STATE FORESTER’S MESSAGE

by C.W. MOODY

We had another outstanding Landowner Conference. A record number of TREASURE Forest Landowners attended, thanks to the great work of James Hughes and his committee. They did an outstanding job of coordinating the landowner portion of the conference and communicating the value of attending to TREASURE Forest and other landowners. James was assisted by Chuck Lewis, Larry Trotter, Ed McCullers, and many others. All who attended are much better informed regarding the management of their hardwood timber stands as well as manipulation of forest stands to enhance wildlife habitat. I use this means to express sincere thanks to all who had a part in the conference.

There is another exciting program developing in Alabama which is totally consistent with TREASURE Forest ideals. Alabama People Against a Littered State (PALS) is a nonprofit grass roots organization dedicated to the prevention and control of litter in Alabama. This worthy organization interacts with communities, cities, counties, and other control programs. Talladega County was the first county chapter. Judge Derrell Hann has done an outstanding job of developing and carrying out a litter control program for Talladega County. Sheriff Studdard is also to be commended for his work in employing a deputy whose full-time job is that of litter law enforcement. Deputy Travis Ford not only carries on his duties in Talladega County, but serves as chairman of the Alabama PALS Law Enforcement Committee and is available for consultation to other law enforcement agencies in political subdivisions in Alabama. Efforts such as those in Talladega County are beginning to clean up our forests as well as make our cities and roadsides more beautiful.

There is a write-up concerning this organization inside the magazine. I would encourage everyone who has interest to become a member and get involved in this worthy organization.

The Alabama Reunion is shaping up to be an outstanding event for Alabama. Next year, 1989, is the year of celebration in which all Alabamians are encouraged to set up a reunion event and celebrate the joy and privilege of being Alabamians. We will be working with them on setting up a major celebration next year for forestry. Nothing more exemplifies the spirit of Alabama and Alabamians than TREASURE Forests and TREASURE Forest landowners.

Sincerely,

C.W. Moody
State Forester
Alabama's TREASURED Forests

Volume VII Fall Issue, 1988 Number 4

CONTENTS

Building Bridges for Those to Follow ........................................... 4
By KIM GILLILAND, Managing Editor

Perspective on TREASURE Forest .................................................. 7
By JAMES HUGHES

Canada Geese—Going South ......................................................... 8
By DAVID A. HOGE, Productivity Forester

PALS Appoints Executive Director ............................................... 9

Alabama Woods Arson Report ...................................................... 10
By WALTER VEST, Chief, Law Enforcement

The Wildland Urban Interface ...................................................... 10
By RICHARD CUMBIE, Protection Division Director

By STANLEY R. ANDERSON, Alabama Forestry Commission WILLIAM C. JONES, Alabama Forestry Association

Own Your Own Sawmill ............................................................... 14
By JEFF LASKOWSKI, Executive Vice President, Wood-Mizer®

Landowners Legislative Alert
NATIONAL—By MELINDA COHEN, Legislative Liaison, National Association of State Foresters .......................................................... 16
STATE—By FRANK SEGO, Legislative Liaison, Alabama Forestry Comm. ................................................................. 17

WILDLIFE—Managing for Profit .................................................... 18
By CLAY WIGGINS, Black Warrior Hunting Service

Hardwood Timber Harvesting ....................................................... 19
By TOM V. CAMBRE, Hardwood Specialist

Reforestation—County Planning Committees at Work .................... 23
By DAVID A. HOGE, Productivity Forester

What A Landowner Should Do Before Selling Timber ..................... 23
By NORMAN K. KINNEY, Registered Forester

A Hunter's Paradise—CEDAR HEIGHTS ...................................... 27
By TIMOTHY C. BOYCE, Development Division Director

Tree Planting—It's Worth Doing Right ........................................ 29
By DAVID A. HOGE, Reforestation Specialist

DEPARTMENTS

Editor's Understory ................................................................. 6
Activities .................................................................................. 20
Calendar .................................................................................. 22

You Ought To Be In Pictures! ...................................................... 28

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Managing 500 acres of land is a formidable task for anyone. But what if you lived 550 miles away? That is the situation confronted by Bennie Brown, who owns land in Northeast Morgan County near the town of Sommerville. Brown has lived in Chicago for a number of years, but still has an interest in managing his land in Alabama.

**Absentee Management**

An absentee landowner faces a problem that is unique. He can’t go out to his land whenever he wants and show someone where he needs a fence or where he wants to plant a food plot. He can’t inspect conditions of a road. He has to find someone he trusts to manage the land. He needs to know that the property is being utilized correctly—to gain a profit from timber and to insure the wildlife needs are met.

Brown’s property had been rented to a farmer for several years, but Brown wanted his property to be useful in the years to come in several different areas. For Bennie Brown the person to turn to was Roger Nichols, Morgan County forester, who nominated Brown to be a TREASURE Forest landowner in 1987. Nichols made several suggestions, one of which was that Brown find someone who could manage the land for him. Nichols also suggested that trees be planted on his cropland, but Brown wanted to have a steady income. That’s when Nichols told him about the Conservation Reserve Program (CRP). The program seemed tailor-made for someone like Brown, who had erosion problems on part of the land but who also wanted a profit.

For the actual day to day managing of the land, Brown leased it to Huey Long. Long is a timber procurement manager for Tolleson Lumber Company and has a 10-year lease with Brown, which allows his Cotaco Bend Hunting Club to use the land. The club is named after the Cotaco Creek which runs behind the property. For the first three years of the contract, Long will make improvements to the land out of his own pocket. After 1988, he will begin making yearly rental payments to Brown. The eight other members in the club help with the work on the property.

**Management Strategy**

The property is being managed under the guidelines of the TREASURE Forest program as well as the CRP. To date, 107 acres have been planted under the program. Long says that two main objectives are timber and wildlife. "Our objective, and Mr. Brown’s, is to establish a sustained yield multiple use forest. By 1995 we ought to start developing a timber return annually." The timber, Long says, is to be achieved through planting and natural regeneration of pine stands. He plans to retain hardwoods for wildlife food. "We don’t want to create a pure pine stand in detriment to wildlife," he said. "We’re seriously interested in improving the wildlife habitat." Plans are to retain wildlife openings in pine stands, and for every five acres of hardwood converted to pine, they plan to leave one acre of hardwood.

As far as wildlife is concerned, waterfowl takes primary consideration. An 18-acre pond was made by constructing a dam, and corn was planted in the shallow area. This pond is excellent for the birds who flock to feed there. In a buffer of trees that divide the pond, a two-story hunting stand, cleverly called the "penthouse," has been built. There is no deer hunting at this time, but Long
firebreaks this year, Long plans to put in new ones. He also plans to string 2,000 additional feet of fencing and convert 30 acres of open land to pine trees.

Roots in the South

Although Brown lives in Chicago now, his roots are in Alabama. He was born in Athens, and since his father was a minister and had to move often, the family lived all over the state. The land, which originally belonged to his great-grandfather Gus Breeding, was passed down through his family. Brown attained the property from his mother and her sister in the early 1969's. Although he hasn't lived in Alabama since his late teens, the land still has a tremendous meaning to him. When he visits, which is several times a year, Brown likes to go out to his property and think about past times. "I like the outdoors. I always have."

Brown has fond memories of visiting the land as a child with his mother, who was a teacher. He said many afternoons were spent riding in a horse and buggy to the property and then picking blackberries and muscadines.

In a small thicket, there is a reminder of that time long ago, before Brown was even born. A cemetery where some of his ancestors are buried is part of the property. Approximately 20 people are buried on the plot. Most of the tombstones are blank, and some are just piles of rock with a headstone, but one reads "Sam L. Breeding, May 2, 1833, May 22, 1908; Eliza F. Breeding Born Mar. 14, 1848." The cemetery has been cleared off several times and is one place that is special to Brown when he visits.

Looking around the property, one may notice the TREASURE Forest sign is not found. Brown is so proud of his status as a TREASURE Forest landowner, that he took the sign to his office in Chicago.

Brown hopes that the land will stay in his family. Plans are to divide it among his children. He is looking forward to bringing his three grandchildren to visit so that they may enjoy the outdoors and feel a part of their heritage. "I think we're going to have a good future here."

Part of Brown's philosophy is that the older generation needs to conserve so that future generations can also enjoy our resources, something he calls "building bridges for those to follow." He hopes that the improvements he has made will serve as building blocks in the future. "Somebody's got to take an interest in farming," he said, "and I hope it continues."
EDITOR'S UNDERSTORY

by KIM GILLILAND, Managing Editor

Bennie Brown's ancestors came to America from England in the early 1800's. One of those was Gus Breeding, who along with some family members, built a three-story home on the property that now belongs to Brown. After Breeding passed away, his will was contested by members of his family. In the will, the white man had left a portion of the estate to his son, Millard W. Breeding—a black minister and Brown's grandfather. The will was upheld, though, and today the majority of that land, some 500 acres, belongs to Brown. His sister and nephew own a small part of the property.

Brown was born in Athens, Alabama, and lived in Decatur and Bessemer, among other places, while he was growing up. His mother was a teacher and his father a Christian Methodist Episcopal minister, so the family moved quite often. His sister was a concert pianist, and Bennie himself played the violin.

Music was to be a large part of his life. He attended Talladega College for a short period of time, and after a summer job at a hotel on Mackinac Island in Michigan, he was able to obtain a scholarship to the University of Iowa. There he majored in romance languages and music, playing violin in the school orchestra. He continued his love of music, playing the violin in orchestras in DeMoine, Iowa and Tacoma, Washington.

After college, he was employed by the National Youth Administration to train youth for better jobs. He helped raise money to send young people to college, while also making sure they were treated equally. "I insisted that it be interracial at all places," he said. While living in Omaha, Brown met his wife Lila, whom he married in 1940. They have two children—Bennie Jr. who is a lawyer, and Catherine Brown Vattiste, a teacher.

A position as executive director of the Army/Navy YMCA saw Brown and his wife stationed in Tacoma, Washington, Portland, Oregon, and San Diego. A chance to work for his fraternity, Alpha Phi Alpha, brought him to Chicago.

Brown was concerned about the opportunities for minorities in Chicago, and tried to help integrate the city by finding them jobs. He would call on large corporations and try to persuade them to give minorities an equal chance at employment.

A few years later, he was instrumental in organizing the Chicago Conference of Brotherhood. Presently he is the executive director for this philanthropic organization. Through speaking engagements to the organization, Brown has met many famous people, including former President Jimmy Carter and former Vice President Hubert Humphrey. Being active in the Conference brought him close to former Chicago Mayors Richard Daley and Harold Washington.

Brown is still active in Alpha Phi Alpha. He recently attended an international convention, where he took pictures and mementos to display, along with his TREASURE Forest sign.

One can easily see how proud Brown is to be part of the TREASURE Forest program. He is a gentle man, who when asked if he ever hunted on the property, revealed a story that is true to his nature.

Brown said that on one visit, he donned hunting gear and waited in the forest. Finally, he saw a deer and aimed to shoot. "He looked at me as if he trusted me," Brown said. "I just couldn't shoot." Brown will no doubt leave the hunting to Huey Long and the Cotaco Bend Hunting Club.

Living in a city as large as Chicago can make a person appreciate the rural outdoors more than the average person. Brown is interested in managing his land so that his family after him can enjoy it. He says he hopes that no one ever sells it. He has good people helping him, and knowing that, he can live outside Alabama and feel that his property is in excellent hands.

Former Vice President Hubert Humphrey and Bennie Brown were members of opposing debate teams in college—Brown from the University of Iowa and Humphrey from the University of Minnesota.
We had a preacher once who would say, "All I know to do is to beat on the pulpit and brag on Jesus." When the subject of forestry comes up, all I know to do is to brag on the folks of the Alabama Forestry Commission. You took a family that knew nothing about forestry and started us off in the right direction. You taught, encouraged, and worked with us—your influence is evident all around us and we will always be grateful to you. During the 80's we have built a relationship with some of you that's more than just an advisor-landowner relationship. It's one you share with people who care for each other.

You taught us how to invest in timberland and about the returns to come in the years ahead. As we approach the close of a decade of timber stand improvement, we give thanks to God that the returns on our investments are not just the money expected from sales of 15, 23, and 35 years, but daily. Our returns are seeing the baby rabbits running ahead of you as you cut the fire lanes; the deer at the edge of the woods watching you; the dove flying, as if hurt, away from its young; a bluebird on her eggs that doesn't even fly as you check her house, or bids you good morning from the clothes line; finding a hawk's nest in a fall, old pine; the fast heartbeat you get when a covey of quail fly from under your feet—and the excitement of seeing a pair in your flower bed.

All the wild flowers, many we miss because they are so small, or because our mind is filled with thoughts we would be better off without; the shape and shade of a big, old oak (thank goodness timber people say it has no value); who would think a thing as small as a hummingbird could bring such big joy?

The beauty of a red bird eating at your window sill. We don't talk much as we sit on the porch in the early morning having our coffee, but oh, how we enjoy the things around us, especially all that chatter from the martins. We surely would like to know what all that talk is about.

Thank you for helping us get started in this business and we praise the Lord that we don't have to wait 35 years for payday—it's ours daily, just for the taking.

*Taken from a speech delivered at the 1988 Annual Meeting of the Alabama Forestry Commission.*

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**In Memorium**

Albert Hardage died July 11, 1988. He was 60 years old. Hardage worked for the Alabama Forestry Commission for 31 years, and was county supervisor in Covington County.

Hunter Reynolds, who worked for the AFC for 35 years, died in April at the age of 74. He retired in 1976 and served as supervisor in Clarke County.

Both men gave outstanding service to the AFC and the state of Alabama. They will be missed.
Our vast flocks of waterfowl have great meaning for those of us who live in North America. The change of seasons would somehow not be the same if there were no V-formations of geese to herald the departure of summer or the arrival of spring. Many of us look forward to the days of autumn spent hunting with good companions and well-trained dogs. Many more enjoy simply watching ducks in a pond.

However, all is not well with our waterfowl populations. Many are significantly lower now than they were just ten years ago. Reduced numbers of individual species such as mallards, black ducks, and pintails are of special concern. In an effort to reverse this trend, the United States and Canadian governments have signed the North American Waterfowl Management Plan which sets forth a course of action for the two countries to take between now and the year 2000 to assure the continued survival of abundant populations of ducks, geese, and swans.

The work of national governments alone will not be enough, however. Rather, in order for this great conservation effort to succeed, it will require strong commitment, creativity, and hard work by regional and local governments, private organizations, businesses, and individual citizens—hunters and non-hunters alike. Many of us are already aware of the work that organizations such as Ducks Unlimited have done in the area of waterfowl conservation. Recently, it was my pleasure to observe firsthand what a group here in Alabama is doing.

About five years ago, a group of dedi-
cated conservationists living in north Alabama got together and formed the Tennessee Valley Waterfowl Association (TVWA). The primary objectives of the group are to locate a resident flock of giant Canada goose in the Tennessee Valley, to begin a mallard duck stocking program for the area, and to preserve and encourage the protection of wetland habitat for all wildlife species, particularly waterfowl. As part of the Canada goose project, breeding pairs of geese will be released on selected TREASURE Forest landowners' properties in the area. Criteria for selection of sites will be based on the presence of suitable habitat. Currently, the 300-member association is making substantial progress in achieving those objectives.

Since the summer of 1987 when 38 giant Canada geese (the Greg W. Myers Flock) were released at the North Sauty Refuge in Jackson County, the TVWA has released a total of 438 of these geese in north Alabama. In addition to the original 38 geese obtained from a private individual, 220 giant Canadas were acquired from the State of Illinois, and 180 more from the State of Michigan. The geese were collected up north as three-year-old or older birds during the moult and transported to Alabama by cattle trailer. The manner of acquisition and the logistical problems encountered during transportation is a complete story in itself. Besides North Sauty, TVWA has released geese at Conner's Island, Paint Rock River, North Elk River, Brown's Creek, Fort Payne, Sylacauga, and a site in Lawrence County. These releases supplement several goose stockings by the Alabama Game and Fish Division on the Tennessee River and other sites.

On July 7, 1988, TVWA concluded its release program for the year. On this day 1,160 mallard ducks were released at seven sites in the Tennessee Valley. This is the first large-scale wild mallard duck release project ever in Alabama. Obtained as one day old ducklings from the Oak Ridge Game Farm in Gravette, Arkansas, the mallards were reared according to the Max McGraw Wildlife Foundation's guidelines until their release 29 days later.

The rearing of the mallards was facilitated by the construction of a rearing pen on the grounds of the Alabama Forestry Commission's Marshall County Office in Guntersville. Larry Parker of the Forestry Commission reported that the project would not have been possible without the support of local businesses in the area supplying the raw materials necessary for the construction of the rearing pen and an estimated 200 pounds of feed consumed daily by the ducklings.

Under the guidance of David Hayden with the Alabama Game and Fish Division, the gender of the ducklings was determined and they were banded at the Guntersville site. They were released there and at Paint Rock River in Marshall County, North Sauty Refuge in Jackson County, Elk River in Limestone County and in Morgan and Lawrence Counties.

Supporting these restocking efforts, TVWA has built and put out fifteen floating nesting structures. In an effort to help wood duck populations in the area, TVWA has also built and installed sixty wood duck nesting boxes. TVWA has also set aside 240 acres of wetland habitat for the Paint Rock River Refuge with a full-time manager.

Funding for these projects comes from member contributions, sport and leisure sales, and the sale of an exclusive print by John Warr, 1987 winner of the Alabama Duck Stamp Contest, depicting the release of two of the geese belonging to the Greg W. Myers flock entitled "The Beginning." In addition, TVWA is incorporated, has tax exempt status, and encourages private contributions.

For more information about the Tennessee Valley Waterfowl Association, Incorporated contact:

Jerry Davis, Director
Tennessee Valley Waterfowl Association
Post Office Box 262
Guntersville, Alabama 35976
Telephone (205) 837-7939

Largely through the efforts of dedicated conservationists, such as those comprising the TVWA and the support of local businesses, the frequent sightings of giant Canada geese and mallard ducks may be a common occurrence in Alabama. Should their efforts prove successful, the members of the TVWA can take great pride in preserving this TREASURE of Alabama.

**ALABAMA**

Appoints Executive Director

Spencer Ryan, 33, has been named executive director of Alabama PALS, People Against a Littered State. PALS is a non-profit organization whose sole purpose is the beautification of Alabama through the elimination of our state's litter problem.

Ryan was formerly with Bambi Leasing, serving as their district manager in Montgomery. He feels that his outdoor hobbies of hunting and fishing have made him all too aware of the litter problems in Alabama. "I feel like the time to do something about it is now."

PALS works with individuals, groups and organizations to assist them in establishing and implementing long-term litter programs. Education, civic involvement, law enforcement, recycling, legislation and youth involvement are the areas of concentration.

The ultimate goal, Ryan says, is for cities and counties to be designated as Proud PALS Cities and Counties. A portfolio is available through the PALS State Office with step-by-step procedures necessary for such designation. "Through the programs and resources available through PALS, this organization can be a vehicle towards eliminating the litter problem in Alabama," Ryan said.

Write to PALS, 46 Commerce St., Montgomery, AL 36104; telephone (205) 263-7737.
Alabama Woods Arson Report

by WALTER VEST, Chief, Law Enforcement

Woods arsonists—who are they? They are tall and they are short; they are young and they are old; they are male and female. Investigators have no profile on them. They do have one thing in common—they are "arsonists."

During the eight-year period of 1979-87, Alabama averaged 7,586 fires a year and 125,678 acres burned. Fifty-two percent of these fires were started each year by arsonists.

Some of these fires are set by disgruntled hunters because a landowner refused to let them hunt on his property. Some are set because the arsonists get a kick out of seeing the flames and watching the fire fighters battle the blaze. Some are set to cover other crimes like drugs. Some are set out of frustration or revenge.

Whatever the reason, every citizen of Alabama should be concerned about arson and wildfires because they pose a threat to our residents, degrade the environment, drain money from our tax fund, and deplete a valuable state resource.

A new approach to encourage the public to report arson is being used by the Alabama Forestry Commission. In cooperation with the Alabama Forestry Association, the Forestry Commission has set up a secret witness toll-free number.

In the past, the Alabama Forestry Association has paid an award for information about arsonists, but only after the person was convicted of the charge. Under the guidelines established by the Association and the Forestry Commission, an Alabama Woods Arson Report (AWAR) call is "any call in which a citizen reports a suspected or specific violation of the forest fire laws and renders sufficient information from which investigators can work." When these calls are received, the dispatcher will take the caller's information in detail, being careful to record all information. If the caller wishes to remain anonymous, a code number will be assigned at that time. If the caller does not request anonymity, his name, address, and telephone number will be recorded. All Alabama Woods Arson Reports are confidential and are given appropriate security.

The amount of the reward offered under this program is $25 to $500 depending on the value the investigator placed on the information.

Anyone wishing to report an arsonist using the hot line should call 1-800-222-2927 (1-800-222-AWAR).

The Wildland/Urban Interface

by RICHARD CUMBIE, Protection Division Director

With the ever increasing pressures, stress, and fast pace of today's society, it is no wonder that more individuals are turning to the peace and solitude of the forest to build their homes. Small country properties and subdivisions with 10-40 acre lots are one of the hottest items in today's real estate market.

However, along with the peace and quiet comes the added danger of wildfire. When a wildfire moves through the woods, it doesn't care if the fuel is limbs and brush or houses and cars. More and more fire fighters are measuring the severity of fires by the number of structures threatened or burned.

In Alabama we average over 7,500 wildfires annually. Chances are good that if your house is in a wooded area, a wildfire has or will occur nearby.

It is time that these homeowners take a serious look at their problem. They must take responsibility for some of their own fire protection.

Many rural areas have no codes for fire safe structures. It is just "good sense" for a person to gather information on how to make the structure as "fire safe" as possible before building or buying a home in such an area. Local fire departments, Home Builders Association, and the Alabama Forestry Commission are good sources for such information.

Contact these organizations before it's too late.

Food for Thought

- Is brush cleared an adequate distance from house?
- Will access roads allow evacuation and access for fire vehicles?
- Is area protected by a fire department?
- Is the home marked where fire department can locate it?
- Is the home constructed with a fire problem in mind?
- Is firewood stacked too close to the house?
- Is chimney properly equipped with a spark arresting device?
The 5th Alabama TREASURE Forest and Landowners Conference was held August 12-13 in Montgomery, with the largest landowner turnout ever. For the benefit of those who did not attend the event this year, most of the articles in this issue of Alabama's TREASURED Forests are taken from presentations given at the conference.

**Doxier, left, and Ozier Slay receive the District Helene Mosley Award from State Conservationist Ernest Todd. The Slay brothers also won the state award.**

**This chipper was among the demonstrations at the outdoor portion of the conference, held at the Jim Wilson Farm in Macon County.**

**The Macon County Forestry Planning Committee wins the state award. Pictured with them is Gov. Guy Hunt, center.**

Young and old alike enjoyed the field day.

The Alabama Forestry Planning Committee would like to thank the following firms and individuals for donating prizes for the TREASURE Hunt at the Fifth Alabama TREASURE Forest and Landowners Conference.

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<td>Foley, Alabama</td>
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<td>Lew Childre &amp; Sons Fishing Poles</td>
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A Reforestation Survey of Butler, Wilcox, and Monroe Counties Using Satellite Remote Sensing

by STANLEY R. ANDERSON, Alabama Forestry Commission
WILLIAM C. JONES, Alabama Forestry Association

This survey began as a project of the Alabama Forestry Planning Committee's Productivity Subcommittee. Funding for purchase of materials and technical services were provided by the Alabama Forestry Association's Productivity Committee.

The purpose for the survey and selection of counties is a result of a special request for information by Monroe County's Forestry Committee. A need existed for determining the number of acres regenerating after harvest.

In February 1987, members of the AFPC Productivity Subcommittee visited the Space Remote Sensing Center NSTL Station near Bay St. Louis, MS to learn about forestry applications of remote sensing. At the time, most of the satellite information was available on computer tape and not in a usable form for the survey.

Technical Procedure

In June 1987, George May and Chuck Hill from the Center offered an opportunity to use new equipment and technology for mapping satellite images onto larger scale maps and topographic quadrangle sheets. Imagery and interpretation of this study area was negotiated at a reasonable cost. AFA purchased a satellite image taken on January 20, 1986, which covers an area from Marion, Alabama to Tuskegee National Forest south to Geneva State Forest and west to Tensaw, Alabama.

This covered an area of approximately 115 miles by 110 miles. The Space Remote Sensing Center used a new mapping machine to project clearcuts and partial cuts identified by a photo interpreter onto 7½ minute topographic quadrangle sheets. On approximately half of the topo sheets, the Center was capable of using a modified geological information system to digitize, plot and calculate the acreage of these harvested areas.

Field Procedure

After the AFPC Productivity Subcommittee received the topographic maps, Chairman Jerry Johnson appointed field crews to select field samples and visit at least 25 cut over areas in each county. These tracts consisted of both private non-industrial and industrial ownerships. Information on method of site preparation, stand age and a brief description of existing stand was recorded at each cut over site. A sample of 87 clear cuts and partial cuts was visited from a total of 822 cut over acres. The sample area consisted of 13,272 acres and total harvested area is estimated to be 104,000 acres (Table I). Those working on the field data collection included Ron True, Alabama River Woodlands; Dave Becker, Champion International Corporation; David Hoge, Alabama Forestry Commission; Stanley Anderson, Alabama Forestry Commission; and Bill Jones, Alabama Forestry Association.

Data Summary

After completing the field procedure, the data were divided into adequacy of stand regeneration, method of site preparation, type cut and number of acres. Stand regeneration was determined to be adequate if the existing stand contained at least 300 stems per acre of pine or desirable hardwood species. Marginal stands contained less than 300 to 150 stems per acre and were not adequate if the stand contained less than 150 desirable stems per acre (Figure 1).

Methods of site preparation were classified in the medium to heavy site prep classification if a combination of chemical and mechanical site prep or mechanical site prep only was used. Seventy-five percent of the sample area was regenerated using medium to heavy site prep methods. Light site preparation was classified as chemical site prep, prescribed burning, a combination of the two or either used singly. Approximately nine percent of the sample area used was reforested using these methods. Natural regeneration methods included lands that had been reforested by seed tree, shelterwood or other natural methods. Natural regeneration accounted for approximately six percent of the reforested area. The other two remaining categories consisted of nonregenerated areas, nine percent by area, and converted areas approximately two.

<table>
<thead>
<tr>
<th>Survey Area</th>
<th>Total Survey Sites</th>
<th>Acres Samples</th>
<th>Total Cut Over Sites Identified</th>
<th>Av. Size Per Cut</th>
<th>Total Estimated Harvested Area</th>
<th>Total Forest Acres in Survey Area</th>
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<tr>
<td>Butler, Wilcox, and Monroe Counties</td>
<td>87</td>
<td>13,272 acres</td>
<td>822</td>
<td>127</td>
<td>104,394 acres</td>
<td>1,320,500 acres</td>
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*Survey results based on satellite imagery taken by Landsat 5, January 20, 1986, Space Remote Sensing Center, NSTL Station, Mississippi 39529.
percent of the area. In the converted category, timberland was converted to another land use which included nursery expansion, pastureland and beaver ponds (Figure 2).

Age distribution was classified for each age class up to four years of stand age. Some five year old plantations were included in the four year age class (Figure 3). The nonregenerated class contained cut over areas that were cut between 1984 and January 1986.

In checking the accuracy of the interpretation of clear cuts from the satellite imagery, 1986 National High Altitude Photographs were used as a comparison. The satellite method detected 127 clear cuts, while the NHAP photographs detected 135 clear cuts for the same area. Another reason for checking the satellite method with NHAP photographs was to ensure the satellite method did not neglect nonregenerated cut over areas.

**Summary**

Satellite imagery can be used to effectively determine clear cut and partially cut tracts of forestland. Once identified by a photo interpreter, these areas can be plotted on topographic maps and acreage can be calculated. After transferring this information to topo maps, land ownership determination and field inspection can be facilitated. From this point, county reforestation committees can use this information to identify adequacy of regeneration after harvest and to make follow up contact with landowners.

The survey data indicated an excellent reforestation effort by industry and the reforestation committees in this three county area. This data, however, is not intended for use as a representation of reforestation activities in other counties of Alabama.

This survey indicates an aggressive reforestation effort after harvest in Butler, Wilcox, and Monroe Counties and credit should go to area industries, agencies, and forestry community members responsible for reforestation activities.

*This article reprinted from the January-February, 1988 issue of Alabama Forests, a publication of the Alabama Forestry Association.*
All small woodlot owners see something different when looking at their property. It may be a spot to build a quiet hideaway, a place for nature to flourish. For some it may be security for retirement as land prices continue to rise. Many view their woodlot as an investment in standing timber or logs. One select group of people sees another asset within their grasp when they scan their property—lumber. A growing number of small woodlot owners are becoming members of an ever increasing group of people who own their own sawmill.

Recent developments in small sawmills have made the possibility of owning and operating a mill more practical than ever. The new generation of bandsaw sawmills opens up the greatest opportunities for a woodlot owner with no milling background. The new mills are safer, require less horsepower, are easier to operate, portable, and yield accurate dimensional lumber.

The leading manufacturer of bandsaw mills, with over 5000 units operating in the field, is WOOD-MIZER® Products, Inc. in Indianapolis, Indiana. A recent WOOD-MIZER® survey showed that the largest group of mill owners was farmers and ranchers (most owning woodlots), with the next largest group of WOOD-MIZER® owners being retirees. The survey also showed that over half of the owners use their mills to generate income on a part-time basis and over 10% of the mill owners use them as their primary source of income. We took a closer look at the various applications made by these small woodlot owners.

No Experience Necessary

"I had no previous experience sawing lumber," states Jim Starr of Columbia, Missouri. "I'm very satisfied with my sawmill and have learned to cut quality lumber." This statement is true of three quarters of the people buying WOOD-MIZERS®. Because most new owners are inexperienced sawyers, free schooling is held for persons buying a WOOD-MIZER®. The classes cover general mill operations, mill safety, maintenance, and blade sharpening. Every mill owner actually sharpens a blade and cuts with his mill before leaving the factory school. "We feel that hands-on training and operations of his own mill are the most important step in introducing the new owner to sawmilling," according to Dave Mann, sales manager for WOOD-MIZER® Products. "In many cases the closest these men have come to being a sawyer is cutting a little firewood."

The ability to quickly become adept to operation of the mill is echoed by owner, Jan Gisslen, of Cincinnati, Ohio. "The very nice thing with the mill is that you can start making good lumber basically right from the start. It does not take years of experience to saw dimensionally correct boards." The guarded bandsaw blade is also much safer for a new operator than a four- or five-foot diameter circular blade with four times as much horsepower.

With enough drive, a first-time operator can accomplish something as major as Jim Starr. Three years after purchasing his sawmill, he now lives in a 2,000 square foot log cabin he literally built from scratch. He cut 2,500 linear feet of logs and thousands of feet of dimensional lumber from 200 acres of timber on his father's 400 acre farm. The flooring, paneling, doors, cabinets, window trim, door frames, baseboard, and even most of the furnishings were made from lumber he cut—quite an accomplishment when you consider he felt his only qualification for operating a mill was being "very comfortable with a chainsaw."

Selective Harvesting

Most woodlot owners have heard of the destruction caused by a large logging operation in removing a "few" select trees. Some of the stories are more than a little exaggerated, but it is true that the large equipment can do significant damage. Removal of some timber is required just to get the equipment in and out of the woods. The portability of the new bandsaw mills allows a woodlot owner to cut a tree where it falls and haul out lumber in a small truck instead of hiring skidders and loaders for log removal.

Jan Gisslen spent over five years of "lots of cutting and skidding and hauling effort—and with only minor success in getting anything useful from the painfully extracted timber" before he purchased his portable bandsaw mill. Now Jan mills his own lumber and exclaims, "A bandsaw owner can make cuts to get the nicest surfaces exposed, and for an interested woodworker, this is real satisfaction. I cannot use all the wood myself, so I am planning to start selling some of it to my friends and acquaintances."

Robert Riesemey of Missouri constructed a 3,750 square foot house out of timber taken from an 80 acre tract and cut on his mill. According to Robert, "We began dropping trees a month before we purchased the WOOD-MIZER®. Selective cutting was used and most of the trees cut were considered 'cull logs.' But the WOOD-MIZER® made fine lumber out of junk logs. At first we thought there were not enough good trees for the project, but with the WOOD-MIZER®, all lumber (103,000 board feet) used in the construction of both the house and a 32' x 56' barn was cut from the property." The home's 30' x 30' living area has a waterfall and a goldfish pond.

Another side benefit of using these new bandsaw mills is the higher yield, up to 30% more lumber from each log. Fewer trees must be felled to obtain the necessary board feet of lumber. Albert Rogers of Ontario, Canada, uses his mill to cut pallet lumber. He comments concerning lumber savings, "Now that I have experienced how the WOOD-MIZER® runs, I would buy one for the wood savings alone. In the first six months I went through over a quarter million scaled feet of logs and saved at least 10 trailer loads of logs to get the same quantity of lumber as a circular mill would have produced. This repre-
sents a savings of over $6,500 in log costs alone!"

Income Generation

If generating income is one of the goals of a woodlot owner, a mill can multiply the amount of revenue generated from each acre. It isn’t uncommon for a few boards to sell for the same price as an entire tree. Owning a small mill can keep some of those profits in the woodlot owner’s hands. Ray Chattin owns 185 wooded acres in Indiana and has this to say about what the addition of a mill meant to him, “My brother and I spend our winter months logging and sawing for our retail lumber business, and we have not been able to keep up with demand. With the state of the farming economy the last few years, our sawmill has been a big factor for us in making ends meet. I feel we can increase the value of one acre of mature timber by up to five times by making it from the stump to the final form. Not only that, but it’s also a great pastime!” Ray has also built a home from lumber cut on his property.

Operation of the mill doesn’t need to be limited to cutting your own woodlot. The majority of mill owners use their mills to make money by sawing for people on a custom basis. Depending on the area, owners charge from $25 to $50 an hour or charge $100-$300 per thousand board feet. In 1982 Mark Schrader of Wisconsin bought his first mill upon seeing the WOOD-MIZER® demonstrated and had these observations, “I had ‘not much’ mechanical knowledge but was impressed by the accuracy and safety of the mill.” After years of running his own cutting business, Mark comments, “I have sawn furniture stock, log homes, barns, siding, paneling, lath, and crating and am still finding new ways to use the saw. I keep the electric mill at home and use my gas mill at job sites.”

It May Be For You

People who own sawmills are as varied as the people who own woodlots. In addition to farmers, you can find a psychiatrist, chimney sweep, or goldsmith behind the controls of a mill.

Many people have the misconception that it takes a Paul Bunyan, 6'2", 220 lbs. (or larger!) to operate a sawmill. Don’t let that to a 130 lb. Jean Sumner of Virginia. “I like exposing the endless variety of grain patterns in each new board I cut.” Jean adds, “I recently became the first female member of the ‘100,000 Board Feet Club’ at WOOD-MIZER® and take exception to the notion that sawmilling is strictly man’s work. The same attention to detail that allows me to sew a complicated pattern or follow a special recipe helps me saw accurate lumber and sell the most from a log. Besides, why should men have all the fun?” Her husband, Lloyd, comments, “We agonized weeks before finally deciding to invest in a WOOD-MIZER®, but now we know it was the best decision we ever made, except maybe the decision to marry each other. We like the quality of the lumber we produce, the goodwill of our satisfied customers, and the quick, helpful service from the company. But the best part is all the trees we save. We can get as much lumber from three trees as an ordinary sawmill can get from four trees.”

Buying a portable mill may be just what you need to make the dreams you hold for your woodlot a reality. For additional information or the name of a mill owner in your area, call WOOD-MIZER® Products, Inc., at 1-800-553-0182, or write WOOD-MIZER® Products, Inc., 8180 West 10th Street, Indianapolis, Indiana 46214-2430.

WOOD-MIZER® was demonstrated at the Fifth Alabama TREASURE Forest and Landowner Conference. For that reason, this article appears in this magazine. Use of the WOOD-MIZER® name and trademark does not imply endorsement of them.
The Senate has passed the largest ever farm disaster assistance bill. The bill includes provisions for tree farms and orchards that suffered losses from this year’s drought. Up to 40,000 acres of newly planted seedlings in Alabama could be eligible for disaster relief.

Alabama’s Senator Howell Heflin and Congressman Claude Harris, as well as Senator Fowler (GA), Senator Cochran (MS) and Congressman Volkmer (MO) were instrumental in including these provisions for trees in hotly contested debates that sought to exclude, figuratively, all “Christmas-tree-like” items. At one point in the Senate Agriculture Committee, the debate was stalled. Senator Pryor (AR) suggested the committee adjourn to the hall, “since that was where most of the work was being done.” The bill mark-up looked like a scene out of a movie about Washington. Lobbyists crowded the noisy hallways, running from the Senate Agriculture Committee to the House Agriculture Committee whenever the action changed. Congressmen escaped to back board rooms to cut deals and avoid constituents. The president is expected to sign the bill during the August recess.

**Tree Provisions**

The legislation will require the Secretary of Agriculture to provide disaster assistance to tree farmers who planted tree seedlings in 1988 or 1987 for commercial purposes and whose seedlings died as a result of the drought. Tree farmers would be eligible for assistance if seeding mortality exceeds 35 percent of natural mortality.

Assistance will take the form of either 65 percent of the cost to reestablish the stand, or sufficient tree seedlings to reestablish the stand. A farmer could receive no more than $25,000 under the program.

Other eligibility requirements include the following: (1) the farmer must own 1,000 acres of land or less of each qualifying tree crop (for example, Christmas trees, commercial pine trees, fruit and nut trees). The Secretary of Agriculture has the discretion to extend the acreage restriction to 5,000 acres; (2) no farmer can earn more than $2 million in gross revenues; (3) ornamental trees and nursery stock are excluded from this package.

**Other Provisions**

Rental rates under the Conservation Reserve Program (CRP) would be reduced 25 percent for haying, but could be restored if the landowner carries out additional approved conservation practices to enhance soil, water, and wildlife conservation on or in the vicinity of lands subject to the contract.

The Secretary of Agriculture would be authorized to provide assistance for the promotion or establishment of watershed in cooperation with other agencies.

**Other News**

The House and Senate Interior Appropriations Subcommittees are expected to complete their conference of the Interior and Related Agencies Appropriation Bill. The bill is expected to be sent to the White House for the president’s signature in September, although plans may change since the presidential veto of the Defense Appropriations Act. The State and Private Forestry and Forest Service Research funding levels are about the same as last year.

The Environmental Protection Agency (EPA) is expected to release new pesticide worker protection standards. They have also begun work again on a program to enforce the Endangered Species Act, which could include regulating pesticide use on private lands.

The National Association of State Foresters and the Forest Farmer hosted a congressional luncheon to discuss private forestry needs. John Kammel from the Alabama Forestry Commission attended. Congressman Sonny Callahan, a co-chair of the group Forestry 2000, and Congressman Claude Harris also attended.

The Forestry 2000 Task Force, an informal congressional group, recently heard a panel discussion on the IRS
As this article is being prepared, we are still awaiting the call for a special session of the legislature by Governor Guy Hunt. As you read this, a new fiscal year will have begun and all agencies will have received funding approval for 1988-89.

Since we have had no session since our last issue of Alabama’s TREASURED FORESTS, I thought I might deal with some interesting figures evolving from legislative sessions.

Recently, the Associated Press came up with some numbers that reflect operating costs for the current year. The regular session, which ended on May 5, cost $812,397. What may surprise many is that this is about half the amount that Alabama taxpayers have doled out in other years to bring lawmakers to the State House for a normal session of 30 meeting days.

The cost of the special session was expected to range from $89,000 for a five-day session, the minimum allowed by state law, to approximately $333,700 for a 30 day session, the maximum allotted time for such session.

Regardless of the cost, here’s the revealing part—the legislature is constituted so that it will never run out of money! This is because an annual appropriation is set aside for operation of the legislature and it is automatically replenished from the general fund as it runs low. This is a fact of law regardless of whether there is a budget overrun.

For example, a depletion in the balance as of December 1987 caused half a million dollars in supplemented funds to be allocated to the legislature as it prepared for 1988.

Legislators actually receive $40 in expenses for each legislative day. That figure is based on two meeting days a week. Their third day in Montgomery is reserved for committee meetings.

The $40 expense allowance amounted to $169,200 for the 1988 Regular Session. Members also received $40 per day for each of the committee meeting days. Lawmakers were paid $84,000 for regular session committee meetings in 1988.

As your legislative editor, I have to say that Alabama taxpayers really do get their money’s worth when you consider the cost of operating legislatures and assemblies in some of our neighboring states and across the nation in general.

Alabama’s legislators are sometimes ridden pretty hard—and sometimes undeservedly so—by critical citizens and the media, but how many of us would take leave from our chosen profession to run for the pay a legislator receives? Many do, and their dedication to the people of Alabama is to be appreciated. It’s something to think about.

In the next issue we will summarize the impact of the special session on forestry legislation and its effect on the Forestry Commission budget for Fiscal Year 1988-1989.
WILDLIFE
Managing for Profit

by CLAY WIGGINS, Black Warrior Hunting Service

I own and operate the Black Warrior Hunting Service, 4,000 acres of prime river bottomland—20 miles southwest of Tuscaloosa on the Black Warrior River.

Getting Started

The commercial wildlife service sparked my interest when on a trip to a ranch in south Texas. The fee was $150 a day, and the hunting wasn’t any better than what I had at home. One year later, I started my own business.

The advertising was strictly by word of mouth at first, and only hunting was offered (deer), no meals or lodging. The number of people has grown considerably, starting out with 10 the first year, 25 the second, 45 the third, and 75 the fourth. Now beginning the seventh season, I have been averaging 75-100 hunters. In the fourth year lodging was offered, and last year a new cabin was built which sleeps eight and includes a kitchen and bath.

Operating a Business

Hunts of three days or more are offered on deer and turkey, at $225 and $150 per day respectively. Lodging, but not meals, is included. To have a commercial hunting operation and be able to charge those rates, a prime hunting area is a must. People won’t travel to Alabama to hunt marginal or average hunting areas. If they do, you can bet they won’t be back. Some people who are hunting marginal or average areas try to make up for it by providing big meals and offering fancy lodging, but the memory of a bad hunt will linger long after the smell and taste of all that fancy cooking is gone. My philosophy is that you have to start with a good hunting area; management can turn it into an excellent place to hunt.

The 4,000 acres we hunt on is approximately 55% wooded and 45% open. The land is farmed with corn, soybeans, winter wheat and cotton being the primary crops. For cover crops, sericea, partridge peas, as well as crimson clover are grown. Clover is also planted for green plots in areas where no wheat, corn or beans are grown. Timber stands are all river bottom hardwood, oaks and hickory, with a few pine scattered about. All the timber is selectively cut. A practice of clearing weak areas in the hardwood stands of two to five acres and planting pines has been implemented. There are also areas of dead timber swamps and sloughs, which make for excellent hunting.

In 1976 the property was put under a deer management program to raise and produce quality or trophy bucks. The principal idea is to shoot does and spikes and let the small rack deer go so they may mature into trophy class bucks. Because of this program, close to 100 trophy class bucks have been produced and harvested over the past 10 years, including 2 Pope and Young deer and a Boone and Crockett deer taken by a neighbor. In 1984 the State of Alabama started the Deer Management Program (DMP). Part of this program is to improve body weights and trophy quality. I put the property under the DMP in 1985 and am now working with a state game biologist.

The Black Warrior Hunting Service acquires business by advertising in popular hunting and fishing magazines. Hunts are also sold by attending deer shows and setting up a booth. Seventy-five percent of the business is repeat or referral from old clients.

The hunting service takes eight bow hunters or six gun hunters at a time (up to six turkey hunters at a time). My brother and I serve as guides, taking the hunters to and from the stands and taking care of their kills. We also make sure all guns are sighted in before anyone goes out.

A large walk-in cooler is provided to hang the kills. Although processing meat is not usually done, the equipment is available if the client wishes to do so. There are over 100 permanent hunting stands, portable aluminum shooting ladders and shooting huts. All deer hunting is done from stand or blind. Again, hunts include lodging, but not meals.

On deer hunts, a day starts before daylight and runs until 10:30 or 11:00 a.m., and then continues about 2:00 p.m. Deer hunters are allowed three deer on a hunt; one doe, one spike and one mature trophy class buck—eight points or better.

For turkeys, we hunt until 10:00 a.m. and then go out again at 3:00 p.m. Turkey hunters are allowed one gobbler for every two days hunted.

We take a deer off of every 25-30 acres (150-160 deer a year). About 20 gobblers are killed each year.

If you have a good hunting area, you could commercially hunt a tract as small as 1,000 acres, but 2,000 or more is ideal. Good hunting land along with good management can gross up to $25 per acre, with $20 per acre being common.

Conclusion

Practicing good sound wildlife management and timber management benefits wildlife. The timberland should be no less than 35 percent wooded and no more than 70 percent wooded. A 50-50 ratio is ideal. The open land should be productive farm land with some grain crops being produced. In a nutshell, the most wildlife and best hunting is on productive farm land with a good balance of timber stands (hardwood timber stands or hardwood and pine mixture). If your place meets these criteria, you could be generating additional income from your wildlife and timber resource!
Many times throughout Alabama, landowners have their timber harvested and give little thought to what problems or situations they will be faced with after this operation takes place. The landowner needs to seek prior professional forestry advice to ensure that the harvest operation is done correctly and professionally.

**Contract**

Before a harvesting operation begins, the landowner should have a written contract for timber sales. In the contract, there should be a detailed description of the sale area, a clear designation of the logging method used, and designation of trees to be cut. A clause should say that any damage incurred on the property to fences, roads, bridges or other improvements is to be repaired at the buyer’s expense.

The method of payment should also be listed in the contract statement. This statement should include how and when payment should be made. The contract should cover the length of time—beginning and ending—and stipulations pertaining to contract extension which might be needed due to weather conditions or other uncontrollable circumstances.

**Harvesting**

In hardwood harvesting, if the harvesting is a select cut, great care should be taken in the removal of the trees so as not to damage the trees left for the future stand. If the butt log of the leave tree is damaged, approximately 70% of the value of that tree is lost. This is due to rot, stain, or insects developing in thebole of the tree. Hardwoods, when damaged, do not self-seal as pines do because they do not produce resin. The wound is left open, providing an easy accessible entrance for insects and disease, thus causing serious rot and destroying wood quality. This damage to the tree removes it from the category of high grade product, such as veneer, to pallet lumber or pulp. The primary value of hardwoods is the butt log. Therefore, harvesting should be done carefully and cautiously.

Harvesting should be planned to accomplish management objectives and regeneration plans. Harvesting in and of itself is not management, but the management system depends on harvesting practices that efficiently remove the tree crop while protecting both the forest productivity and the ecological functions of the site. In order to accomplish this, the following guidelines should be noted.

Harvest operations should be scheduled during certain periods in correlation with the appropriate system to minimize site damage, soil compaction and impacts on water quality. Many times, depending upon the soil and the type of equipment used, more damage is done during wet periods. This has been noted through research, especially in the wetland areas of the state.

Roads constructed in hardwood areas should be carefully planned before construction begins. These roads should not contain extensive amounts of fill that would, in essence, act as levees or restrict the natural drainage throughout the area. Also, the road should use a minimum design standard consistent with the anticipated traffic and safety needed. If the road considered is a limited use road constructed to a specific block of timber to gain access for harvesting, once the operation is completed, all temporary structures should be removed. The road needs to be abandoned and allowed to revert back to natural vegetation.

If a main access road is to be constructed, the road should be bridged or culverted with permanent structures of a size and frequency to allow normal flow of water. The design of these roads is to provide all weather access for silvicultural operations to be executed throughout the life of the forest. Where possible, avoid crossing streams, sloughs and other water courses. Each time a crossing is made, make sure that the crossing is at right angles to the stream channel. Except at crossings, locate roads as far as practical from streams.

Zones on each side of streams should receive special attention and specific attention should be given to measures that can be taken to protect both instream and downstream water quality values. In the streamside management zone, trees should be left to provide a runway for wildlife stabilization on the stream banks, as well as to provide aesthetic beauty along the course of the creek or river. This does not mean that timber cannot be harvested in this area, but rather, that logging equipment should be excluded from it and any harvesting done should be done by skidding from outside this zone. Extreme care should be taken in preserving this portion of the tract. Under proper management, the objectives of both timber production and water quality can be achieved. The most important consideration within this zone is that of protecting the integrity of the stream bed and stream bank. Log decks should at all times be located on high ground if at all possible. If it is necessary to locate a log deck in a wetland area, locate it on the highest ground, or on islands within the area and keep it to a minimum size.

Before a landowner harvests his timber, certain criteria should be known about the stand. The age of the stand, the growth rate, and the composition of the stand all dictate the type of harvest that should be performed. Local markets also play an important part in the timber harvest. The size of the area and volume present, along with the species composition and quality, determine to a high degree the monetary value that will be received from this cut.

In summary, it should be noted that true hardwood sites, especially bottomlands, are very sensitive areas. The sites should be treated in such a manner as to not destroy or damage wildlife, water quality, or the aesthetic value that they, as timbered areas offer, along with the high-quality wood products that are provided for our use.
Census Day 2020 results were released, indicating that the population of the United States has increased by 7.4% since the 2010 Census. The 2020 Census was conducted in a digital manner, and the results will be used to allocate federal funds and represent congressional districts.

In related news, the American Forests and Wildlife Foundation announced the 2021 Wildlife Conservation Award recipients. The award recognizes individuals and organizations that have made significant contributions to wildlife conservation. This year’s recipients include the National Wildlife Federation, the Wildlife Conservation Society, and the Nature Conservancy.

The Alabama Wildlife Department also released a report on the state’s wildlife population. The report highlights the progress made in restoring wildlife populations and the challenges facing conservation efforts.

In a separate development, the Alabama Forest Board has approved a new forest management plan for the state’s public forests. The plan focuses on sustainable management practices and includes provisions for protecting water quality and biodiversity.

Finally, the Alabama Board of Forestry has approved the certification of new forest management plans for several private forest properties. The certification process ensures that these properties meet the standards set by the national Forestry Service for sustainable forest management.
children were given books and balloons. They also presented a radio program concerning fire prevention.

The fire department in Franklin County have been busy with tree survival checks under the CRP program for the past few months.

On May 17, Monroe County hosted a statewide Soil and Water Conservation District tour. It was sponsored by Monroe Forestry and the Randolph County Forestry Committee. When on tour of the Bedloe property, Gary Cole presented Senator Bedsole with a certificate for the National and State Champion Water Oak.

Monroe County personnel have moved into their new Forest Office. The offices are on 99 percent completed. An opening ceremony is planned for the near future.

Lauderdale County Forestry Planning Committee was in line for another award this year as an outstanding group doing good work. They have been leaders in developing educational events and practical management demonstrations for their county's landowners. Still ahead for Forest Ranger Jerry Lyn's group is sponsoring an independent and incorporated forest owners association and a basis of financial support from funds of a comprehensive local forest society.

Bullbrook landowners are beginning a clean forest program through their municipal Forestry Department. A contract should get started this fall with a school program patterned after those suggested by Rudy and Bob Boll. This will be the first of these projects in District 10 aimed at cleaning up our state for the big homecoming and reunion set for next year.

Elmore County landowners are interested in a forest taxes short course/training session earlier this spring. County Supervisor Lynn Justus arranged for ACF Special Projects to attend the course as a principal speaker. This was one of several such continuing information efforts offered to Elmore T's and C'eens.
Reforestation—County Planning Committees at Work

When I was hired by the Alabama Forestry Commission over six years ago, I recall hearing frequently that forestry in Alabama was an untold story and that so much needed to be done. Recently I had the opportunity, along with other subcommittee members of the Alabama Forestry Planning Committee (AFPC), to evaluate the nominations for Outstanding County Forestry Planning Committees. There is a lot going on at the county level! I am amazed at some of the things various county committees are doing. At the risk of overlooking some of the counties—I’d like to mention a few that stood out among the nominations submitted:

- Franklin Tuscaloosa
- Jackson St. Clair
- Geneva Cullman
- Macon Coffee

As productivity forester for the Alabama Forestry Commission, I am biased toward those counties which excel in the area of reforestation. The latest tool which we use to measure our accomplishments in this area is the reforestation report submitted by the county committees to Jerry Johnson. The summation of these reports indicates that 4,841 nonindustrial private forest landowners regenerated 221,004 acres last year!

Reforestation Accomplishments

Coupled with the accomplishments of industry and government the reforestation totals for Alabama reported for 1988 is more than double that reported for 1982. Some may say that the increase is due to the addition of the Alabama Resource Conservation Program and the Conservation Reserve Program. While these programs have no doubt contributed to this increase, much credit must also go to the reforestation thrust of the AFPC and the efforts of the county committees.

Beginning with the 10 pilot counties in the reforestation project established in 1984, followed by the addition of eleven additional counties in 1985 and subsequent expansion to the entire state, we see the benefit of the county committees pooling their resources and cooperating on the attainment of a specific goal—reforestation.

Tree Planting

Early in 1988 Alabama reportedly was planting trees on the largest number of acres in the state's history—approximately 400,000 acres. Nonindustrial private forest landowners accounted for about 50% of this total. The greatest amount of tree planting is occurring in that portion of the state south of Montgomery.

Tree Planting Trends in Alabama

- North Alabama: 20,753 acres or 13% of state total
- Central Alabama: 65,389 acres or 37%
- South Alabama: 92,062 acres or 50%

Problems With Reforestation Report

As with all monitoring systems, the productivity subcommittee feels that the reforestation report can be improved by changing it slightly to avoid possible confusion (double reporting). Currently, the report contains three reforestation categories:

1. Openland
2. Cutover Unmanaged Timberland
3. Planned Regeneration

We are planning to amend the form, changing the categories to that of the following:

1. Openland Tree Planting
2. Forestland (Wildland) Tree Planting
3. Natural Regeneration

As with the old form, there will be two reporting periods (October-January and February-April). All reforestation in the county accomplished by nonindustrial private forest landowners during that reporting period will be reported to Jerry Johnson. County committees are urged to pool their resources, tap their expertise, and cooperate fully when compiling this report.

Future Challenges

While we can congratulate ourselves for our recent accomplishments in reforestation, there are still many challenges and much yet to be done. Steve Nix, resource analyst with the Alabama Forestry Commission, reports that according to U.S. Forest Service data, annual timber removals exceed annual timber growth in 21 counties in Alabama:

- Autaugu Mobile
- Baldwin Greene Perry
- Bibb Hale Pike
- Blount Henry Randolph
- Conecuh Lamar Shelby
- Coosa Lee St. Clair
- Dale Lowndes Wilcox

According to the 1982 Forest Survey of Alabama, there are 4.8 million acres of forestland which are understocked, (less than 60 percent stocked with growing-stock trees) and 1.7 million acres of cull stands (stands with more than 60 percent stocking of cull trees).

In addition, depending on which study you read or hear about, only about one nonindustrial private forest landowner out of six plans for regeneration prior to timber harvest. I personally think the nonindustrial private forest landowners in Alabama is doing a better job of forest management than these studies.
What a Landowner Should Do Before Selling Timber

by NORMAN K. KINNEY, Registered Forester

Before selling your timber, have a goal. Income is a major consideration, but some sacrifice may be necessary to obtain your long-term objectives. Before you cut, decide what you are going to do afterwards to upgrade the stand—regeneration, game habitat, and other considerations. Plan ahead and use proper management. Consult your accountant regarding your tax situation, as well as the tax credits and amortization that is available for reforestation costs.

Prior Planning

First, let’s be sure we start at the beginning. Do you own the land? This sounds like a simple enough question—one that everybody should be able to answer. You may own the land with others. If you do not own the land, will the owner or owners sign a contract to sell the timber? If you do own it alone, are you married? If you are, will your wife or husband sign the timber deed? If the land is in a life estate, the future owners (remaindermen) must also sign the agreement. If it is in an estate which is undivided, will the other heirs sign the agreement? Is there a mortgage on the land? If so, will the holder of the mortgage release the timber for sale? Generally, they will, with provisions to pay some of the proceeds to them. Be aware of anything that might prevent your having clear title to the land. The purchaser will more than likely do a title search, but anything you know of that may cloud the title will help expedite his investigation of this matter and speed up the closing.

From what areas are you going to sell the timber? These areas should be mapped either by a drawing or an aerial photograph with the sale area indicated on it. Know where the sale boundaries are on the ground and be prepared to show them. The boundaries need to be marked, and can be flagged, painted, or blazed; or fences or fields can designate the edges of the sale area.

Also, is there anything in the sale area you do not want disturbed such as fences, roads, property corners, cultivated fields, buildings, scenic or special areas, or croplands? You need to keep in mind the areas that will be off limits to the logger.

How much and what sort of products are you selling? Are you going to clear-cut? Are you selectively marking the trees to be cut? Who’s going to do the marking? It is important that someone, preferably a professional forester, mark the trees to be removed and calculate the volume to be cut, as well as supervise the harvesting operation. This will insure protection of the trees you want to leave and that you get paid for the products removed. If you are thinning, is it all pulpwood, all sawtimber, or a mixture? Selling timber by diameter limit is considered the worst way to sell timber because the best is cut, leaving poor quality trees to continue growing. As you continually go through diameter limit cuts, you will high grade your stand and have nothing but the inferior trees left to regenerate the stand.

Protect yourself. Know how much timber you are selling and what it is worth on a competitive market. With stumpage prices as high as they are now, it pays to have your timber cruised and appraised by a professional forester knowledgeable of the current timber market. Consultants can cruise your stand and give you an appraisal, as well as offer the timber for sale on a competitive bid basis. This way, you receive the highest price possible for your timber. The Alabama Forestry Commission can advise you and give you information which will be helpful in finding a consultant.

The cruise information you receive should include some of the following facts: DBH, which is the diameter of the trees at breast height (4 1/2 feet above the ground); heights—either total heights or merchantable heights (will it be at 4 inch tops, 8 inch tops, 6 inch tops or 12 inch tops?); It is also
helpful to know what log heights the timber buyer will use. For example, will they take 16-foot logs only, will they use 18-foot log lengths or will they accept 12-foot log lengths?

A board foot is 1 inch by 1 inch by 12 inches. This can be calculated in Scribner scale, which underestimates on larger trees; in Doyle scale which underestimates on smaller trees; or can be done on International Rule, which is supposed to be right, but no one uses it. You may want to sell by the cord, which is a stack of wood 4 feet by 4 feet by 8 feet—92 cubic feet of wood, but 128 cubic feet of space. Timber can also be sold by the ton—2,000 pounds. There’s a number with which we can identify!

Weight factors are important also. They are determined by species, form class, number of logs, grade, whether they are being by Doyle or Scribner scale, as well as other factors. Pine sawtimber generally runs 9,500 to 16,000 pounds per thousand board feet. Pine pulpwood runs from 5,150 pounds to 5,900 pounds per cord. If you sell by weight, selling by the ton is the best. You still should know how much timber you have to sell and what it is worth.

Competitive Bidding

Send out invitations to bid to at least four or five different major companies. Watch connections between companies, dealers, and producers, though. Don’t just invite four or five local people to bid, they may all work for the same person. The Forestry Commission and Alabama Landowner’s Association have lists of bidders available for your use. However, letting a consulting forester knowledgeable of the current prices as well as present market conditions in your area assist you with selling your timber on the competitive market will usually bring the highest price.

Contract

Always have a contract, even if it’s only in letter form. Timber is real estate until it is severed. It does require a written contract. It protects you and the buyer. I also recommend that you not accept the buyer’s contract without first having an attorney or another forester review it.

A timber sale contract should contain the name of the agreement (timber sale agreement), the county and state where the timber is located, the date entered into, and the names of the seller and purchaser and where they are located (city and state).

It should also contain the consideration, or the amount of money to be received if it is a lump sum sale, or a listing of the prices to be paid per cord or per thousand board feet, with the weights or scales that will be used. State to whom the checks should be payable, when payments should be made (usually weekly), and where payments should be sent. A copy of the scale tickets should accompany the payments. State what you are selling, sale area acreage, and the location of the sale area. For example, “all merchantable trees on 40 acres,” or “all trees marked with two spots of blue tree marking paint on 40 acres, which may be described as follows:” Here you should have a legal description of the land. Refer to an attached map of the sale area which will become a part of the contact.

A disclaimer may also be included. You do not make a guarantee as to the quality of trees conveyed by the agreement. The buyer will have looked at the timber and will have determined for himself the quality and quantity of the trees.

The contract should include a specific expiration date. It should also provide that the purchaser will release the timber sale if cutting is completed prior to the expiration date.

You should guarantee title to the property and agree to defend it against any and all claims for taxes, mortgages, and any other encumbrances.

Ingress (right of entrance) and egress (right of exit) to the sale area and adjoining areas is granted. I would suggest that you include here that this access will be at mutually agreed upon locations. This will allow you to determine where the roads will be, instead of the logger going in and out anywhere he wishes.

Other stipulations might include the following:

1. A disclaimer for death, injury, or damage to the purchaser, its agents or workmen, and equipment.
2. A provision to cut low stumps and utilize all cut trees.
3. Protection clause for improvements, such as fences, gates, roads, property corners, crops, etc. from damage.
4. Protection clause for unmarked trees or trees outside the designated sale area from cutting and logging damage.
5. Clean-up provision for trash, paper, cables, cans, etc. that purchaser produces while harvesting the timber.

6. A pre-cutting conference which calls for a meeting of the owner and/or his agent, the purchaser, and equipment operators to review the provisions of the contract and point out especially sensitive areas or specific requirements such as waterbars.

7. An agreement that the purchaser should maintain workmen’s compensation and public liability insurance.

8. Requirement that the purchaser should frequently inspect the logging operation to insure contract compliance.

There should be a place for date of signature, followed by signature lines for the seller and purchaser and a place for two witnesses to sign for each. There should be a notary public affirmation for the seller.

Your contract should contain provisions to protect you. You want to stipulate what you want done and how you want it done. Try to avoid stiff penalties for cutting unmarked trees or damaging leave trees, since courts generally throw these out. You are usually allowed double stumpage for any trees excessively damaged or cut without permission. By stating in the contract that certain trees are excluded from the sale and must be protected, you are covered. You also have the power under the contract to stop harvesting should the logger not comply with the contract stipulations.

**Cost Share Programs**

Be aware that there are programs available to landowners (cost share programs) which assist in re-establishing timberland. There are also tax incentives available for reforestation costs.

The Forestry Incentives Program (FIP) which was begun in 1973, pays cost shares for reforestation of cutover timberland. The government reimburses landowners for up to 65% of the cost or a maximum of $10,000 per year per landowner. The program covers site preparation, planting, timber stand improvement, and natural regeneration. This program is providing assistance on an average of approximately 8,000 acres per year in Alabama now and is administered by the Agricultural Stabilization and Conservation Service (ASCS) with the assistance of the Alabama Forestry Commission.

The Agricultural Conservation Program (ACP) began in 1936 and is primarily for erosion control. It reimburses landowners for up to 60% of the cost with a maximum of $3,500 per year per landowner. The ACP is now providing assistance on an average of 15,000 acres per year and covers site preparation and planting. It is also administered by the ASCS.

The Conservation Reserve Program (CRP) is for eligible cropland. Owners bid a yearly rental and also receive cost shares (a maximum of $50,000 per year) for up to 50% of the cost for site preparation, planting, and weed control. About 75,000 acres per year are now being converted to timberland under this program. This, too, is administered by the ASCS.

A state program, the Alabama Resource Conservation Program (ARCP), pays 60% of the cost with a $3,500 per year limit for site preparation, tree planting, timber stand improvement, and natural regeneration. Approximately 30,000 acres per year are being reforested under this program which is administered by the Soil Conservation Service (SCS).

Contact your local ASCS and SCS office to find out the availability of these programs in your area. Each county has its own guidelines as to how much they pay, depending on the funds available.

Check on these programs and make your applications for assistance while your timber sale is in progress so that, hopefully, you will have received approval for assistance by the time you are ready to begin the reforestation work.

**Summary**

In summary, know what you own and if you can sell it. Know the area you are going to sell. Know what you are selling—get it appraised. Know how you will be paid—whether it will be lump sum, in which you are paid in advance, (the preferred method), or pay-as-you-cut (mile scale)—what scales, weight, etc., are used and will the proper trees go to the proper product. You have to be very watchful of this. Get as many bids as possible and make sure you have a written contract to protect both parties.

When you have finished with your timber sale, the trees have been harvested, and the man has paid you, what are you going to do next? Hopefully, you have planned for regeneration, or a prescribed burn if an interim cut. Plan ahead. Before you finish the timber sale you should know what you are going to do when the harvest is completed. You will need to decide whether you are going to regenerate your stand naturally or by site preparation and planting.

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**Cosby Promoted**

Earl Cosby has been named Deputy State Conservationist for the Soil Conservation Service (SCS) in Alabama, says State Conservationist Ernest Todd. He assumed his position August 15.

"Earl is a professional conservationist. In his new assignment he will assist in all areas of program and management," Todd said.

Cosby has been serving as the Assistant State Conservationist in charge of programs in Auburn for more than two years. He has been working with the USDA, Soil Conservation Service for nearly 20 years.

Since February, 1986, as the Assistant State Conservationist, Cosby has been responsible for implementing special programs, developing and carrying out the plan of operations, and providing leadership in rural development land use activities.

As Deputy State Conservationist, Cosby will share the responsibility of managing and directing the administrative and technical functions involved in planning, organizing and implementing the soil, water and resource conservation and development programs for the State of Alabama.
A Hunter's Paradise—CEDAR HEIGHTS

by TIMOTHY C. BOYCE, Development Division Director

Southeast of Pittsview, Alabama, in Russell County, lies 6,500 acres of prime timberland and wildlife habitat, known as Cedar Heights Plantation. Cedar Heights has been handed down from generation to generation and is now owned and managed by Lewis Holmes. The plantation was established in 1840 as a pecan and cotton plantation, with wildlife management as a secondary objective.

The plantation home stands as it did in the 1840’s, and has been recognized on the National Historic Register. While the main floor of the home has been preserved in its original state, the basement has been renovated and is used by members of the Cedar Heights Hunting Club.

Timber Management

When the property was inherited in 1983, Holmes began an active forest management program. A pine regeneration program is now underway. Most of the pine stands on the property range from one to eight years old; however, there are scattered tracts of pure pine. The majority of the property is covered in mixed pine hardwood.

A sound timber management program could not exist without an adequate road system. Main roads are maintained by using a motor grader and old logging roads are bush hogged to guard against erosion. Where erosion occurs, roads are usually seeded with grass. Bush hogged roads make excellent bugging areas for turkey.

Wildlife Comes First

There was an active wildlife management program at Cedar Heights before any serious considerations were given to timber production. Scattered throughout the property are 40 to 50 wildlife food plots maintained for deer and turkey. Species utilized on food plots include soybeans, chufa, ryegrass, wheat, clover and joint vetch. Native mast producing trees, such as red and white oak, and planting of sawtooth oak and autumn olive are maintained around plots. The autumn olive plantings are a specific source of pride. All food plots and other types of wildlife improvement are done with assistance of the local hunting club, consisting of 20 members.

Included in the deer management program is the establishment of mineral salt licks which are maintained in the same area year after year. Establishment of these licks includes first loosening the soil, then mixing in the mineral salt at the rate of 20 pounds per lick. Mineral salt is added in early summer and replenished in late July or August. Deer seem to frequent salt licks during the hot summer months; therefore, they can be viewed and photographed during the summer months, and the observation gives an idea of the nutritional level of the herd.

Both stalk and stand hunting are the basic techniques used to harvest deer, with stand hunting being the major method utilized. No dog drives are conducted. The hunting club believes in high quality deer stands for two reasons: (1) comfort allows the hunter to stay in the stands longer; and (2) safety. Only high-quality, well-built stands are utilized at Cedar Heights. Several of the large fields are leased to local farmers and stands have been located on these fields which serve as active food plots.

Over the last few years, Holmes has planted Virginia pine in areas where deer can be observed from public roads. These make an excellent screen to discourage poaching from public rights-of-way.

Firebreaks are maintained along all public roads and throughout the plantation, especially in areas that have been recently site-prepared and planted to pine. These firebreaks also serve as access roads for hunting parties.

Prescribed burning is used frequently at Cedar Heights for both timber and wildlife management. The fire opens the woods to allow greater visibility, and young sprouts that return after the fires are utilized are preferred by a variety of wildlife species.

If this sounds like a lot of work, rest assured that it is. Work parties, consisting of club members, are organized three or four weekends each year for building new deer stands, repairing existing stands, and planting food plots.

In addition to the 6,500 acres owned by Lewis Holmes, the wildlife management program includes 3,000 acres of property known as the Glenville Plantation, and 3,500 leased acres. This gives Cedar Heights Club members over 12,000 acres on which to hunt and fish.

Several fish ponds are utilized by the hunting club, most of which have been stocked with bass and bream. Ponds that are located in bottomland hardwood areas are actively used by waterfowl. Since there are only limited areas that offer this type of waterfowl habitat, waterfowl hunting is prohibited; however, many enjoyable hours are spent by club members observing the waterfowl as they frequent these areas.

Managing 12,000 acres takes a lot of equipment and maintenance, which requires a shop. At Cedar Heights, this facility is much more than just a shop. In addition to the equipment maintenance area, the complex includes (1) an archery, rifle and pistol range facility where all members spend many hours to ensure that the loss due to poor marksmanship is kept to a minimum; and that young and inexperienced hunters are given an opportunity to develop their skills; (2) a deer skinning and weighing shed; (3) processing and cold storage facilities so deer can be aged before processing; (4) main headquarters for the hunting club, including a kitchen and bunk house for members who prefer to stay in the shop area rather than using the plantation home; and (5) the plantation office and reloading room.

Sportsmanship and hunting ethics are paramount at Cedar Heights. In the office area is a large aerial photograph of the entire property. All permanent hunting stands are marked on the aerial photograph. Club members tag the stands that they will be utilizing in the morning and afternoon. This process
Deer Management Program

Several years ago the deer management program started in Alabama. Cedar Heights was selected as one of the original 10 clubs to begin the program. Several options exist in the deer management program. Cedar Heights uses the trophy deer management strategy. Under this strategy, a large number of antlerless deer are harvested annually, and generally only the larger trophy size bucks are removed. Smaller, well-formed antler deer are allowed to develop until they reach trophy size. All deer are weighed and jawbones extracted to determine their age before they are processed. This strategy has been working quite well at Cedar Heights, and most of the members possess trophy deer mounts. Even the young members have harvested respectable trophy deer.

A club rule has been established at Cedar Heights. “IF YOU ARE NOT SURE, DON’T SHOOT.” This rule is strictly enforced under the deer management program as well as for safety purposes. If there is any doubt about the size of a harvested deer, an established panel makes the final decision. If, in fact, the deer is determined to be undersize, a fine equal to the cost of a shoulder mount is imposed.

Cedar Heights Plantation truly is a treasure. Many hours of enjoyable recreation have been provided through capable management. Although the club members do pay a fee for the privilege to hunt at Cedar Heights Plantation, they are much, much more than a revenue source to Holmes. They are his friends, advisors, workers and partners. To Lewis Holmes, Cedar Heights Plantation is not a family heirloom, a place to hunt, or a revenue source. To him, Cedar Heights Plantation is a way of life. It’s a place where he was born, a place he loves and cherishes, a place he can be proud to raise his family and bring his friends. He will be leaving a legacy for his heirs to follow—“a true treasure”—a TREASURE Forest.

Seven TREASURE Forest Awards were given out in Butler County on July 28. This set a record for the most awards given out in one county at one time. The landowners, who are related, each own a portion of a large tract of land. All seven forests are managed by Marvin Odom. Two recipients are co-owners, Cleveland and Calvin Poole III.

Pictured left to right are: Chris Waller, Jr.; Paul Schrantz, Butler County Forestry Planning Committee; Francis Griffith, TREASURE Forest recipient; Ann McKinnon; Frances Gravely, TREASURE Forest recipient; Cleveland Poole, TREASURE Forest recipient; Frances Parker; Marvin Odom, manager of the seven TREASURE Forests; Jennie Viere Poole; Calvin Poole III, TREASURE Forest recipient; Elizabeth Shanks, TREASURE Forest recipient; Barry Wood, Butler County Forestry Planning Committee; Caroline Ryan, TREASURE Forest recipient; Roy Kendrick, Butler County Forestry Planning Committee; Mrs. Tommy Shanks; Tommy Shanks; Brandon Burkett, Alabama Forestry Commission. TREASURE Forest recipients not pictured are Thomas Poole and Calvin Poole, Sr.
The Alabama Forestry Commission has been concerned over the quality of tree seedling planting occurring in the state. A set of reforestation standards has been developed which is both strict and yet reasonable. These standards were presented in the Winter, 1988 issue of this magazine ("Planting Trees? Standards Can Help Ensure Survival"). Following the 1987-88 planting season, these standards were revised. What follows is a synopsis of the standards that are in effect for the 1988-89 planting season. The only significant difference is a slight modification in the correctly planted percentage requirement for compliance in order to receive cost-share assistance.

**Seedling Quality**

From the time the tree seedling roots are separated from the nursery soil until the roots reestablish contact with the soil at the planting site, there is a gradual, cumulative loss in the survival potential of the seedling. Individually, these events may seem insignificant, but the cumulative effects can be very important, with plantation failure being the occasional result. (See TABLE I.)

The Alabama Forestry Commission is committed to doing all it can to ensure that a viable seedling suitable for planting is shipped from the State nurseries. Upon receipt, it becomes the respon-
**TABLE I**

*Four Days in the Life of a Mishandled Seedling*

<table>
<thead>
<tr>
<th>Event</th>
<th>Elapsed Time</th>
<th>Type of Damage</th>
<th>Survival Loss %</th>
<th>Cumulative</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIFTING</td>
<td>2 min.</td>
<td>Physical</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>• Loss of roots</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and mycorrhizae</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Seedlings placed</td>
<td>20 min.</td>
<td>Desiccation</td>
<td>7</td>
<td>16</td>
</tr>
<tr>
<td>in tubs, exposed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>to sun and wind</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>prior to pickup</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PACKING</td>
<td>2 min.</td>
<td>Physical</td>
<td>6</td>
<td>22</td>
</tr>
<tr>
<td>• Unloading seed-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>lings in packing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and area, separation</td>
<td>30 sec.</td>
<td>Desiccation</td>
<td>2</td>
<td>24</td>
</tr>
<tr>
<td>of seedlings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Exposure of seed-</td>
<td>30 sec.</td>
<td>Physical</td>
<td>5</td>
<td>29</td>
</tr>
<tr>
<td>lings on the</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>grading belt</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rough handling</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SHIPPING</td>
<td>2 hrs</td>
<td>Physical,</td>
<td>7</td>
<td>36</td>
</tr>
<tr>
<td>• Bags improperly</td>
<td></td>
<td>Overheating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>stacked</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STORAGE</td>
<td>2 days</td>
<td>Overheating</td>
<td>9</td>
<td>45</td>
</tr>
<tr>
<td>• Temporary</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>storage lacks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>adequate</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ventilation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLANTING</td>
<td></td>
<td>Desiccation</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>• Exposure during</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 min.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>planting</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

*Realize that this chart concerns loss of survival potential which need not occur provided seedlings are properly cared for and handled correctly.

**TABLE II**

*Minimum Standards for Plantable Southern Pine Seedlings.*

<table>
<thead>
<tr>
<th>Species</th>
<th>Longleaf</th>
<th>Loblolly/Slash Shortleaf</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characteristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stem Length (in.)</td>
<td>*</td>
<td>5</td>
</tr>
<tr>
<td>Root Collar Diam.</td>
<td>3/16</td>
<td>1/8</td>
</tr>
<tr>
<td>Root Length (in.)</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Winter Buds</td>
<td>Present</td>
<td>Present</td>
</tr>
<tr>
<td>Nature of Stem</td>
<td>*</td>
<td>Stiff, woody with bark</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stiff, woody with bark</td>
</tr>
<tr>
<td>Mycorrhizae</td>
<td>Present</td>
<td>Present</td>
</tr>
</tbody>
</table>

* Minimum needle length for longleaf pine has been set at 8 inches.

The ability of the recipient to properly care for the seedlings until planting in order to maintain seedling quality. During planting, seedlings must be handled and planted correctly to enhance survival potential. Seedling quality should continually be monitored so that only healthy, vigorous seedlings are planted. The Alabama Forestry Commission has established the following minimum standards for plantable Southern pine seedlings: (See TABLE II)

**Defective Planting**

Our evaluations indicate that the most common types of defective planting are planting seedlings of less than minimum standards, J-, U-, and L-rooting of seedlings, improper pruning of seedling roots, planting seedlings at incorrect depths, and failure to properly select soil around seedling roots.

Many of these problems are the direct result of soil conditions which prevent proper planting of tree seedlings. Sites having such soils are identified in the management plan prepared by the forest technician for all cost-share cases. Vendors are urged to consult with landowners and become aware of the tree planting recommendations contained within the prepared management plans. A central concept to the Commission's reforestation standards is that being unaware of our recommendations will no longer be tolerated.

**Compliance Requirements**

For the 1988-89 planting season, in order for the tree planting practice to be approved and the participant to be eligible to receive cost-share assistance, 75% of the number of tree seedlings recommended in the management plan must be found to be alive and correctly planted at the time of final inspection by the forest technician. In addition, the total number of seedlings planted per acre must not exceed 125% of the number of seedlings recommended in the management plan. These standards are in effect for all four cost-share assistance programs available in Alabama—the Agricultural Conservation Program (ACP), the Alabama Resource Conservation Program (ARCP), the Conservation Reserve Program (CRP), and the Forestry Incentives Program (FIP).

**Inspection Procedures**

Following notification that a tree planting practice has been completed, the forest technician will conduct an inspection of the planted area. This in-
spension will consist of a sampling of 1/100 acre circular plots distributed across the planted area. From this sample, an estimation of the number of correctly planted seedlings per acre will be made. This estimate will be compared against the recommendations contained in the management plan for compliance. Again, in order for a tree planting practice to be approved for cost-share assistance, the number of correctly planted seedlings per acre must be within 25% of the number of seedlings per acre recommended in the management plan. Participants have until May 1 to correct any planting deficiencies detected during the inspection process that will result in disapproval of the tree planting practice.

Conclusion

The reforestation standards that are in effect for the 1988-89 planting season are summarized in Table III. For additional information, please contact your local office of the Alabama Forestry Commission. In addition, vendor and landowner sessions will be held across the state during the months of September and October to further educate the tree planting community as to the new standards. Remember, successful tree planting is the joint responsibility of the landowner, tree planting vendor and the Alabama Forestry Commission. The landowner must obtain good quality seedlings suitable for planting, properly care for those seedlings, and locate a reputable vendor to correctly plant them. Simply stated, the tree planting vendor must provide the highest quality service, and the Alabama Forestry Commission must provide quality seedlings from the State nurseries, develop appropriate management plans for cost-share cases, and conduct inspections in an efficient and effective manner to ensure that landowners receive cost-share payments in a timely manner. The Alabama Forestry Commission encourages landowner and vendor alike to engage in written contracts. Finally, your artificially regenerated TREASURE Forest of tomorrow, begins with your nursery stock and the manner in which it is handled and planted today.

Author's Note: The Alabama Forestry Commission is still taking orders for pine seedlings. For additional information, contact the Nurseries Section, 513 Madison Avenue, Montgomery, Alabama 36130, telephone number (205) 240-9345.

TABLE III

Summary of Reforestation Standards.

1. For the applicant to receive cost share assistance for tree seedling planting in Alabama, 75% of the number of seedlings recommended in the management plan by the forest technician must be found to be alive and correctly planted at the time of inspection.

2. Only seedlings of Grade 1 or Grade 2 quality are to be planted. Seedlings which fail to meet minimum standards for plantable seedlings should be culled in the field. Cull seedlings which are planted will be counted as incorrectly planted at the time of final inspection.

3. Seedlings must be transported and stored correctly and planted within two weeks of leaving the nursery. Coolers should be kept at 33° to 40° Fahrenheit and relative humidity at between 85% and 95%.

4. Seedlings are perishable; it is therefore, vitally important to reduce the likelihood of lethal heating or freezing or root exposure to desiccation. Seedling roots must be kept cool and moist at all times.

5. Plant seedlings December through March, preferably on days when the temperature is between 33° to 75° Fahrenheit, the relative humidity is above 50%, the wind speed is less than 10 miles per hour, and the soil contains abundant moisture.

6. Only plant seedlings of native species that are adapted to specific site.

7. Planting recommendations are site specific. The total number of planted seedlings found on site must be within 25 percent of the number recommended in the management plan by the forest technician.

8. When planting, be sure planting hole is clean of debris.

9. Seedlings must be planted at the correct depth, with taproot extending downward at least five inches below the ground surface and with at least three inches of stem and the terminal bud above ground (except for longleaf).

10. Seedling roots must be straight in the hole, with no exposed roots and not twisted, balled or planted in a J-, U-, or excessively L-shaped manner. A short L root occurring at greater than five inches soil depth is acceptable.

11. Improper angling of the root, defined as greater than 30 degrees from the vertical, is not acceptable. Stem angles greater than 45 degrees from the vertical are, likewise, not acceptable.

12. The soil must be firmly packed around seedling roots. Firmness of packing will be checked by the "four-needle test."

13. Compliance inspections will be made by Forestry Commission representatives within six weeks following notification of forest practice completion, and will consist of a representative sampling of 1/100 acre plots distributed uniformly across the planted area.

14. An appropriate planting review form will be completed for each area inspected. The completed planting review form will be placed in the applicant's file along with the referral form. Suitable copies should be maintained by the Forestry Commission representative.

15. It is highly recommended that written contracts be executed for the protection of both vendor and landowner.
Several months ago, many farmers throughout the state were notified by the Soil Conservation Service (SCS) that they were farming highly erodible cropland. These fields fall under the Conservation Compliance Provisions of the 1985 Farm Bill. The bill requires producers who are planting annually tilled crops on highly erodible land to develop and apply a conservation plan to remain eligible for USDA program benefits.

Farmers must have their plans developed and approved by the local soil and water conservation district before January 1, 1990. Practices called for in the plan to protect the land must be installed by January 1, 1995.

Many thousands of farmers have already developed their plans with USDA assistance. SCS is again asking farmers with highly erodible cropland who have not developed their plan to come in and request assistance in developing it. Assistance should be requested at your local SCS office.

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