

Alabama's TREASURED Forests

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STATE FORESTER'S MESSAGE

by C. W. MOODY



CALL TO ACTION!

TREASURE Forest landowners are the culmination of the Alabama Forestry Planning Committee's agency objectives for forest landowners in Alabama. As I travel about the state and have the opportunity to be involved with TREASURE Forest landowners, I am increasingly convinced that these landowners are not only willing and able to help us promote the TREASURE Forest concept, but, in fact, have credibility with other forest landowners that agency personnel do not have.

One way that you can help us is to assure us that this magazine continues to be a useful tool for forest landowners. Our most sincere desire is to have this magazine held in high regard by creed signers, TREASURE Forest landowners, and others on our mailing list. Perhaps you would like to see a particular article, or maybe you've heard of some new technology. Please take a little time to share your thoughts and desires with us on these issues.

Beginning with the next issue of the magazine, we want to try a new feature—spotlighting TREASURE Forest landowners in “unusual” places. In this section, we want to use pictures of our TREASURE landowners wearing their TREASURE Forest caps in unique situations. For example, we know of one landowner who will be visiting China. How wonderful it would be to have a photo of him in his TREASURE cap on the Great Wall! In sending in your picture, we prefer a 35mm color slide of sufficient quality to include in the magazine. A brief description of the picture would also be of interest to us. We feel that this will give us insight into the personalities of our TREASURE landowners and will also keep us in closer touch. This brings us to Call to Action Number 2!

Many of you have practical, useful hints on improving and enjoying your forestland. Won't you take the time to share some of this with other landowners? As space is limited, we must reserve the right in editing and using the material, but often we find that landowners are innovative and have thought of techniques that others can use effectively, and often at less expense. Black and white 35mm photographs would be welcomed to accompany your article of 500 words or less.

We thank you for your continued support!

Sincerely,

A handwritten signature in cursive script that reads "C. W. Moody". The signature is written in dark ink on a white background.

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

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Cover Photo: Thurston and Ava Nell Nix enjoy the beauty of their Marion County TREASURE.

Alabama's TREASURED Forests

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Number 1

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It's Quality, Not Quantity

by CYNTHIA K. PAGE, Editor

FORTY ACRES IS SMALL in comparison to many of our TREASURE Forests. A herd of a dozen cattle may not sound impressive to a cattle farmer. Thurston Nix, at about 5'5", is hardly a *large* man, either. But the old saying of "quality, not quantity" certainly is not to be disputed on his TREASURE Forest.

Back in the Old Days

Fifty some odd years ago, cotton covered these rolling hills in Marion County. The old terraces are still holding, but there's a new crop on it now. Some twenty-two year old natural loblolly pines are "homesteading" the old fields.

"After I inherited the old homeplace, I didn't really know what to do with it," says Nix in retrospect. "I knew I ought to be doing *something*, but I really didn't know *what*."

He and his wife Ava Nell did have a pond dug with the help of the Soil Conservation Service (SCS) and had it stocked with bass and bream just for the family to enjoy. Some cattle were turned in to graze the hillside. Beyond that, they didn't know how to set about improving the forty-acre site.

Hello to TREASURE

Long about 1982, Nix ran into a young county forester by the name of Tony Avery. "We talked about the place some," says Nix,

"and I asked him if he would come out and look it over. His response was 'Would tomorrow be soon enough!' If it hadn't been for him, I don't know if it ever would have happened."

Avery did go out the next day and, recognizing the potential of the land and the enthusiasm of the landowner, started to work. Other members of the Alabama Forestry Planning Committee (AFPC) jumped right in, too—Soil Conservation Service (SCS), Alabama Cooperative Extension Service (ACES), Agricultural Stabilization and Conservation Service (ASCS), and the Alabama Department of Conservation, Game and Fish Division.

What the AFPC saw was a lot of kudzu

off-site hardwoods, and natural loblolly infested with kudzu. Nix had already decided that his primary objective would be timber and that his secondary objective of wildlife would give equal consideration to both game and nongame. With this input, Avery developed a Cooperative Forest Management (CFM) plan in March, 1982. Subsequently, a Woodland Resource Analysis Program (WRAP) plan and an Agricultural Conservation Program (ACP) plan were drawn up in 1983 to give more in-depth management recommendations on wildlife.

Nix followed the plans closely, working only on weekends, Wednesdays, and holidays. In 1984, his land became TREASURE Forest #213.

Accomplishing That First Objective

Kudzu was growing prolifically on the farm. Unless it could be brought under control, timber improvement would be out of the question.

The entire farm was fenced in and cattle were allowed to graze the kudzu within the pines. TORDON was also used. Pretty soon, those "kudzu castles" were being torn down and the trees underneath them looked promising.

About 13 acres contained 22-year-old loblolly pines. Nine acres had a basal area of more than 200 square feet per acre! Close to eleven cords per acre were thinned out of the stand in 1982, leaving a basal area of about 75 square feet per acre. "Thurston got more out of that first thinning than he ever got for the cotton growing on it!" jokes Avery.

The next step was to prune his high value trees and all those surrounding his open land which had been planted to improved pasture. That's when Nix discovered the benefits of prescribed burning. Not only did it reduce the fuel hazard, but greatly benefitted the wildlife.

The remaining four-acre loblolly plot was prescribed burned in 1983. Some of the scrub hardwoods that weren't killed by the fire received timber stand improvement (TSI) treatment.

Much care is given to these pines now. Nix is quick to get out his spray gun at the first sign of any insect activity. Also, following last winter's ice storm, three truck loads of pulpwood were taken out before the beetles could hit.

A low grade hardwood stand occupied a four-acre natural pine site on the backside of the property. This was clearcut, site-prepared, and planted to loblolly last year with cost-share assistance from ACP. A few high mast producing hardwoods were purposely left for the wildlife.

The only other hardwood is on a natural

hardwood site, along streams, and on steep slopes. These areas receive much attention since they are critical to Nix's wildlife objective.

He also gives special attention to his Champion sweetbay which was being threatened by beavers. The solution was simple—wrap the base of the tree with aluminum! His management practices, too, seemed to be a little discouraging to the pesty little creatures who soon began to migrate to other areas.

On to the Wildlife

Nix says that he loves to spend a day on the forty acres just "watching the bluebirds work or the ducks swim on the pond." There's little wonder he chose wildlife as his secondary objective.

Besides the prescribed burning and leaving select hardwoods, he's been attentive to wildlife needs with other measures. His logging roads which were graded and fixed with water bars were also seeded with permanent grass. Besides the edge effect and grazing potential for wildlife, this also helped to prevent erosion.

Japanese millet was sown around the two ponds. Woodduck boxes were strategically placed. Also, a bluebird trail on the property was strewn with bluebird houses. Some snags were left during site preparation because of their potential for primary cavity nesting birds.

Plowed firelanes also serve a dual purpose. Seeded with fescue and clover, they are both a



Blue bird houses are scattered throughout the Nix property.

food source for the wildlife and a protective barrier from wildfire. Nix grins when he talks about his wildlife. "I've got deer, squirrel, rabbit, quail, woodducks, bluebirds, and even a screech owl!"

And on to Others

The Nix farm is now a demonstration forest for Marion County. Several practices are being studied on the farm—prescribed burning, cattle grazing, and kudzu control. Because Nix keeps excellent records, the results of the work are quite apparent. Several tours have been conducted on the property to show other landowners the benefits of the various techniques.

Nix says that before he started work on his TREASURE that he had never gotten any encouragement or much recognition for anything in his lifetime. He, though, is the one now offering the encouragement. Both his employer and his neighbor have begun to take forest management seriously because of him. Also, many other landowners have learned from his experiences which have been published in many newspapers and magazines or retold in a slide-tape presentation.

Almost all of the work on the 40-acre farm has been accomplished by this one man. It may not seem like a large farm, and he may not be so large himself, but just think of all the benefits that he has caused to happen for all of us to enjoy!

Seldom a Wednesday passes... ♣



Mast producers and snags can be left to benefit wildlife.

TIPS

For Absentee Landowners

by NEIL LETSON, TREASURE Forest Coordinator, Alabama Forestry Commission

AS THE OWNER OF EIGHT and a half acres of forestland in North Alabama, it is always a thrill to visit and see how things are going—especially since I live 185 miles away. Earlier this spring, I had the chance to see my property and check on two acres of planted pine. This was the first opportunity for me to see how they were doing since they were planted two years earlier. It's hard to describe the excitement and anticipation I felt as I drove to the property wondering if the seedlings had survived and if so how tall they were. As it turned out, my expectations were rewarded. The pines were alive and growing with some over three feet tall.

While walking over the rest of the property, though, I discovered there was another “crop” that had been planted on my property, and it too was alive and growing. Six marijuana plants were neatly spaced in a well secluded part of my firelane. Three were six feet tall and the others six inches tall. All had been carefully cultivated. My enjoyment quickly turned to fear and then anger as I felt that I was now a “trespasser” on my own property and perhaps in some danger.

This experience made a deep impression and made me aware that as an absentee landowner a person faces problems that a “resident” landowner does not. Some of these problems include the difficulty in visiting the property on a regular basis (if at all), trying to coordinate projects needed to manage the land, plus leaving the land vulnerable to trespass and misuse. As a result, many absentee landowners are just not able to devote the time and energy needed to reach their management goals.

What can be done? There are some definite steps an absentee landowner can take that will help him manage his land in a way that makes it productive and enjoyable. Here are a few.

Know Your Property

Before you can do the first thing on your property, you have got to know the exact location, the acreage, your purpose for owning it, and your goals. If you can't answer all of these questions, any activity (such as planting, thinning, timber stand improvement) won't get done and you will procrastinate yourself into no management at all. When you live long-distance from your land, it is very easy to postpone needed practices, especially if you don't know your property.

In getting to know your land you will need a map that shows each compartment or stand, plus boundaries and any local feature such as buildings, roads, or water. Other information that will help you in planning or in locating the property should be included. You can get help in developing a map from a number of sources both private and public (See “Looking for Help in All the Right Places” in *Alabama's TREASURED Forests*, Summer, 1984).

In addition, it is very important that your boundary lines be surveyed, visibly marked (use a color paint that can be readily seen) and maintained. If anything can go wrong, it will. Let's suppose that you arrange long distance over the phone with a contractor to site prepare and plant 10 acres in loblolly pine and he accidentally plants it on your neighbor's property! You think this can't happen? Well, it did, and it could have been prevented if the boundary lines had been established and well marked.

Finally, have a written plan. Establish your objectives and schedule each year what activities you want to accomplish. Have all your activities work toward meeting your goals, yet be flexible when conditions change. A registered forester can help you develop a plan for your property.

Identify A Local Contact

“Who's minding the store?” may best describe the need for a local contact. If you live 185 miles from your property like I do there is no way you can possibly know all that is happening on your land. You will need someone locally who can be your “eyes and ears.” This person needs to know the exact location of your property, your goals, and most importantly how to contact you in case of an emergency such as a southern pine beetle outbreak, wildfire damage, storm damage or in the event of timber trespass. This person should be trustworthy. Also, make sure you stay in contact with him. Don't wait for a call, but keep in touch with him and let him know of your continued interest in the property.

Candidates for a local contact include friends, relatives and neighbors. It's also a good idea for local government agency representatives to know you and your property. If you qualify for a forest industry landowner assistance program, their foresters can help keep an eye on your property.

For many absentee landowners it may be best to hire a consultant forester. He can help in the management of your land and check your property. There are usually two arrangements that can be made with a consultant forester to monitor your land. One is to pay him a retainer fee to inspect your land on a regular basis. The other is for the consultant to occasionally “drive” through the property and if he detects a problem, he will investigate, report back to the landowner and charge an on-site inspection fee based on his rate.

One term you'll need to know when identifying a local contact is *power of attorney*. According to Black's Law Dictionary, power

of attorney is "an instrument authorizing another to act as one's agent or attorney. The agent is attorney, in fact, and his power is revoked on the death of the principal by operation of law. Such power may be either general or special." This means that you can legally give your rights as a landowner to someone else. A general power of attorney does give all rights to a designated person to act on your behalf. A limited power of attorney gives a designated person the right to do a specific action on your behalf, for example, the right to sign you up in a cost-share program for your land. This can be to your advantage when you have only 30 days to sign up in the newly created Alabama Resource Conservation Program, and because you are an absentee landowner you don't hear about it until two months after the deadline. By giving your local contact the power of attorney to apply your land for cost-share assistance, you can take advantage of these programs. With regard to the cost-share programs FIP and ACP, you can complete a form from the Agricultural Stabilization and Conservation Service designating someone the power of attorney to sign you up. When giving someone the right of power of attorney you must be very careful to understand what

power that person can have. It is best to use the services of an attorney in these matters.

Keep Informed

A lot of forestry activities are happening in counties all across the state. These include forestry field tours, demonstrations, lectures and meetings. Attending these can help keep you up with some of the new or old ways of doing things. It is very important that you do make an honest effort to stay on top of things going on in your county as well as on all current management information.

An easy way to do this is to contact various local county agencies and get on their mailing lists. You may receive newsletters, announcements or invitations to landowner meetings. Key agencies include the Alabama Forestry Commission, Alabama Cooperative Extension Service, Soil Conservation Service and the Agricultural Stabilization Conservation Service. There may be a landowner association in your county. If so, you'll want to make sure they have your name also. In addition, you should subscribe to the local paper in your county. Many in Alabama have forestry related columns and local feature articles. Local papers also list delinquent tax sales of

land. This is a good way to see that yours isn't listed!

Finally, join statewide organizations that can keep you informed on forestry in Alabama. These include the Alabama Forest Owners Association and the Alabama Forestry Association.

Visit Your Land

It is vitally important that no matter how far away you live from your forestland that you do visit. You can inspect to see the progress made on the property, to enjoy the benefits of your management and to receive a renewal of spirit. One of the joys of private land ownership is in improving the land and making it better. As one of Alabama's TREASURE Forest landowners said, "Every acre we've got is going to work or we're going to know why it isn't." You can't really improve the land to its fullest unless you're out there to see it.

There are trials and tribulations to being an absentee landowner, but the rewards are just as great, if not greater, than experienced by a "resident" landowner. It takes a conscious, dedicated effort, but it's worth it. ♣



For landowners who cannot visit their property, a professional consultant can be invaluable.



THE COST OF MIS-MANAGING YOUR LAND

by LOU HYMAN, Chief, Forest Management

“QUALITY IS JOB ONE. Recently the Ford Motor Company has used that slogan in its campaign to improve their cars. That saying also has a lot of meaning to the landowners of Alabama. Too many of our prime forestlands are not producing quality timber, but instead are growing “green junk.”

Whenever a forester looks at a stand of trees, the first two things he looks at are quantity and quality. How many trees are there, and what products are they growing? How good is it? The value of a tree is based on what it can produce: lumber, pulpwood, mast for wildlife, or just beauty. Some trees can produce special products that give them special value. On my parents’ land, we have a small patch of mature white oaks that my father refers to as his “whiskey-barrel” trees. These trees have a special value to him.

Harvest the Right Trees

A landowner receives his value, his reward for the quantity and quality of his

trees, at harvest time. It is also the time when not managing can cost him money, both now and in the future.

The two most common problems are short-sighted cutting and failure to regenerate. An example of this is the practice of diameter limit cutting. This harvest system is based on the idea of “Cut the best, leave the rest.”

Let’s apply that same system to a cattle breeding operation. Each year the brood cows produce a crop of calves and each fall the calves and some of the cows are sold, but some calves are kept to build up the herd. Would a good farmer sell only his best cows and leave the sickly ones to build his herd? What would he have left after five years of doing this? A pretty sickly herd! No, the good farmer sells the poor and average heifers and only keeps the best ones for his herd. The same applies to the trees in your woods. If you just sell the best trees and leave garbage, pretty soon all you have left is garbage.

There are many excuses for bad cutting. “If you cut the big ones, those suppressed

ones will grow.” Look at your trees first and see what they’re growing. If a tree is sawtimber, it will grow more sawtimber, but a tree that is diseased and rotten will only grow more rotten wood. Studies have shown that suppressed pine trees over twenty years old will not respond to release. This is even more true in hardwoods.

The best way to cut your woods is to do what is called thinning from below. This can be summed up by the motto “Leave the best, cut the rest.” Leave that quality tree to grow quality wood and get rid of the poor trees that are growing poor wood, just like that good cattle breeder.

The Cost of Not Regenerating

The other costly area of “mis-managing” is not regenerating your land after harvesting. After your final harvest, the stand should be cleaned up and a new stand of trees started. This is the one part of forestry where time is critical. A delay of even one year can drastically increase the cost of site preparation and reforestation.

Many people are not reforesting at all. By not managing their land, they are forfeiting much of their future. Studies have shown pine reforestation to have an economic return on investment of between twelve and fifteen percent, depending on reforestation cost. Delaying regeneration can lower the return. Avoiding reforestation will destroy the return on your land.

Delaying regeneration can cost you in four ways. It increases your site preparation cost, as you encounter more hardwood sprouts and seedlings. It lowers the survival of your seedlings, as they have more competition. This heavy hardwood competition usually means that some pine release treatment with herbicides is needed. Finally, it delays your future income. A study by the AFC indicated that these factors can lower your internal rate of return by over three points (from about 12.5% to about 9.4%). This is a significant drop.

If you do not take care to regenerate your pines, trees will grow back, but they will mostly be inferior grade hardwoods. These slower growing, poorer quality trees produce a rate of return that is only one-fourth that of pine trees (about 3.06%)! The lesson is quite clear—**Pine Reforestation Pays!**

Many folks worry about the cost of managing their forest. It is expensive, but help is available through tax deductions and cost-share payments from programs such as the Alabama Resource Conservation Program (ARCP). The main point in this article is that the cost of not managing your land is even higher. Don’t let your land lose its TREASURE.

Natural Regeneration of Upland Hardwoods in the South

by C. E. McGEE, D. E. BECK, and D. H. SIMS, U.S.D.A. Forest Service,
Southern Forest Experiment Station

This article is reproduced from a pamphlet by the same title and authors, published by the U.S.D.A. Forest Service, 1979.

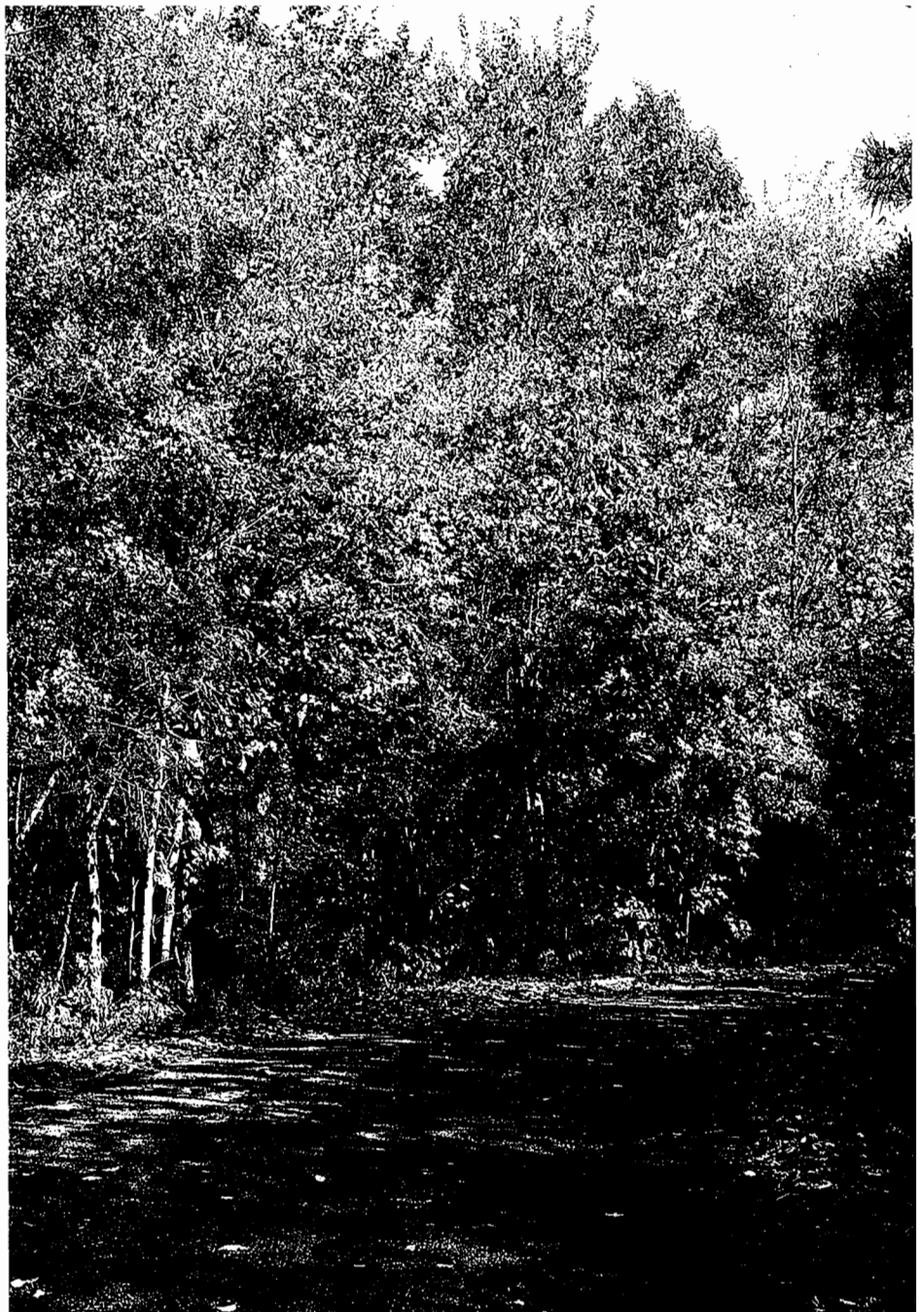
GETTING A CUTOVER hardwood forest in the South to regenerate itself is easy. Making sure you have desirable species and that they are free to grow is not quite so easy. This article tells how to achieve good natural regeneration by following a few simple procedures for cutting the mature stand and for controlling competing vegetation.

How Stands Regenerate

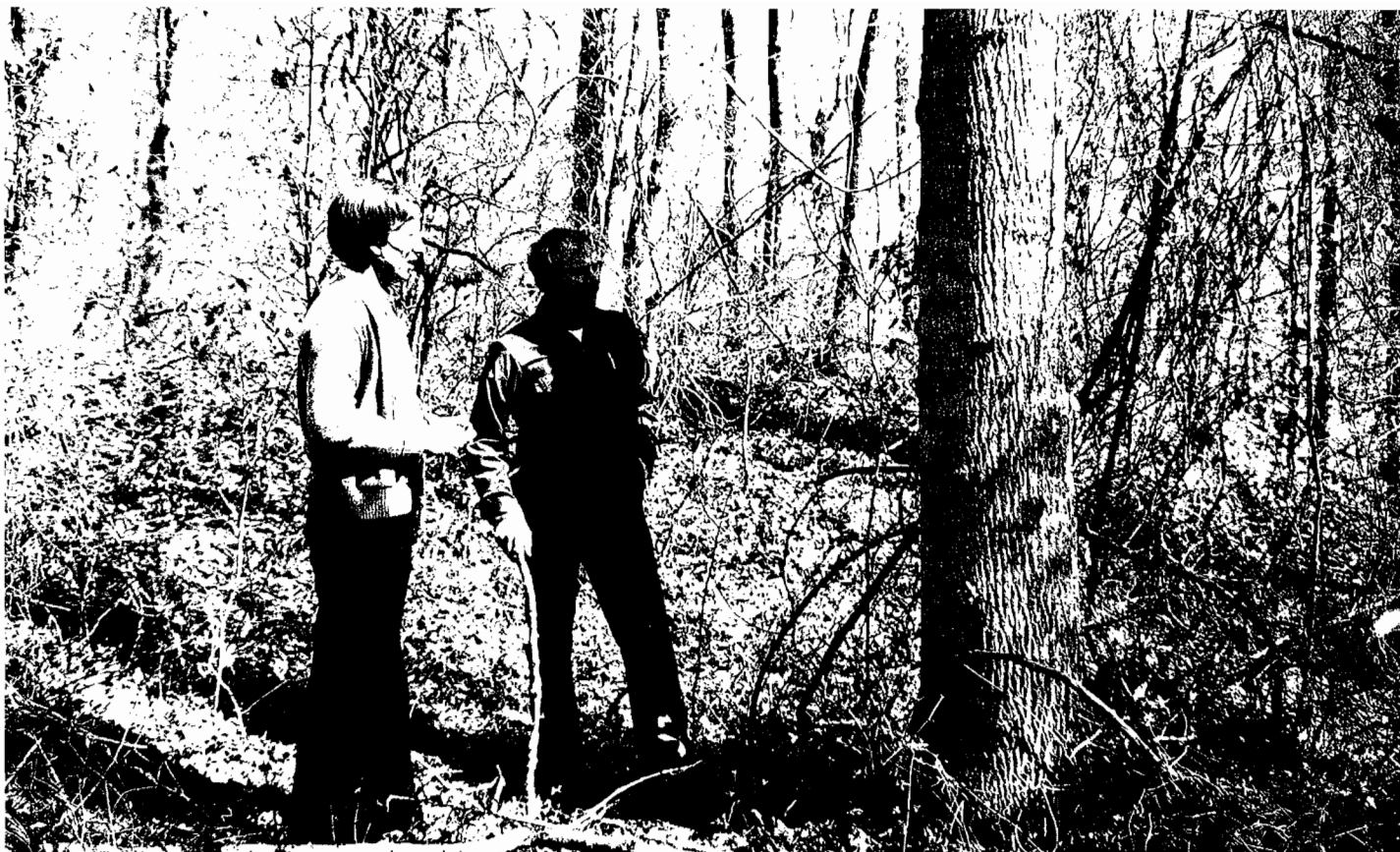
Southern hardwood forests regenerate quickly because many sources of reproduction are ready to take over the stand when the mature canopy is removed.

Seeds of several species such as yellow-poplar, ash, and sycamore remain viable on the forest floor for several years, so when overstory trees and shrubs are cut, the seeds germinate and grow. Also, birds, animals, and wind transport seeds from adjacent stands. Light-seeded species may be blown into the regeneration area from several hundred feet away.

Some seeds germinate under the forest canopy. Many seedlings die quickly, others die back and resprout, but some endure under closed canopies for a long time and are called *advance regeneration*. Their top growth may be very slow, but roots continue to develop. Most hardwood stands contain some desirable advance regeneration. Advance regeneration is particularly important for oaks because new seedlings are produced sporadically and grow slowly. Older oak stems, an inch or more in diameter, with well-developed root systems are necessary for advance regeneration to grow satisfactorily after release. Logging usually does not harm



Clearcutting will produce even-aged stands of intolerant species.



Professional advice in hardwood management may be beneficial.



Yellow poplar is a fast growing hardwood on a good site.

advance regeneration since sprouts from the root collar will grow vigorously.

Young hardwood stands almost always contain some *stump sprouts* and occasionally entire stands can develop from stump sprouts. Because of their vigorous early growth, stump sprouts often dominate other forms of reproduction. The quality and longevity of stems resulting from stump sprouts are sometimes questioned, but stems that start from small stumps below or near groundline usually are good risks. Stump sprouts from yellow-poplar often produce the best stems in the stand. Most hardwood species also produce *root sprouts*. Black locust and sassafras produce them prolifically and may regenerate almost entirely from root sprouts.

A most effective and efficient method for naturally regenerating a hardwood stand is *clearcutting*, the total removal of the canopy in one cut. Clearcutting provides the best conditions for fast-growing, desirable timber species that can use full sunlight to develop rapidly. Some shade tolerant species also do well under these conditions.

The best way to remove the canopy is through commercial timber harvests. Have the logger cut and use as much of the stand as practicable. The cleaner the logging job the better.

But the logger will not be able to use culls, low-quality trees, and some small trees. Most of these leftover trees should be cut or killed or they will impede regeneration.

There are several good ways to control the unmerchantable material. Several months before logging, you can inject herbicide into trees the logger can't use. Or, you can follow the logging job with a combination felling and injection. Trees that produce desirable sprouts could be felled; undesirable trees could be injected. How the material is controlled is not important, but most of it must be treated, especially stems larger than 4 inches.

In some stands grapevines can interfere with growth. Vines should be cut several years before the timber harvest.

The size of the clearcut depends on overall management objectives. Tracts as small as one-half acre can be used, but development of such small tracts will be impeded by side competition and over-browsing by deer. Also, small stands are inefficient to manage. Clearcuts several acres or larger in size are usually more economically desirable, but maximum size for a regeneration area depends upon other management needs.

Clearcutting produces an even-aged stand that favors intolerant species, but species composition seems to be controlled mainly

by the quality of the site. On good sites seedlings of fast-growing species such as yellow-poplar, ash, black locust, black cherry, and birch along with sprouts from the oaks, red maple, and others usually predominate. On average sites oaks will predominate with occasional yellow-poplar, pine, hickory, red maple, and others mixed in. In the Ozark Highlands, however, desirable light-seeded species are not present, so desirable species, primarily oaks, must come from advance regeneration and stump sprouts.

Hardwood regeneration begins to develop when only a portion of the mature stand is removed leaving a *shelterwood*. The continued growth and development of the regeneration depends upon how much was cut and how soon the rest of the mature stand is removed. Development of regeneration also depends upon how much of the smaller understory material is removed. Simply cutting part of the overstory will not work. Good hardwood regeneration has developed from a series of treatments involving (1) a partial cutting that left only 40 to 50 square feet of basal area per acre; (2) deadening the unmerchantable understory stems by cutting or injecting with herbicides at the time of the first cut; and (3) removal of the remaining overstory as soon as adequate regeneration was present.

This harvesting technique produces an even-aged stand. The sources of regeneration can be the same as in a clearcut but with somewhat less dependence on seed and seedlings already in place before any cutting is done.

In most cases, leaving a shelterwood has few biological advantages. When light-seeded species are not present and advance regeneration is absent, a shelterwood can help develop the desired advance regeneration. Regeneration develops more slowly under a partial cut or shelterwood than it would if the entire canopy were removed.

The shelterwood method of regeneration cutting should not be confused with the occasional removal of the biggest and best timber trees—or high grading. In making partial cuts to regenerate a stand definite provisions must be made to treat unmerchantable understory stems and to remove the remaining overstory shortly. High-grading does neither of these things and seriously detracts from long-range growth potential.

Removal of single-trees, or *selection*, has generally not proved to be an effective way to regenerate the upland hardwoods of the South. Most desirable hardwoods are relatively intolerant of shaded conditions. They will begin development under partial shade, but they must be released from overhead competition fairly early in life. The biggest drawbacks to single-tree selec-

tion are that the system fails to provide for quick and orderly removal of overhead competition and it promotes the development of shade tolerant species, many of which are not desirable.

Upland hardwood forests have a strong regenerative capacity and obtaining desirable regeneration is usually not complicated or difficult. Much of the regenerative effort should consist of creating proper conditions for growth of seedlings or sprouts by orderly removal of the mature stand. Stand removal may be accomplished by one harvest or by a series of cuts. Likewise the size of stand created may vary widely. The essential point is to create conditions where regeneration can grow free from overhead competition of older and larger trees.

Extra efforts such as scarification, etc., are usually not needed. The key operation that will require expenditure of effort and money is the control of unmerchantable material. In most of the South's upland hardwood stands that have been protected from fire and grazing, there will be a relatively dense understory of tolerant trees. These are usually trees with little or no commercial potential. The control of these smaller trees along with the control of culls in the overstory is an essential part of a properly done regeneration cut.

These rather simple practices will produce diverse young stands that will ordinarily contain many thousands of seedlings and sprouts of trees of desirable and undesirable species along with numerous briars, shrubs, and weeds. Do not be overly concerned at the brushy appearance for the first years. Because of their more rapid height growth, desirable species will almost always become dominant as the stand develops.

This paper reports research involving herbicides. If herbicides are handled, applied, or disposed of improperly, they may be injurious to humans, domestic animals, desirable plants, and pollinating insects, fish, or other wildlife, and may contaminate water supplies. Use herbicides only when needed and handle them with care. Follow the directions and heed all precautions on the container label.

Some States have restrictions on the use of certain herbicides. Check your State and local regulations. Also, because registrations of herbicides are under constant review by the U.S. Environmental Protection Agency, consult your county agricultural agent or State Extension specialist to be sure intended use is still registered. ♣

MANY QUESTIONS ANSWERED

By GEORGE W. LOWREY, AFC, Fayette County

IHAD THE PRIVILEGE to hear W. Kelly Mosley make a simple, yet eloquent speech regarding his interest in forestry and how he progressed from a casually interested landowner to become the first TREASURE Forest landowner in Alabama. To personally know Mr. Mosley or be familiar with the TREASURE Forest Program is not necessary

to understand the influence of his words. If you have a slight interest in forestry, I hope you will explore some of Mr. Mosley's comments; for me, many questions were answered.

Mr. Mosley began by discussing his many years as an absentee landowner and how most forestry work on his land had been

conducted by telephone. The work was usually initiated by a pulpwood producer or logger calling to express some needed work and how he could perform such work. This seemingly worked well until retirement allowed Mr. Mosley time to actually see the accomplishments. Upon seeing the property, he realized that he did not know much about forestry, but he knew some folks who knew less, so the need for advice was evident. With a very strong motivation to improve things, which he credited to his mother, he set out to find the advice and thus began the long road to improving the old home farm. In his closing remarks Mr. Mosley encouraged everyone to seek out advice, and once having obtained the needed information, to follow it.

The thing which is so unique about Mr. Mosley's comments is they answer why we as landowners don't do certain things to our property and why some landowners do certain things to their property. Stated plainly, why are some landowners good stewards of those things natural on their land—trees, soil, water and wildlife—and others are less careful or indifferent.

First in priority is the compelling, driving desire to improve or leave things better. This can be generated from many areas; better for one's own future, for your children or grandchildren.

Second, you must acknowledge you need advice and then actively seek that advice. It is the sort of thing that great men and women would do. Finally, but equally important, is to launch out on that advice. Nothing can be accomplished by intentions or untried advice.

Many in Fayette County possess this attitude in many different fields of work. Regarding forestry they do not appear to be in the majority, or perhaps I have not had the privilege to work or meet everyone interested in improving the forestland in Fayette County. It is a thing which cannot be hid; it will reveal itself in the appearance of the forest. Why not examine your own attitude toward the forest resource; is it an attitude which will help improve the forest or will it cause more waste and plunder of the forest resource? ♣



U.S.F.S Chief Max Peterson shown with Eduardo Pesqueira displaying a wood sculpture donated by the Alabama Forestry Commission to the Ninth World Forestry Congress held in Mexico City. The sculpture is the handiwork of Skip Turner AFC District 4 office. Anita Benton, I&E Specialist coordinated the project.

Estimating the Timber Volume of Your Forest

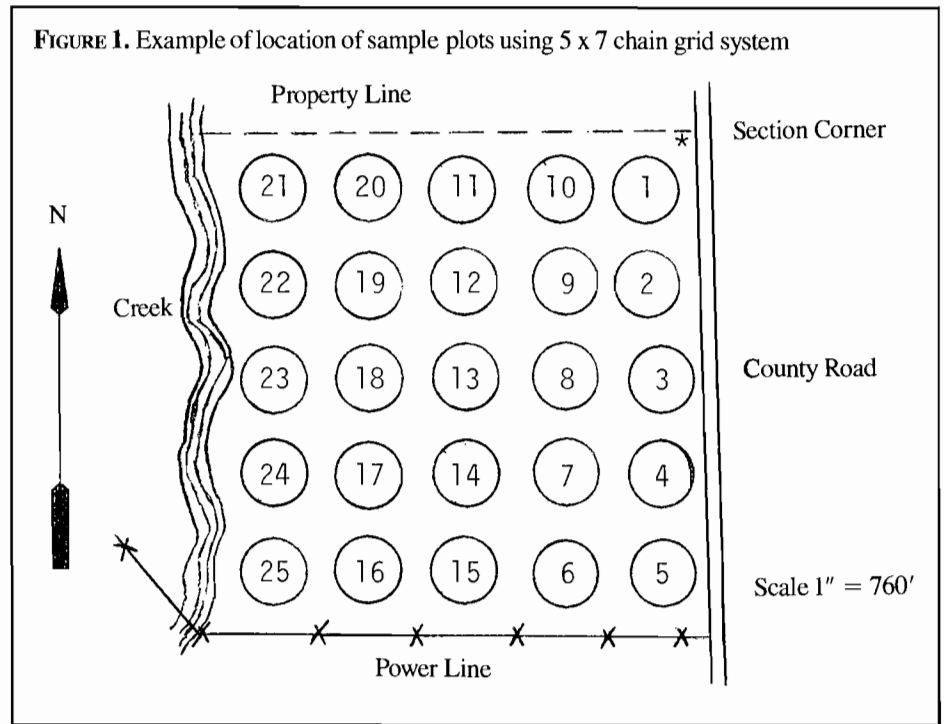
by DAVID A. HOGE, State Lands Coordinator

FREQUENTLY FOREST LANDOWNERS who wish to sell their timber have no idea of the timber volume on their property or its present value. This article will give some insight into how to conduct a timber cruise to determine just how much timber you've actually got. Such information will enable the landowner to communicate more effectively with consultants and other service foresters.

Plot Sampling

Except for those circumstances where a complete tree tally is justified, a *sampling* process will probably be the best method of inventorying or cruising the property. Many sampling designs are available to the professional forester to determine the timber volume. This article will only discuss *plot sampling* since it is easiest for those unfamiliar with statistics, probability theories, and other technicalities of forest mensuration.

In plot sampling, a number of fixed area plots representative of the entire stand may be taken either systematically or randomly throughout the stand. The sample data is then expanded by the appropriate conversion factor to obtain fairly reliable information about the entire stand. These sample plots are generally circular, however, rectangular plots can also be used. The actual size of the plot should vary with the type of timber being sampled, but most people commonly use a one-tenth acre plot.



The radii of other commonly used circular plot sizes are shown in **TABLE I**.

Even though plots can be laid out randomly, it is probably best to establish a systematic pattern. This will make it easier to recheck these plots if linear distances and compass bearings from an established point such as a corner marker or section monument are known.

The number of plots needed is determined by taking the total area and dividing it by the desired area of each plot. The total sample plot is determined by the total stand area and the desired intensity of the cruise, usually expressed as a percentage. This intensity will depend upon the stand variety, allowable inventory costs, and desired standards of precision. Generally, the intensity of the sampling tends to increase as the size of the stand decreases and as the value of the timber increases.

For example, imagine that a landowner has a 100-acre pine stand of uniform age and density. The landowner has determined that

with his confidence limits concerning the data, that a 5% cruise will provide reliable stand information. Therefore, he needs to sample five acres. If he uses one-tenth acre plots, he will have 50 sample plots. If time is critical, he may elect to use larger sample plots, reducing the overall number of plots required. For example, one-fifth acre plots would only require taking information from 25 locations.

Preparing for the Cruise

Before beginning the cruise, tract boundaries and corners should be established. Aerial photographs and surveys may prove useful in establishing these boundaries, if unknown. Large tracts should be broken into component stands and inventoried separately. A specific location such as an established corner should be used as the basis for cruise layout and location of sample plots. **FIGURE 1** shows the location of the 25 one-fifth acre plots needed for a systematic sampling of the

Plot Size (acres)	Plot Radius (feet)
1	117.8
1/2	83.3
1/4	58.9
1/5	52.7
1/10	37.2
1/20	26.3
1/25	23.5

TABLE I. Plot Radii of Commonly-Used Circular Plots

100 acres of our previous hypothetical example.

With the sample design completed, the following equipment will be needed for taking and compiling the data:

- Hand compass to follow cruise lines
- Engineer's or forester's tape to determine linear distance between plot centers, to measure plot radii, and to establish the proper distance from the tree for height measurement, even though fairly accurate "pacing" is an acceptable substitute
- Diameter tape or similar instrument to measure tree diameters
- Abney level or suitable replacement to measure tree heights
- Pencil and tally sheets to record information
- Appropriate tree volume tables

Many of these items can be found locally. If not, they can be ordered from a variety of forestry supply catalogs mentioned in a previous magazine article ("Where to Find Forestry Tools," *Alabama's TREASURED Forests*, Winter, 1985).

Having previously determined the location of the sample plots and the distances between them, you're ready to start cruising! Record keeping can be expedited if tally sheets for each plot are prepared beforehand. Depending on the type of volume table to be used, standing trees may be tallied by simple counts, by diameter and species, or by various combinations of diameter, species, merchantable height, total height, form, and so forth. Diameter measurements, usually taken 4.5 feet above ground level (diameter breast height or DBH), can be grouped into one- or two-inch classes.

Height measurements, total or merchantable, are usually taken at 50, 66, or 100 feet from the tree bole depending on the type instrument and scale used. A forester can show you how to read an Abney level, Suunto clinometer, or other suitable hypsometer to determine tree height. The basic premise behind all hypsometers is the concept of triangulation.

Which trees to measure within each sample plot depends upon the objectives of the forest inventory. If the objectives are long term, such as future growth and yield analysis, all trees within the plot should be measured. If objectives are short term, such as a timber sale immediately following the cruise, as in the case of our example, only those trees that are merchantable (above 6 inches DBH) need to be measured. Merchantable height is usually expressed in the number of 16-foot logs for sawtimber (pine trees greater than 10 inches DBH) and the number of sticks or 5-foot increments for pulpwood (generally those pine trees 6 inches or more DBH not suitable for sawtimber). TABLE II shows a sample tally by dot-dash method of counting for Plot 1 of our prior example.

A tree tally is made at each sample plot. Once all the plots have been measured and sample totals computed, a volume table is needed to convert DBH and height measurements into volume estimates.

A number of volume tables are in existence for sawtimber estimates. The best one to use is the one most popular in your locality. Ask your local Alabama Forestry Commission personnel for assistance in locating the appropriate table.

Pulpwood tables are rather uniform, being listed in either cords or cubic feet, though weight measurements are becoming more

common. Examples of each type of table are shown in TABLE III. Using the tables presented here and referring to the tally presented in TABLE II, plot number one of our 100-acre pine stand example contains 0.989 cords and 674 board feet, Scribner Log Rule. This type of computation would be made for each plot and the total sample multiplied by the appropriate conversion factor, in this case a multiplying factor of 20 for a 5% cruise. If plot number one is representative of the entire pine stand, the per acre volumes are 4.945 cords and 3370 Scribner board feet respectively. Stand volumes are 494.50 cords of pulpwood and 337,000 Scribner board feet of sawtimber (often written as 337 MBF, Scribner).

Various periodicals exist which can provide information on timber prices and market trends. However, actual unit prices received will depend upon several local factors such as the location of the timber, difficulty in logging the timber, proximity to the mill, and associated transportation costs. To conclude the computation of our hypothetical example, let's assume a unit price of \$160 per thousand board feet (MBF), Scribner Log Rule and \$17 per cord for pine stumpage. Using these prices, our landowner's stand has a value of \$62,326.50 (337 X \$160 + 494.5 X \$17).

Perhaps this article has provided some insight into the general rules behind timber cruising by using a simple method. Having acquainted the reader with this basic understanding, this author urges those interested to contact the local Alabama Forestry Commission office for further information regarding forest inventory practices. If you will be actually conducting a timber sale, seek the services of a professional forest consultant.

Avery, Thomas E. *Natural Resources Measurements*, 2nd Edition, McGraw Hill Book Company, New York, N.Y., 1975.

Freese, Frank. *Elementary Forest Sampling*, Southern Forest Experiment Station, U.S.D.A. Forest Service, New Orleans, Louisiana, 1962, (U.S.D.A. Forest Service Agriculture Handbook Number 232).

Methods for Estimating Timber Volume and Value of Pine Trees, Alabama

Landowner : John Q. Public			Plot Size : 1/2 acre		
County : Crenshaw			Plot Number : 1		
Acreage : 100					
<u>PINE PULPWOOD</u>			<u>PINE SAWTIMBER</u>		
DBH	Merchantable Height	Tally	DBH# (#Logs)	Height	Tally
6	20	┌─	10	1 1/2	:
6	25	: :	10	2	:
6	30	:	10	2 1/2	:
8	20	.	12	2	:
8	25	┌─	12	2 1/2	:
8	30	┌─	14	3	┌─
TOTAL TREES		20	TOTAL TREES		10

TABLE II. Plot 1 Tally of John Q. Public

Cooperative Extension Service, Auburn University, Auburn, Alabama, 1981, (Extension Circular ANR-263).

Neal, James; and Frank Norris. *Southern Stumpage Prices*, Forest Farmers

Association, Atlanta, Georgia, 1985, Vol. 44, No.5, Pg. 46-48. *Service Forester's Handbook*, Southeastern Area, State and Private Forestry, U.S.D.A. Forest Service, Atlanta, Georgia, 1982,

(U.S.D.A. Forest Service Miscellaneous Report Sa-MR 10).

So You Want to Sell Some Timber, Ala-Tom Resource Conservation and Development Area Forestry Committee, 1983. ♣

TABLE III. Examples of Pulpwood and Sawtimber Volume Tables

**Merchantable Rough Cord Volume Using Merchantable Stem Length
(Form Classes 75-79)
By Charles O. Minor**

Diameter breast high (inches)	Merchantable Length of Stem (Feet)													
	20	25	30	35	40	45	50	55	60	65	70	75	80	85
	Pulpwood Volume (Rough Cords)*													
5	0.026	0.031	0.035	0.040										
6	0.036	0.042	0.048	0.054	0.060	0.067								
7	0.047	0.055	0.062	0.070	0.077	0.085	0.092	0.100						
8	0.060	0.069	0.079	0.088	0.098	0.107	0.117	0.126	0.136					
9	0.071	0.082	0.093	0.104	0.115	0.125	0.136	0.147	0.156	0.169	0.180			
10	0.089	0.102	0.116	0.129	0.143	0.156	0.170	0.184	0.197	0.211	0.224	0.238		
11	0.105	0.120	0.136	0.151	0.167	0.183	0.198	0.214	0.229	0.245	0.261	0.276	0.292	
12	0.122	0.141	0.159	0.177	0.196	0.214	0.232	0.251	0.269	0.287	0.306	0.324	0.342	0.361
13	0.142	0.163	0.184	0.205	0.226	0.248	0.269	0.290	0.311	0.333	0.354	0.375	0.396	0.417
14	0.165	0.189	0.214	0.238	0.262	0.287	0.311	0.336	0.360	0.384	0.409	0.433	0.458	0.482
15	0.188	0.216	0.244	0.273	0.301	0.329	0.358	0.386	0.414	0.443	0.471	0.500	0.528	0.556
16	0.210	0.241	0.271	0.302	0.333	0.363	0.394	0.425	0.455	0.486	0.517	0.547	0.578	0.609

*Cord = Stack of 4' X 4' X 8' roundwood

SCRIBNER LOG RULE, FORM CLASS 78

GROSS TREE VOLUME

VOLUME (BOARD FEET) BY NUMBER OF USABLE 16-FOOT LOGS

DBH (inches)	1	1 1/2	2	2 1/2	3	3 1/2	4	4 1/2	5
10----	28	36	44	48	52	--	--	--	--
11----	38	49	60	67	74	--	--	--	--
12----	47	61	75	85	95	100	106	--	--
13----	58	76	94	107	120	128	136	--	--
14----	69	92	114	130	146	156	166	--	--
15----	82	109	136	157	178	192	206	--	--
16----	95	127	159	185	211	229	247	--	--
17----	109	146	184	215	246	268	289	--	--
18----	123	166	209	244	280	306	331	--	--
19----	140	190	240	281	322	352	382	--	--
20----	157	214	270	317	364	398	432	459	486
21----	176	240	304	358	411	450	490	523	556
22----	194	266	338	398	458	504	549	588	626
23----	214	294	374	441	508	558	607	652	698
24----	234	322	409	484	558	611	665	718	770
25----	258	355	452	534	617	678	740	799	858
26----	281	388	494	585	676	745	814	880	945
27----	304	420	536	636	736	811	886	959	1,032
28----	327	452	578	686	795	877	939	1,040	1,120
29----	354	491	628	746	864	953	1,042	1,132	1,222
30----	382	530	678	806	933	1,028	1,124	1,224	1,325
31----	411	571	731	871	1,011	1,117	1,223	1,328	1,434
32----	440	612	784	938	1,089	1,206	1,322	1,432	1,543
33----	469	654	838	1,001	1,164	1,289	1,414	1,534	1,654
34----	498	695	892	1,066	1,239	1,373	1,507	1,636	1,766
35----	530	742	954	1,141	1,328	1,473	1,618	1,757	1,896
36----	563	789	1,015	1,216	1,416	1,572	1,728	1,877	2,026
37----	598	836	1,075	1,290	1,506	1,670	1,835	1,998	2,160
38----	629	882	1,135	1,366	1,596	1,769	1,942	2,118	2,295
39----	666	935	1,204	1,449	1,694	1,881	2,088	2,251	2,434
40----	703	988	1,274	1,532	1,791	1,993	2,195	2,384	2,574

NOTE: For each form class above or below 78 determine approximate volume by adding or deducting 3% of total volume.

LANDO

LEGISLATIVE
ALERT

NATIONAL



by J. KENNETH MYERS, Legislative Affairs Staff, U.S.D.A. Forest Service

CONGRESS' LEGISLATIVE ACTIVITIES through the fall months have been directed mainly at the Federal budget and at the debate over whether to add an amendment to the budget to eliminate the Federal deficit by 1991. While consideration of other legislative issues continues in committees, their passage has been stalled until the budget legislation is passed.

Such is the case with the Farm Bill, reauthorizing the Federal Government's farm programs for the next five years. After passing the House in October, this legislation now awaits action by the Senate. The Senate version has cleared the Agriculture Committee but had not been heard by the full Senate at this writing. Action was expected to occur in December. Several amendments were expected to be offered on the floor, including

one authorizing the Secretary of Agriculture to assist delinquent FHA loan holders by allowing them to plant trees and later use the timber sale proceeds to repay the U.S.D.A. This proposal originated with legislation proposed by senators from Georgia and Mississippi in 1982 calling for a U.S.D.A. study of such a program.

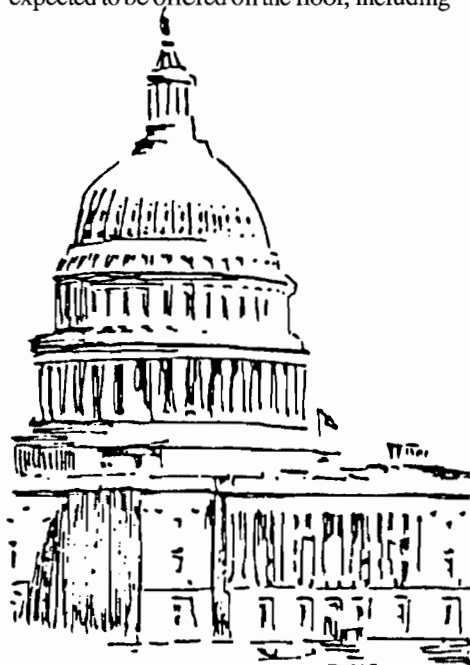
While the commodity and price support provisions of the Farm Bill will likely be the subject for extensive debate and amendments, primarily on the basis of cost to the government, one provision apparently has broad agreement and support—the new conservation programs provision. The “sodbuster” portion of the bill would deny U.S.D.A. payments to farmers who begin tilling highly erodible cropland that has not been in production in previous years. A “conservation reserve” program to retire erodible croplands by placing them in permanent vegetative covering, including trees, is also contained in the bill. Farmers electing to participate in this program would receive cost-share assistance in establishing the cover, and an annual rental payment for keeping the land in the reserve for a contract period (5-10 years). This Conservation Reserve Program will encompass some 30 million acres when passed, and is expected to have the heaviest concentration of eligible lands in the South.

Reform of the Federal Tax Laws is also a high priority for both Congress and the Administration. Work on this legislative issue continues in the House Ways and Means Committee following a long series of hearings on the proposal during the summer, 1985. One of the major concerns raised during these hearings, and being debated by the Committee, is the removal of certain tax

benefits available to forest landowners, including those that allow the cost of tree planting to be deducted from a landowner's taxable income, and the timber sale income to be treated as a capital gain. Several members of Congress have expressed opposition to these timber tax provisions. With other legislative issues dominating congressional action, it is doubtful that any tax bill approved by the Ways and Means Committee will be passed until next year.

Funding for Fiscal Year 1986 (beginning October 1, 1985) for those Federal programs that provide cooperative assistance and funds to State forestry agencies has not been approved by Congress. The Forest Service, responsible for administering these funds, is operating on a “continuing resolution” basis which allows spending at a level not to exceed the funding of the previous Fiscal Year. The House-passed Appropriations Bill maintains these cooperative forestry programs at the 1985 funding level. The Senate has yet to act, but its recommendation for these programs is expected to be very close to that of the House. Conference Committee action will probably be necessary before the funds can be released for transfer to the states. Funding for the Forestry Incentives Program (FIP), contained in a separate appropriations package, has been approved by both the House and Senate at \$12.5 million, the same as in 1985, but is being held up in Conference Committee while differences in other parts of that bill are being resolved.

Lawmakers will begin their Second Session of the 99th Congress in January. New legislative proposals will be introduced, but many unresolved issues from the First Session will require attention. 1986 looks like a busy year for Congress!



WINNERS

STATE



by FRANK SEGO, Legislative Liaison, Alabama Forestry Commission

FORESTRY LEGISLATION will again command a focal point in the Alabama Legislature during the 1986 Regular Session. In response to the current and future role that forests play in Alabama's economy and the need to protect this resource, the Forestry Commission has developed a solid legislative agenda for the '86 Session.

During the 1985 Session, legislators enacted a law doubling the forest products severance tax. This act, which was passed with the concerted efforts of landowners, industry, and the Forestry Commission, will ensure accelerated assistance to forest landowners across the state. The passage of this bill is an indication that legislators and executive officials are realizing the importance of Alabama's forest resource and its potential for the citizens of this state.

A Stronger Program

The Forestry Commission now seeks to strengthen its 1987 program with a budget that will consolidate the gains made in the Fiscal Year 1986 appropriation and allow the agency to implement the following:

1. Construction of buildings, seedling beds and an operating system at the new North Alabama nursery site.
2. Construction of a district headquarters building and equipment shop to support its mission in Northeast Alabama.
3. Replacement of additional obsolete and worn-out fire suppression equipment throughout the state.
4. Continuation of lease-purchase payments for replacement equipment secured in Fiscal Year 86 and the replacement of other on-line equipment with available funds.

5. Replacement of communications and mission support equipment on a priority basis.

Normal salary increases and a 5% inflation increase in operational expenses would be required in addition to the above requests. This puts the total budget request at \$23,780,280 for Fiscal Year 87. This represents an increase of \$4,717,937 over the projected FY 86 revenue.

Forestry Industry Planning

In an effort to ensure responsible planning of future forest product industrial development, the Forestry Commission, Alabama Development Office, and the Alabama Department of Economic and Community Affairs have combined their efforts in a measure that would create a state forest industrial development board. This bill, sponsored by Senator Perry Hand of Gulf Shores, received favorable attention in the 1985 Session when it passed the Senate with 21 cosponsors and made the special calendar of the House just as the session ended. The general functions of the board would include a long range industrial development plan concerning the forest product market and would give special attention to the development of Alabama's wood energy potential.

Insect and Disease Control Funds

The control of forest tree insects continues to pose a problem for landowners and the Forestry Commission. A bill proposed to amend the Code of Alabama would establish a fund for "the control of forest insects and diseases" to be automatically appropriated in the amount of \$180,000 at the beginning of

each state fiscal year. The State Forester could then request these funds during insect and disease emergencies. The fund would be replenished automatically within a week following the beginning of each fiscal period.

Seizure of Vehicles Used Unlawfully

The Forestry Commission is also seeking to gain passage of a law establishing procedures for seizing, confiscating, and condemning vehicles and equipment used, or intended for use, in connection with the violation of timber theft and forest fire laws in Alabama. Enactment of this law would be a serious deterrent to anyone planning such criminal acts on the forestlands of this state.

Public Support Needed

Success of all this new legislation depends, as always, on the public interest and its willingness to support such measures. When we realize that the forest products industry is the leading industry in the state, it would seem natural to expect such support. You are the key to helping the Alabama Forestry Commission with its long range and comprehensive program of commitment to the people of this state.

NOTICE TO TREASURE FOREST LANDOWNERS

TREASURE FOREST LANDOWNERS are certified for five-year periods. To maintain TREASURE Forest status, the property must be reinspected and recertified at the expiration of the certification period.

Landowners who were first certified or recertified in 1981 should be contacted by County Forestry Planning Committee members during this calendar year (1986) for reinspections.

Those landowners who are due for reinspection according to our files include the following:

TREASURE FOREST #	NAME	COUNTY
1	W. Kelly Mosley	Marengo
2	J.O. Youngblood, Jr.	Macon
4	Waymon Hornsby	Marshall
5	Boyd Batchelor	Pickens
6	David Rowland	Walker
7	Watrous Garrett	Clarke
8	John B. LaGarde	Calhoun
9	Ralph McClendon	Etowah
10	Charlie Jackson	Choctaw
11	C. L. Odom	Washington
12	Hunter Phillips	Choctaw
13	Sam Lowery	Conecuh
14	J. Earl Park & Son	Tuscaloosa
15	E. B. Richey	Fayette
16	Curtis Eatman	Greene
17	E. A. Broughton	Hale
18	Florence Cabiness	Lowndes
19	Dr. James Ray	Crenshaw
20	W. M. Newton	Conecuh
21	Mary Bradley	Pike
22	M. W. Redd	Dale
23	Walter Warr	Barbour
24	F. M. Fleming	Geneva
25	John Rudd	Russell
26	Russell Lands-Dixie Farms	Elmore
27	James Otis Byrd	Houston
28	Nalty Tree Farm	Escambia
29	Wilmon Timberlands, Inc.	Monroe
118	W. T. McAlpine	Marengo
119	Pat Keahey	Dale
120	Walter B. King	Crenshaw
121	Dennis Walker	Calhoun
122	D. W. Kiser	Walker
123	Guy Ernest Thorn	Franklin
124	Herbert P. Walker	Madison
125	Thomas J. Earle	Baldwin
126	Hunter T. Reynolds	Baldwin
127	T. A. Carnes	Marion
128	Sidney Bledsoe	Macon
129	William H. Dodson	Chilton
130	A. C. Mitchell, Jr.	Barbour
131	T. J. Steinwinder	Sumter
132	A. B. Eatman	Greene
133	Irby Stickney	Hale
134	Gene Brown	Montgomery
135	Robert A. Pace	Baldwin
136	Joe Bowers	Russell
137	Robert Sellers	Pike

ACTIVITIES

DISTRICT 1

State grants totalling \$5500 were distributed to nine fire departments in Marshall County. Arab Fire Chief **Tommy Prest-ridge**, Beulah Chief **Yvon Smith**, Boaz Chief **Jackie Nicholson**, and Douglas firemen **Sherrill Jolley** and **Paul McAbee** attended the ceremony. Others present included Representative **Euclid Rains**, Georgia Mountain Volunteer **Lynne Stanton**, Guntersville Chief **Dewey Wales**, Mt. Hebron fireman **Cecil Owens**, Rep. **Lloyd Colentan**, Swearingen Chief **Doyle Farr**, Wakefield fireman **Bill Welch**, and Forest Ranger **Jack Lay**.

Phillip Smith, Etowah County Ranger, attended the SCS District meeting at Noccalula Falls. Assistant State Forester **Charles Pigg** was on the program.

Larry Parker, Marshall County Ranger presented a forestry program on prescribed burning and Alabama hardwoods to 25 campers at Lake Guntersville State Park. He also attended a **HOSPICE** meeting and offered our assistance to any terminally ill patients we might could benefit through forestry related activities. **HOSPICE** is a national organization which provides counseling and direction to terminally ill patients and their families.

The **Jackson County Forestry Planning Committee** held a forestry tour and demonstration hosted by **William Kampmeir**. State Representative **Ben Richardson** was the introductory speaker. Lunch was sponsored by **Hiwassee Land Company** and **Mead Hardwoods**.

Floyd Clemons of Jackson County was this district's Helene Mosley Award recipient. His multiple-use land management program combines soil, water, wildlife and timber management. Clemons, who moved to Jackson County in 1937, is a past chairman of the **Soil and Water Conservation District**, an organization in which he was involved for 22 years! Congratulations Mr. Clemons!

DISTRICT 2

Cullman County Supervisor **Darrell Johns** presented a 30-minute radio program on forest fires and forestry in general on July 14.

The '85 **North Alabama Forestry Expo** was held at the Cullman Civic Center on July 27.

Shelby County welcomes **Mike Wilcox** as a Forest Ranger. Mike has already helped with a 4-H Boys' tour of Kimberly-Clark's Tree Nursery.

Daryl Lawson, **Johnnie Tidwell**, **Mike Wilcox**, and the **Shelby County Forestry Planning Committee** sponsored an award ceremony for **Chuck Lewis'** TREASURE Forest. State Forester **C. W. Moody**, District Forester **Bart Williams**, and TREASURE Coordinator **Neil Letson** were guest speakers.

Chuck Lewis, **Doug Joseph**, and **Anthony Joseph**, all TREASURE Forest landowners, attended the Second Annual Alabama Forestry Conference as representatives of Shelby County landowners.

Several fire departments from **Shelby County** attended the **Fire Department Appreciation Day** held in Prattville.

Lloyd Peoples returned to work August 30. His eyes appear to be okay!

Gary Hamilton attended the Second Annual Alabama Forestry Conference as a representative of the **St. Clair Forestry Planning Committee**.

Forest Ranger **Randy Hurst**, recently hired, attended the Forestry Academy.

Grant checks were delivered by State Senator **Butch Ellis** at the monthly meeting of the **St. Clair Fire Fighters' Association** in July.

Charles Tidwell, 14-year veteran ranger in Walker County retired in June. His retirement party was held at Quincy's in Jasper. Having been an extremely loyal employee, Charles will certainly be missed by his fellow employees.

Charles Hall and his wife were fortunate enough to get to watch a Space Shuttle launch during a trip to Florida in June.

The addition to the **Walker County** shop was completed in July. The 450 can come in out of the rain!

DISTRICT 3

District 3 held its annual **Fire Control Cooperator's Meeting** in October.

Eleven forest industry cooperators attended and listened to State Forester **C. W. Moody**, District Forester **Wayne Strawbridge**, and other district staff and county supervisors explain our detection, communication, and suppression program. Mr. Moody expressed his appreciation to Forest Industry for their help in getting increased funding from the State Fund and the severance tax increase. District 3 personnel were presented with the Organizational Values in the afternoon by Mr. Moody.

District Forester **Wayne Strawbridge** attended the Tuscaloosa County Fire Protection Association Awards banquet on October 5 and presented them with a check for \$1,000. After thanking the more than 200 volunteer firemen for their assistance, Strawbridge presented the Annual Forestry Award to Northport Chief **Jake McQueen**. Fire Specialist **Ken Elmore** was recognized for having been chosen as the Alabama Forestry Commission's Ranger of the Year. His role in organizing 36 volunteer departments played a major role in his being selected for this award.

Frank Sego attended the Tuscaloosa County Fire Protection Association Banquet, also, and presented Smokey Bear Commemorative cachets to members of the Tuscaloosa County legislative delegation. He also spoke on the new volunteer program.

Fayette County has had numerous

Fayette County has had numerous newspaper articles printed in the *Times Record*. Additionally, there have been programs conducted for Boy Scouts, 4-H, and Girl Scouts.

Guthrie Smith Park was the setting for the Annual Frog Level Farm City Festival in September. Exhibits included wood carving, basketweaving, broom construction, lye soap making, and a chain saw contest.

Fayette County had a county-wide RCFP meeting in May to discuss the role of volunteer fire departments in fire suppression efforts. Also another RCFP meeting was held in the **Kirkland** community to organize a volunteer fire department. This brings Fayette County's total VFD's to 9.

After adding four new volunteer fire departments—**Siloam**, **Morning Star**, **Coatopa**, and **Whitfield**, and one reorganization in **Bellamy**, Sumter County has 14 VFD's, giving the county an almost 100% fire protection coverage. The first phase of the Sumter County RCFP radio system has been completed with one repeater installed and a second being planned.

Two schools (75 students) and one Boy Scout Troop (12) toured the nature trail at **Rumley Tower** recently. Tree growth and forest products are part of the program at the tower.

Pickens County was been involved in a herbicide demonstration, prescribed burn "hands-on" demonstration, FFA Land Judging contest, and a forestry field day. Landowners reviewed "before and after" Velpar L treatments in June and other chemical techniques in August.

A forestry field day was held in **Aliceville** in May for five agriculture classes. Contests included tree identification, pole climbing, timber cruising, age and acreage estimation, wildlife habitat determination, pulpwood throw, log rolling, and chain saw competition. **Pickens County High School** was the overall winner. **Aliceville Chamber of Commerce** sponsored the barbeque lunch.

Fire Specialist **Ken Elmore**, Tuscaloosa County Rangers **Ricky Dockery** and **Everette Brown**, and Forester **Mark Beeler** were among the first crews sent out West to assist in fire suppression.

Six of seven counties in **District 3** are reporting the southern pine beetle in epidemic levels. A media blitz is underway in all six counties to create an awareness of the problem and to offer a solution—**SALVAGE!**

Lamar County has been especially successful in gaining media coverage for the southern pine beetle situation. Newspapers in the county and TV Channel 4 out of Columbus, MS have been supportive.

Lamar County personnel assisted with the FFA and 4-H forestry field days in that county.

The **Lamar County Firefighters' Association** was organized in September to provide better fire protection in that county.

The **Hale County Forestry Planning Committee** met in June to develop a

landowner assistance program with the help of local industry to provide tree planters at no cost to the landowner.

The organization of the **Tishabee VFD** in Greene County brings that county's total VFD's to 6.

Greene County has successfully run articles in local papers advising landowners of the southern pine beetle problem.

Both **Hale and Greene Counties** have shown slide presentations on hardwood management, wildlife management, and seedling care at landowner meetings.

The **Tuscaloosa County Forestry Planning Committee** had an exhibit at the West Alabama State Fair in October.

Harris Lake was the site of a woodland field day for 110 high school students in May. Students came from Hale, Tuscaloosa, and Greene Counties. The meal was sponsored by the **University of Alabama**. Instructors were **John Harper**, SCS; **Mark Beeler**, AFC; and **Doug Phillips**, University of Alabama.

Pickens and Tuscaloosa Counties conducted their fire fighter competitions. **Mt. Olive and Zion VFD's** won first prizes. **Sipsey Valley**, **Ward**, and **Carrollton VFD's** participated in the state level competition in Prattville.

More than \$25,400 was distributed to 39 VFD's in **District 3** by AFC personnel and local legislators.

DISTRICT 4

Chambers County now has a **TREASURE Forest!** With the presentations to **Jack Langley** and **Mr. and Mrs. Charles**

Kendrick-Holmes, all 67 counties in the state can now boast of a **TREASURE Forest**. **Bob Waters**, SCS wildlife biologist; and **Clayton Schwind**, Chambers County Supervisor; made the presentations. District Forester **Ernie Moore** and other members of the **Forestry Planning Committee** were also present.

Lafayette is working toward a December 31 deadline to qualify for **Tree City**. Good luck!

AFC personnel are working with the **Extension Service** and **FFA** to develop a small hardwood nursery at the **Highway Department**. Planting will begin during the December-March planting season.

Ronnie Ray, Forest Ranger II, has been busy with Tree Farm inspections. He plans to submit 20 new inspections for certification along with several recertifications.

Two new Treasure Forest nominations were turned in for review on December 12. The landowners are **Leonard Blanton** and **Dr. David Hall**.

Glenn Berry, Cleburne County Forester, attended the Wood Energy Seminar at Cheaha State Park. He also met with the Cleburne County Forestry and Wildlife Association.

The **Cleburne County Volunteer Firemen's Association** held its meetings in Heflin and Fruithurst this quarter. The Association received \$1000 in September from the Governor's Discretionary Fund.

Glenn Berry was among several agency personnel who attended a

welcome party for the new County Extension agent in Heflin.

Thirty **Randolph County** timberland owners learned about forest regeneration. Coordinated by the **Randolph County Forestry Planning Committee**, the program featured **Harry Murphy**, Resource Management Service; and **Dr. Bill McKee**, Auburn University Extension.

Steve Nix's Treetips column in the **Randolph** leader has had numerous forestry articles run during the month.

Charles Sikes participated with the **Randolph Volunteer Firemen's Association** to accomplish two nights of instruction in Wildland Fire Suppression. Twenty-two firemen completed the course and received certificates.

Officers and Chiefs of the **Volunteer Firemen's Association** attended a meeting where Rep. **Richard Laird** presented them with \$1000.

The **RCFP** departments met in the AFC office in September for Fire Training in Arson Investigation conducted by the Alabama Fire College.

Randolph and Chambers County AFC personnel joined with the **RCFP** departments to sponsor a booth at the Kiwanis Fair in September.

Steve Nix presented two programs on the 1985 Colorado meeting of the Society of American Foresters. One was to the Lion's Club and the other to the Rotary Club.

The **Roanoke Tree Board** applied for Tree City, USA status in September. **Mrs. Steve (Vangie) Nix** is chairperson.

RC&D Forester John Tyson participated in a 30-minute show on WJSU-TV in Anniston emphasizing the economic importance of forestry in East Alabama.

John Tyson has provided assistance to 63 landowners in the Coosa Valley area in making or revising management plans. Emphasis has been on erosion control and wildlife habitat management. He also assisted with the Wood Energy Seminar held at Cheaha in September.

John and Clyde Atkisson, AFC Talladega County, conducted classes for fifth and sixth graders at Camp Cosby. Many of the students were from the Jefferson County School System.

District Four has completed 121 new management plans in 7 counties. **Talladega and Tallapoosa** both have 30 (Guy Slayden did 28 in Tallapoosa), **Clay** has 15, **Cleburne** has 9, **Coosa** has 8, **Randolph** has 18, and **Talladega** has 11. Many of the counties had a number of revisions in previous plans.

DISTRICT
5

The **Bibb County Forestry Planning Committee** held a forestry tour on **Dan Jones'** property on October 12. Prescribed burning, pine release using herbicides, and grass control in black walnut stands were all emphasized on the program.

The 6351-acre forest of **Dr. M. L. Crawford** received TREASURE status in October.

Approximately 100 people attended the **Autauga County Forestry Tour** in October which was sponsored and supported by **ACES, SCS, ASCS,**

Union Camp, Hammermill Paper Co., SACO Wood, Champion Timberland, Monsanto, Autauga Area Vocational Center, Central Alabama Electric Coop, consulting foresters and private landowners. State Forester **C. W. Moody** presented **John Herrod** with his TREASURE Forest certificate.

Monroe and Wilcox Counties Forestry Planning Committees held a joint forestry tour of McMillan-Bloddel's tree orchard and nursery in October. **J. R. Spinks** of Sunny South was presented his TREASURE certificate by State Forester **C. W. Moody**. **Tree Farm certificates were given to Russell Lawlis and the United Presbyterian Church** of Wilcox County by District Tree Farm Chairman **Doug Link**.

Appreciation plaques were given to State Senator **Francis Strong** and State Representative **Harrell Blakeney** for their support of forestry programs in Marengo County.

A state-wide media tour sponsored by the **Alabama Forestry Association** was held in **Autauga County** on October 18. The **Autauga County Forestry Committee** cooperated with the AFA's Communication Committee to organize the event.

The **Perry County Forestry Planning Committee** is leading that county's efforts to salvage Southern Pine Beetle infested timber.

Smokey Bear appeared at the **Camden Fall Festival** on October 21 to help promote the **Wilcox County Fire Department Association's** fire prevention booth.

The **Second Annual Firefighter's Field Day** was held in Thomasville on October 12. The event is sponsored by **McMillan-Bloddel** and the **Thomasville Fire Department**. **Camden and Pine Hill** Fire Departments won first and second place.

State Representative **James L. Thomas** presented the **Wilcox County Fire Department Association** with a \$1000 grant check on October 8.

DISTRICT
6

The **James Hughes family** from Cottonwood in Houston County received the **State Helene Mosley Award** at the Second Alabama Forestry Conference in September. Having had five Regional Helene Mosley winners and one State winner for the best TREASURE Forest is quite an accomplishment for the Peanut Capital of the World!

Dale County is organizing a County Forestry Association. The steering committee, headed by **H. C. Jordan**, has met to adopt a series of proposals for the first meeting set for January. The first program will be on taxation and cost sharing.

At the last quarterly meeting of the **Houston County Forestry Association**, Forester **Harold Stepler** of **Great Southern Paper Company** presented a program on his company's landowner assistance program. Forty people attended this meeting.

The **Wiregrass Area Forestry Field Day** was held in late October on the

property of **H. C. Jordan** in Dale County. Approximately 125 landowners and forestry personnel viewed techniques in natural regeneration, selective thinning, forestry economics, wildlife management, erosion control on woods roads, and permanent fire lanes. A barbeque lunch was followed by a summary from **Robert Foster** with Larson and McGowin, comments by **ASCS Director Bubby Trotman**, and an awards presentation by State Forester **C. W. Moody**.

Hats off to **Tracy Lawrence**, Ranger in Houston County, for his innovation and determination to have 20 forestry billboards printed and posted all over the Wiregrass area. With assistance from **Cynthia Page** and the **District 6** personnel, Lawrence used the "Partners in Life" theme developed by the advertising agency of **Sayers, Martin, and Seifried** in Huntsville. The billboard features the transformation of a tree into a man holding a tree, followed by the phrase, "The forests will do their part if Wiregrass landowners do theirs."

Urban Forester **Barry Lawrence** has been busy promoting Tree City through his continued work with **Geneva, Abbeville, and the Dothan Federation of Garden Clubs**. Geneva recently planted 40 street trees during an Arbor Day celebration.

The **Pike County Forestry Planning Committee** sponsored a woodland tour in November on the property of **Jimmy King**. **Ranger Wayne Craft** did an outstanding job in coordinating the program which featured prescribed burning, wildlife, woodland grazing, and regeneration.

Barbour County has formed an Association of Volunteer Fire Departments. At a recent meeting State Forester **C. W. Moody** presented **Smokey Bear** plaques to Representative **Jimmy Clark** and Senator **Danny Corbett** who in turn presented a \$1000 grant check to the Association. County Forester **Don VanHouten** and Ranger **Ed Fenn** assisted in organizing the event.

DISTRICT
7

Butler County Supervisor **Brandon Burkett**, chairman of the **Greenville Tree Commission**, is assisting in writing a City Tree Ordinance.

Both the **City of Luverne** and **City of Brantley** in Crenshaw County have been contacted about the Tree City program.

Under the new ARCP Program in **Covington County**, \$12,420 will be spent on tree planting on marginal cropland!

Covington County certified two new TREASURE Forests during September and expected to have two more (2140 acres) in December.

Forty-five 4-H boys and girls attended a Hunter Safety Camp at the **Dixon Center** in **Covington County**. They received training in gun and archery safety, hunter ethics, snake identification, and first aid.

A Tung Nut Tree is being nominated for a Champion Tree in **Covington County**.

Ranger **Lem Harrison** was honored with a retirement party on October 31 in **Escambia County**. Harrison, who has thirty years service with the AFC, was presented with a gift from District 7 employees and friends by County Supervisor **Robert Knowles**. Others present were State Forester **C. W. Moody**, **Alvin Downing**, **James McGougin**, and **Cathleen Sanford**.

A 160-hour Certifiable Training Course in Firefighting is being taught to 38 volunteer firemen at the **Covington County Ranger Headquarters**.

Johnny Kline, Monroe County, worked with the Forestry Academy students on equipment.

Monroe County participated in the Monroe County Forestry Committee's annual tour on October 24 at McMillan-Bloddel's seedling nursery. **Gary Cole** and **Ernest Johnson** went on to **Dow Chemical's** herbicide tour October 16-17.

Monroe County and District 7 personnel hosted the Southwest Alabama meeting for the ARCP program in September.

DISTRICT
8

Gary Faulkner, Wood Utilization Specialist; and **Miles Andrews** of Timberland Harvesters provided information for the Bay Minette District personnel at a field tour of a fuelwood chipping demonstration on August 6.

On August 14, **Chuck Quinn**, AFC Choctaw County Supervisor, presented a class on tree identification to the 4-H Club. **Rip Deavors** with the Cooperative Extension Service made a presentation on bait casting, and **Craig Peters** with SCS spoke on soil identification.

Hugh Mobley conducted a smoke management training session in Mobile on August 14. About 40 landowners, consultants, forest industry and AFC personnel attended the session.

Patrick Waldrop, Mobile County Supervisor, conducted a meeting for the South Alabama Botanical Society on Wildflowers in September.

Baldwin County AFC personnel and the **Baldwin County Fire Chiefs' Association** had excellent response to the fire prevention display that they manned at the Baldwin County Fair in October.

The **Clarke County Forestry Planning Committee** sponsored a landowner meeting and tour on the use of herbicides, September 19, in Grove Hill. **Vivian White** received the **Helene Mosley Award** for having the best TREASURE Forest in the Southern district. **Welch Timber Company** provided a steak lunch. Other support was provided by **James River Corporation, Alabama River Woodlands, and McMillan-Bloddel**.

Clarke County AFC had an exhibit in the Clarke-Washington County Fair held the first week of October. They also had a truck-tractor in the **Jackson, Alabama Fire Prevention Week Parade**. **Smokey** rode the tractor.

Baldwin County Supervisor John Martin and Forest Ranger **James Travis** gave a fire prevention presentation to a

six classes at Robertsdale School during Fire Prevention Week.

Baldwin County Assistant Supervisor **Lynn Booth** and Forest Ranger **John Fenn** manned a fire prevention display at the Baldwin County National Hunting and Fishing Day in Robertsdale on September 28.

The **Mobile County Fire and Rescue Association** held their annual Fire Fighter's Competition on October 5 at **Wilmer Fire Department, Mt. Vernon** was the overall winner.

The **Clarke County Fire Chiefs' Association** had their annual Fire Fighter Competition on October 12. **Thomasville** took first place.

The **Choctaw County Forestry Planning Committee** sponsored a landowner tour on the use of herbicides. **Dr. Jim Miller** from Auburn University was the quest speaker. Lunch was provided by **American Can**.

John Martin, Baldwin County Supervisor, conducted a fire prevention program and showed fire fighting equipment to Junior Firemen of **Barnwell Volunteer Fire Department**.

The **Youth Conservation Committee** of the **Mobile County Soil and Water Conservation District** held an Appreciation Day on October 19. **Bob Thompson**, SCS in Auburn, was the guest speaker. **Patrick Waldrop**, Chairman of the Youth Conservation Committee; and **Cecil Tanner**, Soil and Water Conservation Supervisor presented conservation awards to Cub Scouts, Boy Scouts, Girl Scouts, and 4-H Clubs.

Neil Letson, AFC Urban Forestry Coordinator, and Mobile County Supervisor **Patrick Waldrop** presented a program on Street-Scopes and the Tree of Mobile at the Continuing Education Center in Fairhope.

John Martin gave an overview of the AFC operations and discussed the wildfire problem in the state with the Optimist Club of Foley.

Mack Vines of Baldwin County was the runner-up for the Helene Mosley Award for South Alabama.

Daphne Fire Department won first place in the overall training competition at the Prattville Firefighter Appreciation Day in September. They also won the District 8 "Pick-of-the-Year" brush truck competition. In all, they came home with \$750 and four trophies!

DISTRICT 9 Marion County Forester **Tony Avery** recently received a \$1000 W. Kelly Mosley grant to support the Bear Creek Education Center's Multiple-Use Forestry Workshop held in November. Students from all over North Alabama heard lectures from instructors with the **U.S. Forest Service, Consultant Forestry Services, Itawamba Junior College, and the Alabama Forestry Commission**. F.F.A. students received training in skills that they will need for the upcoming forestry judging contest in the spring. A second workshop is being planned for the spring of 1986.

District 9 Headquarters has once more been awarded the Florence

Beautification Award for their Wildflower Garden. This award is presented annually by the **Florence Garden Club**.

Lauderdale County Forester **Steve McEachron** traveled to New Orleans for a three-day study of the Enhanced "911" Emergency System.

District 9 hosted a cookout for the Old-Timers' session held at Joe Wheeler State Park in October. The I & E Section is developing a booklet and video tape on the attitude, characteristic, and philosophy that always seems to have existed among AFC employees—doing more with less!

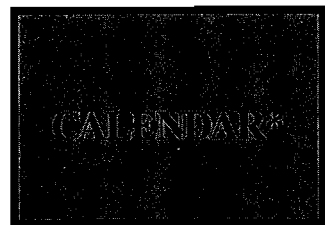
A grand opening of the expanded and improved **Marion County Nature Trail** was held in October. **Superintendent of Education Roberta Goggans** led the first walk along the half-mile trail.

Steve McEachron, Tony Avery, and Don Burdette conducted a tour of the District 9 Nature Trail for 30 elementary students who learned to identify wildflowers, trees and shrubs.

Forester **Don Burdette** conducted a lecture and field trip for Boy Scouts at Westmoreland Lake in Lauderdale County. They were shown the benefits of multiple-use forest management.

Three Thailand visitors toured the Shoals area recently and learned about Alabama's demonstration forests, TREASURE Forest, interagency cooperation, fire control, law enforcement, and the volunteer fire department program.

Firefighters and officials from the **Tennessee River Paper and Pulp Company, Champion Paper, and the Alabama Forestry Commission** met for a fellowship dinner in November. Each expressed appreciation for mutual aid and recommitted to the cooperative efforts among them.



January (Date not Firm)—Crenshaw County. Hands-on prescribed burn. This is not the same area that was burned in December. Call Tim Money, 335-5712.

January 6—Cleburne County, 6:30 p.m., County Forestry and Wildlife Association. Program on prescribed burning. Call Glenn Berry, 463-2876.

January 10-29—New Zealand. American Forestry Association sponsored tour. \$2650 from Los Angeles. Call Bill Tikkala, 1-800-368-5748.

January 14-16—Athens, Georgia. Quantitative Timber Stand Management for Southern Yellow Pine. Call Dr. Leonard A. Hampton, (404) 542-3063.

Roger Nichols participated in a fire prevention-demonstration program held at Beltline Mall in Decatur.

Howard Swanner and **Roger Nichols** participated in the FFA Forestry Judging Contest in Limestone County.

DISTRICT 10 Phenix City's recently appointed **Tree Board** has submitted an application for Tree City, U.S.A. Russell County Supervisor **Melvin Phelps** has been working with the officials in that city.

Property owned and managed by **Hugh Upshaw** and **George Watkins** was the setting for a forestry tour featuring wildlife in Hurtsboro in November. Over 30 local forestland owners toured this TREASURE property as well as the nearby **A. B. Carroll Lumber Yard**. **Farm Bureau** provided the meal and other assistance came from the **Alabama Forestry Planning Committee** agencies in Russell County, and special assistance from the local **Game and Fish Division**.

The **Elmore County Volunteer Fire Departments** received \$1000 in grant funds to build dump tanks for RCFP units. The **Santuck VFD** won the brush truck competition in District 10.

Rangers **Jim Foreman** and **Lynn Justiss** conducted a comprehensive fire prevention program for students at Eclectic Elementary School.

The **SCS, ASCS, Farmer's Home, and AFC in Elmore County** have moved into a new office on Hwy. 111 just north of Wetumpka.

The **Elmore County Forestry Planning Committee** held its annual TREASURE Forest Field Day in November on the property of **Robert**

January 16—Dale County, 7:00 p.m. County Forestry Association organizational meeting. Program on taxes and government cost sharing programs. Contact Bruce Hancock, 774-8112.

January 18—Jefferson County, 9:00 a.m. Alabama Forest Owners Association. Tour of McCrary TREASURE Forest. Meet at Shoney's in Hoover for breakfast. Car pool leaves Shoney's at 10:00 a.m. for McCrary Forest. Meeting open to public. Call Lee, 663-4138.

January 29-31—Jefferson County. Society of American Foresters (Georgia and Alabama) will discuss "Foresters Involvement in Public Affairs." Call Kendall Dexter, 457-8911.

February II—Jefferson County 7:30 p.m. AFOA. AmSouth Bank, Hoover. LEASING YOUR LAND FOR HUNTING. Doug Schofield, Executive Director of Alabama Wildlife Federation, will share some valuable ideas on the "Hunter Resource." Dinner at Shoney's, 6:00 p.m. Call 663-4138.

Parker near Deatsville. Presentations by **Extension Service, SCS, AFC**, and forest industry featured prescribed burning, containerized seedlings, cost share programs, and fire lane construction. Refreshments were provided by **Farm Bureau**.

Lowndes County Forest Ranger **Bill Davis** reports that wildlife habitat enhancement, multiple-use forest management, and water quality protection and improvement will be on next year's slate of programs for the **Lowndes County Forestry Planning Committee**.

Forester **Bruce Johnson** worked with 44 area citizens to develop plans approved by the State Soil and Water Conservation Committee for the improvement of Little Catoma Creek watershed in Montgomery and Bullock County. He also gave a two-hour program on forest history to Lee High School students.

Ranger **Tommy Wilson** in cooperation with the Extension Service gave a presentation to 75 FFA and Boy Scout youngsters at White's Lake.

Extension Agent **Adre Bryant** has announced a planning meeting for the **Montgomery County Forestry Planning Committee** to discuss next year's projects which will include a tour for area bankers, financiers, and forestland investors. Featured speaker will be **Dr. Bill McKee**.

The **Southwest Lee County Volunteer Fire Department** was named top VFD in the state by the Alabama Association of Volunteer Fire Departments at state-wide competition held recently in Phenix City. During this three-day event, the Southwest Lee County VFD won first place in hose lay, second in bucket brigade, and third in hose lay making them the overall first place winner. ♣

February 13—Montgomery County. Forest Investment Seminar for Bankers & Landowners with Dr. Bill McKee. Call Bruce Johnson, 261-5585, or Adre Bryant, 281-1292.

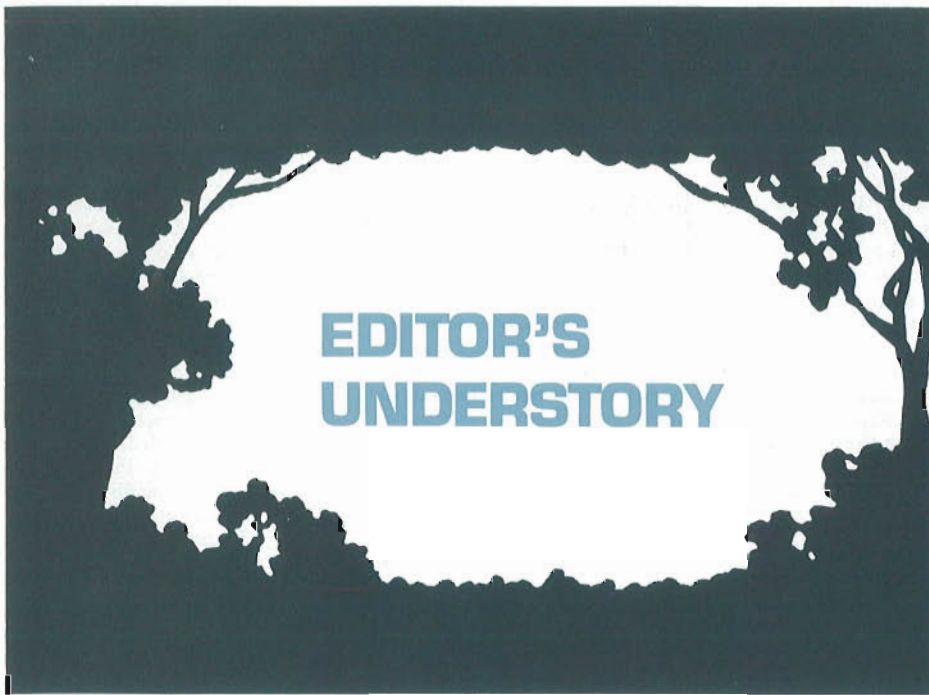
2:00 p.m. Bankers' Seminar
6:30 p.m. Landowners' Dinner & Seminar

February 16-22—Alabama. Arbor Week—Plant A Tree.

February 18—Houston County 7:00 p.m. County Forestry Assoc. Call Mrs. Lucia Driggers, 792-5784, or Tracey Lawrence, 677-5454.

February 18-20—Athens, Georgia. Timber & The Federal Income Tax PLUS Estate Planning & Forestry. Call Dr. Hampton, (404) 542-3063. ♣

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



by CYNTHIA K. PAGE, Editor

I FIRST MET THURSTON NIX two years ago on a Wednesday afternoon. He always spends Wednesdays on his farm.

It was the middle of summer, but somehow the tranquil pastoral setting on his forty acres made the 90 degree temperature seem much cooler than it must have been. Ducks floated across a glassy-surfaced pond. The rolling pasture just beyond the pond was crowned at the summit with beautiful pines. Cows lazily grazed on the green grass while bluebirds fluttered into the safety of houses built especially for them. An occasional moo, quack, bobwhite, bird songs, and the gentle rustle of the wind

all seemed to blend harmoniously under the white puffy clouds in this rural Marion County setting.

"How breathtakingly beautiful!" I thought, and wondered how much work must have gone into laying out such an engineered scheme.

Standing before me and dressed in dark blue work clothes, Thurston Nix seemed to just fit into the scenery himself. I had come to ask his assistance in preparing a slide-tape presentation for other landowners to see. It was a rewarding day—the slide material was superb, and so was the end product one month later.

I had a unique honor that day, though. I presented Thurston Nix with his TREASURE Forest certificate! All the Alabama Forestry Planning Committee county representatives were there along with Les Walters from the *Hamilton Progress*.

Two years later, the setting is even lovelier. For this man who only devotes Wednesdays and weekends to his forest management, the fruit of his labor is apparent. His love for his forest is shared by his wife of 36 years, Ava Nell, and his son Gary.

"Before I met Tony Avery (Alabama Forestry Commission) and started working on TREASURE Forest, I never had much encouragement or any recognition for anything," says Nix. "I know it's small, but it's what I like to do. I can come up here and watch the bluebirds work and just forget about everything else. I really *appreciate* what the program has meant to me. I don't know, just to look at it and say it's *mine*, that's important to me, too."

Mr. Nix, the Alabama Forestry Planning Committee is glad to hear what the program means to *you*, but *you* also mean something to this *program*. *You* make a difference in the future of our forest resource. *You* give of yourself and your land. *You*, as a TREASURE Forest landowner, deserve the recognition that you have received.

The benefits that your TREASURE provides go beyond what the eye can see on your property. The Timber, Recreation, Environment, Aesthetics, for a Sustained, Useable REsource are all there. The wildlife, the clean water, the fresh air—they're there, too. There are also jobs, wood products, tax dollars to the state, along with numerous other benefits.

I'd say that's not a bad accomplishment for a Wednesday's work. ♣





The Hard Facts of Hardwood Management

by TOM CAMBRE, Hardwood Specialist, Alabama Forestry Commission

WE CONSTANTLY HEAR the statement that companies and private landowners are clearing all the hardwood and planting pines. This is a gross error in statement because the hillsides supporting hardwoods are *true* pine sites. Such areas are *best* suited for the growing of pine trees, and the hardwoods they support are of poor quality and low value to the timber grower.

Rice cannot be grown on most hillsides, nor corn in a marsh since both of these plants are site or area selective. So it is with pines and hardwoods. Pine trees will grow on hardwood sites and do very well, but as stewards of the land, we should preserve our hardwood sites for growing high value hardwood logs and as havens for wildlife.

Quality hardwoods will not grow on pine sites and should not be left on these areas unless the landowner desires this for wildlife or for sources of fuelwood. The public should be aware of the requirements for good hardwood as well as the landowner's objectives before being critical of his methods and intentions.

Areas along creeks and branches are called Streamside Management Zones (SMZ). After a clear-cut for pine regeneration purposes, the areas are bulldozed and windrowed, but the SMZ is left for a variety of purposes. The SMZ provides runways through which wildlife can travel undisturbed as well as food, and shelter for the different species in the area. These buffers also provide a natural strip along the streams to provide clean and clear water. Finally, these areas can

be managed selectively for the growing of desirable hardwood.

Hardwood management is not a "cut and dried" set of rules pertaining to all species. Rather, it is a group of proven techniques that sometimes are not understood by many of our landowners and land managers as well as by the general public. In hardwood stands on true hardwood sites our first impression of a clear-cut is that this is destructive; actually, it is a *sound* management principle.

If a hardwood area has been high-graded (the best timber cut) and then left alone until another harvest would be feasible, the results would be predictable. The hardwood stand would be dominated by cull trees and generally undesirable shade-tolerant species developing within the shade of the culls. Of course, these stands are occupying valuable, highly fertile lands and producing little value. They should be replaced by vigorous young stands of desired species trees.

To accomplish this change in hardwood management, a clear-cut (commonly known as a regeneration cut) is performed. The steps necessary for obtaining a new stand of desirable hardwood regeneration follow:

1. Survey the understory plants, seedbed condition, and density and composition of the overstory;
2. Understory trees (known as advanced regeneration) should be inventoried because they will form the bulk of the new stand;
3. Vines in the understory should be noted for these are particularly damaging to small trees;
4. Presence of overstory trees that reproduce primarily from seed such

as yellow poplar and sycamore should be noted since the new stand will often contain more of these trees than presently exist;

5. If the landowner/land manager is depending on seed instead of advanced regeneration and sprouting, the time of the cutting is of great importance.

Poplar, sweetgum, and sycamore are examples of the importance of timing in the overstory cutting. The cutting of these species must be done between November and February because the current year's seed crop is mature and is either on the ground or will be scattered over the ground when the trees are cut. Reproduction from seed must be established during the first year of cutting because after this time competing vegetation occurs and greatly reduces the chances of establishing seedlings.

Remember, a clear-cut should not be condemned without knowing the management goals. This may be a hardwood regeneration cut providing a new and *better* stand for the future—new and more nutritious food for wildlife and products for our children and grandchildren. ♣

Plan Your Management Around Control Burning

by JAMES M. EASLEY, Consulting Forester

FIRE MAY WELL BE the most important single factor in determining the type of life forms—animals and vegetable—that will thrive in many areas (Stoddard 1930:402). Even though fire is an ancient resource, our modern mind seems to reject any dates beyond the Indian South (700-1300 AD). These early users of fire created our southern landscape we know to have existed before the European travelers and explorers. The habit of burning, like that of eating corn, has proved durable. Fire, like agriculture to which it was closely allied, reshaped much of the South in line with the needs of its human masters.

During the late 1920's and early 1930's, man gradually developed a fear of fire, lost his respect for it, and refused to benefit from the simple, primitive use of it. The 1960's through the 1980's has seen the rebirth of using fire as a management tool.

Depending upon your objective, controlled or prescribed fire is one of the least expensive management tools in use today. Let's take a species of wildlife, say the bobwhite quail, and try to point out why this little fellow needs prescribed burning. We will start following the quail at the end of the hunting season. March in Alabama and many other Southeastern states indicates the start of prescribed burning season. Most quail shooting plantations follow these procedures.

Attempts are made to set aside areas within all burning units to be excluded of fire. Studies have shown that quail prefer to nest in vegetation that has had one growing season without fire. In other words, a two-year rough. We call these areas "ring-arounds." These need to be at least one-half to one acre in size. If possible these ring-arounds should be scattered throughout the area to be

burned. After establishing the ring-arounds, recut fire lanes around the entire burn area. This is to insure control of the fire within the designated burn area.

Burning mixtures of three parts diesel fuel and two parts gasoline seem to work best. This ratio is safe to use in that it is not too volatile but will stay lit. The extra oil helps to keep the drip fire going until the litter can be ignited. After contacting the Alabama Forestry Commission for permission to burn, you're ready to fill your drip torches and start to lay out fire.

Burning conditions are usually very favorable during the late winter and early spring. Excessive wind speeds with very dry litter can cause more damage than good, so one needs to use common sense when starting a controlled burn. First-time burners tend to under burn more often than over burn. This is best for confidence building. When in doubt, burn against the wind (backfire) instead of with it. If your vegetative cover is moderately light and your older pine trees are 35 to 75 feet tall, then consider burning with the wind (head-fire).

The main way fire helps quail is that it causes more quail food plants to sprout when spring arrives. Most legumes (plants with bean-like pods) require some sort of scarifier, and fire acts as the scarifier agent by aiding in the breakdown of the hard seed coat.

Insects are more abundant on vegetation that is burned the previous spring. These insects are very important to the young quail during their first 3-5 weeks of life. Turkey poults also need the high protein diet furnished by insects. The major considerations for young chicks are abundance and availability of these insects, and fire helps to increase both. Insect abundance can also be increased by harrowing and mowing. These methods

of keeping vegetation in the early, tender stages need to be carried out when there is not a great risk of damaging the species of wildlife you are trying to increase. For instance, the peak nesting time for quail in most of the South ranges from late May to mid- to late-August. During this time, you would not want to disk or mow vast areas for fear of disturbing a nest of small birds. However, careful placement of mowed or disked strips can be of great value.

In most cases good management for one species of wildlife is good management for others. Today's landowners are moving toward a more multiple-use concept of management. In doing so, they manage for timber as well as wildlife. Controlled burning is a good management tool for both and can be advantageous.

One exception can be made when the manager needs to use fire to help reduce undesirable vegetation in pine stands. The first of May is one of the best months to use fire for hardwood control. At this time of year, the young hardwoods have used up most of their stored plant growth nutrients in putting on new leaves. These leaves are still tender and have not put on the protective cutin layer. Burning at this time can increase your hardwood kill, but it is also one of the peak nesting months of the wild turkey.

Now is when the trade-offs have to come in. Do I want to kill more hardwoods or more turkeys? Burns after the nesting season of the turkey will put you into the nesting season of the quail. It goes on and on, but the delirium is only temporary. Usually the burn is in a limited area, and by the time the pine stands get to a height to be burned, the nesting habitat in these areas is limited and not as desirable.

With a fairly wide use of fire here in the

Southeast, we still need to educate more people to the use and misuse of fire as a resource for timber and wildlife management. So, go ahead and get your forester and wildlife friends together and ask their help in starting to use fire in *your* management. With good communication channels between the two professionals in their fields and you, a good compromise can be distinguished from a bad one. ♣



Avoiding or postponing reforestation following harvesting can be costly to the forest landowner.

CYPRESS—A Tree to Consider

by TOM CAMBRE, Hardwood Specialist, Alabama Forestry Commission

CYPRESS IS A TREE that many people have overlooked, while many others have forgotten its value. Cypress has a good resistance to wear, holds paint well, and is effective for the development of handicraft products. The nailing ability of this wood is excellent and the knots contained within the boards are usually tight and do not fall out during the manufacturing process. As to the ability of the lumber to be bent or formed, it is 70% to 80% better than pine. Old growth or virgin cypress was very resistant to rot, although second growth trees do not possess this quality. Because most of our second growth cypress is sapwood and not heartwood, it is comparable to pine when exposed to the elements in relation to decay and rot.

Planting can be accomplished very easily in beaver pond areas by simply lowering the water level to where the seedling is placed and by not allowing the existing water to cover over one-third of the seedling. Remove

any existing competition around the tree and any overtopping competition. Cypress must receive overhead sunlight in order to achieve a normal rate of growth. Planting of cypress stands in many ways is much easier than relying on natural regeneration. In natural regeneration, even though cypress produces some seeds each year, good crops of seed are produced only every three to five years. Then Nature's optimum conditions have to follow as mentioned below.

First the seeds fall from the tree, sink to the bottom of the pond, and remain until the hard outer covering or seedcoat is softened to permit germination. This usually takes three months or more. After this is accomplished the water has to be removed through drought or draining, and a wet muck is left providing a good seedbed. Once the seedling is established, it grows rapidly and its moisture requirements decrease. The area must then be free of flooding since newly germinated

seedlings will usually die after a few days from being submerged while older seedlings can survive periodic flooding. After these steps are completed and the trees are growing, the water around them keeps any competing vegetation from coming up. These conditions occur in Nature about once every thirty years without man's intervention.

Cypress grows in a wide range of soils and temperatures. Fine sandy loams, well drained, with an abundance of moisture are best. Cypress prunes itself readily but also must have overhead light for growth to be normal. Plant cypress on an 8' x 8' spacing, control all competitive vegetation, thin young stands at 15 to 20 years and manage the stand much like loblolly pine on successive thinnings.

The many benefits received from cypress include food and cover for wildlife, scenic beauty, timber production, and various novelty items. These trees are a valuable asset to any landowner.

Other suggested readings on cypress can be obtained from the U.S.D.A. Forest Service, Southeastern Area, 1720 Peachtree Road, N.W., Atlanta, Georgia 30367. ♣



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PLEASE Don't Let Them Die

Revised from an article which appeared in *Texas Forest Service News*, Vol. 62, Spring, 1983. Edited for this magazine's readers by Bill Padgett, Chief, Forest Tree Nurseries, Alabama Forestry Commission.

DON'T PLANT PINE SEEDLINGS on marginal sites in dry weather. That seemingly simple advice sounds like common sense, but the application in the field is a lot more complicated than that.

Rainfall is critical—the critical factors are when the rain occurs and how well it is retained in the soil. Different types of soil retain moisture in differing rates, ranging from relative impervious to highly permeable soils (clay, sand, loam and gravel). The rainfall which is available during the growing season from March to November is more of a critical factor than the total amount during the year. Pine seedlings just cannot survive hot summers without water, and supplemental watering is not feasible.

Although available soil moisture and growth characteristics of each species appear to be the most significant factors in predicting the success of a pine plantation, other factors also have been considered. Proper planting techniques and seedling care also are important to insure that viable seedlings are planted. If seedlings are allowed to freeze, dry out, or to sustain root damage, then the seedlings may

already be dead when they are planted. Since commercial contract vendors plant the majority of the tree seedlings, their planting procedures are crucial to the successful establishment of a pine plantation.

Fire can completely wipe out a new pine plantation under ten years of age. Although drought increases the incidence of forest fires, wind and seasonal variation (dead vegetation during the dormant season) are equally important. The primary causes of fire are not natural events, such as lightning, but are incidents caused by people burning debris, clearing land or deliberately setting fires.

A variety of forest pests can kill pine seedlings and may devastate individual tracts. Reproduction weevils, rabbits, deer and rats may feed on pine seedlings if other forage is not available. The most significant pest, in terms of statewide losses, is the southern pine beetle, but this insect does not attack the seedlings. Fusiform rust is a major disease of loblolly and slash and can cause heavy losses in young plantations. However, with the advent of rust resistant seedlings, the rust

problem can be somewhat reduced especially on those sites where the rust is the most severe.

The desirable spacing of seedlings varies with species and site index, but allowing more space does not necessarily increase the chances of survival. Spacing is usually selected on the basis of maximum volume production per acre within the capacity of the site while still providing access for fire control.

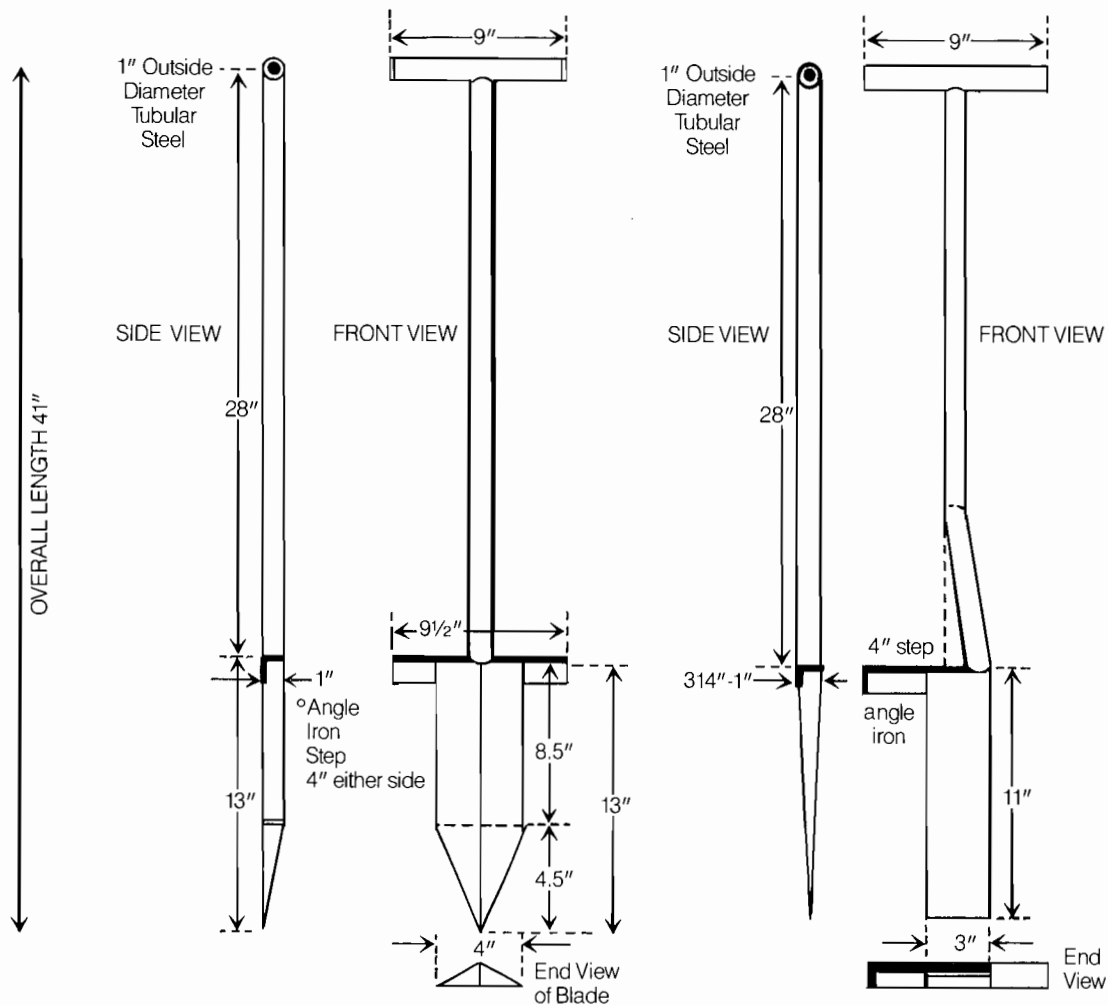
Planting trees on marginal sites increases the risk since better sites, by definition, have a better potential. Even though trees may be planted on a tract with site index of 50 or 60 and may survive, they will not produce the growth of trees on better sites. Topographic features, such as slope, are less of a factor in the South than they are in the western states. Bottomland sites which periodically flood are marginal, and it is preferable to plant hardwood trees on these sites.

The most difficult factor to quantify is the quality of the seedling itself. Industry, governmental agencies and universities are studying various traits and growth patterns which are inherited and can be genetically selected. Seed from these trees is used to produce improved seedlings. Much of the planting that is being done in the South is using seedlings that come from improved seed. This should increase in the future as these seedlings become more available to the landowner.

Available soil moisture is still the most important factor affecting the survival of pine tree seedlings. Predicting in December what the weather will be in July isn't feasible, so forest landowners simply should make the effort to plant as early in the season as possible. Proper consideration of many factors which can influence the first year's growth can greatly increase the probability of success. Landowners cannot do anything about the weather, but many other problems can be eliminated with proper care. ♠



PLANTING BAR SPECIFICATIONS



KBC BAR – works best in Rocky or hard-to-penetrate soils. The pointed shape of the blade penetrates the soil cleanly and easily. Good for planting large seedlings. Overall length is 42".

OST BAR – works best in non-rocky, easy to penetrate soils. Overall length is 40".

Make It Yourself

FOR THE AVERAGE Alabama landowner, a planting bar is a "must" tool. Sometimes called a "dibble," this can be useful in planting trees quickly and efficiently, especially for small or hard-to-get-to acreage. Many kinds of planting bars are available and

may be obtained through a variety of sources. For the innovative landowner, however, this tool is relatively simple to make.

All of the materials and specifications are contained in the diagram below. A welding torch is essential, as well as the proper cutting

instrument for the pipe and angle iron steps. If you lack the proper tools, most machine shops or trade schools can make a planting bar for you if you present them with this sketch.

Happy Planting!

YOU Ought To Be In Pictures!



TREASURE FOREST LANDOWNERS are special people. Others learn from their exemplary stewardship. Take the TREASURE Forest sign, for example. Many people see those signs and follow up on their curiosity about what it means. Take those TREASURE Forest caps, too. How many times have landowners been stopped and asked to explain the significance of the logo? What we want to do is show you, our landowners, out publicizing the TREASURE Forest Program! Send us those pictures of you wearing your cap in a place of interest where others can see you. Maybe it's at a ball game, the local coffee shop, a space shuttle launch—anywhere that you have an audience! We can use any 35mm photograph (color or black and white) or a 35mm color slide. Polaroid photos will not reproduce well. Send these photos to Cynthia Page, Editor, *Alabama's TREASURED Forests*, 513 Madison Avenue, Montgomery, AL 36130.

TREASURE SEEKERS • TREASURE FINDERS TREASURE KEEPERS

This column will be devoted to keeping you updated on current participants in the TREASURE Forest Program. TREASURE Seekers have signed creeds, TREASURE Finders have recently been certified, and TREASURE Keepers have been recertified.

TREASURE SEEKERS

Creed Signers
(Between 7-11-85 and 9-12-85)

SEEKERS

Key Foster, Jr. (Shelby)	Leonard T. Smith (Chambers)
Joseph McConnell, III (Sumter)	David Holley (Marengo)
Jay William Collins (Tuscaloosa)	Clement Clapp (Chilton)
Paul Sparkman (Sumter)	James Dennis (Chilton)
Mrs. E. T. Chambers (Greene)	Jim M. Wilson (Pike)
Derthia Taube (Fayette)	Mr. & Mrs. M. W. Merritt (Geneva)
Guy Traylor (Randolph)	Robert E. Smith (Escambia)
J. Keever Benefield (Randolph)	George Ward (Escambia)
L. Frank Bassett (Randolph)	Q. C. Crommelin (Elmore)
Willis Morrison (Randolph)	John Ben Lane (Elmore)
Pleasant Hill Farms (Chambers)	Charles Hightower (Montgomery)

TREASURE FINDERS

Certified TREASURE Forest Landowners
(Between 7-11-85 and 9-12-85)

FINDERS	OBJECTIVES	ACRES
John Herrod		939
Sam Murphy	1-Timber 2-Wildlife	21,275
Patrick Henry Jr. College	1-Timber 2-Aesthetics	106
Arthur Wiggins	1-Timber 2-Wildlife	85
Helen Williams	1-Timber 2-Wildlife	313
St. Bernard College	1-Aesthetics 2-Wildlife	684
Mrs. John Dee Garrick	1-Timber 2-Wildlife	163
Sylvia Russell	1-Timber 2-Wildlife	1,850
Rutherford Farms	1-Recreation 2-Aesthetics	3,600
Paul Ross	1-Timber 2-Wildlife	114
Burr Whorton	1-Timber 2-Wildlife	240
Hoyt Montgomery	1-Timber 2-Wildlife	242
Harvell Montgomery	1-Wildlife 2-Timber	292
John Foster, Sr.	1-Timber 2-Wildlife	978
David Mellown	1-Timber 2-Wildlife	200
Jack Langley	1-Timber 2-Wildlife	1,100
Charles Hendrick - Holmes	1-Recreation 2-Wildlife	268
Loyd Ferguson	1-Wildlife 2-Recreation	177
Dr. M. L. Crawford	1-Timber 2-Wildlife	6,351
Clement Clapp	1-Timber 2-Wildlife	488
J. R. Spinks	1-Timber 2-Environment	700
Jimmy King	1-Environment 2-Aesthetics	243
Doug Watkins	1-Timber 2-Wildlife	266
James & Dan Pridgen	1-Timber 2-Wildlife	236

TREASURE KEEPERS

Re-certified TREASURE Forest Landowners
(Between 7-11-85 and 9-12-85)

Manny Hall	1-Timber 2-Wildlife	500
Frank "Butch" Ellis, Jr.	1-Timber 2-Wildlife	200
Maubila BSA Reservation	1-Recreation 2-Wildlife	680
Wayne Chancey	1-Timber 2-Wildlife	5,106
John Braswell	1-Timber 2-Wildlife	4,853
Joseph Propst, II	1-Timber 2-Wildlife	320
Edgar Lee Fannin	1-Timber 2-Wildlife	460
J. Gary Fortenberry	1-Wildlife 2-Environment	539
Dr. Jon Owings	1-Timber 2-Recreation	272
Lorraine Gowder	1-Timber 2-Wildlife	636
Young Smith	1-Timber 2-Wildlife	136
Dr. Robert Parker	1-Timber 2-Wildlife	520
Raymond Newman	1-Wildlife 2-Timber	4,500

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MEMORIAL

This page is dedicated to the memory and life's work of three people who meant much to the forest resource community. Their accomplishments will stand for decades as a tribute to their dedication to improving our earth. The way in which they touched other lives will stand forever.



Larry McClennan
Staff Forester, Brewton
Died August 3, 1985



Bruce Owens
TREASURE Forest Landowner, Dallas County
Died November 20, 1985



Floyd Clanton
Forest Ranger, Retired, Chambers County
Died November 14, 1985

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careful.
All
the
time.



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