

Alabama's **TREASURED** Forests



SUMMER ISSUE 1984

STATE FORESTER'S MESSAGE

by C.W. MOODY



Much hullabaloo is being made this year about Smokey Bear's 40th birthday. You will probably see and hear about Smokey's birthday, August 9, several times during the next few months. Smokey is credited with a major role in preventing wildfires which has encouraged more productive regeneration of our Southern forests. Let's help to keep Smokey's movement alive and prevent as many wildfires as possible, both from carelessness and arson!

Our forests today are faced with another "fire" related problem -- the use of beneficial or, as foresters would say, "prescribed" fire. These fires are prescribed by foresters for specific purposes which will enhance our forest resource. Being one of the most cost effective tools in the forester's bag of tricks, it is used to achieve natural regeneration, to improve wildlife habitat, to reduce undesirable species competition, and even to reduce the threat of wildfire!

We foresters have been afraid to say too much about this subject because we feared that people might become confused or consider us inconsistent in our approach to the subject of forest fires. However, most people can understand the difference between using fire in a prescribed manner and allowing it to run wild and burn without regard to the values present. A good correlation would be a doctor's precaution in prescribing drugs. The *unrestricted* use of drugs in society today has created severe problems, but when properly prescribed has been beneficial in treating illnesses.

Let's not be confused as we reflect on Smokey's message and give him all the credit that he is due. All fire is *not* bad. We should be strongly aware of the need for foresters to prescribe fire in the forest which, under specific conditions, will benefit the resource.

If the above is unclear, or if you have a differing viewpoint, please contact your nearest forester or write to me in care of **Alabama's TREASURED Forests**.

Sincerely,

A handwritten signature in black ink, appearing to read "C.W. Moody". The signature is written in a cursive, flowing style with a long, sweeping tail on the final letter.

Alabama's TREASURED Forests

Volume III

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Number 3

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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: Alabama's youth are discovering the TREASURES in our state's forestland. See this month's spotlight on Barry Hughes, Alabama's first Junior TREASURE Forest.

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“Junior” Generally Means “Second” But ... Barry Hughes has a **FIRST!**

by CYNTHIA K. PAGE, Editor

Almost twelve years ago in a rural community in Tuscaloosa County, a six-year-old boy took a shovel and dug a hole in the ground just like most six-year-old boys would do. With blue eyes sparkling, he probably stepped back to survey his successful accomplishment, again typical of most children his age. However, that one small hole into which a small pine seedling was placed inspired Barry Hughes to continue digging and planting so that now 210 acres of his parents' farm nurture young pines!

Barry doesn't just plant trees, though, he manages them. In fact, he manages so well that he has been certified as Alabama's first Junior TREASURE Forest!



Barry Hughes is a *typical* teenager with an *atypical* TREASURE - Alabama's First Junior TREASURE Forest.

Something in His System

Barry's parents, Floyd and Faye, say that forestry just seemed to be in Barry's system from the time he was old enough to express himself. Children often disclose their inner emotions in their first crude drawings. Mrs. Hughes proudly produced several rough sketches by a six-year-old Barry which showed site preparation and planting!

As Barry progressed in school, he participated in 4-H, Future Farmers of America (FFA), and athletics, just like most boys who grow up in rural communities. Again, though, his ambition pushed him toward excellence, and his forestry projects as well as other endeavors have placed many trophies and plaques on the fireplace mantel.

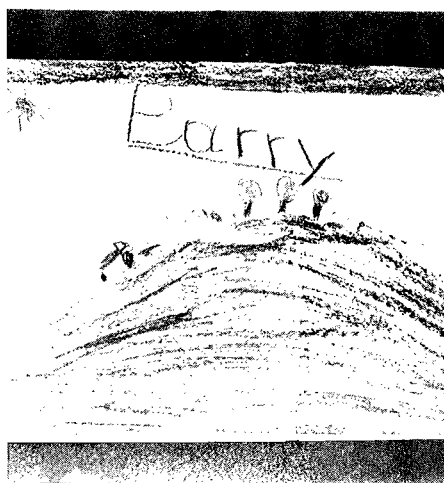
Even though his primary objective is timber management, Barry has considered all of the other uses which are compatible. Close to 45,000 pine seedlings have been planted since that first one 12 years ago. In addition, hardwoods have been eliminated either by injection or by cutting them for firewood. Fire lanes wind around his timberland and land lines have been clearly marked.

While the trees which Barry has planted himself are still too young to recognize any revenue, he has made some money by thinning existing stands on the property. Also, he has cut more than 800 fence posts for one of his projects and again to salvage something from an ice-damaged area. Explaining the difficulty involved with that operation, Barry demonstrated his homemade debarker.

Barry's father suppressed a chuckle and added that he had also tried a hand at growing Christmas trees. "Sericea was a bad enough problem, but then tip moth hit us," he explained, "and we had to replant close to 1000! Fay and the kids did manage to take a truckload to town and sold about \$75 worth the first day, but we finally had to just plow them up and set out loblolly."

Wildlife and Recreation

Just like most young men, Barry loves wildlife and just knocking around the woods. Both game and nongame species are given consideration. Quail feed on planted strips of bicolor, while hardwood areas provide food and cover for turkey and squirrel. Additionally, some corn is always left during harvest to help sustain the wildlife. A night time



At age 6, Barry already had "forestry" in his system.

prescribed burn was conducted not only to increase browse for wildlife, but also to reduce the risk of wildfire. Purple martin houses are also placed at strategic points on the property along with gourds which are used as shelter for other birds.

A brief distance down the road from the house, a three-acre lake fits right in with the natural beauty of the hardwood bottom. Constructed in 1974, it is stocked with bream, bass, and some catfish. Family and friends alike enjoy this tranquil setting for picnics, camping, and just plain peaceful relaxation.

Environmental Quality

Barry is not satisfied with just seeing what can be produced on his forestland. He wants to do it in such a way as not to harm the environment. Leading down to the lake, the road has water diversion bars to prevent washing and the formation of gullies.

Other roads are sown in vetch and are often closed during wet weather. Barry even constructed his own culvert and cut a drainage ditch in one of his young pine plantations.

Additionally, trees and vegetation are left intact along streambanks to protect water quality.

Support from Several Sources

Barry's first and primary support came from his family. Besides his parents, he has an older brother (Bryan) and a younger sister (Robin). All three have been normal siblings, and the rivalry among them has pushed each to high achievements. Perhaps the fireplace needs two mantels!

Barry's FFA teacher at Northside High School, Gilbert McCarley, gave him extensive instruction in the forestry field. Wayne Ford (Alabama Cooperative Extension Service) and Philip Dubois (Alabama Forestry Commission) also provided much technical expertise. However, the self-determination inside young Barry Hughes pushed him toward becoming Alabama's first Junior TREASURE Forest recipient.

To qualify for the Junior TREASURE Forest Award, a youngster may manage only a portion of the property for multiple use as opposed to the entire land holding which is required for the adult participants. Land managed by a group or club such as 4-H, FFA, Boy Scouts, or Girl Scouts may also qualify.

Philip DuBois pointed out that in Hughes' case, "Word came down to be more lenient in inspecting Barry's property for a Junior TREASURE Forest Award." He laughed, "It came a little late though; we'd already inspected it just like we would have an adult's forestland! That's quite an achievement for Barry!"

Typical Only for a Junior TREASURE

Barry admits that managing his 210 acres which are scattered over four different plots takes up most of his time. Like most young men, however, he has a steady girl, likes romping through the woods on his three wheeler, and kicks around in his red four-wheel-drive pickup truck. He says he'd like maybe to be able to cut some timber in the winter so he could farm in the summer. He even gave some thought to taking a welding course so he could do something in the "off" season.

Barry's rewards have been many. Being Alabama's first Junior TREASURE Forest recipient "made me feel like I had done something nobody else ever did," he said. Besides that, his land was used as a demonstration site for a forestry field day last fall. Imagine how he felt showing older men the principles of forest management!

Barry's achievements also captured a W. Kelly Mosely Environmental Award. He not only received a plaque, but a check for \$500.

Forestry isn't all this young man thinks about. He planted 20 acres of no-till soybeans in 1980. This added to his father's no-till operation which began in 1970 as one of the first such practices in the state!

Just like any other 18-year old? Be your own judge!

EDITOR'S UNDERSTORY

by CYNTHIA K. PAGE, Editor

A recent comic strip prompted my approach to this article. Two youngsters lazily stared up at the clouds, and one remarked that he simply saw a dog. The other then proceeded into an eloquent and lengthy oration with a vivid description of a stampeding herd of Appaloosa.

After a casual drive, I found myself daydreaming as I reached the familiar terrain where I had spent three years teaching. I knew that Barry Hughes had been a student at a nearby grammar school during that time. I wondered if he would be like most teenagers.

The modest brick home had a lived-in appearance and even reflected the personality of those I would find inside. It should have, for they had all had a hand in its construction.

Pulling into the driveway, at first glance all I saw was a boy, blonde, and casually dressed in jeans and a light blue shirt which captured the glint in his pale blue eyes. Yes, just a boy, quiet, reserved, and polite. Customary handshakes followed by a stream of "Yes maam's" to all of my questions revealed that he had been given a proper upbringing.

Barry's parents, Floyd and Faye, in their 40's, are a very attractive pair, neither showing a hint of their age. Obviously they had raised their three children — Bryan, Barry, and Robin — with much care, issuing love at every opportunity and administering discipline when the occasion warranted such action. This was evident in the exchanges between father and son during our visit. No sooner did Mr. Hughes utter a request than Barry proceeded to carry out his father's bidding.

Following strawberry shortcake and soft drinks, off we went to tour the

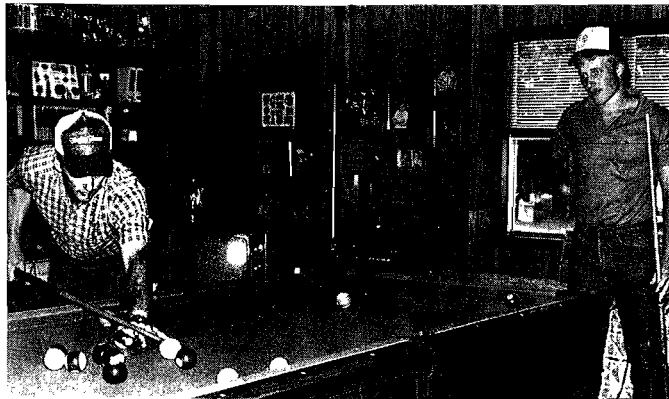
farm. Having the opportunity to be alone with Barry in his own territory (a four-wheel-drive pick-up), I soon began to see a transformation. Some of the drapery of shyness slipped away, even though he still remained basically quiet, and he began to disclose some of himself by answering my questions about his accomplishments.

He very modestly spoke of his accomplishments, as if they were just casual chores. Planting trees, managing timber, cutting fence posts, improving the wildlife habitat, all just sounded like what everyone does day in and day out. He truly doesn't view himself as a model for others. Then all of a sudden he shifted to the other Barry -- the fun-loving, competitive person who had won a tractor pull contest with his four-wheel-drive.

His whole life is centered around work, an obvious conclusion once you had shaken his hand, for calluses always tell the story. After school and on weekends his time is spent improving the woodland and ultimately himself. A strong work ethic has been implanted in this young man. He is proud of all he has done, but not boastful.

To a youngster, from age six to eighteen is a whole lifetime. To an adult, twelve short years is no time to have transformed a farm into an agricultural/woodland operation.

Yes, I remember thinking as he swung around to get out of the red pick-up, "He's just a boy," but as I left I finished the phrase, "doing a man's job!"



Barry occasionally finds time for some leisure. He and his father shoot pool (left) in the game room. His pick-up truck (bottom) is his second "home."



MANAGEMENT MEANS MORE!

Timber - Wildlife - Aesthetics - Recreation

by DON BURDETTE, Information and Education Specialist, Alabama Forestry Commission

The right to own land is among the most valued rights of all Americans. Over three-quarters of Alabama's forestland is owned in tracts of only a few acres up to several thousand acres by some 200,000 individuals. These are the lands that provide wood for housing, furniture, books, and many other products we use and enjoy every day. These same lands can also provide natural beauty; serve as homes for wildlife; conserve water; check erosion; and provide hunting, fishing, camping, and other recreational activities.

Management Means Greater Returns

Many landowners, however, don't benefit as much as they might because they are not managing their woodland well. Generally, their lands grow less than half of the timber they could. These same forests produce less wildlife and few opportunities for recreation. They may be suffering from neglect and generations of past abuse.

Sometimes owners forget that forests are alive! If man doesn't manage the forest, as he would farm crops, nature will. Chances are that the trees and brush found naturally on the land would be far less attractive than what you could have with a little management. Trees need attention to keep them healthy, attractive, and valuable.

Many landowners don't manage forests because they are afraid — afraid that managing their forestland is too expensive or that they'll do something to harm the attractiveness of their stands. They may feel that taking better care of their woodlands will require too much of their time or require skills they lack.

Ownership of land not only grants a person the privilege of pursuing personal goals, but it also carries the responsibility of good stewardship. As more Americans make more demands on our forests for products and other

uses, good management of this resource becomes more important — and more attractive -- for every landowner.

Steps to Productive Woodlands

The first major task that you as the landowner must take on is to determine your objectives for owning the land. Would you like more periodic income, more wildlife, a more constant supply of firewood, outdoor recreation, protection of soil from erosion, a clean water supply, a place for cattle to graze in the shade, or a combination of these other uses? You do not have to make a final decision at first, but the sooner you know what you want, the sooner a forester can devise a plan that will improve your forest for these goals.

Your next step is to contact a forester to secure his professional advice and assistance in developing your

woodlands. In most cases he will want to start off by walking over your property to familiarize himself with your woodlands and to learn more about your desires, needs, and abilities concerning the land. Locating and marking boundary lines and corners in advance would be helpful.

Try to be open-minded about suggestions he may make that seem to contradict your first set of objectives. The forester has training and experience that has taught him to think of some things that may not have occurred to you. After all, it is his job to consider the myriad of variables that will affect the ability of your land to provide what you want. After he has explained compromises between different uses of your property, don't be surprised if your priorities are rearranged. In the end, though, you want to make sure that his forest management ideas support your most current objectives. This is also a



Forestry assistance is available from many sources - state and federal agencies, private consultants, or industry.

good time to discuss the methods of billing for services that he can provide.

The forester must then cruise your property to locate significant features of your land and to inventory the type, size, and volume of timber on your property. This information is then evaluated to determine how best to conserve and develop your forest resources to provide your goals.

The Management Plan

The result is a forest management plan. A plan will contain a map of your property showing the forestland divided into two or more management compartments which have been separated because of differences in timber type, size, or stocking. Also shown on the map are both present and proposed roads, trails, firebreaks, ponds, fields, structures, or other improvements. A schedule of recommendations lists for each compartment the present use and condition, proposed treatment, and the expected costs and returns. Some plans will contain detailed stand tables; an investment analysis; and extra reading material on game management, road construction, recreational development, and other land management information relevant to your goals.

Some of the most common forest management practices recommended include timber stand improvements, planting or otherwise renewing your forest stands, harvesting to generate income or to restore the health and vigor of stands, and protection against fire and other hazards.

Timber stand improvement (TSI) is a term used to identify various management practices aimed at improving the vigor, composition, and quality of an existing stand of timber. TSI measures include *weeding* out undesirable trees to make room for more valuable trees, *thinning* to relieve overcrowding, *pruning* the lower stems to produce knot free lumber, and *release* of vigorous young trees by removing overtopping trees.

Reforestation may be necessary to turn unproductive woodland or idle fields on all or part of your land into dynamic working forests. This is usually necessary where land is occupied by mature timber, understocked, or forested by slow growing and low quality timber. Timber can be renewed by artificial or natural means with every option having its advantages and disadvantages. You and your forester must decide on the method that is best for you in each case, taking into consideration

your financial abilities and personal preference.

One reason for harvesting trees is to make money. Because trees die from natural causes, including old age and overcrowding, removing unhealthy trees or thinning crowded stands improves the health and growth of the remaining stand. Your forester can specify how each stand should be cut in its time so that it is continually being upgraded for its intended use (sawlogs, game habitat, recreation, etc.). Also, a forester is the best person to consult for marketing assistance, drawing up a contract, logging supervision, record keeping, and reporting of income for taxation.

Protection of your forest investment from fire, uncontrolled grazing, beavers, and insects and diseases is also usually considered. Your plan may propose locations for fire lanes and contain a schedule for prescribed burning your pine stands on a rotation basis to reduce hazardous fuel buildup. Costs for fencing cattle out of certain stands during vulnerable times may be included. Your forester will probably also advise you on controlling diseases and problem populations of beavers and insects.

Each of these forest management practices not only improves timber crops but can be varied to benefit other resource values ranging from wildlife and forage to water quality and recreation. Other recommendations may be included which are specifically designed to increase your enjoyment of values other than timber from your forests.

For wildlife, your plan may designate key areas to be protected and managed as habitat for a particular species. Locations for food plots, permanent openings, and watering ponds may be proposed.

For cattle grazing, the plan may designate that the spacing between pines be kept wide and shading from hardwoods be eliminated to allow more light to reach the forest floor. Some areas close to woodlands may be designated to be managed for winter pasture.

To protect water quality and fragile soils, certain steep areas may be designated to be left relatively unmanaged. Other areas may be shown which can be managed with certain precautions. Proposed new road locations will most likely be located on the map where erosion can be minimized. Stipulations to protect the environment during logging and site preparation will also be made.

Favorite recreation areas can be made safer and more attractive by removing dead, dying, or suppressed

trees. Fire lanes or access roads can be located to provide recreational trails for walking or horseback riding.

The Work Begins!

Once the planning stage is complete, the work will still need to be done. With the guidance of your management plan, your forester and other professionals in related fields, you and your family can do a lot to improve a smaller tract yourselves. The time required depends on what needs to be done and how much you want to do yourself. Usually the work can be scheduled at your convenience. For many, it's a rewarding weekend activity.

You might do your own hand planting or seeding, take care of road and firebreak maintenance, plant game food patches, mark and harvest your own timber, paint your boundary lines, weed out undesirable trees, and even prescribe burn. (Remember, outdoor burning requires a permit!) You should try to have your forester to guide you through each new operation until you have his assurance that you are doing the job correctly. If you are an absentee landowner or can not do all of the work yourself, you might arrange for a neighbor, relative, or friend to take care of some of your management needs. A list of vendors showing which forestry practices they provide is available through your local county agent or county ranger.

Help Is Available

Foresters who can provide management planning and various degrees of technical assistance are available from several sources. Consulting foresters are independent professionals who provide technical services for a fee. Many of them offer vendor services for tree planting, timber stand improvement, and prescribed burning. They are particularly adept at handling timber sales. Absentee owners may find the consultant is very often the best source of help.

Industrial foresters are increasingly available to work with landowners who may be prospective suppliers of wood to the company who employs these foresters. They often provide free timber marking and management plans. All that many of them ask in return is to have the "right of first refusal" when you sell the timber. They particularly like to work with owners of tracts of 200 acres or larger.

A forester, employed by the State, available for each county in Alabama through your local Alabama Forestry Commission office, can spend a few days each year advising you. He can discuss your objectives with you, determine what you have on the land, provide a multiple-use management plan and advise you as you proceed. He can also assist you with prescribed burning assistance, provide inexpensive seedlings, and provide protection from wild-fires, insects and diseases.

Federal foresters can also provide valuable information and assistance in some areas through the Soil Conservation Service and Cooperative Extension Service. The soil conservationist in your county can assist you with coordinating cattle herds with timber and field management, determine if a pond is feasible on your property, and help to properly locate and construct farm roads.

Your county agent is an excellent source for information on timber and wildlife management. He can also keep you up-to-date on the most recent forestry research being conducted at forest experiment stations. Whenever possible, try to attend forestry tours and seminars offered by your county agent.

Other sources of information include the Fish and Game Division of the Department of Conservation, Alabama Forestry Association, Auburn University, and if you are fortunate enough to have one, your local county forestry association.

Financial aid for forestry practices may be available from the Agricultural Stabilization and Conservation office in your county, but funds are usually extremely limited.

The next step is up to you. You *can* have more enjoyment from your woodlands, but you must decide to do so. Any natural improvements in your stands will come much more slowly than they would with some management. Natural deterioration rather than improvement is a real possibility!

Do what you can to be a good steward of the land! ♣

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Looking For Help In All The "Right" Places

by NEIL LETSON, TREASURE Forest Coordinator

Whenever I am in a new or strange town, I'll sometimes find myself on the wrong road and unable to find my way back on course. Experience has taught me that I'd better start looking for the nearest service station where I can ask the attendant for directions back to my original route. Because of his familiarity with the local roads and landmarks, I am able to correct my error and avoid a lot of wasted time, energy and patience.

Many private non-industrial landowners are in the same boat. They know what condition they want their forest to be in, but they don't know how to get it there. Without assistance, they will lose time, energy, patience and money. If you find yourself in this situation then you might consider "pulling off the road at the nearest service station and asking for help."

Where can a person get forestry assistance in Alabama? Fortunately there are a variety of sources available regardless of where you live. The following list has been prepared to give a better idea of what's available to you.

Public

The **Alabama Department of Conservation and Natural Resources** (DCNR) is a state agency whose duties are to protect, conserve and increase the wildlife of the state and to administer all laws relating to wildlife. The DCNR also carries on a program of education and public enlightenment with respect to the wildlife and other natural resources, state parks and the monuments and historical sites of Alabama

The DCNR's Game and Fish Division provides technical assistance for wildlife management and farm pond

stocking and management as part of its overall program. Requests for technical assistance can be directed to any district or area Game and Fish personnel.

The **Alabama Department of Education, Vocational Division, Agribusiness Education**, prepares students for challenging careers on the farm in agribusinesses that support modern farmers and forestry, horticulture, food processing, and natural resources occupations. Students use knowledge gained in the classroom as a foundation for Supervised Occupational Experience Programs on farms, in local agribusinesses and in FFA activities.

The **Alabama Forestry Commission** (AFC) is a state agency whose duties are to protect, conserve and increase the timber and forest resources of Alabama and to administer all laws relating to timber and forestry. The AFC also carries on a program of public enlightenment with respect to the state's timber and forest resource.

Specific AFC county services include fireline construction, limited prescribed burning, written forest management plans, forest law enforcement and seedling applications from state nurseries. Recommendations are given in insect and disease management, timber stand improvement, planting or seeding, site preparation, timber marketing, timber harvesting, forest taxation, wood utilization, wildlife management, water and soil quality, reforestation, hardwood management, wildfire control and other forest management related practices.

The **Alabama Soil and Water Conservation Committee** carries out preventive and control measures within each county, including but not limited to engineering operations, methods of cultivation, the growing of vegetation,

changes in land use and other erosion control measures on lands owned by or controlled by the state or any of its agencies with their consent and cooperation.

In addition, this agency conducts surveys, investigations and research related to soil erosion and the preventive and control measures needed; publishes survey results; and disseminates information concerning such preventive and control measures; conducts demonstration projects; assists landowners within the district with operations on their land for conservation of soil resources under terms as prescribed to the landowner; and develops comprehensive plans for the conservation of soil resources.

The mission of the **Alabama Cooperative Extension Service (ACES)** is to extend the benefits of land-grant research to the people of the state through informal, out-of-school education. The ACES disseminates practical and useful information about multiple-use forest management, Christmas tree production and marketing, forest products marketing, forest economics, and other related topics; and provides educational opportunities through meetings, workshops, field tours, forest management demonstrations, publications and mass media. This information and education helps people to help themselves in solv-

ing their problems, taking advantage of opportunities, and achieving their highest potential.

The **Auburn University School of Agriculture, Forestry and Biological Sciences** offers students the opportunity for undergraduate or graduate studies in areas such as forest management and forest products, and jointly administers a forest engineering program with the Department of Agricultural Engineering.

The **Alabama Agricultural Experiment Station** conducts applied and basic scientific research which has a bearing, directly and indirectly, on the establishment and maintenance of permanent and effective agricultural and forest industries in the state; on development and improvement of the rural home and of rural life; on advances in agricultural and forestry technologies which contribute to the welfare of the people of the state and the nation and to improvements in the quality of our environment; and on promotion of global human welfare and world peace through such advances.

A secondary but important role is to help train agricultural and forest scientists by providing support and opportunities for research for graduate research assistants.

The **USDA—Farmers Home Ad-**

ministration (FHA) provides funds to eligible landowners and operators for establishing approved forestry practices. Improvement practices are coordinated with recommendations of the Alabama Forestry Commission, Soil Conservation Service, Alabama Cooperative Extension Service, and Agricultural Stabilization Conservation Service.

Principal and interest payments may be deferred up to three installments from the date of the note. Loans are amortized over a period of time not to exceed 40 years at a fixed rate depending upon current cost of money to the government.

The **USDA—Forest Service (FS)** is responsible for participating, both locally and nationally, in designating land use priorities; formulating programs that carry out broad management objectives; and establishing a pattern of policies and cooperative forestry programs with the states to assure the optimum benefits of forest resources for present and future generations.

Activities cover three major areas: (1) management, protection, and use of the 188 million acre National Forest System for a sustained flow of economic and social benefits; (2) cooperation with State Foresters, private forest and woodland owners, wood processors, and private and public agencies. Such



An Alabama Forestry Commission County office provides assistance relating to all forestry activities.

cooperation is designed to focus scientific management and utilization on forest resources to improve the quality and increase the quantity of goods and services produced from forest lands; and (3) research in forestry and forest products that supports National Forest management and cooperative forestry programs, plus management of the nation's forests and rangelands in general.

The **USDA—Soil Conservation Service (SCS)** provides technical assistance to landowners in the management of their soil, water and related resources. Help is provided to landowners through conservation plans which include recommendations on managing their soil, water, forests, wildlife and other resources.

The basis of the conservation plan is the soil survey. Soil surveys and interpretations help landowners decide which land use is best for each soil type and gives them the productivity ratings of the soils for producing timber, crops or wildlife. Site index information is valuable for forest landowners who must make management decisions based on the productivity of the land. Soil interpretations also give ratings for management problems such as erosion hazards, equipment limitations and seedling mortality.

The **USDA—Agricultural Stabilization and Conservation Service (ASCS)** offers cost-share assistance to landowners to carry out needed conservation measures through the Agricultural Conservation Program (ACP) and the Forestry Incentives Program (FIP) through annual appropriations provided by Congress.

The programs of the ASCS are administered by the local county ASC committees. The county committees work closely with the Alabama Forestry Commission, Soil Conservation Service, Alabama Cooperative Extension Service, consulting foresters and others in providing forestry assistance to landowners.

The **Tennessee Valley Authority (TVA)** is a regional resource development agency with responsibilities within portions of the seven states that make up the Tennessee River drainage basin. The Division of Land and Forest Resources is responsible for ensuring multidisciplinary land use planning on TVA lands and directs the management of TVA's dam reservations and reservoir lands. The division also works directly with public, professional and commercial forestry organizations to identify current forestry needs and develop solu-

tions, technical information, and programs to help meet these needs. Assistance is provided to forest industry firms to make the harvesting and processing of their products more efficient and environmentally sound, and information on natural and human resources is provided to evaluate the suitability for industrial locations of expansions. The division works with public and private foresters to increase their effectiveness in forest resource analysis and planning.

Private

Consulting foresters offer personalized in-depth forestry services which other organizations are unable to provide. These professional services are provided to the forest landowner client for a fee and includes stand analysis, valuation and marketing. Consulting foresters are technically trained. In Alabama, they must meet certain standards and be registered as required by state law. Many consulting foresters are members of the Association of Consulting Foresters. This is a professional organization which was founded in 1949 to promote and maintain professional standards.

Many forest industry firms offer **Landowner Assistance Programs (LAP)** to private non-industrial forest landowners; however, these programs vary considerably from company to company. Some corporations verbally request an opportunity to purchase any forest products sold from the land. Others ask for a formal agreement, often called "first right of refusal." This first right of refusal may vary in duration and specific provisions may differ. Generally, under first right of refusal, the landowner is contractually obligated to sell his timber to the corporation, provided the corporation is able to match the highest stumpage price the landowner has been offered for his timber from an independent third party when the landowner decides to sell. Some industries offer forestry assistance with no obligation to the landowner.

Contacting Forestry Assistance

Once you have identified the type of forestry assistance you want, contacting can be as simple as making a phone call. Each of the public agencies listed in this article have offices in your county or general area. They can be found by looking in your local phone directory. Private assistance can also be found in

the phone book by looking in the yellow pages under "Consulting Foresters." Forest industries may be more difficult to find but a good starting point is in the yellow pages under "Paper Manufacturers or Paper Products." If you have trouble, contact your local Alabama Forestry Commission office.

In addition to the phone book, keep an eye open for local newspapers with a forestry tabloid. Many private sources of forestry assistance will advertise their service in these issues.

Finally, listen to friends who have recently received forestry help. They can tell you of their experience, both good and bad. Always keep an open mind and ask questions.

Managing your forest in today's world requires constant attention and the application of the latest management techniques. Don't deny yourself or your family the true value of your forest. Make sure you utilize all the forestry assistance available. ♣

References

- Alabama Forestry Planning Committee. 1983. "Forestry Assistance in Alabama."

"Imagine where we'd all be today if wood didn't burn."

"We'd all be a little colder—and a lot poorer. With plentiful supply, people have turned back to wood to produce dependable inexpensive heat from woodstoves and fireplaces.

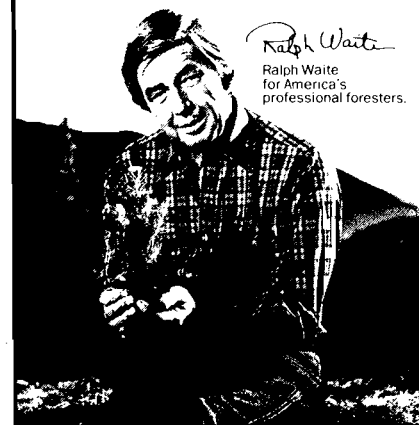
"This new demand is coming at a time when we're losing a thousand square miles of forestland each year to urban expansion and other people pressures. So we've got to take extra good care of the forests we have.

"Our job is growing. For information on how you can help, write..."



Society of American Foresters

5400 Grosvenor Lane, Bethesda, MD 20814



Got Beetle-Killed Timber? Well, seeing is believing that

Sawing Is Salvaging!

by JIM HYLAND, Chief, Pest Management

What Is It?

The Alabama Forestry Commission's portable sawmill is a versatile machine mounted on a trailer for easy transport to the woods. The mill can be leased, set-up and operated on your land for the purposes of salvaging beetle-killed pine trees or utilizing trees removed in thinning operations. *No* hardwoods will be sawn.

Who Can Lease It?

The portable sawmill, together with trained Alabama Forestry Commission (AFC) operators, can be leased for 40 working hours or a two week period by any non-industrial landowner.

What to Expect?

The sawmill has the capacity to convert 20-30 logs per day into roughcut lumber of any specified dimension up to 4"x12". The mill has three saw blades which simultaneously cut and edge one or two pieces of dimension lumber on each pass of the saw. The lumber should be air dried prior to use or further manufacturing.

What Must I Do?

The landowner must sign a lease agreement prior to the mill being moved onto his property. He will be expected to have the trees felled, cut into suitable log lengths (minimum 8', maximum 18') and the logs skidded to an accessible location on his property before leasing the mill. He will also be asked to provide one worker to carry and stack the lumber and have a tractor available to move logs.



Sawmill with trailer



Three blades of the mill



Sawmill in operation



Lumber cut by mill

What Will It Cost?

Since the objective is to control or prevent beetle populations, the cost of leasing is free, as long as a control project is in effect.

Who to Contact?

For lease arrangements or further information contact Gary Faulkner at the AFC office in Montgomery, 261-2547, or call your county office.

Photographs by Andy Boone, South Carolina Forestry Commission, 1983.



LANDOWNERS' LEGISLATIVE ALERT

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

Congressional action on the budget for the cooperative Federal/State Forestry programs continued during the spring months. Indications are that the House and Senate appropriations committees will disagree with the President's budget proposals to reduce spending in the cooperative forestry programs and to combine the ACP and FIP programs and to reduce spending for them. Hearings on the budget were completed at the end of May, at which point the committees began the process of developing a congressional budget legislation.

The Senate-passed "Highly Erodible Land Conservation Act of 1984" (also called the "Sodbuster" Bill) was taken up by the House in early May in conjunction with action on H.R. 3478, the "Soil Conservation Act of 1984," introduced by Congressman Ed Jones of Tennessee. These bills would prohibit USDA from paying certain agricultural incentives, including price support and production adjustment payments and loans to farmers who produce commodities on highly erodible land. The House bill contains additional provisions allowing farmers to voluntarily set aside erosion-prone croplands into permanent grass cover or to place the land in a conservation reserve. However, the bill does not authorize the planting of trees as a means of establishing permanent cover on the retired lands. This omission is considered a major flaw in the bill by foresters who view the legislation as an opportunity to encourage tree-planting on marginal croplands. Both bills passed the House on May 8. The Senate bill, amended to be identical to the House bill, will be the legislation considered by the Conference Committee. Conference action is expected to begin after the Memorial Day congress-

sional recess. It is possible the conferees will consider adding tree-planting to the bill.

A bill described in the spring issue of **Alabama's Treasured Forests** also was acted upon by the Congress and a modified version is now law. S. 2148, sponsored by Senator Nunn of Georgia, and entitled the "Conservation and For-estation Act of 1984," contains a provision authorizing a USDA payment to persons who divert acreage from farm use to pine trees. During Senate consideration of a bill concerning the USDA wheat program, Senator Nunn offered a modified version of his bill as an amendment to the wheat bill. This was passed. It would authorize the Secretary of Agriculture to implement a tree-planting program to amortize loans to farmers made by the Farmers Home Administration that are now delinquent. The income from the trees would be used to pay off the loans and thus prevent foreclosures for these **FmHA** borrowers. This legislation was passed by Congress and was approved by the President, April 10, 1984. USDA is now preparing a report to Congress on how it intends to implement the tree-planting program. Senator Thad Cochran, a member of the Senate Agriculture Committee, announced a field hearing would be held in Tupelo, Mississippi on June 10 to gather information on how this program would operate in that State.

The concern over soil erosion in the United States is a matter that both USDA and the Congress plan to examine closely in the next few months. The legislation discussed here is directed to one aspect of the problem. It is likely that it will receive much attention as the information of the 1985 Farm Bill gets underway in the near future. Fed-

eral and State forestry agencies and forest landowners could be involved in this legislation since tree planting is recognized for its potential to solve conservation problems created by soil and water erosion. ♣

CALENDAR*

July 9 - 13 - Auburn University, Teachers Conservation Workshop, call the Alabama Forestry Association, 265-8733.

July 10 - Tuscaloosa County, Alabama Forest Owners Association, 7:30 p.m., Discussion Session, call Lee Laechelt, 798-3227.

July 10 - Jefferson County, Alabama Forest Owners Association, 7:30 p.m., AmSouth Bank, Hoover, call Lee Laechelt, 798-3227.

July 20 - 21 - Shreveport, Louisiana, "How to Make Money Growing Trees," \$100, call David Litterst, (318) 226-0094.

July 26 - 28 - Montgomery County, Alabama Farm Bureau Southern Commodity Producers Conference & Trade Show, call Steve Guy, 288-3900.

July 29 - August 4 - Blue Ridge Summit Vacation! Ecology, Music, Backpacking, Hiking, Crafts, Birdwatching and More! Adults: \$145, Children: \$75. For more information call Anne Rust, (703) 790-4371.

Any Alabama Forestry Planning Committee member agency may be contacted for information on listings in this section.

What You Should Know Before You Sign HUNTING LEASES

by CHESTER E. BILLIE, JR. Wildlife Specialist, Alabama Forestry Commission, Bay Minette

Hunters experience much frustration when searching for a place to enjoy their sport. In days past, a hunter simply needed to ask a landowner for hunting permission and it was usually granted. However, today with increased hunting activity and an increased demand for hunting lands, leases are becoming much more prevalent as a means of obtaining a place to hunt.

When entering into a lease agreement there are certain basic provisions that should be covered and understood by the landowner (lessor) and sportsman (lessee). The terms of the hunting lease are paramount in establishing the rights and responsibilities of both. These important provisions can be classified into four broad categories: (1) duration of the lease; (2) property rights involved; (3) improving, conserving, and maintaining the property; and (4) miscellaneous provisions.

Duration of the Lease

The hunting lease customarily contains statements concerning the length of the lease, the beginning and termination dates, the manner in which notice of termination can be conveyed, and the way in which the lease can be cancelled and renegotiated. The majority of the deer hunting leases in Alabama are on an annual, rather than a multi-year basis. The lease period can coincide with the hunting season or run for the entire year.

Property Rights

The hunting lease involves the transfer of certain property rights from the lessor to the lessee. The area to be leased should be precisely described in terms of acres and boundaries. Normally, the lease contains a provision for rights of entry by the landowner and his agents. If the lessee is planning to use any of the lessor's buildings or other structures,



this should be stipulated in the contract. The property rights conveyed in the lease should not interfere with the landowner's principal interest in the land, for example, farming, timber management, and others. In the absence of any clause about subletting, the usual legal presumption is that the lessee can sublease the property or any part thereof. Parties to the contract should make their ideas on subleasing evident in the lease.

Improving, Conserving, and Maintaining the Property

Generally, the lessee is responsible for construction and upkeep of facilities. Some landowners prohibit the construction of any structure on the property while others not only permit it, but encourage it by offering multiple year leases so the lessee may protect his investment. Usually the lessor retains the right to choose the location of the structures, particularly in the case of a clubhouse, food plot (size and location), and fences. A provision for landowner indemnification is contained in some hunting leases in the event of property damages. Conservation practices (food plots, mowing, control burning, etc.) may be included in the lease and the cost

borne by either or both parties to the contract.

Miscellaneous Provisions

The important question of liability arises in any leasing agreement. Many leases contain provisions exempting the lessor from any liability arising from the lessee's use or a third party's use of the leased area. Whether this provision will stand up in court is questionable. Therefore, some leases require that either or both parties carry liability insurance in specified amounts.

Agreements to arbitrate differences that cannot be resolved easily may reduce the probability of disagreements arising. Some leases contain clauses stating that if the lessee or lessor fails to perform any of the terms and conditions in the lease, it shall be lawful for the other to declare the lease terminated and void.

Patrolling and enforcement of trespass laws can be carried out by either party, but the lessee usually has the major responsibility and this should be part of the lease. The detection and reporting of any wildfires on the property can also be a responsibility of the lessee, and should be covered in the agreement.

In summary, all conditions of a hunting lease should be clearly understood by both parties to the agreement. Many provisions can be contained in a lease, but these four categories are the most common. The relative importance of each provision will depend on the lessor/lessee relationship and the type of area to be leased. Numerous miscellaneous provisions adapted to the local conditions can be included to assure mutual understanding between the lessor and lessee.

References

Shelton, Ross. *Important Hunting Lease Provisions*. Mississippi Cooperative Extension Service Circular.

Some "Rules" You Should Know In Timber Marketing

by T.J. LYNCH, Assistant Division Director, Development

Have you ever wondered why you will hear timber prices quoted as "so much per thousand, Doyle," or "so much per thousand, Scribner," and the prices are different? What does Doyle and scribner stand for? They are the names of log rules, and log rules are an attempt to determine the amount of finished lumber that can be sawn from logs of certain diameters and lengths.

Frank Freese with the Forest Products Laboratory has spent years working with log rules and I want to share some of his findings with you.

History of Log Rules

At first glance it would seem a simple matter to devise a log rule and that would be the end of the problem, but this is not the case. No two logs of the same diameter and lengths have exactly the same shape. There are a large number of different sized boards that can be sawn from any log. The type and condition of the equipment used to produce logs varies from mill to mill, as does the skill of the various sawyers operating the mill. All of these factors contribute to the amount of lumber obtained from any given log and the amount of the log ending up as mill residue.

The lumber industry in this country started in the Northeast, spreading south and westward. It always consisted of individual independent companies. In the beginning there was no industrial organization or government agency that had control over the measurement of logs. This resulted in individual log rules being developed or adapted for use in different parts of the country. Each individual company could develop a rule that fit its particular set of operating conditions. Today in the United States and Canada there are 95 recognized rules bearing about 185 names. In addition, local variations in the application of any given rule are a common practice.

As time went on several states

adopted a "legal log rule," but with so many different log rules in use by this time the legal rule varied from state to state. Alabama does not have a "legal log rule", but if no log rule is mentioned in the sales contract it is assumed to be the Doyle Rule.

Establishing a Log Rule

How does one go about developing a log rule? Basically there are three methods that can be used, each one having its advantages and disadvantages.

The first one is to operate the mill sawing straight, defect free logs and recording volumes obtained until data is obtained for logs of all diameters and lengths. These "mill scale" or "mill tally" rules are accurate as long as conditions in the mill do not change, and apply only to the mill where the data was gathered. Any change in the conditions will alter the accuracy of the rule.

The second method is to draw sawing patterns in circles representing each log size and allowing for saw kerf, shrinkage, width, thickness, and length of the boards. These "diagram" rules can be good or bad depending on how well the sawmill situation fits the assumptions used in producing the diagrams.

The third and most difficult is to start with the assumed arithmetic formula for a solid mass in the shape of a log. Formulas are developed to allow for saw kerf, slabs, and edgings. These are referred to as "formula" rules, and just like the other two methods of developing log rules their accuracy depends on how well assumptions fit the individual mill situation. In the development of a log rule the author may use a combination of these methods. In developing a diagram or formula rule the allowance used for slabs and edgings may come from mill tally data. Also parts of different rules can be combined to take advantage of the best or worst features of the different log rules. Two examples of these combination rules are the Doyle-Scribner Rule which uses the

Doyle Rule for small diameter logs and the Scribner Rule for large diameter logs, while the Scribner-Doyle Rule uses the Scribner Rule for small diameter logs and the Doyle Rule for large diameter logs.

Log Rules in Alabama

Today in Alabama there are three logs used. The most common is the Doyle Rule which has been referred to as "the most widely used and roundly cursed log rule in existence." It is not commonly used when federally owned timber is involved or where timber is very large. In the rest of the country there is probably more timber measured by Doyle than by all other rules combined. Its main characteristic is that it gives a very large over-run on small logs. The Doyle Rule is a good example of the formula rule. The main weakness of this rule is that its allowance for slabs and edgings is too small for large logs and far too large for small ones. The log rule also does not make any allowance for taper, but this is a deficiency found in most log rules.

Another rule being used more in the state is the Scribner Rule. It is very common in areas where federal timber is sold. This rule was published in 1846 by J.M. Scribner, a clergyman who believed that he had developed the perfect log rule. This is an example of a diagram rule which has been modified and today can be expressed as a formula. When discussing his rule, Scribner said "it is mathematically certain that the true contents are hereby given, and both buyer and seller of logs will unhesitatingly adopt these tables as the standard for all future contracts in the purchases of sawlogs where strict honesty between buyer and seller is taken into account." Scribner also did not make any allowance for taper. His tables give fairly accurate volumes on logs under 28 inches but for larger logs the rule gives increasingly large over-runs. There have been several modifications of Scribner's original tables. One of the most commonly

used was started in the Lake States where all values were rounded to the nearest 10 board feet and the zero dropped. This resulted in the so-called decimal form of the table, or the Scribner Decimal C Rule. The Scribner Rule, in one form or another is another one of the most commonly used rules. For many years it was the rule prescribed by the U.S. Forest Service and the Dominion Forestry Branch of Canada.

Another log rule encountered sometimes in northwest Alabama is the International Log Rule. This rule was developed by Juston F. Clark in 1900 and published in 1906. This is another example of a formula rule and one of the few rules that takes log taper into consideration. As circular sawmills became more common, Clark modified his rule to allow for their thicker saw kerf. This was published in 1917 and became known as the International 1/4 Inch Kerf Rule. This rule gives accurate volumes on logs in all diameter classes.

Harold Belyea has published some interesting studies of the history of the Doyle and Scribner Rules. The second edition of "The Improved Pocket Reckoner for Timber, Plant, Boards, Saw Logs, Wages, Board, and Interest" by Doyle was published in 1837. It listed the board content of logs as given by the Doyle Rule. After the Scribner Rule was introduced in 1846, it replaced the less reliable Doyle Rule. An odd turn of events brought back the "old sinner of a log rule." Scribner sold the copyrights for his rule to George Fisher who had also acquired the copyrights of Doyle's "Ready Reckoner." In 1876 Fisher published "Scribner's Lumber and Log Book" which never listed Scribner as the author. The only difference was that the Scribner Rule was replaced with a table of values identical with the Doyle Rule which had been out of print for over 20 years. This led to much confusion and after this the Doyle Rule was often called the New Scribner Rule.

This is just a brief look at some of the log rules used in Alabama to familiarize you with them. Remember that if you are comparing timber prices, be sure all prices are quoted on the same log rule.

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Belyea, H.C. "A Postscript on the Lost Identity of Doyle and Scribner." *J. Forest.* 51(5):326-329.

Freese, Frank "A Collection of Log Rules, *FPL*, 1.

TREES NEED A PROPER HOME

by TOMMY PATTERSON
Forest Management Chief

Forestland sprawls across 21.7 million acres in Alabama. This vast forest is made up of five general types — longleaf-slash pine, loblolly-shortleaf pine, oak pine, oak-hickory and oak-gum-cypress.

These categories simply indicate that on the average, the titled tree species makes up the majority of the forest. A description of the five major types follows:

LONGLEAF-SLASH PINE

Forests in which 50% or more of the stand is longleaf and slash pine, singly or in combination. Common associates include other southern pines, oak, and gum.

LOBLOLLY-SHORTLEAF PINE

Forests in which 50% or more of the stand is loblolly pine, shortleaf pine, and other southern pines, except longleaf or slash, singly or in combination. Common associates include oak, hickory, and gum.

OAK-PINE

Forests in which 50% or more of the stand is hardwood (usually upland oak), and southern pines make up 25-49%. Common associates include gum and hickory.

OAK-HICKORY

Forests in which 50% or more of the stand is upland oak and hickory, singly or in combination, and southern pines or red cedar make up less than 25%. Common associates include gum, yellow poplar, elm, and maple.

OAK-GUM-CYPRESS

Bottomland forests in which 50% or

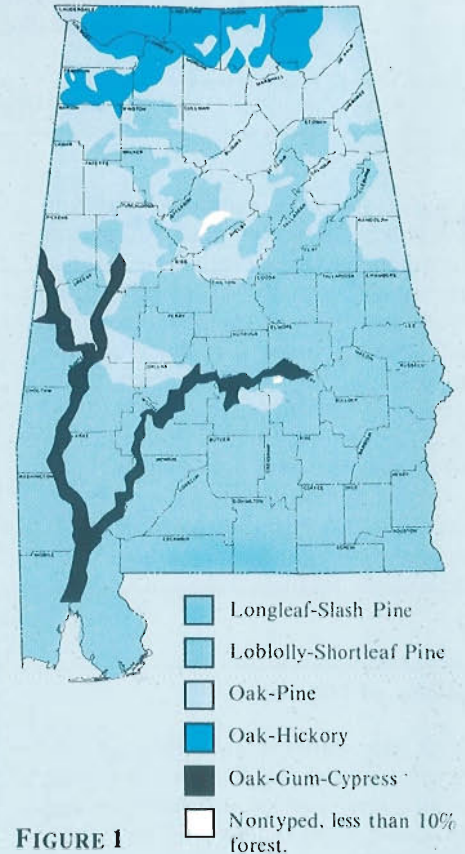


FIGURE 1

more of the stand is tupelo, blackgum, sweetgum, oak, and southern cypress, singly or in combination, and southern pines make up less than 25%. Common associates include cottonwood, willow, ash, elm, hackberry, and maple.

FIGURE 1 is a graphic illustration of where the major forest types occur in Alabama. Remember these are general classifications and many other species grow in these types as well.

This illustration can serve the private landowner by identifying what tree species he might successfully manage or plant. As an example, landowners would be ill advised to plant slash pine much farther north than the lowest row of Alabama counties. Slash pine planted north of that region is very likely to be damaged by winter ice storms. The indicated forest types in FIGURE 1 occur naturally in those locations because of weather conditions, soil types, topography and past land uses.

As you plant or otherwise regenerate your forest, keep in mind the location of these natural forest types. By planting the right tree in the right place, you can better help your forest to become a TREASURE. ♣

1983/84 BEST MANAGEMENT PRACTICES SURVEY

by BOB KUCERA, Pest Management Specialist

Purpose and Methods

The 1982-83 Best Management Practices Survey was designed to monitor some forestry harvesting practices and determine possible trends in awareness of the recommended Best Management Practices (BMP). The survey design for 1982-83 departed from past surveys by decreasing the number of samples and dropping the design for selecting samples at random. In other words, the survey was not designed to provide a statistically precise picture, but rather to 1) maintain awareness by loggers of the interest in water quality protection, 2) maintain ability of Alabama Forestry Commission (AFC) personnel to assess harvest practices, and 3) determine possible trends in BMP use and effectiveness.

Each of the ten AFC districts was asked to conduct ten surveys. There are five to seven counties in a district. Past surveys have used specified, predetermined sampling dates and locations. The time and location of this 1982-83

survey were the choice of the surveyor. It was not necessary to follow logging trucks back from a mill, although this was an acceptable way of choosing a site. Surveyors had the latitude to go directly to any logging site they chose.

The first part of the survey consisted of interviewing the logging foreman to get the answers to questions 1-4a of the BMP Monitoring Report, shown in **TABLE 1**. Observations 5-24 were made by actual inspection of the site. If there was no stream on the site, then observations 6-24 were not made.

Results

A summary of the results of the survey are displayed in **TABLE 1**. Approximately 101 samples were taken; 62 of which were sites with streams. The response to each question or observation has an obvious connotation of GOOD or BAD for water quality. For example, in question 1, Yes, is GOOD; in observation 24, Yes is BAD.

TABLE 1 displays the ranking of the responses to the interviews with the logging foreman for questions 1-4a, and a non-statistical comparison with the results of the 1981-82 survey is made.

The ranking of the result of observations 6-24 are presented in **TABLE 2** with a comparison with the results of the 1981-82 survey. Observations 14 and 24 were not used in determining the mean because they do not provide information on application of BMP's. The mean is 80.35 with a standard deviation of 10.89.

TABLE 3 simply groups the results of the survey to put attention on the practices which may stand out as especially good or bad.

Discussion

The first part of the survey indicates that there may have been a decline in the advanced planning and contractual commitments for the purpose of water quality protection. At the same time, the observations of actual practices showed that every recommended practice either was improved or was applied at approximately the same rate as in the previous year. Since the general awareness of BMP's stayed the same and contractual BMP stipulations decreased, it is felt that this survey is indicating a lack of awareness of the specific term "BMP" while at the same time there is an increase in the application of practices which actually are BMP's. The author feels that there are forces at work, larger than the Silvicultural Runoff Management Plan (SRMP), which are accomplishing the goals of the SRMP. One of these forces is the forest industry which promotes soil conservation in order to maintain the productivity, or value, of their land asset. Another force is industry's promotion of water quality protection, perhaps because of a "corporate conscience," fear of regulations,

TABLE 1. Ranking of 1982-83 Best Management Practices Survey Responses — Interview Part and Comparison with results of the 1981-82 Sawmill Monitoring Survey.

Rank	% Good Response	Comparison* to 1981-82	Survey Questions
1	85	0	2. Were roads planned in advance?
2	57	-	4. Do you have a written contract?
3	51	0	1. Have you heard of BMP's?
4	50	-	4a. Does written contract contain BMP stipulations?
5	38	0	3. Were skid trails planned in advance?

* "+" indicates % Good response more than 5% greater than 1981-82 response

"0" indicates % Good within + 5% of 1981-82 response

"-" indicates % Good more than 5% less than 1981-82 response

or because they are realizing the opportunity to generate a favorable public image. At any rate these forces would have the same effect, but would not be recognized as BMP's. For example, Union Camp Corporation (for one) has a company policy which protects water quality and conserves the soil. The policy is to apply their Forest Management Practices (FMP's) which are perhaps more stringent than BMP's and accomplish the same thing, but would not be recognized as BMP's. The AFC does promote BMP's, but this is a coined term, the concept of which is redundant to the conservation ethic which is a traditional part of forestry.

The mean "percent good response" was raised from the 1981-82 mark of 70.66% to 80.36% in 1982-83. The key questions, 14 and 24, which indicate whether sediment is reaching the stream, remained the same as last year at about 71% good response. Future goals should be to increase the percent of good response on the two observations. The specific BMP observations 20 and 21 should be targeted for improved results.

The Alabama Forestry Commission has made three different posters available to promote the environmental quality which can be achieved through the TREASURE FOREST program.

Please contact your local AFC office if you would like to display one of these posters.

TABLE 2. Ranking of 1982-83 Best Management Practices Survey Responses — Observation Part and Comparison with results of the 1981-82 Sawmill Monitoring Survey.

Rank	% Good Response	Comparison* to 1981-82	Survey BMP Observation
1	98	0	22. Stream channels used as skid trail.
2	97	0	18. Landings properly located.
3	95	+	10. Roads located outside SMZ.
4	94	0	23. Intermittent channels used as skid trail.
5	90	+	8. Roads avoid sensitive areas.
5	90	+	17. Landings adequately stabilized.
7	89	+	7. Roads adequately stabilized.
8	81	0	16. Skid trails are located properly.
9	77	+	15. Skid trails adequately stabilized.
10	76	0	7. Roads adequately stabilized.
11	74	0	6. SMZ is adequate.
12	71	+	11. Diversion structures adequate.
12	71	+	12. Outfall protection adequate.
12	71	+	13. Roads can be closed in wet weather.
12	71	0	14. Road sediment is being deposited in stream.
12	71	+	19. Tops/branches/slash in stream.
12	71	0	24. Harvest sediment is being deposited in stream.
18	69	+	20. Oil and trash properly disposed of.
19	52	+	21. Equipment operated in SMZ.

* "+" indicates % Good response more than 5% greater than 1981-82 response.
 "0" indicates % Good response within + 5% of 1981-82 response.
 "-" indicates % Good response more than 5% less than 1981-82 response.

TABLE 3. Grouping of BMP Observations.

- Group 1. More than one standard deviation above the mean.
Observations: 22, 18, 10, 23
- Group 2. Within one standard deviation of the mean.
Observations: 8, 17, 7, 16, 15, 7, 6, 11, 12, 13, 19
- Group 3. More than one standard deviation below the mean.
Observations: 20, 21

Plan In Advance
To Prevent
SOIL EROSION
and Protect
WATER QUALITY



Contact the Alabama Forestry Commission for Further Information

Use Best Management Practices
To Prevent
SOIL EROSION
and Protect
WATER QUALITY



Contact the Alabama Forestry Commission for Further Information

Use Streamside Management Zones
To Prevent
SOIL EROSION
and Protect
WATER QUALITY



Contact the Alabama Forestry Commission for Further Information

IT'S POPLAR

by TOM V. CAMBRE, Hardwood Specialist

Yellow poplar is one of the top commercial hardwood species of Alabama because of its rapid growth, availability, excellent form, and large size. The mature yellow poplar is tall, clean, straight, and presents a striking appearance to those who see it in a forest stand. It has many uses such as hidden furniture parts and core stock, cabinet wood, veneer, pulpwood and plywood. Unlike many commercially important species, yellow poplar is relatively free from insects and disease, and the quality of lumber produced remains high.

Wildlife also benefits from the yellow poplar which produces seeds for the quail, gray squirrel, and cotton tail rabbit's diet. Twigs and foliage of the yellow poplar are also succulent foods for the white tail deer.

Not only does this tree produce an abundance of seed, but also sprouts prolifically when cut making preparatory cuts unnecessary. Under normal conditions the site disturbance caused by logging the mature stand is the only seedbed preparation needed to provide seedlings for a new stand. Once established on a desirable site, yellow poplars originating as seedlings and as sprouts grow rapidly in height. It is common for seedlings to grow from 8 to 15 feet in height within five years time, and sprouts may grow as much as 24 feet tall in this same timespan! Height growth



will continue rapidly for the next 25 years before slowing noticeably. Yellow poplar stands can grow to maturity and produce acceptable yields with minimal management effort. At the same time they are extremely responsive to management.

Many management objectives can be met by manipulating the timing of

thinnings that are begun early and repeated at five to fifteen year intervals. The first commercial thinning will begin when the trees are between 20 to 25 years old and thereafter as needed.

In summary, the yellow poplar is a valuable tree for commercial use, wildlife, and aesthetic beauty offering many benefits to our state. ♣

Archaeological Sites

A Valuable Cultural Resource in the Alabama Forest

by DR. HARRY O. HOLSTEIN, Archaeologist, Jacksonville State University

During the last several years the Jacksonville State University Archaeological Research Laboratory has been systematically searching for archaeological sites in the surrounding agricultural fields and forests in Calhoun County, Alabama. It became apparent to the survey crews that Alabama forests have many rich and varied archaeological resources. Scattered across the fields and forests are valuable clues representing over 10,000 years of Alabama's fascinating past.

These clues (artifacts and other archaeological data) come in all shapes and sizes and represent millions of cultural objects that either have been modified or manufactured then discarded, lost, or abandoned by earlier human populations. In the surrounding hills and valleys researchers have observed

clues ranging from the familiar prehistoric Indian stone arrow and spearpoints (termed bifaces) to historic 19th century Civil War uniform buttons. Many archaeological clues are more massive in scope, and, hence, more obvious. Surveyors have encountered and recorded several 2000 year old Indian stone burial mound complexes, 16th century protohistoric Indian village sites, and several 19th century grist mill complexes. All of these sites and other such sites provide valuable clues to understanding Alabama's past.

What Is an Archaeological Site?

An archaeological site is simply any location in which an earlier cultural activity has occurred and which a 20th

century archaeologist can recognize or identify. Archaeological sites can be either prehistoric, such as an Indian village; or petroglyphs (Indian rock carvings); or sites can be historic, such as a 19th century fort or iron furnace complex. Archaeological sites can be recognized by the presence of archaeological data.

What Is Archaeological Data?

Archaeological data is typically divided into three categories: artifacts, ecofacts, and features.

Artifacts are anything that has been modified or manufactured by humans. Beautifully flaked 10,000 year old chert bifaces (spearpoints), 19th century brass buttons, or 3rd century ceramic Indian potsherds (pottery fragments) are all examples of artifacts.

Ecofacts are bones, seeds, pollen, or other organic remains which permit the archaeologist to reconstruct the environmental condition of the area around an archaeological site to resemble its original state.

Features are immovable artifacts. Stone building foundations, irrigation ditches, or Indian storage pits have all been modified by man but are not, for obvious reasons, easily removed to an archaeological laboratory for further analysis.

How Does One Recognize Archaeological Sites?

Archaeological sites are recognized by the presence of archaeological data.





Any areas where one occasionally or regularly finds prehistoric or historic artifacts/features are candidates for sites. By carefully examining the ground surface in the area of the artifact find, one should see other bits or fragments of artifacts/features if a site is present. In some cases the only clues to recognizing an archaeological site may be a few "chips" of chert or quartzite on a prehistoric site, or a few brick fragments or window fragments on a historic site. Remember, one has to look very carefully along the ground surface to recognize archaeological sites. Never dig or probe in an area of a suspected site. While collecting artifacts off the surface of the ground has very little negative impact on archaeological resources, digging or probing below the ground can totally destroy archaeological resources. Hence, the rule is **never dig**, just surface collect.

What Should One Do Once Archaeological Sites Are Recognized?

As with any other valuable natural resource, one should protect archaeological resources from needless destruc-

tion. Destruction results from natural (erosion, animal burrowing, etc.) and/or man-related (construction, pothunting, etc.) processes.

Sensible cultural resource management can reduce the destruction of archaeological sites. Sensible management can take several forms. For example, senseless destruction of archaeological sites by pothunters (people who dig up artifacts for profit) can be stopped. If you are aware of this unlawful activity, it should be reported to proper authorities. This alone would be a positive step in sensible cultural resource management.

If a landowner is aware that future construction or future farming activities will destroy an archaeological site on his property, a simple inexpensive modification of the construction or agricultural plans, in many cases, may greatly decrease the damage to a site, or totally prevent damage. When the landowner realizes destruction is unavoidable, all efforts should be made to contact a professional archaeologist and permit the archaeologist to salvage as much of the archaeological information from the site prior to its destruction. This can usually be done with very little loss of time and at no expense to the owner.

Which Archaeological Sites Are Considered Significant and How Is Significance Determined?

All archaeological sites yield bits of data from the past. Yet some sites may be deemed more significant than others. Significance varies based on such factors as artifact/ecofact preservation, uniqueness, quantity of data present and/or the question being asked by researchers in regard to the site's probability of answering those questions.

Again, common sense permits one to determine the general significance of archaeological resources. However, since in many cases it is extremely difficult to determine the historical significance from surface material alone, the question of significance should be left up to a professional archaeologist to answer.

When Should Sites Be Reported to Archaeologists?

Not every single arrowhead find or brick/glass fragment locale need be reported to an archaeologist; however, common sense and good judgement should prevail. If you feel a site is signif-

icant because it is unique or produces vast quantities of artifacts or preservation of artifacts is excellent, then contact an archaeologist immediately.

Professional archaeologists keep all the information you provide concerning site locations or other pertinent archaeological data confidential. Archaeologists realize everyone's property is private, and this confidentiality ensures the protection of the landowner's property from unwarranted trespassing and helps prevent the destruction of archeological resources from relic hunters.

Where Does One Contact an Archaeologist?

Professional archaeologists are located at or affiliated with most major colleges or universities. Simply call the nearest local college/university switchboard and ask the operator if the school has an archaeologist on staff. Archaeologists are also on staff at the Office of Archaeological Research, Moundville, Alabama, and at the Alabama Historical Commission in Montgomery, Alabama.

In addition, professional archaeologists can be contacted through the members of chapters of the Alabama Archaeological Society. Presently, there are active chapters in Anniston, Birmingham, Cullman, Dothan, Florence, Huntsville, Moundville, and Opelika. The location and time of the chapter's local meetings are announced through local news services.

What Rewards Does Archaeological Resource Conservation Provide?

As a landowner, one can feel proud he has helped to preserve a piece of Alabama's history. On many occasions I have informed my students "when archaeological sites are destroyed by vandalism or by construction projects, the destruction of a site is like ripping a page from the history book of Alabama." Thus, careful management of archaeological resources by protecting them from relic hunters/collectors/pothunters and by informing professional archaeologists of archaeological site locations and informing professional archaeologists of any potential destruction of these resources will both fulfill one's responsibility in salvaging our history "pages" and help preserve for the future a valuable Alabama resource — its past! ♣

Fire Fighting Computers???

by RAY C. JONES, Fire Specialist

Computers have reduced the manpower needed in many areas — bookkeeping, manufacturing, and others! However, computers cannot rake out a fire, plow a fire line, or set a backfire to stop an advancing blaze, *at least not yet!* They *can* be used quite effectively, though, to provide valuable information to enhance our fire prevention efforts.

In a very short time, the Alabama Forestry Commission will be placing micro-computers in all the Forestry Commission districts in the state. The Fire Control Section anticipates that each district will be able to do a more complete job in all fire activity management areas with this new machinery.

One big advantage the computer offers in the area of fire control will be in fire prevention and prescribed burning. For the burning prescriptionists, the more comprehensive fire weather forecast will enable them to plan their daily activities concerning prescribed fire with increased confidence to complete the burn as prescribed.

The fire weather forecast information obtainable by accessing another weather computer will be more indepth. This will be available to industry and others who are involved in prescribed burning. With the increased concern about smoke management it is imperative that the prescriptionist have current and complete fire weather in evaluating environmental and safety considerations. The Alabama Forestry Commission, working with the National Weather Service, plans to have the fire weather forecast available earlier in the day. It's uncertain just how early we can have the fire weather, but the National Weather Service has assured us they would get the fire weather forecast to us as early as possible because of the pressing need. Since the upper air readings are made at 6:00 a.m. to get the mixing height and transport wind speed, we hope to have the forecast around 7:30 a.m. **NO PROMISES!**

The computer will give the district the capability to be aggressive in their fire prevention programs. With all the information that will be readily available for recall, it will be invaluable in

planning fire management activities. Without a doubt in a very short time after the districts receive their computers it will become an integral part of not only the fire program but many others as well!

It is our earnest desire in fire control to always be in a position to aid the forest landowner and to provide him with the most current fire program information possible. The computer is a step in that direction, making us more

effective in all phases of fire control, whether it be detection, suppression or prevention.

Following is a sample of the fire weather forecast that will be available to the fire manager. This is weather information the fire manager must have to make the decisions he will need to make. Ask for it when you get your burning permit. This sample may be used as a guide to request specific items. ♣

BHMFVLBHM/08:16:12
 WOUSOO KBHM 071415
 ALABAMA FIRE WEATHER FORECAST
 NATIONAL WEATHER SERVICE BIRMINGHAM, ALABAMA
 815AM CST WED MAR 7 1984

SYNOPSIS . . . A WEAK RIDGE OF HIGH PRESSURE EXTENDED FROM THE OHIO VALLEY TO THE WESTERN GULF OF MEXICO THIS MORNING. THE HIGHER PRESSURE WILL MOVE EAST OF ALABAMA TONIGHT. ON THURSDAY . . . A SMALL LOW PRESSURE CENTER SHOULD MOVE FROM THE CENTRAL PLAINS INTO WESTERN KENTUCKY AND COULD BRING A FEW SPRINKLES TO NORTH ALABAMA.

TODAY	TONIGHT	THURSDAY
ZONES... 1..2..3..4..5..6..7		
SKY /SUNSHINE (HRS). CLR	PCLDY	MCLDY /
VSBY (MI)/DRYG PTNL. 15 /		10 /
TEMPERATURE..... 48-52	30-34	46-50
RH(MIN,MAX,MIN).../ 30-35 %	85-90 %	48—53%
OPRECIP TYPE..... NONE	NONE	LGT RAIN
DUR(HRS)/TIM(AM-PM) /	/	1-2 / PM
?PROBABILITY (%)....		20-30
AMOUNTS(INCHES).../ 0.0	/ 0.0	/ 0.10
STAG. INDEX..... 10,11	5-7	0.1
AM WIND (4-MIN AVG). N 4-8		SW 4-8
PM WIND (4-MIN AVG). N 5-9	SW 2-4	NW 6-9
YMIXG HT/TNSPT WND . 4000 FT/22	(WINDS IN MPH)	3500 FT/ 20
?REMARKS.....		
N		
ZONES... 8..9..10..11..12		
SKY /SUNSHINE (HRS). CLR /	FAIR	PCLDY /
VSBY (MI) /DRYG PTNL. 10 /		8 /
TEMPERATURE..... 51-55	31-35	51-55
RH(MIN,MAX,MIN).../ 30-35 %	85-90 %	/ 45 %
PRECIP TYPE..... NONE	NONE	NONE
DUR(HRS)/TIM(AM-PM) /	/	/
?PROBABILITY (%)....		
□AMOUNTS(INCHES).../ 0.0	/ 0.0	/ 0.0
STAG. INDEX..... 10-12	10-12	1-3
AM WIND (4-MIN AVG). N 4-8		SW 4-6
PM WIND(4-MIN AVG). N 5-9	SW 2-4	W 6-9
MIXG HT/TNSPT WND.. 4200 FT/ 22	(WINDS IN MPH)	3500 FT/ 20
?REMARKS.....		

Forestry Commission Announces Seedling Sales

If you plan to plant trees this winter, **NOW** is the time to order seedlings! The Alabama Forestry Commission nurseries will begin accepting orders for the following species on June 1. This price schedule is for one-year-old seedlings, F.O.B. nurseries.

PINES

Loblolly (Improved)	\$20/1000	\$10/500
Slash (Improved)	\$20/1000	\$10/500
Longleaf	\$25/1000	\$12.50/500
Virginia (Christmas Trees)	\$40/1000	\$20/500

HARDWOODS

Dogwood	\$70/1000	\$35/500
Sycamore	\$70/1000	\$35/500
Sweetgum	\$70/1000	\$35/500
White Oak	\$70/1000	\$35/500
Water Oak	\$70/1000	\$35/500
Lespedeza Bicolor	\$20/1000	\$10/500

A transportation charge of \$2 per thousand per species will be added.

Order applications are available from your county Forestry Commission office or may be obtained by contacting the Nursery Section, Alabama Forestry Commission, 513 Madison Avenue, Montgomery, AL 36130, telephone (205)261-2532. The Forestry Commission only recovers the actual cost of tree seedling production. Since the supply and demand ratio may limit the number of seedlings available, be sure to get your order in early!

TREES

*Swaying softly
in the wind
like an old, dear
and faithful friend.*

*Showing off
their newborn leaves
stand the tall,
the beautiful,
the graceful trees.*

*Majestically towering
Over all the earth
Carefully watching
in death and birth.*

*Never uttering
A disagreeing word,
making a home
for a tiny little bird.*

*In all their wonderful
splendor and grace,
trees made the world
A more beautiful place.*

*The most beautiful
of God's creation,
often living
in unappreciation.*

*This tribute of mine
for all to see
is just to the
plain, ordinary tree.*

*Robin Collins
Demopolis, Alabama*

Summer Is A Time For Camping

by PATRICK WALDROP, Mobile County Forester

Growing boys is just as important as growing trees to Treasure Forest owner Arthur Tonsmeire, Jr., and he manages to combine both on his 1,200 acres in Mobile County. For 25 years, Mr. Tonsmeire has made his land available for the Boys Clubs of Mobile, as well as the Boy Scouts. Mobile Boys Clubs Director Clyde McGuire estimates that thousands of children have camped on the Tonsmeire property.

While growing trees is the foremost objective for this Treasure Forest, recreation is the number two objective. Besides the camping for youngsters he also manages for wildlife. The Tonsmeire property is primarily populated by birds. Hurricane Frederic cut down on the squirrel population as it did all

over Mobile County, but it did not affect the abundance of rabbits, possums, coons, foxes, and other wildlife.

His 1,200 acres -- 1,000 of long leaf pine, and the remaining 200 acres in pasture, with pecan trees and wetlands of marsh and hardwood swamps -- are located between Alligator Bayou and Rabbit Creek on Dog River which empties into Mobile Bay not far from the Tonsmeire place.

The Boys Clubs operate a Christmas tree farm near the river. When the trees are grown, they will be harvested and sold, thus providing income as well as training and work for the boys. This land has been provided to the Boys Clubs without charge and the project is guided by the help and efforts of the

Forestry Commission and one of the local papermills.

With the heavy population in Mobile County demanding full recreation facilities, it is encouraging to find landowners, such as Mr. Tonsmeire, who are willing to share their land with Boys Clubs, Boy Scouts, the field trial hunters and others, as well as with his family and friends.

Mr. Tonsmeire and his sons are the kind of forest landowners who set a good example in protecting the land and in treating it with respect. He's had a strong influence both in growing boys of Mobile County -- his own and thousands of others -- and in growing trees!

Put Yourself in . . . ONLY YOU

by ANITA BENTON, Information Specialist

Smokey Bear is as American as baseball, hotdogs, and apple pie. Having been conceived during World War II when the need for fire prevention was at a critical point in this country, Smokey is a product of America's willingness to rally behind worthy causes. He has achieved a 98 percent recognition factor among youngsters in this country as the symbol of fire prevention.

In appreciation for his fire prevention efforts, the National Association of State Foresters will commemorate the

40th anniversary of the Smokey Bear Cooperative Forest Fire Prevention Campaign with a cacheted envelope (Official First Day Cover) cancelled on the first day of issue of the Smokey Bear stamp at Capitan, New Mexico.

The envelope cachet and affixed stamp were designed by Rudy Wendelin, nationally known Smokey Bear artist and former illustrator for the Forest Service, U.S. Department of Agriculture.

These cachets will be marketed at a cost of \$2.00 plus \$.50 postage and

handling each. All proceeds will be retained by the National Association of State Foresters to be used for fire prevention and the advancement of forestry in the United States.

An order blank is located on the back cover of this magazine for your convenience. All orders should be sent to Allane Wilson, Alabama Forestry Commission, 513 Madison Avenue, Montgomery, AL 36130. Checks and/or money orders should be made payable to the National Association of State Foresters, with delivery expected the first part of September.



The Southern Pine by any other name . . .

by LOUIS HYMAN, Chief, State Lands

The Southern pine, Alabama's state tree, is a general name for five closely related species. These trees are the major resource supporting Alabama's largest manufacturing industry, an industry that in 1982 added over \$3 billion to the state's economy. Let's take a close look at these trees for the economic structure of the TREASURE Forest.

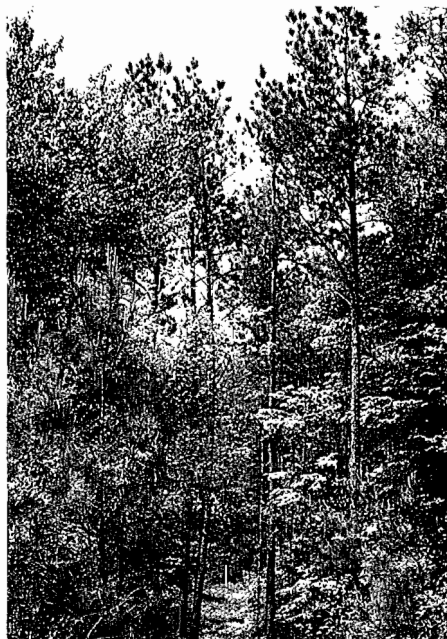
Longleaf Pine (*Pinus palustris*)

In the original southern forests, longleaf pine outranked all the other pines in importance. Its common name refers to the length of its needles, which can reach 18 inches, and grow 3 to a bundle. Longleaf is a prime wood for lumber, and its long, straight stem makes it the major source of telephone poles in the Southeast. It was also the major source of naval stores, chiefly turpentine and rosin, which are used in the making of paints, varnishes, soap, paper and printing ink.

Longleaf is a Coastal Plain species that naturally grows from North Carolina to Texas. An exception is the Appalachian foothills in northern Alabama and Georgia, where longleaf can be found on the drier ridgetops. It particularly likes deep, sandy soils, in spite of its scientific name, which literally means "the pine of the marshy places."

Longleaf trees are very intolerant of shading. It is, however, very tolerant of burning. Longleaf is considered a fire subclimax species and originally existed in prime stands over great areas of the South where other species could not stand the frequent fires caused by lightning or Indians. When fire is kept out, hardwoods or other pines shade out the longleaf seedlings and eventually break up the stand.

Longleaf flowers in mid-February through March. The cones mature in October of the second year. The seedlings grow very slowly the first few



years, entering what is called the grass stage, during which it develops a deep tap root. After about three to seven years, the tree begins rapid height growth averaging one to three feet per year. Rapid growth continues for 35 to 50 years, producing trees 55 to 80 feet tall. Growth slows but continues with trees eventually reaching 100 to 120 feet tall and 2 to 3 feet in diameter.

Longleaf pine has few natural enemies. It is very resistant to fire. Seedlings are damaged by the brown-spot rust and by wild hogs which dig them up for their succulent roots. Mature trees can be attacked by black turpentine beetles and southern pine beetles.

The Alabama State Champion longleaf pine is located in Tallapoosa County. It stands 99 feet tall and has a diameter at breast height of 32.8 inches.

Slash Pine (*Pinus elliottii*)

Slash pine is one of the most important pines of the Southeast and one of the two species yielding commercial

quantities of naval stores. The common name comes from the turpentine face, or cut made into the bark to collect the resinous sap. Other common names include swamp pine and pitch pine. Slash pine is found naturally in the Coastal Plains region from South Carolina to central Florida and southeastern Louisiana. It occurs in pure or mixed stands and is aggressive on cutover areas, if protected. Old stands are often found in low, wet areas where they are protected from fire damage.

Slash pine is an intolerant species, but less so than longleaf, and growth is very rapid during the early life stages. Slash pine is less resistant to fire and will be found on the lower, moist sites, while longleaf will be dominant on the drier ridges. Slash pine prefers sites where the water table is within a few feet of the ground surface.

Slash pine flowers in January and February before the appearance of the new leaves. Male flowers are dark purple in short, crowded clusters on the lower tree branches. Female flowers are pink and are generally found on the upper branches. Cones and seeds mature rapidly during late summer and fall of the second year. Seed fall occurs in October. At the end of the first year, young trees may be 8 to 16 inches tall, and in three years may be 3 to 5 feet in height. Slash pine at age 25 years has been found to be 10 inches in diameter and 65 feet in height.

Generally, annual growth peaks for slash pine at age 20, and falls off gradually thereafter. Depending on the site, stands of slash pine reach biological maturity at around 70 years of age. As stands approach this age, increased problems should be expected from insects and disease, ice damage, and windthrow. The tree commonly grows to 100 feet in height with a tall, straight, tapering trunk 2-3 feet in diameter.

Slash pine trees are subject to attack by Ips beetles and the black turpentine beetle, especially during droughts. It is also attacked by red heart disease and annosus root rot. Most of the management problems associated with slash pine can be traced to the species being planted outside its natural range. It is highly recommended that slash pine not be planted north of an imaginary line drawn from Henry County to Washington County in Alabama. Slash pine stands north of this imaginary line have been noted as having more problems with tree growth, insects and diseases, cone production, and susceptibility to ice damage, than those stands with the species' natural range.

The Alabama State Champion slash pine is located in Baldwin County. It stands 136 feet tall with a diameter of 30.2 inches.

Loblolly Pine (*Pinus taeda*)

Loblolly pine is the most important commercial forest tree in the South today. It often grows naturally in low, wet areas that were referred to as “loblollies” by early settlers, hence, its common name. Its Latin name means a torch of pine wood, referring to the early use of pine knot torches. Today, loblolly pine is grown primarily for lumber, and supplies the state’s many plywood, poles, pulp and paper mills.

Loblolly pine is found naturally in the Coastal Plains and Piedmont areas from Delaware to Texas and north into the southern edge of Tennessee. Loblolly adjusts well to any forest management system and is the preferred species for plantation forestry. Loblolly pine grows faster over longer periods than any other southern pine. It is intolerant of shade and is a very aggressive invader of disturbed land. One of its nicknames is old field pine.

Loblolly pine flowers in mid-March. The female flowers form cones that need two years to ripen. Seeds are shed during early October. The seeds are winged and can be carried great distances by the wind. During the first 5 to 10 years, height growth of vigorous seedlings averages 2.5 feet per year.

The chances of a seed growing into a tree depends on a number of factors. The key factor is the amount of competition the young seedling must overcome. Hardwood trees and shrubs have a competitive edge over the young pines, shading them out. The seed also needs exposed soil for good growth. The best way to ensure that the pine trees will come back after cutting is to do some form of site preparation. Burning the cutover area, chemical treatment with herbicides or some form of soil disturbance is needed to get good regeneration. Doing nothing will result in turning your pine forest into a shrub field.

Loblolly has several natural enemies. It is slightly susceptible to wildfire damage. It is subject to attacks by the southern pine beetle, especially when the tree is under stress from overcrowding or drought. Two serious diseases that can hurt these trees are fusiform rust and annosus root rot.

Under good conditions loblolly pines can grow to 90-110 feet in height

and 2 to 2.5 feet in stem diameter. This species reaches biological maturity at age 70 with many reaching 150 years old and some specimens reaching in excess of 300 years.

The Alabama State Champion loblolly pine is located in Jefferson County. It stands 142 feet tall with a diameter breast height of 50.8 inches.

Shortleaf Pine (*Pinus echinata*)

Shortleaf pine has the widest range of any southern pine. It grows naturally from New York to Texas and Oklahoma. A very hardy tree, it can withstand lower winter temperatures than the other southern pines. Its scientific name means “prickly pine” and is derived from the Greek word for hedgehog, in reference to the prickly cone scales of this tree. The wood is used extensively for lumber and as a resource for the pulp and paper industry.

Shortleaf grows on a variety of sites. It is an intolerant species, and is usually crowded out by loblolly pines on the better sites. Today it is considered primarily a Piedmont species, although it can grow anywhere in Alabama.

Shortleaf pine flowers in late March or April. The cones mature in two years with seed fall occurring in late October. Shortleaf is unusual among the southern pines in that, as a seedling, it can sprout from a stump or fire-killed stem.

On good sites, mature trees can attain heights of 80 to 100 feet and diameters of up to 2 feet by age 60. The trees will generally live to age 120, with some living to 300 years.

Shortleaf pines are subject to attack by several insects. The southern pine beetle causes great losses. This insect attacks living trees, especially during times of drought, and can wipe out an entire stand in a few weeks. The best preventative for southern pine beetles is to keep the trees growing well through a good system of timber thinnings. Other insects that attack young seedlings include the pine tip moth and the pales weevil.

The greatest threat to the shortleaf pines, however, is littleleaf disease. This root-rot is most common on heavy clay soils. The disease slows the ability of the tree to absorb water and nutrients from the soil, especially nitrogen. In effect, the leaves starve to death. An unusual characteristic of the disease is a very heavy flowering and excessive cone crops the last few years of the tree’s life.

The Alabama State Champion shortleaf pine is located in Madison

County. It stands 84 feet tall with a diameter of 44 inches.

Virginia Pine (*Pinus virginiana*)

Virginia pine becomes the center of attention every year in December. It is the primary species planted for Christmas trees in the South. Young Virginia pines naturally form a dense pyramid shape and only need light pruning to form “perfect” Christmas trees. The wood is also useable for pulp and paper and low quality lumber. The tree usually keeps its branches, even after they die from shading, giving the tree the nickname of the scrub pine.

Virginia pines are found naturally from New Jersey to the mountains of north Alabama. It is generally found on poor quality sites and needs full sunlight. It has been planted extensively across the South for Christmas trees and also for erosion control on steep banks.

Virginia pines flower in early spring and produce cones that take two years to mature. Seeds are shed in late October, while the cones remain on the trees for up to five years. The young seedlings require direct sunlight for growth and survival. At the end of the first year, the seedlings reach a height of four to eight inches. At the end of ten years, they may average 17 feet. Christmas trees that are grown from nursery seedlings can reach merchantable size in four to six years.

In the forest, Virginia pines reach 50 to 75 feet in height and 18 inches in diameter. The trees reach maturity at age 50 and seldom live longer than 150 years.

Virginia pines in the forest are subject to several diseases and insect attacks. In Christmas tree farms, pales weevil and Nantucket tip moth cause much damage. Forest grown trees are subject to attack by southern pine beetle and red-heart rot disease.

When choosing a Christmas tree, look for trees that are fresh, well formed, and have a straight lower stem. Tests for freshness vary, but a reliable method is to bounce the tree on its stump and look for falling needles. Virginia pine keeps its needles longer than the fir-type Christmas trees. Once you take the tree home, keep it shaded and well watered to maintain its freshness.

The Alabama State Champion Virginia pine is located in the Bankhead National Forest in Lawrence County. It stands 97 feet tall with a diameter of 23.2 inches. ♣

ACTIVITIES

DISTRICT 1—**Calhoun County** has recently organized a new Volunteer Fire Department Association.

Marshall County forestry personnel assisted **Cedar Lodge Recreation Area** in selecting trees to remove because of disease and shallow root systems caused by excessively high water table.

Larry Parker, Marshall County, has been working with the City of **Guntersville** in site preparation and landscaping on Highway 431 near the river bridge. Dogwoods and juniper were planted in this area.

A forestry slide presentation was given by **Larry Parker** to the **Soil Conservation Service Banquet**.

DeKalb County has been working with the **De Sota State Park** in opening bike trails. The trails are approximately 2 miles long.

Madison County Forester, Charles Weber, has recently worked with the **Burrett Museum** in Huntsville in selecting a landscape architect. Timber and wildlife management recommendations were also made.

Cherokee County has three more certified volunteer fire departments. Certificates were presented to **Leesburg, Broomtown** and **Rinehart** fire departments.

Alabama Space and Rocket Center in Huntsville was assisted by **Charles Weber** in marking trees for removal in the recreational area.

Dan Fincher has recently attended the NRA school to qualify to operate the range for district practices and qualifications with their weapons.

In April, the **Northeast Alabama/NW Georgia Fire Prevention Group** met to discuss accomplishments for past fire seasons and plans for 1984-85 fire season. **Dan Fincher** and **Stanley Anderson** attended from District One.

Gene Wade has recently been appointed to the **Steering Committee** to represent District One. He was recently appointed to serve an unexpired term of **Jimmy Copeland** and will do a good job as the steering committee representative.

DISTRICT 4—**Rangers Ronnie Ray** and **Euwel Giles** have participated in Boy Scout activities in their county. Ray and Giles always meet with the **Chambers County Firemen's Association** (quarterly meeting). They did a program at **Chamber's Academy** on the Importance of Timber Products; they used visual aids and feel that there

was a good response. They also did a program for the **Fredonia Fire and Rescue Department** concerning Forestry Law Enforcement and information on Burning Permits. The Fredonia department agreed to aid with the permits.

Chambers County has 13 RCFP units; 9 of these units are also Rescue Units with rescue equipment. There are 13 **Emergency Medical Technicians** serving with the RCFP units and 5 of these are Paramedics.

Floyd H. Clanton retired April 30, 1984. He has been Ranger Supervisor for 23½ years in Chambers County. He has been honored by the **County Commission**, the RCFP units, his **State legislative representative**, the **Hon. Bill Fuller**, and the **District 4** people, and others for his outstanding service to Chambers County and to the **Alabama Forestry Commission**.

Clayton Schwind transferred from **District 9** to **Chambers County** on May 14. He is **County Forester**.

Earl Smith, **County Forester**, met with the **Clay County Forestry Planning Committee** and discussed **Forest Regeneration** in **Clay County**. Committees were appointed to study the problems and decide on adequate response. Smith also assisted in setting up the **FFA Forestry Judging Competition**. Smith and **W.N. McCollum** worked with the **Clay County Fire Fighters Association** in setting up a **County RCFP** competition. On March 7, **Smith, McCollum**, and **Keith Medforth** all participated in this competition which was called the **Clay County Fire Fighters Spring Festival**.

Earl Smith attended the **Forest Herbicide Seminar** at **Camp Hill, Piedmont Substation**; the pest coordinators meeting in **Montgomery**; and the dedication ceremony of the **Delta Fire Department**.

Glenn Berry, **Cleburne County Forester**, attended the regular meeting of the **Cleburne County Forestry Association** in the **County Extension office**; he attended and assisted in the organization meeting of the **New Hopewell RCFP Department** at **Antioch Methodist Church**; he also organized and assisted the **County FFA Forestry Judging Contest** with **Ranburne** and **Heflin High schools** participating.

Steve Nix, **Randolph County Forester**, assisted in a **Biomass Seminar, REMAP** project, at the **Farm Bureau building**. Steve introduced **Jim Gober, AFC, Gary Faulkner, AFC, Ralph Stanford**, **Alabama Dept. of Economic and**

Community Affairs, and **Sam Wylie, Jr. REMAP Agriculture and Business Chairman**. There were talks and discussions of various aspects of biomass usage in industry. Nix also did a program for the **Wadley Kiwanis Club** concerning biomass utilization for **Randolph County**. Nix (a member of the **Rotary Club**) had **Lee Laechelt** of **Birmingham (AFC)** to do a **Greater Awareness program** for the **Roanoke Rotary Club** on **TREE CITY USA**. Nix and other **County agency** people received the announcement from **Larkin Wade** that their nomination of **THE RANDOLPH LEADER** had been approved for a **Mosely Environmental award**. Steve also assisted in a meeting of the **West Point Lake Committee** at the **Resource Manager's office** in **West Point, GA**. **Gordon Maner** is **Chairman-elect** and **Steve Nix** is **Co-chairman-elect** for a 2 year term.

Ranger Charles Sikes assisted in presenting a program for the **Randolph Co. Association of Volunteer Fire Departments** monthly meeting at the **AFC office** in **Wedowee**. The program subject was **Fire Hazards** around the home. This same program was done at **Harmony Church** for the recently organized **Newell Fire Dept.** and the ladies of the RCFP. Sikes is assisting the **Morrison Cross Roads RCFP Dept.** in attaining certification. He also did a 2-day wildfire suppression training course in April for 20 members of the **Randolph County fire departments**.

Randolph County ranger Doyle Foster assisted in a program on **Forest Improvement** in **Wadley** with **Ray Covin** of **AFC**. He also attended a **Law Enforcement session** at **Randolph County courthouse**—organized by **Sheriff Fred May**. Foster also assisted in a map information session for the county officers with **Jim Spradley, AFC pilot**. He attended a meeting at the **Bank of Wedowee** concerning a **Forestry reward fund**; he assisted in a training meeting of the **A&M Fire Dept.**

Talladega County ranger Supervisor Clyde Atkisson and **ranger Steve Blanton** assisted in a program for the **Talladega County Association of Firefighters**. The subject was the **Acreege Assessment Bill** for **Talladega County**. They used charts with facts and figures of wildfires and damages/losses in the County. The result was a **Resolution** by the Association to promote the bill. Atkisson and Blanton planted 30 dogwood and cherry trees in **Arbor Day programs**. In February they instructed 24 **Boy Scouts** in tree identification using the book **100 TREES OF ALABAMA**; **Boy Scout Troop 130** worked hard on this project to obtain **Merit Badges**. Atkisson and Blanton participated in a program for the **CRD Committee** and their guests on **Waste of Forest Re-**

sources by **Wildfire** in **Talladega County**. **District Forester Ernie O. Moore** presented the program with the rangers' assistance using charts he (Moore) had compiled. There has been a good response concerning the increased awareness of conditions in the county.

In February the rangers met with the **Talladega County Association of Firefighters** concerning the enforcement of forest laws. The departments agreed to assist with **Enforcement** and to assist in distributing the **Section-Township-Range stickers** and **Burn Permit** information to landowners.

Talladega County Association of Firefighters discussed equipment needs and made application for 5 trucks. **Atkisson** and **Blanton** did a program for the **5th, 6th, and 7th grades of Talladega Middle School**; this was a **wildlife preservation poster contest**. 103 posters were entered in the contest. Ribbons and a plaque were awarded.

Steve Blanton did a program for the residents of **Providence Community** concerning the correct way to control burn small plots. Twelve residents of the community participated.

Tallapoosa County forester Guy Slayden and rangers **Jim Money** and **Ben Parrish** were involved in **ARBOR WEEK** programs in **Dadeville** and **Alexander City**. They gave away trees, balloons, rulers, and litter bags. **Smokey Bear** appeared at one kindergarten in **Alexander City** and one in **Dadeville**.

Forester Slayden organized a **RCFP competition** in **Dadeville** in March; **Tallapoosa County Firefighters Association** sponsored and participated in this event. **Bill Greer** achieved **TREASURE Forest status** for his farm out on the **Mt. Carmel Road, Guy Slayden** has been assisting in the planning. **Tom Cambre**, forester, was awarded the **Roy B. Morgan Memorial Forester of the Year Award** at the **Lamp-lighter** in **Montgomery**.

DISTRICT 5—The **West Central District FFA forestry judging contest** was held Saturday, April 7 at **East Perry High School** in **Perry County**. Teams from **Bibb County High** and **East Perry** finished first and second from a field of six teams. They will represent the **West Central District** in the **State Competition**.

On March 22, **Wilcox County** landowner **Jake Harper** was presented his **TREASURE Forest certification**.

During February, **Linden** and **Demopolis** signed **Arbor Week Proclamations**.

On January 13, **WHBB's Carolyn Hutchinson** interviewed **Larry Brooks** about the **TREASURE Forest Program**.

On February 14, Larry Brooks gave a program on prescribed burning to 25 landowners attending the Marengo County Minority Landowner Group.

The Marengo County Forestry Committees met on March 28 for a demonstration of Dupont's spot gun. Tim Sharpe, Dupont Chemical Co. and Frank Roth, Auburn Extension Forester presented the program.

On April 10th, an eight week course began at the Marengo County Area Vocational Center. One two hour course per week will be instructed by personnel from the Soil Conservation Service, Auburn Extension Service and Alabama Forestry Commission.

On January 26, the Wilcox County Farm Bureau Committee was presented a slide program on prescribed burning.

During March, District 5 personnel built and placed bluebird boxes at the district office and towersites.

Wilcox County personnel working with the S.C.S. participated in the Wilcox County F.F.A. Land Judging Contest.

On February 23, Marengo County Ranger Alan Weeks had a tree planting program at Demopolis Academy. The Smokey Bear film was shown to 150 students at the Academy and also the Log Cabin Kindergarten.



DISTRICT 8—Lynn Booth, District 8 Fire Specialist did a radio program on fire prevention for WJBB in Bay Minette on January 28, 1984.

Channel 10 in Mobile did a week of news series on the work of Volunteer Fire Departments in Baldwin and Mobile. The series was aired in February, with one segment being devoted to forest fires.

Lisman Fire Department in Choctaw County was inspected and received certification as a Volunteer Fire Department in February 1984.

A demonstration forest tour was held in Washington County on February 16, 1984. Approximately 30 people visited St. Regis Paper Company land to see demonstration plots that had been fertilized. The plots were wet "pitcher plant flats" that were deficient in phosphorus.

The cities of Mobile, Foley and Silverhill were designated Tree Cities USA again for 1984, during Arbor Week in February. The city of Loxley in Baldwin County was designated a Tree City for the first time during Arbor Week.

Numerous Arbor Day Programs with tree "give-aways" were conducted throughout the district with Mobile County giving away 52,000 seedlings. The Mobile County tree give-away was a cooperative effort of the AFC, International Paper Company, Scott

Paper Company, Mobile Tree Commission, Smith Bakery and Tom Dodd's Nursery.

This spring the Mobile Youth Conservation Program planted 12 acres of pine trees on an old landfill site to reclaim the area.

Chester Billie, District 8 Staff Forester and Lynn Booth, Fire Specialist, presented a program to the Montrose Garden Club in Baldwin County on February 15, 1984. Chester discussed shade trees and Lynn presented a fire prevention program.

On March 15, 1984, Mike Hinson presented a slide-tape to the Rotary Club in Clarke County.

The Choctaw County Forestry Committee held a Forestry Taxation Seminar on March 15. John Kelly, Tax Specialist with the Alabama Forestry Commission from Montgomery conducted the program.

Chester Billie, District 8 Staff Forester and Wildlife Specialist presented a program on Deer Management to the Baldwin County Wildlife Federation on March 27, 1984 in Robertsdale.

FFA Forestry Judging Contests were conducted by AFC Clarke County personnel in Grove Hill, Jackson, and Thomasville. The County competition was won by Jackson on April 3, 1984.

Baldwin County Supervisor Robert Dismukes presented a slide-tape program on Tree City USA to the Stockton Garden Club on April 4, 1984.

Mr. J.R. Crosby of Baldwin County received the Helene Mosley Award for the Best Treasure Forest in South Alabama. The award ceremony was held at the AFC District Office in Bay Minette on April 6, 1984. Frank Roth, Forestry Specialist with the Cooperative Extension Service from Selma presented Mr. and Mrs. Crosby with a certificate, picture and a check for \$500.00 Mr. Cleveland Morgan from Clarke County was one of five runners-up for the award for South Alabama.

Mr. Robert Dismukes, Baldwin County Supervisor presented a program on Tree City USA to the Westminster Retirement Community in Spanish Fort on April 17, 1984.



DISTRICT 9 — March 8th was Treasure Forest Day in Marion County.

Among the events occurring that day was the meeting of the Alabama Forest Planning Subcommittee on Treasure Forest certification in Hamilton. Three new Treasure Forests for Marion County were certified, namely, R.P GOGGANS, BUDDY GOGGANS AND JOHN GOGGANS. This brings the county's total to eleven. The Alabama Forestry Commission slide/tape program was also

shown on that day to the Marion County CRD Committee. Thurston Nix was honored at both events for being one of the three Mosley Treasure Forest Award winners. Mr. Nix was presented with a \$500.00 check as part of the award by Dr. Frank Roth, Forest Management Specialist with the Alabama Cooperative Extension Service. This is the second time in the last two years that Marion County has received the award in Extension District 1 and AFC District 9.

Alabama Forestry Commission, Champion International Corp. and Tennessee River Pulp and Paper Company sponsored a Forestry Camp held at the Bear Creek Center. Students from sixteen Northwest Alabama schools heard presentations from Dr. Harry Larsen, Auburn University; Reid Parker, University of Georgia Forestry School; and Joe Namie, Head, Forest Technology Department, Itawamba Jr. College. Foresters from the AFC, Champion International Corp., TRP&P, and U.S. Forest Service served as instructors for the two-day event. Dr. Harry Larsen, a member of the W. Kelly Mosley Awards Selection Committee, presented Louise Bone with a support award to fund the camp.

Steve McEachron, County Forester, Lauderdale County, was

presented the Officers Award by the Lauderdale County Volunteer Fireman Association at their annual dinner.

The Florence Recreation Department has opened the hiking trail located adjacent to the District 9 office complex.

The Florence Garden Club has received \$1,000 from the W. Kelly Mosley Environmental Awards and has begun construction on the Wildflower Trail located at the District 9 office complex.

Alabama Power Company hosted "Energy Awareness Day" held at the Hyatt House in Birmingham. Louise Bone represented the AFC and Florence Garden Clubs.

District 9 personnel attended a three-day course on equipment operation taught by Steve Weaver.

Plans are being finalized for a tax seminar for landowners, accountants, and all interested persons. Contact Louise Bone at the Florence headquarters.

The Alabama Forestry Commission is sponsoring a thirty hour basic firemanship training session. Bobby Atkins of the Decatur Fire Department is the instructor.

The AFC and SCS have broadcast a Prescribed Burning course on their television program — "Conservation Today".



Kelly Mosley Honored

Alabama's first TREASURE Forest recipient, W. Kelly Mosley of Atlanta, Ga., has won a 1984 Gulf Oil Conservation Award for using the principles of multiple use management on his 920-acre timberlands in Marengo County, Alabama.

The Gulf Oil Conservation Awards are presented each year to 10 professional and 10 citizen conservationists for their outstanding contribution to the preservation of renewable natural resources. Each 1984 honoree received a bronze plaque, a citation and \$500 at a special awards ceremony at the Four Seasons Hotel in Washington, D.C. on May 10.

SUBURBAN FORESTRY

A New Frontier

by LOUIS HYMAN, Chief, State Lands

Since the mid-1950's, the most noticeable population growth pattern in the United States has been the mushrooming spread of the suburbs.

Recently, these developments have been including outsized lots of two to ten acres for each house. These homeowners have an opportunity to practice some forest management on a small scale. This interface between traditional rural forestry and urban forestry can use concepts from both fields. The emphasis is more toward individual tree management than is the case in rural forestry, but it is not as intensive as in urban forestry. This article is primarily aimed at people whose homesite is larger than a city lot, but has less acreage than needed for commercial forestry.



Suburban residents can practice forestry on a small scale to produce all of the TREASURE benefits.

Inventory the Lot

The first step in suburban forestry is to inventory what vegetation you already have on your property. In the October 1983 issue of **American Forests**, Rita Malone wrote a good article on just this subject. The first step is to draw a map of your property. Ms. Malone says that the "exact locations of plants and structures are not critical, but . . . should be accurate to within a few feet of their actual location." For a more detailed discussion of mapping and land measurement see "Basic Steps in Land Measurement" in the Fall 1983 issue of **Alabama's TREASURED Forests**.

Things you need to include in your map are the location of buildings and driveways, garden plots, streams or other natural features and the location of trees. On smaller lots it is possible to

number all the trees. On larger tracts they can be clumped into small blocks, based on tree types and sizes.

The next step is to inspect each tree. Ms. Malone suggests that you write down the following information for each tree. *Tree location and type* is needed so that you can return to the tree for future work. *Tree size* is usually recorded as diameter of the tree stem at 4½ feet (diameter breast height). *Tree height* is another useful measurement. Neither of these items needs to be too precise, so rough estimates can be used. *Date planted or tree age* is also helpful for your records. The *condition* of the tree is based on four classes: good, fair, poor, or dying. Also list any *insect and disease problems* as well as any *work needed*, such as pruning or trimming.

Plan Your Objectives

Once you know what you have, the next step is to plan what you want to do with your property. Most people have four general goals for their homesteads: aesthetics, wildlife, recreation and income if possible. By aesthetics, I mean making the yard look as nice as possible so that you can enjoy the view from your patio, porch, or window. Many game and nongame animals can be attracted to your house, such as songbirds, squirrels or even deer. Family play areas or picnic sites can be excellent uses for the backside of a large lot.

While timber production might not fit in with your goals, there are other

income making or money saving ideas that you can use on your homestead. One good use of a portion of your lot is a small Christmas tree plantation. In Alabama, Virginia pine can be grown for Christmas trees on a four to six year rotation. The trees can be planted on a six or eight foot grid. The plantation usually needs weed control, but this can be done by mowing between the trees at least three times during the summer. The trees also need to be pruned twice a year so as to achieve the best Christmas tree shapes. On a small plantation this work would not be that time consuming. Soon you can be using your own trees at Christmas, and even making a little money selling excess trees to your neighbors.

Another idea that is cost-effective is to plant a few acres in pecan trees. As these trees mature, they create a lightly shaded area that is aesthetically pleasing as well as useful for a children's play area. Nut producing trees require spraying at least three times a year and protection from fall bagworm. Nut production varies from year to year, but the trees will nearly always pay for themselves.

Another money saving idea is to establish a firewood lot. Dead or dying trees, tree prunings and poor quality trees are all sources of firewood. In fact, prunings from pecan trees, which are a variety of hickory, make a high-quality

firewood with an aromatic smoke. Other prime firewood trees are hickories, oaks, dogwood and persimmon. These trees are also prime sources of wildlife food, so only take out the poorly formed or suppressed trees for firewood. Prime firewood species can be planted as a source of future firewood, and would be ready to be thinned for firewood in about 15 to 20 years.

Trees can also help conserve energy in your house for shade in the summer. Shade trees can lower the temperature of your house and thus save on air-conditioning costs in summer. Likewise, a windbreak of evergreen trees, such as cedar or pines on the north and northwest sides of the house, shelter it in winter and could lower heating costs.

If your homestead is over ten acres you might consider having a small timber sale if there are enough trees present. The best type of operation is a selection cut where individual trees are marked to be removed by a short wood pulpwood operator. This is not a strong money maker as small sales generally are at the low end of the price scale.

Enjoy the Beauty

There are many other uses of your lot than just making money. One of the main reasons people leave the city and

move to the suburbs is to live in a prettier place and have a chance to see wildlife. The TREASURE Forest concept holds that forestlands can produce a multitude of uses for the landowner. Many uses are intertwined. For instance, many of the firewood species listed above are also important wildlife food sources. Other wildlife food producing trees are mulberry, holly and black cherry. Some things you can do to attract songbirds include setting out nesting boxes, feeding stations and a birdbath. You would want the feeders and the bath within sight of the house so that you can see and enjoy your visitors. Many of the favorite songbirds are "edge" dwellers who need mix of open land, shrubs and large trees.

Many hardwood trees take on beautiful colors in the fall. These trees can form striking vistas from your patio or front window. Other trees produce pretty flowers, such as magnolias, dogwood, redbud, and yellow poplar. Colorful trees can be planted, or left during firewood cutting, in areas where their beauty can be admired. (See "Color Your Forests This Fall" in **Alabama's TREASURED Forests**, Fall 1983).

One of the best ways to fully utilize your property is to develop recreational areas away from the house itself. A family picnic area with a barbecue grill in a grove of trees will be enjoyed for years. Tree houses are an adventure-some project for children. These platforms do not have to be high, and can be fixed up as fancy as a child's imagination permits. Other recreational ideas include laying out a jogging/walking path on larger tracts, building a natural wood play gym for children, and setting out a rustic-style bench in a quiet part of the tract for a restful hiding place to sit and relax.

Alabama is blessed with abundant rainfall and many streams and creeks. A creek on your property can be dammed to form a small pond. Depending on its size, the pond can be stocked with fish, or can be left as a point of interest and as a water source for wildlife. Contact your local Soil Conservation Service for more information on pond building.

There are many other things you can do on your homestead. Many people have large vegetable and flower gardens. You could build a grape arbor or rock garden. While few yards are large enough to do all the things discussed in this article, feel free to pick and choose the ideas that you like. A well laid-out yard enhances the value of your house. Your only limit is your imagination. ♣



Forest management on large lots provides many benefits to the homeowner.

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