annual Equivalent Value**	Present Net Value***
Tree Planting	\$8.02:1	\$39.22	\$418
Pastureland	1.21:1	24.03	257
Hayland	1.28:1	32.83	351

*Benefit: Cost Ratio is often used as a measure of the value of government programs. It is a ratio of the revenues produced by an enterprise to the costs associated with the enterprise.

**Present Net Value is generally accepted as the best method for evaluating long-term investments such as forestry. It is defined as the difference between the present value of all future incomes and the present value of all costs, at a given discount rate.

***Annual Equivalent Value is based on the present net value. The annual equivalent value is determined by spreading the present net value over the entire investment period in even annual payments like an annuity. It provides a convenient way of comparing long-term enterprises with shorter-term investments.

Want Extra Money at Christmas?

Christmas Trees CAN BRING PROFIT!

by BILL PADGETT, Chief, Nurseries

CHRISTMAS TREE PRODUCTION is on the increase in Alabama. However, Christmas tree growing is *not* a get-rich-quick endeavor. It will require considerable money and labor for several years before realizing the initial income. Prospective growers should investigate all possible factors prior to becoming involved in growing Christmas trees.

In Alabama over 90% of the Christmas trees planted are *Virginia pine*. *Eastern white pine* is planted to some extent in North Alabama where the climate is more conducive to its growing. *Eastern red cedar* occurs naturally throughout the state. However, the foliage quickly dries after harvest and is highly flammable. Other species that are suitable in limited areas are *Arizona cypress*, *Atlantic white cedar*, *Austrian pine*, *Colorado blue spruce*, *Fraser fir*, *Leyland cypress* and *spruce pine*. The information in this article pertains to growing of Virginia pine Christmas trees in Alabama.

Site Selection

The selection of a suitable site is an important factor in establishing a Christmas tree plantation. Level to rolling land is the best for growing Christmas trees. Cultural practices such as mowing, shaping and harvesting will determine the degree of slope that is acceptable. The land must be level enough to permit the safe use of equipment. The plantation should be near all-weather roads that would allow access during poor weather. This is a prime consideration during harvest time since the buying public would desire ease of access and adequate parking.

The area selected should be so located as to discourage unauthorized entry. In some localities, theft of trees has been as high as ten percent.





As would be expected, the most profitable of the Christmas tree operations has been on the most fertile land. Even though these sites have a high weed growth, the weeds can be controlled with the proper use of approved herbicides. Poor sites will produce trees of slow growth, poor form and color. A desirable soil is easy to work, well-drained and of good depth. Soils that are poorly drained, wet and excessively droughty should be avoided. Soil sample should be taken and analyzed to determine fertility levels. Soil testing information and assistance can be obtained through the county Extension Service.

Plot Specifications

Consideration should be given to several items when laying out the plantation. The location of roadways, grassways suitable for travel, row spacing and tree spacing within row and the direction of rows. These decisions will affect future planting, harvesting operations, fire protection and general vehicle movements. It is difficult to change the layout once the trees are planted.

Spacing of the trees should allow full development yet have the full utilization of the site. The size of your equipment will help determine the initial spacing. TABLE I shows the number of trees that can be planted per acre at different spacings.

Planting Spacing (feet)	Number of Trees Per Acre
6 X 7	1030
7 X 7	888
7 X 8	778
8 X 8	680
8 X 9	602
9 X 9	538

Seedling Care

The care of seedlings before planting is always of major importance—most seedlings are bareroot and packed in moist bales. The seedlings should be planted as soon as possible after receipt. If this is not possible care should be given to placing

the seedlings in a cool dry area protected from the wind and sun that will allow good air circulation. The bundles should be watered according to the packing material placed around the roots to protect them. If *sphagnum moss* is used, the bales of seedlings will need watering every other day. The bale should be slightly tilted to allow drainage of excess water. If one of the *gel materials* is used, do not water the bales because of the possibility of flushing the material out of the bale and leaving the roots unprotected.

In either case, it is imperative that you plant your seedlings as soon as possible after receiving them to increase the probability of survival.

The cost of a seedling is insignificant when compared to the total cost of producing a marketable tree. Care should be given to planting the seedling correctly whether it be by mechanical planter or by hand using a dibble bar, mattock or shovel. If the seedlings are cared for and planted correctly, your first year survival should exceed 90%. You may want to consider some interplanting of dead seedlings if your survival is below the 90%.

Maintaining Quality Trees

Weeds and grasses may become a problem in young plantations. These can be kept under control through mowing and the use of recommended herbicides. It is recommended not to cultivate the plantation after the first growing season because of possible damage to the tree roots.

Pruning and shearing are necessary to developing a quality Christmas tree. Pruning is actually the removal of dead, diseased wood, extra basal branches and multiple leaders. Shearing is the partial removal of the current year's growth of the terminal leader and lateral branches. Proper shearing is one of the most important factors in producing a quality tree. In Virginia pine, the first shearing is done when the trees are 2 to 3 feet tall. This is usually in second year following planting when terminal growth may be 10 to 12 inches.

Each tree within the plantation needs to be inspected the first year for multiple leaders. When this occurs, select the strongest and remove the others. Hand pruners or a sharp pocket knife can be used for this operation.

In the second growing season for Virginia pine, in mid-summer cut the terminal leader off at a 45 degree angle. Once the terminal is cut, then cut the laterals that occur in the same whorl. It is important that the early pruning and shearing be done correctly since this will set the stage for later shaping and the work will be easier.

A handle needs to be developed on each tree to properly mount the cut tree in its holder. The tree needs a handle of one inch for each foot of height with a little allowance for a fresh cut so the tree can be placed in a holder. The whorl of branches at the base of the seedling in the nursery do not add to the growth or form of the finished product and should be removed in the first year of establishment. All branches should be cut as close to the trunk as possible. Trying to develop a handle after harvest may result in a poorly shaped tree.

In the third growing season, the recommended times for shearing are based on average growth conditions. Starting in South Alabama, the first shearing should begin about April 7; in Central Alabama, April 15; and in North Alabama, April 22. A general rule is at each shearing cut

the terminal enough to allow some trimming of the tips of most lateral branches. The 66% taper guide is for a tree 6 feet tall to have a base width of 4 feet. This can be achieved by leaving the first lateral of branches below the terminal about one-half the length of the terminal. Use hedge shears for the terminal and the first lateral whorl. The remainder of the work is done with knives.

A good measure on time allowed for shearing is 15-20 man hours for 1000, 3 to 5 foot trees. This will vary among workers and their experience at shearing.

The second shearing should begin in South Alabama about July 8 and in Central and North Alabama about July 15. Emphasis should be on improving or maintaining the desired shape. On good sites, some Virginia pine will attain a 5 to 6 foot height in three growing seasons. In this case, the last shearing

should occur in late July or August so that inlaying needles will cover the shearing scars.

If the plantation extends into the fourth and fifth growing seasons, follow the rules for the third season but with a reduction in the amount of foliage removed.

Marketing Your Trees

The marketing of Christmas trees may take different approaches. The entire plantation may be sold to one buyer where a contract is developed outlining what the buyer and seller will do. Retail of trees in a nearby town or on a lot next to the plantation are alternatives. Small growers may do well with a choose-and-cut operation.

If anyone is interested in growing Christmas trees for a business, it is recommended that you do a considerable amount of investigating before investing. ♣

YOU OUGHT TO BE IN PICTURES



PRECEDENT WAS SET RECENTLY IN Cullman County when four landowners were awarded TREASURE Forest certificates during one ceremony. Pictured from

the left are Beatrice Cartro.; J.F. Williams, accepting for Camp Meadowbrook Conservation Camp; David Gamble, accepting for his father Roy J. Gamble; and W.B.

Stonecypher. The awards were given during the North Alabama Forestry Expo, an event sponsored by the Cullman County Forestry Planning Committee. ♣

WATER QUALITY ACT OF 1987

by JAMES R. HYLAND, Chief,
Forest and Pest Management

THE FEDERAL WATER POLLUTION CONTROL ACT, later to become known as the Clean Water Act, was passed by Congress on October 18, 1972. This act set as a goal zero discharge into water of the United States. Two sections dealing with forestry were Section 208—nonpoint source pollution, and Section 404—navigable waters.

Under these acts, Alabama developed and adopted the Silvicultural Runoff Management Plan. This comprehensive plan gave priority to watersheds, laid out a program to deal with nonpoint pollution, set time tables to implement the programs, and set Best Management Practices to handle potential problem areas.

The Best Management Practices (BMP's) are the key to the Section 208 plan. The BMP's deal with protection of streams from site preparation, road building, and harvesting operations, using streamside management zones and voluntary guidelines for silvicultural activities.

In 1987 the U. S. Congress passed what is called the Water Quality Act. Section 319 deals with controlling nonpoint sources of pollution (NPS). In forestry, this addresses the assessment, BMP development, and NPS management planning. Under the 1987 act, the Forestry Commission, as the lead agency, is cooperating with the Alabama Department of Environmental Management (ADEM) to write the assessment and management plan. At the same time, we will take a close look at the BMP's and update them to include new technology and wetland areas.

We know BMP's work. We have seen them in action and in the TREASURE Forest concept of Forest Management. Over the next year you will hear more about BMP's, water quality, and NPS; for we, as you, are committed to clean water for future generations. ♣



ALABAMA'S FOURTH FOREST

by L. LOUIS HYMAN, Chief, Marketing and Economic Development

THIS IS THE SECOND PART OF A TWO-PART article about a detailed study of Alabama's forestry potential entitled "Alabama's Fourth Forest." The first part of this story, dealing with the present state of our forests was printed in the last issue (see "Alabama's Fourth Forest," *ATF*, Winter, 1988).

The history of forestry in Alabama is a success story. When Alabama was first settled, it was covered with a rich virgin forest. This forest fed the infant sawmill industry in the late 1800's and early 1900's.

As a result of the natural productivity of our land, assisted by increased fire protection, the Second Forest became established. This Second Forest made possible the establishment of the pulp and paper industry, the plywood industry, and the growth of other wood-using industries.

These new markets, along with increased research, education, technical and financial assistance helped shape Alabama's Third Forest of today. The timber being harvested from our Third Forest will supply the raw materials for our forest industry for the rest of this century.

Forests make up a large portion of Alabama's landscape. About two-thirds of the state's total land base is in forests (over 22 million acres)!

About 74 percent of the total timberland is owned by over 220,000 private individuals; 21 percent is owned by forest industry; and 5 percent is publicly owned.

Alabama's Growing Forest

The forests of Alabama are diverse and healthy. They contain many different wood products, such as pulpwood, sawlogs, poles and veneer stocks.

The total timber volume in Alabama's forests has been increasing since the Great



Depression years. 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.

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 1982, many segments of the forestry community began to work

together to increase reforestation. Although Alabama has over three million acres of pine plantations, there are many more acres of natural forests.

The forests of Alabama produce more than just timber. They also supply wildlife habitat, recreational opportunities, clear water and fresh air. The recovery of our forests also led to an improvement in our wildlife habitats. We now have more deer

and turkey in Alabama than when Columbus discovered America.

Alabama's Number One Industry

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

The raw material for this industry is the number one agricultural "crop" in Alabama. In 1985, the value of timber harvested was more than double the next highest agricultural crop.

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

Forest products value added, the difference between the value of a product and the cost of goods used to produce that item, has increased rapidly since 1972. Forest products dominate Alabama's economy with the highest value added of any primary manufacturing industry.

The rapid expansion of the forest products industry can also be seen in the increase in forestry employment. In 1985, there were about 64,300 wood products related jobs in Alabama. In 1986, forest products accounted for 18 percent of all manufacturing payrolls. This is about 50 percent higher than the next highest industry.

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.

Alabama's Fourth Forest Projection

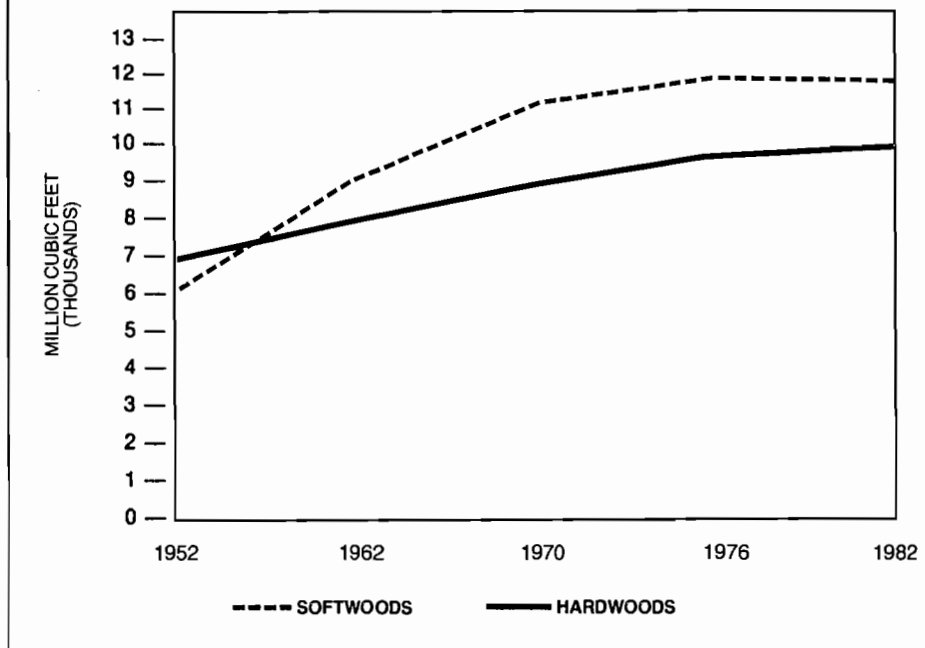
The forests have been good to Alabama. In order to keep the goods coming, and to preserve and enhance the value of our forests, there is a need to look at future trends. Because of the economic importance of Alabama's forest resources to the state and the South, the Alabama Forest Resource Center developed a study of the future of Alabama forestry.

The Alabama Fourth Forest Projections are based on a series of computer models that are based on USDA Forest Survey data and econometric models. These trends are based on current trends and past data and can be changed by changes in public and private policies that affect forestry.

The first step in the analysis was a projec-

TIMBER INVENTORY LEVELS BY TYPE

ALABAMA 1952-1982



tion of the acreage of forestland type. There will be a rapid increase in pine plantation acres between 1985 and 2000, which will then level off. The total acres in hardwood types will remain relatively stable throughout the projection.

Projected Timber Growth and Harvests

The projection indicates that Alabama's forests are presently undergoing a "restructuring." Over the very short term, between now and 1999, we are cutting more timber than is grown each year. This is just setting the stage for the rapid increase in pine productivity in the state. In fact, softwood growth rates will increase by almost 60 percent between now and 2030.

Hardwood removals have been increasing and now exceed growth. An analysis of the market shows that these removals are predominantly in the Southwest Alabama region. Other regions of the state show an increasing hardwood inventory that can fuel future forest industry growth.

Future Timber Inventory Levels

Based on these analyses, the softwood inventory in Alabama will experience a small decline, followed by a steady recovery. The hardwood inventory peaked in 1984 and is expected to decline through 2030. This is primarily a local area problem, which may be corrected by positive action begun at this time.

Again, these trends are based on current trends and past data and can be changed by changes in public and private policies that affect forestry.

Making Alabama Forestry Better

As great as Alabama forestry is, it can be better. The Fourth Forest Study Committee developed an action plan that is the consensus of the group as to the most important needs for forestry in Alabama. The overall objective of the **Action Plan for Forestry** is to improve the quality of forestry in Alabama, as well as the quantity of benefits available to the people of Alabama from their forests. The four key areas of the plan are discussed in the following sections.

Taxes and Economic Environment

Obviously, a positive forest tax climate and economic structure administered on both the Federal and State levels will benefit investment in Alabama forestry. This boost to forestry through investment will come if the state's Current Use Property Tax Law is continued and the Federal Reforestation Tax Credit and Amortization Law remains the same. At the same time, there is a pressing need to restore long-term capital gains treatment of timber income and to improve the Federal Estate Tax Law.

We are vastly improving our knowledge about Alabama's forest resource through cooperative efforts of State and Federal gov-

ernment. A published census of industry, along with a comprehensive forest inventory of Alabama's timber, is helping resource analysts identify and develop areas where timber using industry may be located or expanded. Market development is now being actively targeted to capture national and international attention—and trade!

The key to keeping forestry healthy in Alabama is maintaining forestry's attractiveness to the non-industrial forest landowner. In addition to tax incentives, this attractiveness is enhanced by administering State and Federal cost-share programs that supplement reforestation costs and improve existing forest productivity.

Public Awareness and Education

The Alabama forest landowner is asking strongly for help in managing and marketing his forest assets. A full-scale education campaign is needed to tell the positive record and benefits of forestry to Alabama. This effort should also promote the benefits of multiple-use management, as exemplified by TREASURE Forest.

Hazards in forestry must be addressed. Better ways to avoid damage from insects and disease, wildfire, and other destructive agents should be publicized. The "total" forest would also benefit by using voluntary Best Management Practices (BMP's) in silviculture for positive environmental impacts.

Research and Technology Transfer

Alabama must be a leader in the distribution of information so necessary for the improvement of our forest resource. It has been suggested that we start with professional foresters supplied by the Alabama Forestry Commission in each county and an education forester in each of ten AFC district offices. More important, there is a need to inform the public that the use of a registered forester or wildlife biologist initially can save many future problems. The Alabama Cooperative Extension effort in forestry must be increased on a statewide level.

A truly unique and important addition to Alabama's forest technology transfer is the county forestry committee. It lends its leadership to education by sponsoring short courses and field trips on forest management and, in particular, forest regeneration.

Auburn University should be supported in an effort toward forest research aimed at solving long-term and short-term forest management and wood utilization problems. A method of generating research support would be to develop an Alabama

Applied Forestry Research Program. This state program would direct funding toward forestry problems that have a direct bearing on Alabama's forests.

Resource Protection

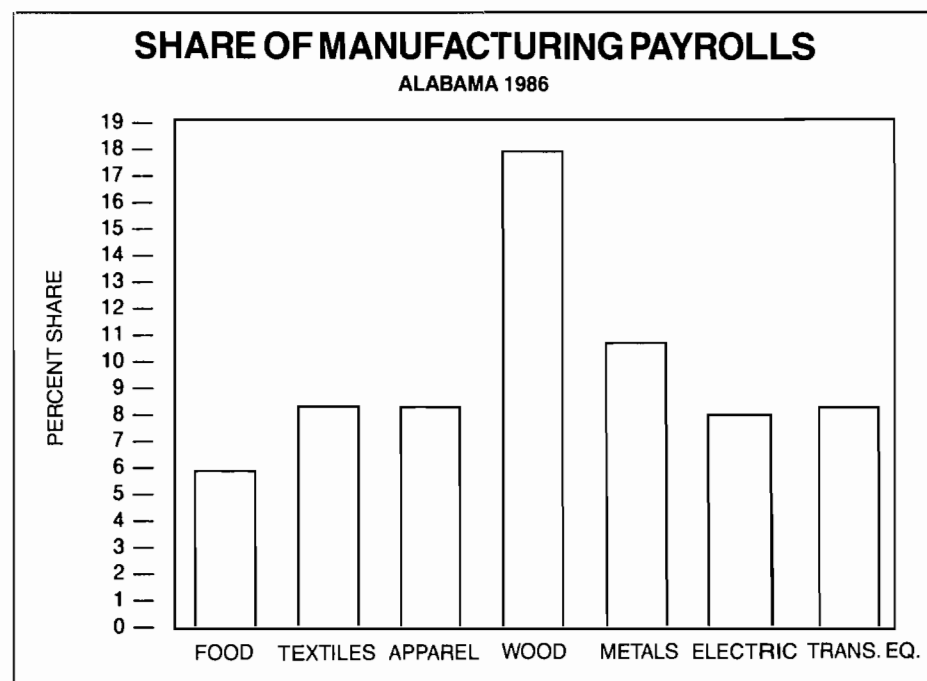
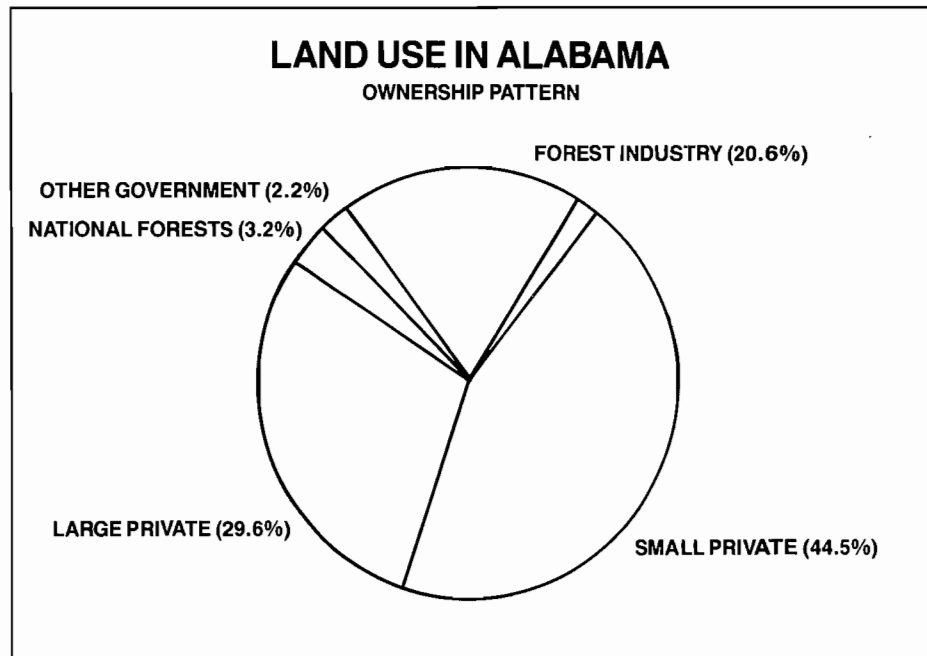
The timber investment in Alabama is associated with some risk. However, necessary steps are constantly being taken to insure the health and protection of our forest property.

Early detection of forest fires is the key to timely control and a reduction in acres lost. A strengthening of detection and a beefing up of the Alabama Forestry Commis-

sion suppression fleet will add thousands of acres to our list of productive forest acres. Also a strengthening between public, commercial (industry), and private organizations (rural fire departments) will increase the efficiency of forest fire control.

Since insects and diseases cause the greatest volume loss to our forests, support for funding of control methods is important. A bill called the Alabama Emergency Fire, Insect and Disease Act has recently passed the legislature and should be supported as an important source for control funding.

As all of these measures are implemented, we can expect our forests to continue to expand and meet of the needs of generations to follow. ♣



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