

Alabama's **TREASURED** Forests



Summer · 1991

STATE FORESTER'S MESSAGE

by C.W. MOODY



“Along with the right to own land comes the responsibility to be a good steward of the land.” I have made this statement, or some variation of it, many times over past years. I am totally convinced to this day that it is a philosophy which is good for forest landowners, the state of Alabama, our nation and our world.

Most of the time I made the statement to landowners to emphasize the need to be responsible stewards so they could become TREASURE Forest owners and good landowning citizens of Alabama.

This time however, I would like to speak up for some of the rights of forestland owners in Alabama. Owners have the right to pursue and achieve their own objectives, as good stewards, on their privately owned forestland. They have the right to control access to their forestlands as consistent with the common good. They have the right to receive full and just compensation for values which are privately owned in their forests. This includes recreational leases and timber sales. Restrictions which take these rights and values from responsible forest owners erode the rights of all and should not be allowed to take place.

I am specifically referring to the furor in Northeast Alabama regarding the permitting of chip mills along the Tennessee River. Vigorous review is justified to determine whether there is, or will be, a detrimental environmental impact on locating chip mills along the river. However, no step should be taken which would deny TREASURE Forest owners, good stewards of forestland by definition, the top price for their forest products.

We will continue to carefully monitor this situation and promote the well-being of TREASURE Forest owners and other good stewards of privately owned forests. The course of action will also unquestionably promote the common good for Alabama, our nation and our world.

Sincerely,

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

C.W. Moody
State Forester

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

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Alabama's TREASURED Forests

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A Commitment to Excellence

by TILDA MIMS, Information
Specialist, Tuscaloosa



In Dr. Bill Sudduth's TREASURE Forest management plan, timber is named as the primary objective, and wildlife is secondary. However, this listing could easily be reversed. His TREASURE Forest is an excellent example of timber and wildlife management functioning together in a harmoniously sound environment.

Sudduth began practicing forest management in 1974 on a 1,097-acre tract in Hale County. He purchased it with money saved while at sea in the Navy after medical school graduation. He later bought 180 more acres adjoining that property.

In addition to the property in Hale County, his TREASURE Forest now includes 400 acres in Perry County, 346 acres in Chilton County and 160 acres in Marengo County. He makes his home on a 65-acre tract in the Summerfield community in Dallas County.

The Hale County tract is known as Cedar Hill, and is clearly a favorite spot for Bill Sudduth, his family and his friends. Carefully managed forestland, an abundance of wildlife, and a recreational lake are only a few of the improvements that disguise Cedar Hill's humble beginnings.

When Sudduth bought Cedar Hill in 1974, the timber had been cut to a 12-inch stump. The major portion of the land was poorly managed, and the rest was left natural. Rampant poaching had eliminated most of the wildlife from the area.

Careful Planning

His successful forest management is testimony to many years of careful planning, and an unflinching belief that

his efforts are worthwhile.

Doug Link, a land manager for Alabama River Woodlands, has served as Sudduth's professional forester for many years. "All of Bill's properties are managed for maximum output," said Link. "To reach his goals, an in-depth, by-site management plan featuring a mixture of even-aged and uneven-aged stands was devised and implemented."

Regular prescribed burns and improvement cuts favoring mast producing hardwoods enhance natural pine and pine/hardwood stands. An average of 150 acres is burned annually, with about half designed for fuel reduction.

Both upland and bottomland hardwood areas have been improvement cut for timber and wildlife.

Future plans for Sudduth's timber contain long-reaching management objectives which include 650 acres of pine plantation managed with basal area cuts, 441 acres of bottomland hardwood maintained with improvement cuts, 90 acres of upland hardwood on a 40-50 year rotation, 393 acres of natural pine using a shelterwood cut and 200 acres of mixed pine/hardwood shelterwood.

Sudduth is very cautious when planning a harvest. He and Link personally mark the timber and monitor the entire operation. All timber sale contracts require the cleaning and smoothing of logging decks, which are later converted to food plots.

Den tree clusters are retained in all regeneration areas. Herbicide injection used for site preparation has produced attractive snags for wildlife.

Excellent stand layout gives special attention to slopes and drainage. Water

bars are provided on all roads, and the slope of all constructed roads is designed by the Soil Conservation Service.

Wildlife Management

Although Cedar Hill provides the most intensive wildlife management program, all of the Sudduth tracts have excellent wildlife and timber coordination. All 2,068 acres of forested land are managed to provide mast, cover, brood rearing, browse and nesting areas for wildlife. Food, water, cover and arrangement are considered prior to any project.

Poor land management and poachers had nearly stripped the area of wildlife in 1974. Following TREASURE Forest principles helped Sudduth turn barren land into a forested haven for Eastern bluebirds, Canadian geese, turkeys, quail and white-tailed deer.

The first four years he owned Cedar Hill, Sudduth says he had no evidence of deer. He initiated a deer management program to focus on enforced hunting restrictions and ample food and habitat. Within a few years, the program paid off with a nine point, 180-pound buck.

Current hunting restrictions prohibit taking a deer with less than eight points. One area devoted solely to bow hunting allows any legal deer to be harvested. Sudduth notes that it is rare to go into the hunting areas and not see at least one antlered deer.

Seven mineral licks are provided year-round near food plots to supplement deer foods. Sudduth mixes his own special formula of dicalcium phos-

phate layered with Dallas County Co-op mix. The licks help improve the quality of the deer's racks by enhancing their nutritional intake.

Sudduth has been an enthusiastic participant in the Deer Management Assistance Program for over four years. The best deer to date on the Sudduth TREASURE Forest is an eight point typically scoring 152 on the Boone and Crockett scoring system.

Twenty-three food plots containing clover, chufas, velvet beans, rye grass, browntop millet and wheat dot the acreage. Autumn olive, sawtooth oak and bicolor lespedeza have been added to provide a food supply for deer, as well as other wildlife. Each year 25-30 acres of corn are planted to serve as wildlife food.

Cultivated foods are cut and edged each year to allow turkeys access to the food. Cuttings are left on the ground until September to retain moisture and attract rabbits and other small game.

Small clearcuts break up larger stands and add nesting areas. Great attention is given to edge effects and creating diversity.

No waterfowl hunting is allowed on Cedar Hill, although every effort is made to attract geese and ducks.

Sudduth has received a resident Canadian geese population through the Greg W. Myers Memorial Waterfowl Program. The geese have adapted to the area, and seem to enjoy the availability of ponds and lakes in Hale County.

Sudduth has an excellent population of wood ducks. He says there isn't a fall afternoon when you can visit this TREASURE Forest and not see at least a few of them. Family members have counted as many as thirty-five wood ducks traveling in a fly-way in a single day.

The wood duck population was once on the decline due to nearby poachers using baited land and ignoring bag limits and hunting seasons. Several years ago, Sudduth purchased about 90 acres adjoining his property where poachers were known to frequent.

Now, when duck season approaches, Sudduth pours corn into shallow waters near the property line to keep wood ducks on Cedar Hill.

Sudduth has his own Eastern bluebird program. In addition to about 40 bluebird boxes at Cedar Hill, he likes to give them away, too.

He regularly donates wood to a carpenter friend who builds bluebird

boxes for Sudduth to give away to friends and family. He has distributed over 250 bluebird boxes in Alabama and throughout the South.

A 22-acre lake was constructed on the property and stocked with bream and bass. Standing timber retained during the creation of the lake now provides ample snags. Wood duck boxes, including unique "squirrel proof" ones, surround the lake. An additional recreational pier is under construction.

An attractive camphouse welcomes friends and family who come to visit. Martin gourds, bee hives, fruit trees and muscadine vines nearby truly make this a home away from home.

Community Involvement

Dr. Bill Sudduth has been a

TREASURE Forest landowner since 1988 and was co-winner of the 1990 Helene Mosley Memorial Award. He has been an active member of the American Tree Farm system since 1977, and serves on the Board of Directors of the Alabama Wildlife Federation.

Bill Sudduth enjoys welcoming forestry tours and educational activities to Cedar Hill. He has hosted the Society of American Foresters national convention hardwood tour as well as many local school organizations.

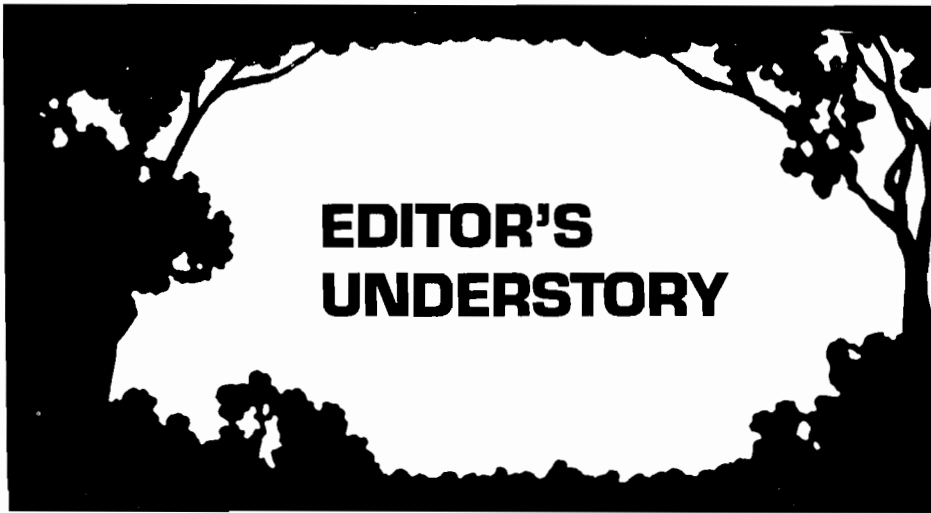
When talking to Bill Sudduth for even a short period of time, it is evident that our environment and quality of life is foremost in his mind. His commitment has resulted in an outstanding TREASURE Forest that is an excellent example of timber, wildlife and aesthetics functioning together. ♣



For aesthetic reasons, Bill Sudduth and Doug Link mark the timber near the house with flagging tape instead of paint.



Dr. Sudduth has been maintaining this particular deer lick for 17 years.



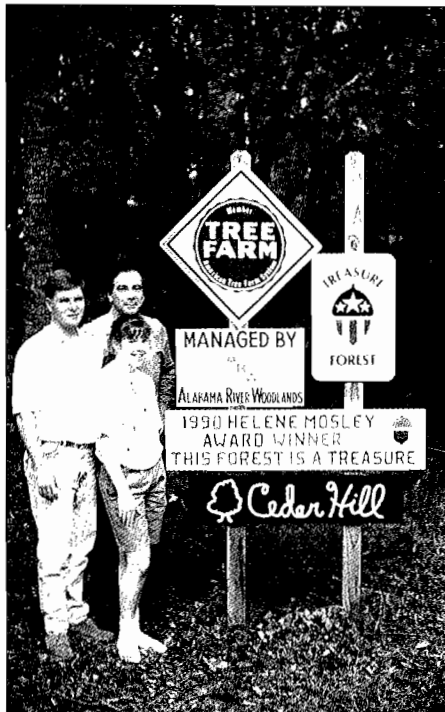
EDITOR'S UNDERSTORY

by TILDA MIMS, Information Specialist, Tuscaloosa

If a list of ingredients for success was made, it might include equal portions of planning, commitment and sacrifice. Bill Sudduth's personal formula would have to include a generous dollop of patience.

Sudduth's career goal of becoming a doctor, and a personal goal of owning healthy, productive forestland are the kind that take time.

"My older brother was a doctor, and he served as a role model for me. I always enjoyed biology and chemistry, so studying medicine was a natural progression," he said. "And I've wanted to own forestland since I was a child."



Scott, Bill and Sherri Sudduth

Sudduth majored in chemistry and biology at the University of Alabama, and completed medical school at UAB. Following graduation he served 30 months as a Navy flight surgeon stationed with a helicopter-carrier unit in the Mediterranean. He then returned to UAB to complete a five-year residency program in orthopedic surgery.

In the second year of his residency, Sudduth purchased his first forestland. Poorly managed for both wildlife and timber, the Hale County land occupied much of his limited spare time while attending school. He patiently began to develop long-range plans for healthy timber and wildlife habitat by personally planting trees and prescribed burning.

Many years have passed, and while much has changed in Bill Sudduth's life, much has remained the same. Bill Sudduth is now Dr. Bill Sudduth, an orthopedic surgeon with a successful practice in Selma.

His forestland holdings now include over 2,000 acres in Chilton, Dallas, Hale, Marengo and Perry counties.

The forest management plan initiated by a young student now typifies the TREASURE Forest principles and was named co-winner of the 1990 Helene Mosley Memorial TREASURE Forest Award.

Sudduth's dedication to improving his forestland, however, is unchanged. He continues to enjoy being personally involved in every aspect of the management plan.

"I just make time for it. It's rare that a week goes by where I don't spend at least one afternoon there. I still enjoy doing a lot of the work myself."

Wildlife may be a secondary objective on his TREASURE Forest plan, but after only a few moments with Bill Sudduth it is clear that he is dedicated to preserving and enhancing Alabama wildlife.

He has served on the Board of Directors of the Alabama Wildlife Federation for many years. One of his favorite AWF duties is helping to judge the annual youth art contest.

He pledged the cash proceeds of his Helene Mosley Award to an environment and conservation essay contest sponsored by the AWF.

He continues to enjoy the forest during his leisure time, but now enjoys sharing its bounty with friends and family. He particularly delights in sharing it with his children, Scott and Sherri.

Scott is 21 years old and a student at George Wallace Junior College in Selma. He enjoys the abundant hunting and fishing opportunities, but balances that with the responsibility of maintaining a healthy wildlife population.

Scott planted several of the food plots, in addition to sawtooth oaks, autumn olive and bicolor.

Eleven-year-old Sherri may have the most fun of all in this TREASURE Forest. She gets to host spend-the-night parties in the camphouse at Cedar Hill. She and her friends can giggle into the night without disturbing any neighbors.

Many believe the secret of enjoying one's success is not to be completely content with one's achievements. Setting new goals may continue to fuel the sense of dedication and commitment necessary for true happiness.

Bill Sudduth may practice this belief because he continues to set new goals for his TREASURE Forest.

"My goal is to produce a healthy game population and to eventually build my retirement home at Cedar Hill. At the time of my retirement I want to be able to cut 200 acres of mixed timber annually while maintaining all hardwood drains."

It is easy to visualize Bill Sudduth attaining his goals and settling into a comfortable, relaxed lifestyle following retirement. It is not likely that he will be complacent.

Rather, one can picture him taking a leisurely stroll past a wildlife food plot, over the ridge to check a thinning operation, and down by the lake to observe the wood ducks, all the while setting long-range management goals for his great-grandchildren to enjoy. ♣

Who Owns Alabama's Forest?

by J. STEPHEN NIX, Resource Analyst, and
L. LOUIS HYMAN, Chief, Forest Information, Alabama Forestry Commission

There are two myths about forest owners in Alabama. The most repeated one is that our timberland is owned either by large timber interests or a special breed of private baron called the "landed gentry."

The second most popular myth is that government owns the rest of the forest—as it truly does in the western states—and that our land is under the watchful eye of some sovereign authority. This generalization is unfounded and based on many misconceptions.

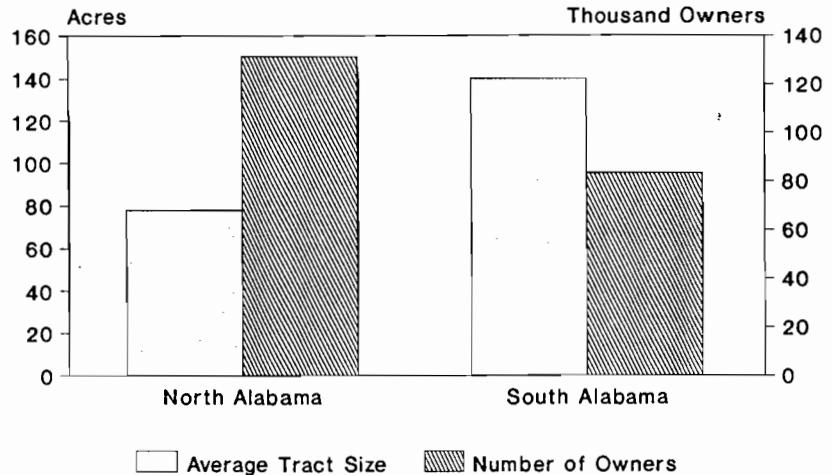
In reality, Alabama's forest ownership looks nothing like either of these. Most of the South Central region of the United States is comprised of hundreds of thousands of small private forest ownerships.

The typical Alabama forest owner owns only a small forested tract. In fact, the average forest owner in our state, according to the latest 1990 Alabama Forest Landowner Survey, owns a mere 80 acres. He or she generally has a high school or better education, earns an average income and has lived through the fourth decade of life.

The Alabama Forestry Commission's new forest owner survey lists some 214,241 ownership units, down 4 percent from the 1982 report. Most of this loss came from the northern portion of the state, due to a loss to other competing land uses and a redefinition of the database. There was an actual gain of forested ownerships reported in South Alabama over the last eight years.

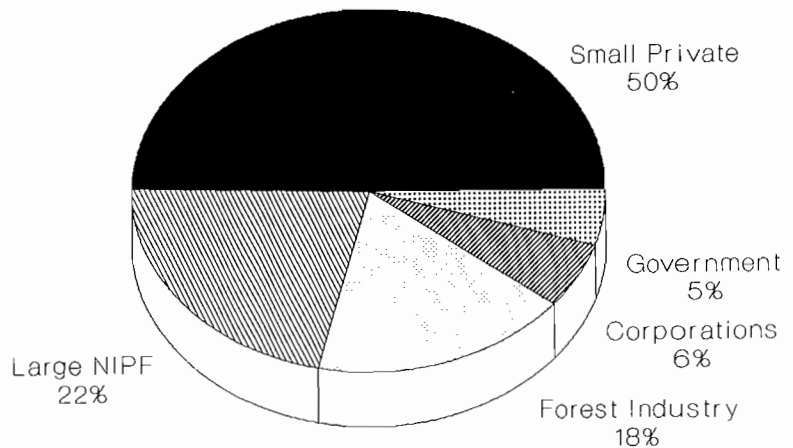
Cullman, Jefferson and Marshall County have the largest number of owners with typically the smallest average tract sizes in Alabama. Montgomery, Lowndes and Chambers County have the least number of owners with some of the largest average tract sizes in Alabama. On the average, North Alabama supports large numbers of owners and small average acres, while South and Central Alabama supports small owner numbers and large average acres (FIGURE 1).

**FIGURE 1 FOREST OWNERSHIP PATTERN
North Alabama vs. South Alabama**



1990 ALABAMA FOREST LANDOWNER SURVEY - ALABAMA FORESTRY COMMISSION

**FIGURE 2 FOREST OWNERSHIP IN ALABAMA
By Ownership Classifications**



(ACRES) 1990 ALABAMA FOREST LANDOWNER SURVEY - ALABAMA FORESTRY COMMISSION

The smaller independent private owner (with less than 500 acres) owns 10.9 million acres, nearly 50 percent of our 21.9 million commercial forested acres. The larger non-industrial private owner (with 500 acres or more) owns an additional 4.8 million acres, or 22 percent of the total Alabama forest. Forest industry owns 3.9 million acres for 18 percent; other corporations own 1.3 million for 6 percent, and govern-

ment owns 1.1 million for 5 percent (FIGURE 2).

Landowners in Alabama have stewardship over the key forested resources that significantly effect Alabama's economy and environment. This unique group needs to continue to work together along with the non-forest owning public, industry, and agencies so that Alabama can be made even better for people through forestry.

Organizing a Hu



by H. LEE STRIBLING,
Extension Wildlife Specialist

The popularity of hunting clubs in Alabama grows each year. Hunting clubs offer their members several advantages not available to independent hunters. Members cite fellowship, opportunities to actively manage resources, and an increased sense of safety and security while hunting as primary reasons for joining clubs.

The longevity and success of a hunting club often depends on how it is organized. Establishing and following a constitution and a set of bylaws helps to ensure efficient operation and continued existence. Provisions and regulations, which are basic to most social clubs, should be contained in any club's constitution and bylaws. The suggestions in this article apply primarily to large hunting clubs, but most provisions will benefit clubs of all sizes.

The constitution of a hunting club should contain provisions for the following: name, objectives, membership, officers, board of directors, meetings of the club, financial matters, amendments, and bylaws.

Name

Select a name that will identify the club and distinguish it from all other such clubs in the county or state.

Example:

The name of this club shall be
The Silver Creek Sportsmen's Club.

Objectives

Clearly state the club's objectives in the constitution.

Example:

The objectives of this organization are:

1. To create, foster, and promote the ideals of true sportsmanship and to actively manage, protect, conserve, and hunt white-tailed deer and Eastern wild turkey.

nting Club

2. To cooperate with all local, state, and federal agencies and other organizations similarly dedicated to the welfare of these and other wildlife resources.

Membership

Eligibility requirements for membership and how members will be brought into the club should be clearly stated.

Example:

1. Any licensed hunter who meets the requirements set forth by this club shall be eligible for membership. (Each club should specify its own requirements).

2. Members shall be selected by a majority vote of the board of directors.

3. Any child under legal age, whose parents or guardians are members in good standing, shall be an associate member without voting privileges and without payment of dues until reaching the age of 16.

Officers and Board of Directors

In the constitution, include a description of the number and titles of officers in the club, the length of their service, their duties and responsibilities, and how and when they are to be elected.

The composition and powers of the board of directors should also be described in the constitution.

Example:

1. The officers of this organization shall be: president, 1st vice-president, 2nd vice-president, secretary-treasurer, and three directors.

2. The board of directors shall be composed of all elected officers.

3. Each officer will serve for a period of one year following a majority election during the July meeting.

4. Two-thirds of the members of the board of directors shall constitute a quorum for business transactions.

5. The powers of this club, expressed or implied, shall be vested in the board of directors.

a. It shall constitute the executive body of this club and its action may be final, subject only to review by the membership.

b. It shall have general management control of the business property and funds of the club.

Meetings

State in the constitution when and how often club meetings will be held.

Example:

1. The club shall hold its meetings on the second Tuesday of each month (or quarter).

2. Two-thirds of the directors and one-half of the additional members shall constitute a quorum at regular meetings.

Financial Matters

Clearly specify matters regarding dues, the fiscal year, and the handling of finances.

Example:

1. Membership dues shall be set by the board of directors and are payable by July 1 of each year.

2. The fiscal year of the club will begin on July 1 and end on June 30.

3. The secretary-treasurer shall make a full accounting of the club's finances as often as directed by the board of directors. A statement shall be prepared, in acceptable accounting form, showing receipts, disbursements, and balance of funds.

4. The books and records of the secretary-treasurer shall be open to inspection at any time by members of the club.

5. Checks for all disbursements of the club shall be signed by the secretary-treasurer and countersigned by the president.

Amendments

Allow a provision for amendments to the constitution.

Example:

This constitution may be amended at any regular meeting by a two-thirds affirmative vote of the members present.

Bylaws

Bylaws should govern the day-to-day operation of the club. Adapt the bylaws to local conditions that affect the club, its relationships with landowners, and its use of wildlife resources.

Avoid overly burdensome bylaws. Newly formed clubs often create too many bylaws and are unable to enforce them. Select bylaws that are basic to the club's operation. Add others as needed when the club grows or changes. Consider the following concerns when writing bylaws:

1. Safety
2. Guest regulations
3. Land management
4. Disciplinary procedures
5. Specific hunting regulations
6. Operational committees (e.g., dogs, clubhouse, firewood, food, safety)
7. Hunter-landowner relationships

This article was reprinted from ACES Circular ANR-537, Auburn University. ♣

THINNING YOUR TIMBER

by MADELINE HILDRETH, Staff Forester and GIB BURKE, Management Specialist,
Alabama Forestry Commission, Brewton

Athinning is one of several intermediate cuttings in an even-aged stand designed to improve future growth by regulating stand density. The total useful yield of the stand is increased, since trees removed in thinnings would ultimately die of suppression. A trained professional can assist landowners in evaluating a stand's need for thinning.

The live crown ratio is a good thinning indicator. The live crown ratio (LCR) is the percent of a tree's total height which has healthy, living branches. If the majority of the trees in a stand have a LCR of 30 percent or less, a thinning may prove beneficial to the stand. Age is a poor factor in deciding when to thin. The age a stand should be thinned varies greatly with initial stocking, site quality, species and other factors.

Understanding the composition of the upper portion of a stand is important when evaluating thinning methods. The term "crown class" refers to the condition of a crown in relation to other tree crowns in the stand.

A stand is composed of several crown classes. The tallest trees with the largest crowns are dominant trees. They receive full sunlight from above and partial light from the sides. Codominant trees are also taller than the rest of the stand, but their crowns are often crowded on the sides since they receive little light in this area. Intermediate trees are shorter than dominants or codominants, but their crowns extend into the upper crown cover. While intermediates receive some light from above, they get none on the sides. Overtopped or suppressed trees are below the general level of crown cover. They receive no direct sunlight. These trees often die before they reach rotation age.

Types of Thinnings

There are several types of thinnings. The method used depends upon the composition of the stand. One method may be used for the first thin while another may be used to meet the objectives of subsequent thinnings.

The oldest thinning method is low

thinning. This is often referred to as "thinning from below" or the "German" method. In a light thinning incorporating this method, only the overtopped or suppressed trees are removed. In a medium thin, suppressed and intermediate trees are removed. In a heavy thin, all suppressed, intermediates and many codominants are removed, leaving only the dominant and best codominant trees. Low thinnings do a good job of utilizing trees that would otherwise die (suppressed and some intermediates), but often do not open the crown enough to stimulate growth.

The crown thinning originated in France and is often referred to as the "French" method. With this method, trees are removed from the upper crown classes—mostly codominants. Some dominants are also removed. This opens up the crown to favor the remaining dominants, codominants and intermediate trees. The very best dominants and codominants are left to grow and yield higher value products. Suppressed and intermediate trees are left to die or be removed in later thinnings.

The selection thinning method is very different from low and crown thin-

nings. Dominant trees are often removed to stimulate the growth of codominants and intermediates. The dominants removed should be poorly formed or otherwise undesirable. A poor selection of trees can result in high-grading (removing the better trees and leaving poorer ones as growing stock). This type of thinning is most applicable early in the life of the stand.

Mechanical thinning is most practical in stands that are very regular in density and composition. It is often applied in plantations. The name may be deceiving. Mechanical refers to a thinning pattern, not the type of equipment used in the operation. Mechanical thinning is based on predetermined spacing. Trees are cut at fixed intervals. For instance, every fourth tree might be cut, or entire rows may be removed at certain intervals (every fifth row, for example). This method does not consider crown classes, but does open the canopy. It is often used as a first thinning.

A combination of two or more thinning methods, without any method predominating, is free thinning. Since most often one single method is appropriate for a stand, free thinning should be reserved for very non-uniform stands.



Thinning opens up the canopy, allowing trees to receive more light to grow.

Advantages and Disadvantages

There are many advantages of a properly timed thin. The growth of the stand is concentrated on the better, more valuable trees, and the overall vigor of the stand is greatly increased. The decrease in basal area resulting from a thinning causes a reduction of Southern Pine Beetle hazard. Since the poorer trees are usually removed during the thinning, overall stand mortality is also greatly reduced. A thinned stand also offers improved wildlife food and more aesthetic appeal. Thinning during a stand's rotation can significantly reduce regeneration costs, whether regenerated by natural or artificial measures.

Thinning can also have an important economic impact. A well timed thin can reduce the rotation length of a stand, often by several years. The volume of the stand is better utilized,

and higher value products are often realized. To landowners, perhaps the most important economic advantage is the intermediate income provided by thinnings during the rotation length of the stand.

There are disadvantages to thinning as well. Since there is often much logging damage to the residual stand, the risk of insects in the stand is increased. Every effort should be made to keep logging damage to a minimum. The spread of Annosus Root Rot is often increased after a thinning operation. This can be reduced by properly treating stumps after cutting. The remaining stand is also less dense, increasing the likelihood of damage to the stand by lightning, wind, snow or ice.

Thinning ultimately reduces wildfire hazard. However, there is a temporary increase of wildfire hazard shortly after the logging operation due to the additional amount of slash on the ground. Following the thin with a prescribed burn can alleviate this problem.

Once a stand has been properly thinned, the crown growth and size of the remaining trees increases. The lateral root systems of the trees are able to expand. Diameter growth is often the most noticeable change. Growth in diameter may increase up to 20 percent. Height growth is the least effected; it changes very little or remains constant after a thinning operation.

Each stand is different in density and composition. It is important to con-

sider landowner objectives, silvicultural and economical, when developing a thinning schedule. To ensure that all thinning operations are well-timed to achieve objectives, landowners should seek the help of trained personnel throughout the stand's rotation. Properly timed, thinnings provide complete utilization of a stand's volume and ultimately provide the highest possible economic returns.

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HARDWOODS OF ALABAMA



Cherrybark Oak

by TOM CAMBRE,
Hardwood Specialist,
Alabama Forestry Commission

The cherrybark oak (*Quercus falcata* var. *Padgodaefolia*) is probably the most valuable red oak for those landowners desiring both wildlife and timber. This oak is a more massive, better formed tree than the southern red oak and often reaches heights of 100 to 130 feet, and a diameter of three to five feet. This puts it in a class among the largest of southern oaks. Other common names for the cherrybark oak are bottomland red oak, Elliott oak, red oak, swamp red oak and swamp spanish oak. This tree is found in many different bottomlands, but develops best on loamy ridges or on rich, but well-drained soils of old fields known as well-drained loams.



The associated species are many, soils for relatively short periods of a few days to a few weeks during the growing season. Mortality is high if flooding persists longer, as this species does not adapt a flood tolerance.

The cherrybark oak disseminates its seed from September through November and the acorns are highly suitable for waterfowl, deer, turkey and other wildlife. This tree is also very good but the most typical include sweetgum, water oak and swamp chestnut oak. This tree is weakly tolerant to flooding

and can survive saturated or flooded from a timber aspect. It is prized for high value in face veneer. Other uses are factory lumber, cooperage and cross ties.

Good success has been achieved through planting, interplanting and direct seeding when the correct site is available. Cherrybark oak is especially plentiful in the lower Mississippi Valley and because of its fast growth, clear bole, and the superior quality of the wood, it is rated as the best red oak of this region. ♣

THE BEST OF THE BEST

by SHARON A. CLARK, TREASURE Forest/State Lands Section Chief and
LARKIN WADE, Coordinator, Extension Forestry Programs

A landowner whose property is certified as a TREASURE Forest can be proud. Out of approximately 230,500 forest landowners in Alabama, only 764 can say they own TREASURE Forests. Owning a TREASURE Forest is a living symbol of a landowner's commitment to practicing good stewardship of the land for present and future generations of Alabamians.

Landowners who participate in the TREASURE Forest program do not get involved in the program because of a cash award they might receive for having their forestland certified. Their reward is a feeling of self satisfaction for doing something worthwhile for the living environment.

Since the program began in 1975, the number of TREASURE Forests has continuously grown in both quantity and acres. The property of Dr. W. Kelly Mosley in Marengo County, known as

Pineland, was certified as the first TREASURE Forest. Today, 764 TREASURE Forests cover 1.36 million acres in Alabama.

Dr. Mosley wisely realized that the TREASURE Forest Program would continue to be a success. He also realized that among the TREASURE Forest landowners there should be a way to recognize the best of the best. Through a \$10,000 grant to Auburn University in 1978 by Dr. Mosley, the Helene Mosley Memorial TREASURE Forest Awards Program was established. In cooperation with the Alabama Forestry Planning Committee (AFPC), the award annually recognizes the most outstanding TREASURE Forests, specifically with respect to educational value and use, like Pineland.

In 1981 the Helene Mosley Memorial TREASURE Forest Awards Program was transferred to the W.

Kelly Mosley Environmental Awards Program for continued funding and overview. Since 1981, the award has been jointly sponsored and administered by the Alabama Forestry Planning Committee and the W. Kelly Mosley Environmental Awards Program.

Nominations for achievements of multiple use development of forestland are not considered by the W. Kelly Mosley Environmental Awards Program. These achievements are referred to the Services Subcommittee of the AFPC. The Mosley Achievement Award and the Helene Mosley Memorial TREASURE Forest Award are considered equal. A landowner may not receive both awards.

The annual awards consist of three \$500 stipends made to the outstanding TREASURE Forest landowner in each of the three Helene Mosley Memorial TREASURE Forest Award Districts

TABLE 1

District and State Helene Mosley Memorial TREASURE Forest Award Recipients

Year	District I	District II	District III
1978	Boyd Batchelor*	Jere A. Henderson	F. Mooney Nalty
	Reform	Troy	Brewton
1979	Mildred Owens*	Robert L. Trotter	Frank M. Stewart
	Altoona	Montgomery	Vrendenburgh
1980	Billy Ogden	Russell Campbell*	Bealie Harrison
	Sulligent	Heflin	Grove Hill
1981	Harris M. Gordon*	Robert L. Snyder	M. H. Lee
	Columbiana	Montgomery	Carrollton
1982	Ralph McClendon	John W. Rudd*	Blinn Sheffield
	Attalla	Ft. Mitchell	Grove Hill
1983	Dorsey Taylor	Albert Rumph	Bruce Owens*
	Hamilton	Auburn	Minter
1984	Thurston Nix	Robert Sellers	J. R. Crosby*
	Hamilton	Troy	Stockton
1985	Floyd Clemons	The James Hughes Family*	Vivian White
	Paint Rock	Cottonwood	Coffeeville
1986	Clyde Holcomb Family	H.C. Jordon	James Brothers Farm*
	Hackleburg	Ozark	Brent
1987	John Mathews	Ed McCullers*	Ann Bedsole
	Cherokee County	Titus	Monroe County
1988	William T. St. Clair	Dr. Hoyt A. Childs, Sr.	Ozier D. Slay* Dozier E. Slay*
	Stevenson	Samson	Spanish Fort Daphne
1989	Sim T. Wright	Jimmy O. King	J. Gary Fortenberry*
	Fayette	Troy	Ward
1990	Jeff McCollum	Joel Neighbors*	W. D. Sudduth*
	Decatur	Rockford	Selma

*State Award Recipients

(see **FIGURE 1** and **TABLE 1**). One of the three is judged to be the best in the state and receives an additional \$500 stipend. Each of the three recipients also receives a framed, limited edition reproduction of a forestry-wildlife painting. The cash award and print call attention to the purpose of the award: to help others know and receive the benefits of multiple use forest management.

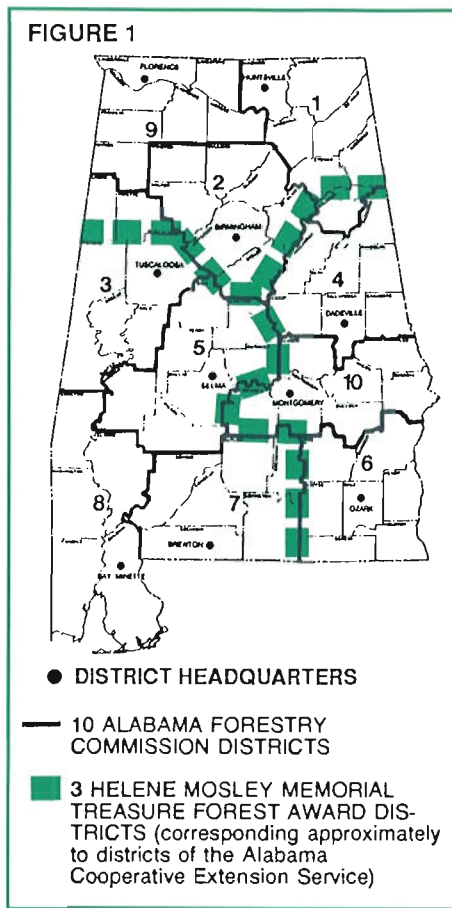
A TREASURE Forest may be honored only once as the state winner of the Helene Mosley Memorial TREASURE Forest Award. District winners may be resubmitted after five years to try again to be named as the state winner.

Procedures for selecting award recipients are as follows:

Each county forestry planning committee is requested to select the most outstanding TREASURE Forest from their county.

An AFPC Middle Management Selection Team reviews all nominations and selects the top four nominees from each Helene Mosley district.

The Services Subcommittee selects two nominees from each of the three Helene Mosley Award Districts and

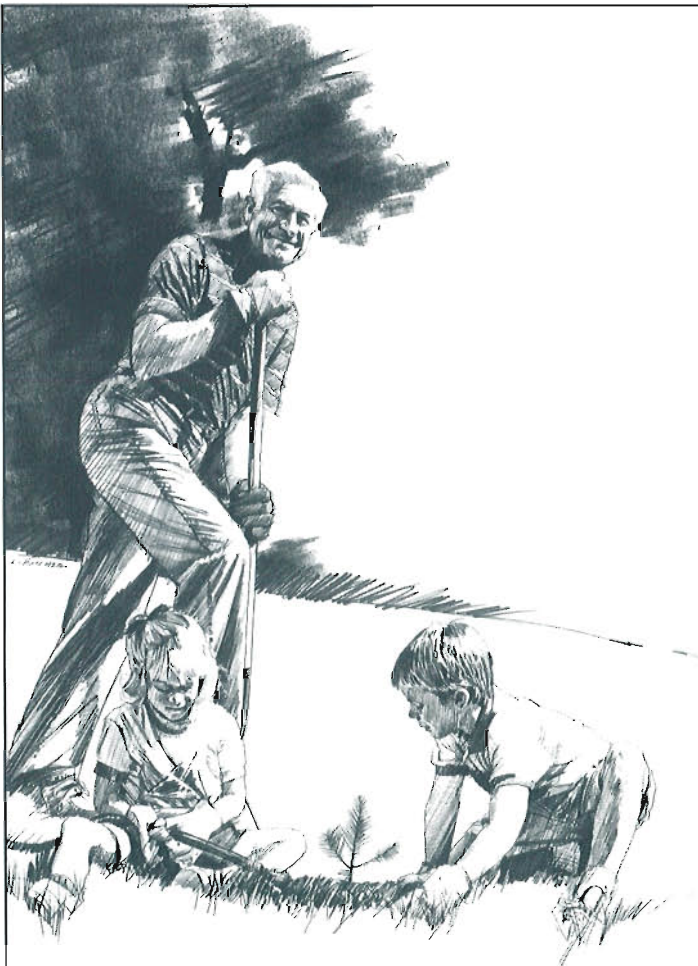


names an inspection team to visit the properties.

The inspection team is composed of three or four prominent citizens and includes a forester, wildlife biologist, and a TREASURE Forest landowner or environmentalist. The team visits each of the six TREASURE Forests for the purpose of getting additional information about the forest and the landowner. The inspection team selects three district award recipients. A state award winner is then selected from the district recipients.

Recipients are invited to the annual Alabama Landowner and TREASURE Forest Conference where their achievements are highlighted and their awards presented.

Helene Mosley Memorial TREASURE Forest Award recipients are truly outstanding. The 15 landowners who have received the award have all displayed a sincere desire to manage for the full potential of all the environmental resources on their TREASURE Forests. The words "for outstanding achievement in multiple use management of forestland," which are stated on the award plaque, are truly justified. ♣



Put Down Roots

Planting a tree is a pact between generations. With tender loving care this seedling will grow into a mighty tree. It will be there during the special times in our lives, for years to come. This tree will clear the air we breathe...make life better...and stand as a living monument to the love we have for each other and the world we share. You can make special moments in your life, too. Join me and plant a tree. For your free brochure, write: Trees For America, The National Arbor Day Foundation, Nebraska City, NE 68410.

 **The National Arbor Day Foundation**

GLOSSARY OF FORESTRY TERMS

Artificial Regeneration—Establishing a new forest by planting or direct seeding.

Basal Area—(a) Of a tree: the cross-sectional area (in square feet) of the trunk at breast height (4½ feet above the ground). For example, the basal area of a tree 14 inches in diameter at breast height is about 1 square foot. Basal area = 0.005454 times diameter squared. (b) Of an acre of forest: the sum of basal areas of the individual trees on the area. For example, a well stocked pine stand might contain 80 to 120 square feet of basal area per acre.

BMP—Best Management Practices: a set of guidelines to protect water quality. BMPs focus on careful road construction and maintenance, careful timber harvesting, minimal impact site preparation and protection of stream-side management zones and wetlands.

Biodiversity—A term for the number of species and communities of plants and animals in an area. The higher the biodiversity, the greater the probability of providing a livelihood for the greatest number of species in an area. The opposite of high biodiversity is a monoculture.

Board Foot—A unit of wood equaling 144 cubic inches. The term is commonly used to measure and express the amount of wood in trees, sawlogs, veneer logs, or lumber. Board feet in a piece of wood is determined by length in feet x width in inches x thickness in inches divided by 12.

Clearcut—A harvesting and regeneration method which removes all the trees (regardless of size) on an area. Clearcutting is mostly used with species like pine which require full sunlight to reproduce and grow well. Clearcutting produces an even-aged forest stand.

Climax Forest—A forest with a combination of species that are able to reproduce themselves in their own shade and create a stable species distribution over time.

Cord—A stack of round or split wood containing 128 cubic feet including

wood, bark and air space. A standard cord measures 4 by 4 by 8 feet. A face cord or short cord is 4 by 4 by 8 feet of any length of wood less than 4 feet.

Cost-share Programs—Federal or state assistance programs that refund a portion of the cost of reforestation or timber stand improvement work on private lands under certain conditions.

Crown Classification—The differentiation of trees into classes based on the size, density, and position of their crowns relative to the crowns of other trees in the stand. (a) *Dominant*—trees with crowns extending above the general level of crown cover and receiving full light from above and partly from the side; larger than the average trees in the stand, and with crowns well developed but possibly somewhat crowded on the sides.

(b) *Codominant*—trees with crowns forming the general level of the crown cover and receiving full light from above but comparatively little from the sides; usually with medium-sized crowns more or less crowded on the sides. (c) *Intermediate*—trees shorter than those in the two preceding classes but with crowns extending into the crown cover formed by dominants and codominants; receiving a little direct light from above but none from the sides; usually with small crowns considerably crowded on the sides. (d) *Suppressed*—trees with small, thin crowns entirely below the general level of the crown cover, receiving virtually no direct light either from above or from the sides.

Cruise—A survey of forestland to locate timber and estimate its quantity by species, products, size, quality, or other characteristics; the estimate obtained in such a survey. Several different sampling techniques can be used in a cruise.

DBH—Abbreviation for tree diameter at breast height (4½ feet above the ground). DBH is usually measured in inches.

Deciduous Tree—A tree which loses all its leaves at some time during the year. These are primarily hardwoods

such as oak, hickory, ash and sweetgum.

Diameter Class—A classification of trees based on diameter outside bark measured at breast height (DBH).

Even-aged Forest Management—Forest management with periodic harvesting of all trees on part of the forest at one time or in several cuttings over a short time to produce stands containing trees all the same or nearly the same age.

Firebreak—Firelane—a natural or man-made barrier usually created by the removal of brush, trees, leaves, and other vegetation. Used to prevent the spread of fire.

Forestland—Land at least 16 percent stocked by forest trees of any size, including land that formerly had such tree cover and is in the process of natural or artificial regeneration.

Forest Management—The application of technical forestry principles and practices to the care of a forest property for the purpose of achieving the goals of the forest landowner.

Forestry—The science, art and practice of managing and using trees, forests, and their associated resources for human benefits.

Forest Stand—A unit or subdivision of a forest type. It is an aggregation of trees occupying a specific area and sufficiently uniform in composition of species, age arrangement, and condition to be distinguished from the forest on adjoining areas. It constitutes the smallest convenient natural division of the forest.

Growing Stock—Live sawtimber trees and smaller trees capable of growing into sawtimber trees that meet certain standards of quality.

Habitat—The natural environment of a specific plant or animal. An area containing all the necessary resources for the plant or animal to live, grow and reproduce.

Hardwood—A term describing broad-leaf, usually deciduous trees. The term does not necessarily refer to the hardness of the wood.

High Grading—The practice of removing only the biggest and best trees from a stand during a harvest operation and leaving only the poorest, lowest quality culls to dominate the site.

MBF—Thousand board feet. A unit of measure for tree volume or sawed lumber.

Natural Stand—A stand of trees resulting from natural seed fall or sprouting.

Plantation—An artificially forested area established by planting or direct seeding. It is usually made up of a single species.

Prescribed Burn—The controlled use of fire to achieve forest management objectives. Prescribed fire can be used to reduce hazardous fuel levels, to control unwanted vegetation, improve visibility, and improve wildlife habitat.

Pulpwood—Wood cut primarily to be converted into wood pulp for the manufacture of paper, fiberboard, or other wood fiber products. Pulpwood size trees are usually a minimum of 4 inches DBH and usually cut to a specified length.

Reforestation—Re-establishing a forest by natural or artificial means in an area where forest vegetation has been removed.

Sawtimber—Individual trees large enough to be sawed into lumber.

Seed Tree Method—Removing all trees from the harvest area at one time except for a few scattered trees left to provide seed to establish a new forest stand.

Seedling—A tree that originated from seed and is two years old or less.

Selection Method—Harvesting individual trees or small groups of trees at periodic intervals (usually five to 15 years) based on their physical condition or degree of maturity. Frequently used in uneven-aged management.

Shelterwood Harvest—Removing trees on the harvest area in a series of

two or more cuttings so new seedlings can become established from the seed of older trees. This method produces an even-aged forest.

Silviculture—The art and science of producing and tending a forest.

Site Index—A measure of forest site quality based on the height (in feet) of the dominant trees at a specified age (usually 50 years for natural stands and 25 years for planted stands). A site index of 95 means that the expected height of the dominant trees at an index age of 50 years would be 95 feet on a particular area of land.

Site Preparation—Preparing an area of land for planting, direct seeding, or natural reproduction.

Softwood—A tree belonging to the order Coniferales, usually evergreen, cone bearing, and with needles or scalelike leaves such as pine, spruces, firs and cedars.

Stand—An area of forest that is relatively uniform in terms of tree species composition, age, size, and stocking, such that the same management recommendations would be appropriate for the entire area. (a) *Mixed*—a stand containing two or more species in the main canopy but with less than 80% made up of any one species. (b) *Pure*—a stand containing only one species or composed primarily of one species. (c) *Fully stocked*—a stand with nearly all of the growing space effectively occupied but having ample room for the developing crop trees. (d) *Understocked*—a stand containing too few crop trees to effectively occupy the site, resulting in reduced yield and lower quality timber. (e) *Overstocked*—a stand containing too many trees, resulting in retarded growth; in extreme cases, growth could be virtually stopped and no trees would ever become merchantable.

Stewardship Program—A federal program design to recognize and encourage private landowners to practice good multiple-use forest management. The program was modeled after TREASURE Forest.

Streamside Management Zone—Buffer strips left along streams that protect stream banks and channels, provide shade and prevent logging debris

and sediment from entering streams.

Stumpage—The value or volume of a tree or group of trees as they stand in the woods uncut (on-the-stump).

Succession—The replacement of one plant community by another until ecological stability (climax forest) is achieved.

Thinning—Generally, a cutting in a timber stand to reduce the number of trees per acre. Hopefully, the remaining trees will grow faster and produce higher quality wood. A thinning will produce income.

Tract—A parcel of land considered separately from adjoining land because of differences in ownership, management objective, or other characteristics.

TREASURE Forest—A program of the Alabama Forestry Planning Committee which seeks to identify, verify and publicly recognize private forest landowners who are doing a good job of multiple-use management of their lands. TREASURE is an acronym for Timber, Recreation, Environment, Aesthetics, for a Sustained, Usable REsource.

Tree Improvement Program—A program using genetics, forest tree breeding and silviculture to improve the volume growth, external characteristics and wood characteristics of forest trees.

Tree Key—A tree identification booklet that uses a series of questions about the tree's features to lead through various alternatives until the sample is identified.

TSI (Timber Stand Improvement)—Improving the quality of a forest stand by removing cull trees and brush, leaving a stand of good quality trees.

Uneven-aged Forest—A forest with many ages of trees present (technically, more than two age classes) and considerable differences in the ages.

Urban Forestry—The planning, establishment, protection, and management of trees and associated plants, individually, in small groups, or under forest conditions, within cities, suburbs or towns.

Wildfire—Uncontrolled fire in the forest that could damage present or future trees and wildlife habitat. ♠

LANDOWNERS

LEGISLATIVE
ALERT



NATIONAL



by TERRI BATES, Washington Representative, National Association of State Foresters

The 102nd Congress is well under way and many forestry issues are emerging as priority legislative battles.

Wetlands

With the Clean Water Act (CWA) up for reauthorization in 1992, water related issues are at the forefront of Congressional action. Of interest to forest landowners is the debate over Section 104 of the CWA which pertains to wetlands regulation.

The U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers jointly administer the 404 Program which was established by the 1972 Clean Water Act. Regulated activities cover deposition of dredged or fill materials. Other activities such as drainage, flooding, and excavation are exempt. Under the program, any individual wishing to dispose of dredged or fill material must obtain a permit from the Corps. However, Section 404 permits are not required for forestry activities within certain limitations and provided that Best Management Practices (BMPs), which are determined by the states, are used. At issue is how normal activities are defined, and this may vary across EPA regions.

Changes in the 404 wetlands of the CWA are being called for on both sides of the issue. Several bills have already been introduced in Congress and more bills are on the horizon. Representatives **John Paul Hamerschmidt** (R-Ariz.) and **James A. Hayes** (D-La.), both members of the House Public Works Subcommittee on Water Resources, have offered bills that reflect growing concerns over activities of conservation groups regard-

ing wetland protection. Both bills (*H.R. 404* and *H.R. 1330*) include a classification system that would identify and protect wetlands on the basis of their function and values (i.e. the more ecologically valuable wetlands would be protected through government easement purchases; those deemed less ecologically significant would be subject to only minimal regulation or landowner incentive programs). EPA Administrator **William Reilly** recently said he favors a Section 404 wetlands regulation program that ranks wetlands by priority and functional value.

Rep. **Lindsay Thomas** (D-Ga.) is also preparing legislation providing for "no net loss of wetlands" while protecting economic growth and reducing the regulatory burden on landowners. Thomas' bill would retain the silvicultural exemption, expand the current dredge and fill program, and regulate other activities which damage wetlands. On the other side of the issue, Rep. **Charles E. Bennett** (D-Fla.) introduced a bill, *H.R. 251*, that creates a wetlands protection program.

Another controversial wetlands issue concerns the reissuance of the *Federal Manual on Jurisdictional Wetlands*. First issued in January 1989 by the four federal agencies with jurisdiction over wetlands (the EPA, U.S. Army Corps of Engineers, U.S. Soil Conservation Service and the U.S. Fish and Wildlife Service), the *Manual* attempts to identify and delineate wetlands according to agreed upon criteria. The *Manual* was not open for public review and comment in its development. When issued it was felt by many that the criteria for delineating wetlands were changed in such a way that

many more acres of property were defined as wetlands, bringing a substantial number of acres of land—Southeastern pine forests in particular—under federal regulation. The *Manual* is expected to be reissued in May and will most likely be open for public comment and review. But there is still concern that public comments have and will not be taken into account. Those familiar with the *Manual* believe Congressional "fixes" will still be necessary. Already, legislation has been introduced (*H.R. 1010*) by Rep. **Bill Paxon** (R-N.Y.) to prohibit federal agencies from implementing the revised *Manual*.

NPS Pollution

Congressional reauthorization of the Clean Water Act will also address implementation of Section 319, which deals with nonpoint source pollution (NPS). Nonpoint source pollution is water pollution that does not come from a stationary point source, such as a discharge pipe. Rather, such pollution may result from farming activities, land development, and some silvicultural activities, such as timber harvesting and construction of logging roads. Control of nonpoint source pollution under Section 319 of the Clean Water Act primarily has been on a voluntary basis with the use of BMPs. States have been charged with implementing NPS programs to address the impact of forest management activities on water resources. And under the recently reauthorized Coastal Zone Management Act, coastal states—including Alabama—will be under even greater pressure to adopt management

measures to control NPS in coastal waters.

To counter calls for more regulation, the National Association of State Foresters (NASF) has proposed a Forest Soil and Water Quality Initiative which aims to reduce silvicultural NPS pollution through increased training and education for loggers and landowners. By expanding state programs, NASF hopes voluntary BMPs will provide an effective and timely means for reducing NPS. NASF has recently published a report which summarizes state implementation of nonpoint source pollution programs regionally and nationally. Copies may be obtained from the Alabama Forestry Commission.

Other Legislation

Alabama landowners who participated in the 10th CRP sign-up held March 4-15 will be pleased to know that Alabama had the second highest number of tree acres in the nation approved after Mississippi. Of the 18,009 acres approved, 11,871 (66 percent) will be enrolled in trees. The national total for acres accepted is 564,989; of this, 101,317 are tree acres. The next CRP sign-up is scheduled for July 8-19, 1991.

Two Alabama lawmakers are leading the fight for full funding of the Fire Forces Mobilization Act in fiscal year 1992. Sen. **Howell Heflin** and Rep. **Claude Harris**, with strong support from the entire Alabama delegation, continue to provide leadership in pushing for funding to implement the firefighting program authorized by the 1990 Farm Act. Fire Mobilization would provide training and equipment to states and rural volunteer fire departments so they may better respond to wildfires.

Prospects for passage of capital gains relief legislation in this session of Congress appears to be waning. President Bush renewed his call for capital gains legislation in his State of the Union message in February. Several bills have been introduced to restore preferential treatment on long-term gains from the sale of timber and other capital assets. However, the leadership in Congress remains strongly opposed to such legislation and no real effort has been made to date to force the issue. Therefore, it appears unlikely that a capital gains bill will be passed this session, but the need for relief remains very much alive. ♣



by FRANK SEGO, Legislative Liaison, Alabama Forestry Commission

In the Spring issue of *Alabama's TREASURED Forests* we unveiled the makeup of the 1991-95 Alabama Legislature. We also made predictions of some major issues that were destined to come before this lawmaking body between April 16 and July 29, the last possible date that this session can meet. A 30-day Regular Session must, by law, conclude its work within 105 days.

We further promised to give you a glimpse of some legislation to be followed closely by the Forestry Commission and the forestry community. As you read this, some of these bills may have already passed into law, while others are still being considered here in July.

"Forever Wild"

One of the hottest issues during the first one-third of the session was a measure that came to be known as the "Forever Wild" bill. It was first introduced by Rep. **Jim Campbell**, speaker pro tem of the House. The Anniston lawmaker sponsored a bill (*H.B. 301*) proposing a self-executing amendment to the Constitution of Alabama. It was so written to secure the preservation and enjoyment of natural lands and waters by creating a permanent trust to be known as the Alabama Forest Wild Land Trust. Its ultimate goal was the acquisition of such lands for conservation and recreational purposes.

Another version of this bill was sponsored by Rep. **W.F. (Noopie) Cosby** of Selma and several co-sponsors. The measures were debated vigorously by officials of the Forestry Commission, the Department of Conservation and Natural Resources, the Governor's Office, the Forestry Association, Alfa and the Wildlife Federation until another bill, heralded as a compromise, was introduced by freshman Sen. **Doug Ghee** of Anniston.

In the final analysis it was Campbell's bill that whirled through the House Ways and Means Committee on the very day this column was being written. That, too, brought further deliberation, especially since his ver-

sion would have excluded the state forester from the governing board of such trust.

Revision of Fire Laws

In other legislative action, the Forestry Commission proposed several revisions to the Code of Alabama pertaining to woodland fires. The amendments, sponsored by Senators **Gerald Dial**, Lineville; **Ann Bedsole**, Mobile; and Rep. **Mike Millican**, Hamilton, and others in the House, related to the willful or intentional setting fire to woodlands or grasslands so as to define the term "incendiary device," and deleted the requirement that the property of another be damaged or destroyed when a person allows a fire to escape in order to constitute a misdemeanor.

One amendment removes the word "reasonably" from the phrase "reasonably necessary precautions" and establish what minimally constitutes "necessary precautions." Further, it would be a misdemeanor to discard a lighted cigar, cigarette, or match without causing the same to be extinguished; and a misdemeanor to knowingly leave a wildfire to burn on one's own land without suppressing the fire or reporting the fire to a fire control agency.

Certain requirements were deleted with respect to obtaining a permit to burn and changed the responsibility for a fire from the person requesting the permit to the person responsible for the fire. It requires the person responsible for the fire to keep it confined to the permitted area.

Finally, the new amendments would allow the state forester to issue a restricted burning proclamation, and allow him greater discretion in determining whether to issue burning permits.

Badge and Pistol Bill

Rep. **John Beasley**, Columbia, was joined by 47 of his House colleagues in sponsoring an amendment to the Code allowing law enforcement officers of the Forestry Commission to retain their

(Continued on page 18)

badge and pistol, at no cost to them, as part of their retirement benefits. State troopers and law enforcement officers of the Department of Conservation and Natural Resources and the ABC Board have had this privilege for the past several years.

Volunteer Fire Departments got their share of attention during this session as bills were introduced in both houses to allow these volunteers more than one distinctive license plate or tag for their personally-owned, private passenger vehicles as long as proper applications are made.

This bill amended the law which allowed only one distinctive tag to the volunteer firefighter. They are used in lieu of standard plates or tags normally issued for such vehicles.

A Cigarette Tax?

Rep. **J.E. Turner**, Citronelle, and **Richard Laird**, Roanoke, came to the session with a bill to amend the Code by increasing the levy on the sale of cigarettes within this state from 8.25 mills per cigarette to 9.75 mills per cigarette, and provide that, under the administration of the Alabama Forestry Commission, a portion of the additional revenue generated be distributed for use by certified volunteer fire departments, by rescue squads which provide emergency medical services, and by independent volunteer rescue squads meeting standards established by the Alabama Association of Rescue Squads. The remainder would be distributed to the Alabama Water System Assistance Authority, the State Parks Fund and the State General Fund.

The bill was referred to the House Ways and Means Committee and, as this column went to press, no further action had been taken.

Workmen's Compensation for VFD's

For some time, members of the volunteer fire departments have sought inclusion in the Alabama Workmen's Compensation law. This idea was actively supported by the Forestry Commission and the Legislative Forestry Study Committee. A bill, proposed by Rep. **John Beasley** and a host of House members, would provide for a sweeping revision of the law, and would include volunteer firefighters in these revisions.

Our next issue will chronicle the success or failure of the aforementioned legislation.

'Til then... ♣



Hidden TREASURES



The Ranger's Woods

by JOHN TYSON, JR., Alabama Forestry Commission, Dadeville

Most of us think of TREASURE Forest landowners and forest rangers as two separate groups of people. W.N. McCollum of Clay County, however, is both a forest ranger and the owner of a 203-acre TREASURE Forest. The land was already a certified TREASURE Forest when McCollum acquired the property from his father, and he says that it will still be certified when he passes it on to his sons. He identifies strongly with the tract, as a portion of it has been in his family since the late 19th Century.

The major interests of McCollum and his family are timber production, wildlife and family recreation. He has roughly 45 acres of planted pines and the rest of the wooded area is of natural origin. He follows a management program of thinning, prescribed burning and salvage cutting according to the needs of the stands. He also has a small sawmill and planer, and has cut, sawed and planed enough lumber for himself and a relative to build houses off of his forest. McCollum plants two or three food plots for deer and turkeys each year and wildlife also graze on the 90 acres of pastureland that are intermingled with the forestland. One pas-

ture that is planted in sericea lespedeza (*L. cuneata*) provides abundant feed for quail and turkeys.

Four to six deer are harvested from this TREASURE Forest annually. McCollum also has a four-acre lake that is stocked with bass, bream, and catfish. He and the rest of his family use the woods roads and permanent firebreaks as riding trails. A sizeable part of their recreation consists of horseback riding, hunting, fishing, and hiking on this TREASURE Forest.

The McCollum's have twin teenage boys, Wade and Wesley, who are actively involved in TREASURE Forest management activities. They both have had forestry projects in their 4-H activities. TREASURE Forest is truly a family activity with the McCollums. Both McCollum and his wife, Linda, see the activities with TREASURE Forest, as well as their horses, as forming the strong nucleus around which their family life revolves. "TREASURE Forests are great for families," McCollum says.

The McCollums have two registered paint horses and one registered quarter horse. "I don't know how many miles of access roads, fire breaks, and trails we have," McCollum said, "but we can ride a long time without using the same one twice." McCollum is also active in many phases of volunteer work that are related to conservation and fire control. Wood that he cuts from his forest is used to make trophies that 4-H awards in their competition program. He has used walnut, black cherry, and catalpa to make trophies, but he prefers black cherry. "It works better than any other wood that I have tried," he explained.

He says the best part of his work with 4-H is just being involved with young people who are interested in conservation and the outdoors. With any luck, these young people will come to appreciate the benefits of a TREASURE Forest just like the McCollum family does. ♣



Linda and W.N. McCollum

Reaping the Benefits of a TREASURE Forest

by MADELINE HILDRETH, Staff Forester,
Alabama Forestry Commission, Brewton

“Prescribed burning is the most valuable and least used tool in forestry,” says Albert Morris Middleton, Butler County’s first TREASURE Forest landowner. It is apparent that burning is often used as a tool on this 1,000-acre TREASURE Forest called Middlewood. Middleton tries to prescribe burn each stand every three years. He uses burning to achieve several goals.

Increased timber growth is just one of the reasons for burning the pine stands. Prescribed burning is also an important aspect of Middleton’s wildlife management. Although they aren’t hunters, the Middletons and their friends enjoy observing the turkey, deer and quail on the property.

Since the Middletons’ home is located on their TREASURE Forest, aesthetics are always considered in the management of the area. Prescribed

burning not only increases the aesthetic appeal, it also makes the woods much easier to walk through, a favorite pastime of Mr. Middleton.

The entire acreage of this TREASURE Forest is producing. Stands range in age from five years to 50 years old. Selective cutting is done on an “as needs” basis, leaving the best to grow. Most of the acreage has been converted to pine over the years, but hardwoods are left for wildlife. Several acres are reserved for food plots.

Middleton credits Joyce, his wife, for giving him the help and encouragement to continue to improve his land. Assistance from the Butler County Alabama Forestry Commission has also been invaluable. Through extensive reading, Mr. Middleton has a broad knowledge of forestry, but often consults AFC personnel for advice and opinions.

Middleton is glad to not only share credit for his TREASURE Forest, he also shares its benefits with others. Several Butler County landowner tours have taken place on his property. An international forestry tour stopped for a prescribed burning demonstration on his property a few years ago. Often, the place is “wrapped up” with friends and family. Fishing and feeding the ducks are favorite activities.

Below the hill from the Middleton’s house is an old family cabin. The cabin is filled with tools, signs and bottles of another era. Friends enjoy sitting on the porch of the cabin overlooking the fish pond and towering pines, forgetting the rush of today’s world. It is easy to see that Mr. Middleton has carefully incorporated all aspects of the TREASURE Forest program in the management of his forest. Perhaps the greatest benefit, according to Mr. Middleton, is being able to say when things get too hectic, “I’m going to the nature trail.” ♣



Butler County Supervisor Paul Hudgins and Albert Morris Middleton

July 16-18—Madison County, Huntsville Civic Center. Alabama Farmers Federation Commodity Producers Conference. For forestry seminar details call Steve Guy, 1-800-392-5705.

August 14—Teleconference on Whitetail Deer Management, 12:45-2:30 p.m. CST. Watch this teleconference at home—satellite coordinates: Weststar 5 Channel 22—or watch at an Extension Service office. For information call your local Extension office or Lee Stribling, 844-9247.

August 15-16—Athens, GA. “Forest Finance: Advanced Topics,” a Univ. of Ga. short course. Call 404/542-3063 for more information.

Sept. 4-5—Athens, Ga. “Hardwood Management,” a Univ. of Ga. short course. Call 404/542-3063 for more information.

Sept. 10-11—Clemson, S.C. “Timber Cruising You Can Count On,” a Clemson Univ. short course. Contact the Dept. of Forest Resources at 803/656-4831 for more information.

Sept. 18-20—Athens, Ga. “Aerial Photography Interpretation,” a Univ. of Ga. short course. Call 404/542-3063 for more information.

Sept. 29-Oct. 11—Clemson, S.C. “Managing Forest Structure and Composition,” a Clemson Univ. short course. Contact the Dept. of Forest Resources at 803/656-4831 for more information.

Oct. 10-11—Eufaula, AL. Eighth Alabama Landowner and TREASURE Forest Conference, Lakepoint State Resort. For more information call 240-9364. Registration forms, p. 31.

Nov. 11-13—Lincoln, Neb. First National Fuelwood Conference. This conference is to promote broader public understanding and to increase the rate of adoption of existing technologies for planting, harvesting and cleanly burning wood for energy. For more information write the Arbor Day Foundation, P.O. Box 81415, Lincoln, Neb. 68501-1415. ♣

KNOW YOUR SEED SOURCE

The establishment of a new forest stand involves a great deal of effort and may be rather costly. Before purchasing planting stock, landowners look at many factors: price, appearance, quality, and delivery (convenience), to name just a few. However, many landowners never consider the source or home range of the seedlings they purchase. This could be one of the most costly mistakes they can make.

Years of research have shown that seed source can affect survival and subsequent growth. Perhaps the most important early study of pine seed sources was done by Phillip Wakeley in 1927. His study showed that loblolly pines grown from local seed produced about twice the wood volume through age 22, as did trees of the same species from other locations. Through natural selection, most southern pines have developed different traits in different places.

Almost all companies or organizations that sell southern pine seedlings are now producing genetically improved seedlings. This means that trees with superior characteristics, such as faster growth, proper limb angle, disease resistance, etc., are located and genetically reproduced in seed orchards. Seeds from these parent trees are collected and tested to insure that

seedlings grown also exhibit these characteristics. The location from which the original material is collected is called the source, or provenance. The actual location of the seed orchard or the nursery where the seedling is grown is of little consequence except that a distant nursery *may* not provide as fresh a seedling as a local nursery.

Loblolly Pine

Loblolly pine is the most important southern pine. It produces over half of the total southern pine wood volume (Dorman, 1976), and it accounts for about 80 percent of all southern pine seedling production.

Within its natural range, which extends from New Jersey to Texas, loblolly pine occupies a great diversity of sites. Geographic variation has been well documented for growth rate, disease resistance, cold tolerance, and drought resistance (Dorman, 1976).

Loblolly pine planting zones have been located in the South based on topography, climate, soils, vegetation, and—of greatest importance—plantation performance. These planting zones are shown in **FIGURE 1**.

Alabama falls in planting zones 3 and 4. Recommended seed sources for these zones are as follows:

Zone 3-Piedmont: North Carolina to North Mississippi. The northern portions of Mississippi, Alabama, and Georgia and the piedmont areas of South Carolina and North Carolina make up an area of relatively uniform climate. In the absence of improved local sources of loblolly pine, movement of seeds either east or west within this region should produce acceptable results.

Zone 4-Coastal Plain: South Carolina to Mississippi. The area extending from Louisiana east of the Mississippi River through the coastal plain of Mississippi, Alabama, Georgia, and South Carolina is climatically homogeneous. Fusiform rust is most prevalent in this area, and in some local “hot spots” almost totally destructive. If seeds or seedlings of improved strains of loblolly pine with proven disease resistance are not available, the best natural seed source for this area is Livingston Parish, Louisiana.

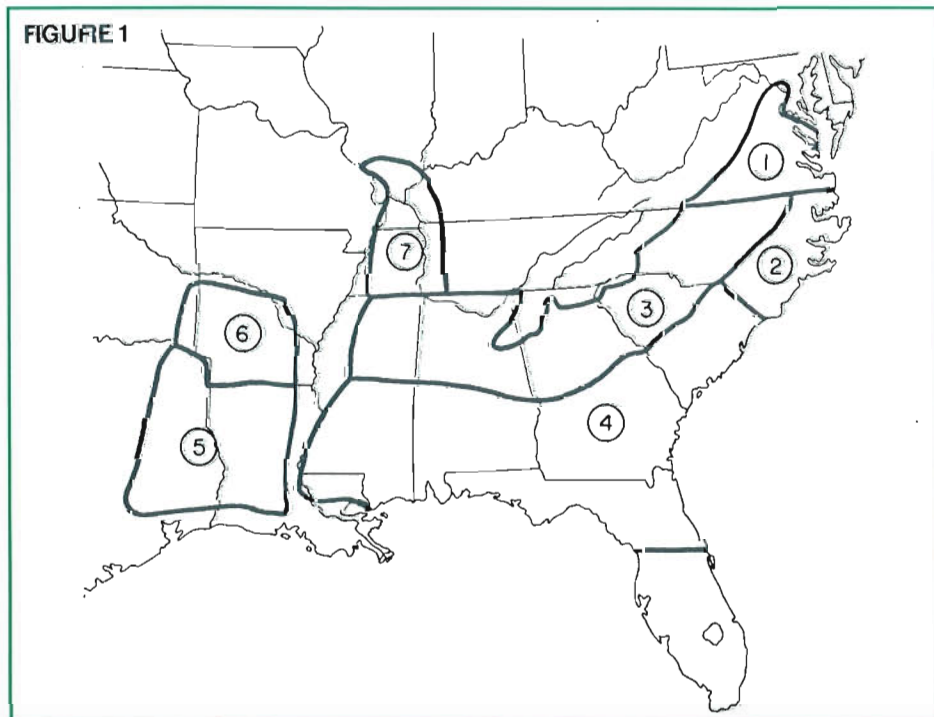
It takes a lot of hard work to be a TREASURE Forest owner. You should be well informed on any undertaking to insure that you make the best decision. Before you buy seedlings, ask questions and know your trees' family history.

Information for this article was taken from “A Guide to Southern Pine Seed Sources” by Clarke W. Lantz and John F. Kraus. This guide contains complete information on all major southern pines. For additional information, contact the Alabama Forestry Commission, Attention: Nurseries Section, 513 Madison Avenue, Montgomery, AL 36130.

References

- Dorman, Keith W. “The Genetics and Breeding of Southern Pines,” Agricultural Handbook 471. Washington, DC: U.S. Department of Agriculture, Forest Service, 1976.
- Lantz, Clark W. and John F. Kraus. “A Guide to Southern Pine Seed Sources,” General Technical Report SE-43. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station, 1987. ♣

FIGURE 1



Order Seedlings Now

The Alabama Forestry Commission began accepting orders for the 1991-92 planting season on June 1. If you need seedlings please order now, as some species of hardwoods are in short supply. All loblolly and slash pine grown by the Commission are **SUPER TREES**, genetically improved for sites in Alabama. All seedlings are guaranteed to be of high quality, healthy and vigorous.

Payments and Refunds

Payment or a purchase order must accompany all orders. Orders of 50,000 or more seedlings will be accepted with a 10 percent down payment, with the balance due on December 1. Orders are being accepted now on a first-come, first-serve basis. Cancellation deadline is January 15. No refunds will be paid on cancellations after this date.

For more information about seedlings, contact your local Forestry Commission office, or write:

Nursery Section
Alabama Forestry Commission
513 Madison Avenue
Montgomery, AL 36130

Hardwoods

Quantity

100 -5000
5000 - 10,000
10,000+

Price per 100

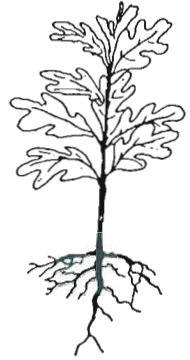
\$15.00
\$12.50
\$ 9.00

Cherrybark Oak
White Oak
Water/Willow Oak
Overcup Oak
Swamp Chestnut Oak
Sawtooth Oak
Shumard Oak
Nuttall Oak

Southern Red Oak
Green Ash
Sycamore
Yellow Poplar
Sweetgum
Dogwood
Redbud
Autumn Olive

Pines

Loblolly Pine—SUPER TREES	\$27.50/1,000
Coastal Seed Source	
Piedmont Seed Source	
Slash Pine—SUPER TREES	\$27.50/1,000
Virginia Pine (Christmas Trees)	\$42.50/1,000
Longleaf Pine	\$36.50/1,000
Benlate treated for better	
survivability	
Lespedeza Thunbergii	\$27.50/1,000



AUTO TIRES MAKE DENS

A simple and extremely durable squirrel den can be constructed from discarded auto tires. These artificial dens are inexpensive and almost bullet proof.

Non steel-belted tires are best.

To make the den, cut a tire in half. Remove the bead from both sides. Use a sharp, strong knife. See FIGURES 1 and 2.

Cut a three-inch triangle from each corner of the side wall of the tire beside the semi-circle. See FIGURE 3.

Choose one end of the tire half and

cut a semi-circle three inches in diameter from the tread surface. See FIGURE 4.

Cut three-inch flaps into each side wall of the tire. These flaps should be approximately 1/3 of the distance from the semi-circle to the other end of the tire. See FIGURE 5.

Fold the short end of the tire into the long end of the tire.

Punch holes through both sides of the tire to secure the tire in the folded parts. See FIGURE 6.

Punch holes in the top of the tire

den and insert a heavy gauge, rust-proof wire hanger. See FIGURE 7.

Position the tire squirrel den from 15 to 30 feet high in a large tree. Place the entrance hole towards the tree trunk. Tilt the entrance hole slightly toward the ground so rain will not enter the den. A hole may be punched into the bottom of the tire to allow any water that might get in to drain out.

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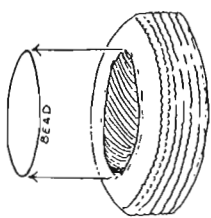


FIGURE 1

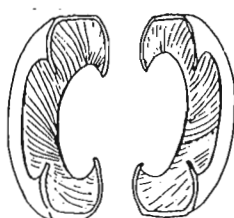


FIGURE 2



FIGURE 3



FIGURE 4



FIGURE 5



FIGURE 6

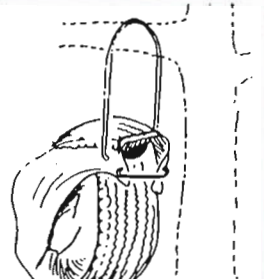


FIGURE 7

Streamside Management Zones

by DON BURDETTE, Environmental Forester, Alabama Forestry Commission

Landowners, foresters, harvesting contractors, and forestry vendors can help protect water quality by following these guidelines for Streamside Management Zones.

Definitions and Objectives

A Streamside Management Zone (SMZ) is a strip of land adjacent to any water of the state where soils, organic debris and live vegetation are managed to help protect water quality from sediment, excessive temperature, logging debris, pesticides, trash and other pollutants.

Although SMZs are recommended primarily for water quality protection, they indirectly provide a variety of other multiple uses for the landowner and society as well. They control erosion, preserve site quality and productivity, provide income from periodic sales of timber products, protect key wildlife habitat, retain natural protective barriers for fire protection, and improve aesthetics of forestry operations (particularly large clearcuts).

Where we in the forestry community once considered SMZs for perennial streams only, recent actions by the Alabama Department of Environmental Management (ADEM) have urged us to look at some degree of protection along all "waters of the state." Waters of the state is a legal term that refers to and includes every cove, creek, river, marsh, lake or reservoir in the state of Alabama.

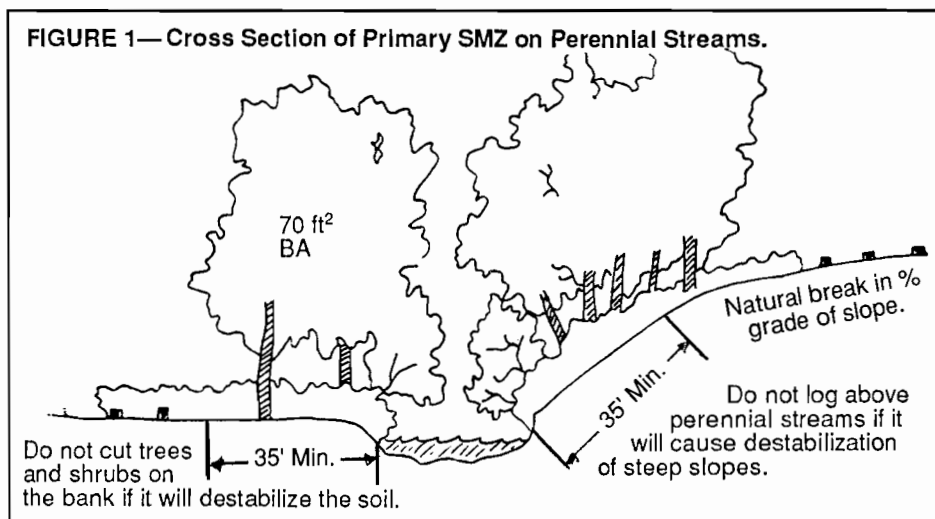
For purposes of this article, it is important to distinguish between three categories of streams because each one requires a different level of protection. **Perennial** bodies of water contain surface water within a well defined channel practically year round under normal weather conditions. Perennial streams may be shown as a solid blue line on a topographic map. **Intermittent** bodies of water contain water within a well defined channel only temporarily following a major rainstorm or as long as ground water is abundant. Intermittent streams may be shown as a dashed blue line on topo maps. **Ephemeral streams** flow in a diffuse manner over

depressions in the forest floor, **not within a well-defined channel**, in direct response to a big rainstorm and continues for only a short period after rainfall ceases.

The big question on any property is, "How wide should a Streamside Management Zone be and how can it be managed to protect water quality and still provide other multiple-use benefits?" The appropriate width for an SMZ will vary at different sites on the same property. Generally, the steeper the slope and/or more erodible the soil, the wider the SMZ needs to be. Other factors may also dictate wider SMZs than the recommendation for water quality given here.

of logging debris and other pollutants into the water channel.

A Primary SMZ that extends from 35 feet or more from the definable bank of perennial and intermittent streams can perform most of the functions just listed. Thirty-five feet is not very wide, and some landowners may want to establish and manage wider SMZs to provide for objectives other than just water quality alone, such as key wildlife habitat, a special place for recreational enjoyment and to establish a manageable-sized stand with uniform characteristics for the purpose of timber protection. Outside boundaries for Primary SMZs should be well marked before harvesting timber.



Primary Streamside Management Zones

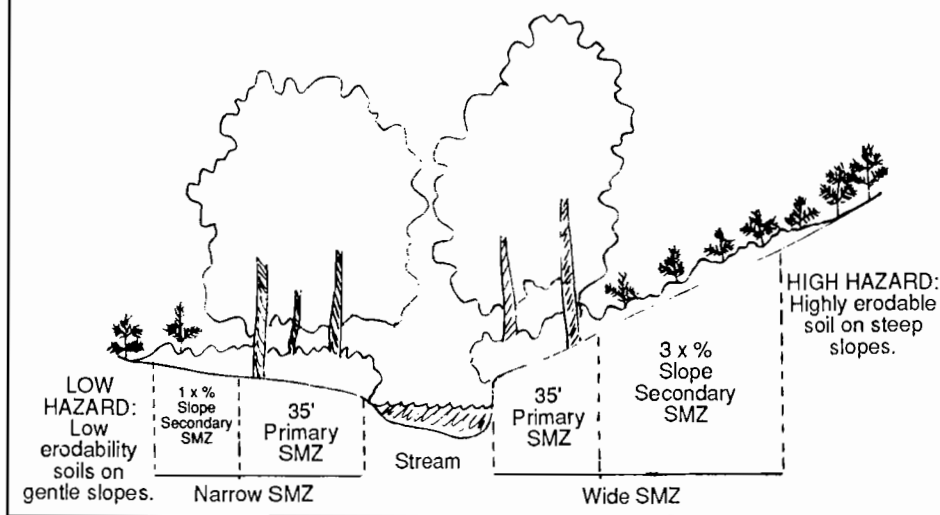
Perennial streams require a permanent strip of trees and shrubs to protect banks and flood plains from erosion; to maintain shade, food and cover for aquatic ecosystems; and to maximize control of logging debris, sediment and other pollutants.

Intermittent streams also require protection, but management restrictions don't have to be so stringent because these waters are not normally inhabited by a fishery community for most of the year. Good silviculture can be practiced here as long as soils, trees, and other vegetation are carefully managed to minimize erosion, compaction, rutting, and to control deposition

Timber can be harvested along perennial streams to a residual basal area of no less than 70 square feet without seriously impacting upon water quality or ecological integrity (see **FIGURE 1**). Along intermittent streams, if there is a well established understory or ground cover, the overstory can be removed partially or entirely. However, if a mature stand of timber beside an intermittent stream has little to no understory or ground cover, then the stand should only be partially cut to a residual basal area of no less than 40 square feet until a dense understory of desirable seedlings is established (see **FIGURE 2**).

Trees directly on the banks, in the stream channels or on very steep slopes

FIGURE 3— Cross Section of Two SMZs with Variable Hazard Conditions.



leading directly into the water should not be cut if this removal would destabilize the soil. Tall overhanging trees on the south and west banks provide the best shading effect for water temperature control.

Mechanical feller bunchers are the best means of removing crop trees from Primary SMZs. Operators should drive into the area, cut the tree(s) and back out the same way to deposit the tree outside the entire SMZ. Trees cut by a chain saw or felling machine should be directionally felled away from the water, limbed and topped where it fell and skidded out top first. Trees that drop across or into live streams should be pulled out **immediately**. If large tops would damage the banks, the tree should be limbed before skidding out, and then all debris cabled out of the water. Organic debris must be removed from dry channels as soon as possible before the operation is completed.

Skidder operators **must** exercise care to use the shortest path in and out of the SMZ with minimal turning. Harvesting on wet soils should be stopped or delayed, if possible, when wheel ruts begin to develop which are deeper than 10 inches. Wet or dry beds of perennial, intermittent or ephemeral streams must **never** be used as skid trails or haul-out roads. Log decks should be located outside of the entire SMZ on high ground if possible.

No more than 20 percent of the ground vegetation and leaf litter on the forest floor should be removed or destroyed during the process of harvesting timber from the SMZ. When the amount of bare soil exposed exceeds 20 percent of the area, it should be revegetated using seeds of plant species that will stabilize the soil and benefit wildlife.

Primary SMZs along perennial streams should be managed using uneven-aged regeneration and stand management techniques to maintain 70 feet of basal area. Landowners should manage true hardwood sites for well-stocked stands of native hardwood species. Areas where mixed pine-hardwood occurs naturally can be regenerated back into mixed stands using natural seeding.

Primary SMZs along intermittent streams should also be managed for natural hardwoods or mixed pine-hardwoods but even-aged regeneration and management techniques can be used. Winter felling of residual trees can be used to encourage hardwood regeneration by stump sprouting. Your local county forester can describe how to use the Clemson Method to regenerate stands of mixed pine-hardwood.

Along both perennial and intermittent bodies of water, select cutting is the best way to practice timber stand improvement. Do not construct roads or firebreaks in the Primary SMZ if possible. Mechanical site preparation,

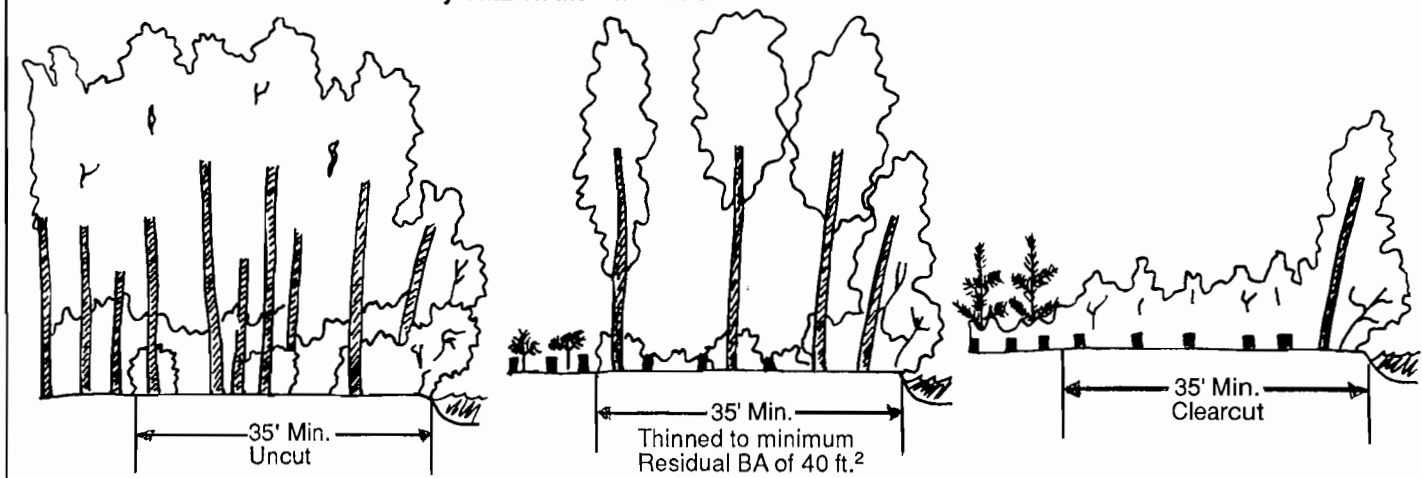
broadcast application of herbicides, periodic prescribed burning, fertilizer application, and mechanical tree planting are inappropriate in Primary SMZs. Basal spraying, injection and directed foliar spray of herbicides with an aquatic label is acceptable if applied according to the label.

Secondary Streamside Management Zones

Ephemeral streams or drainages through a property require some protection because they are the headwaters of a watershed. Even if they don't contain an aquatic ecosystem on-site, the activities that occur in an ephemeral drainage have the potential to impact on the water quality and ecological integrity of your neighbor's property down-drainage.

A temporary, variable-width Secondary SMZ is the least restrictive of the two Streamside Management Zone sub-zones. They are maintained as filtering systems while the forestland surrounding a Primary SMZ or ephemeral stream recovers naturally or is restored

FIGURE 2— Cross Section of Primary SMZ on Intermittent Streams.



artificially following silvicultural operations.

The minimum site-specific width of a Secondary SMZ is established as a function of the erodability of the soil and the percent slope. The Soil Conservation Service can help you determine if your soils are slightly erodible, moderately erodible or highly erodible. The width in feet of a Secondary SMZ is then determined by measuring the percent slope above a Primary SMZ or ephemeral stream and multiplying the percent slope either once (x 1) for slightly erodible soils, twice (x 2) for moderately erodible soils or three times (x 3) for highly erodible soils (see **FIGURE 3**). For example, a 20 percent slope with a highly erodible soil (x 3) requires a 60-foot wide Secondary SMZ. A forester or forest technician could either measure your slopes for you or show you how to do it yourself.

Timber harvesting objectives, guidelines and limitations are the same for Secondary SMZs as in Primary SMZs for intermittent streams with the following exceptions: timber can be removed either partially or entirely without the requirement of a pre-existing developed understory (although a

ground cover of vegetation and organic litter must be maintained on the forest floor) and logging debris does not need to be removed from ephemeral drainages.

This level of SMZ has the least silvicultural restriction. The forest type which is regenerated and/or managed is left to the discretion and best judgment of the forest manager. Site preparation techniques must minimize soil exposure. Broadcast herbicides, drum chopping, mechanical shearing or hand felling of residual cull trees and light to moderate intensity site prep burns may be used as long as the litter layer is maintained. Temporary firebreaks may be installed in the Secondary SMZ outside the Primary SMZ but extreme care should be taken for proper location, installation and maintenance to avoid sedimentation of waters of the state. Mechanical tree planting is acceptable if done with the contour of the land.

Mechanical site preparation techniques which have a tendency to expose large areas of bare soil, such as rootraking and windrowing or piling, discing and bedding are inappropriate in Secondary SMZs.

After stabilization of upland sites is complete, Secondary SMZs may be absorbed and managed as part of adjacent upland stands and receive the same intermediate treatments as those areas.

Responsibility

Streamside Management Zone planning should be done *before* the start of any timber sale proceedings. Preventing environmental problems through pre-planning is much less expensive and more cost effective and practical than restoration after the fact. Landowners and professional forestry practitioners can document their intent to achieve silvicultural objectives with minimum adverse environmental impact and misunderstanding by writing forest management plans, timber sale agreements and site preparation contracts that contain very site specific Best Management Practices (BMPs). Detailed maps, instructions and specifications should also be included in the management plan. For personal assistance with Streamside Management Zones or other BMPs on your property, contact your local office of the Alabama Forestry Commission. ♠

A Trail in the Woods

by JOHN TYSON, JR., Alabama Forestry Commission, Dadeville

One of the most versatile elements in forest recreation is a trail. You can hike on it, ride a horse, a bike or a four-wheeler. You can exercise, visit a scenic area or just go where no one will bother you for a while. Some trails, like the Appalachian Trail, run for hundreds of miles; others run only a few hundred feet—back to that bench you built next to the creek. Some trails are very primitive, no more than a faint trace through the undergrowth; others are wide and well defined enough to double as access roads or firebreaks. Many forestland owners have trails on their land and use them for many purposes. They all say, however, that as far as recreational assets go, it is hard to beat a trail for versatility and economy.

When you decide to put in a new trail, a plan should be developed that spells out its features and the purposes the facility is going to serve. This will

determine where the trail will be located and to some extent how long it will need to be. The size of the forested area will effect the length of the trail to some extent; however, a surprisingly long trail can be put in on relatively small areas. A trail around the outer

edge of a 40-acre tract can be, for instance, roughly a mile long. The trail can run to a dead end, but it will have to be retraced to get back to the starting point.

Most people prefer to lay out trails in a loop or a series of interconnecting loops. The user can then go as far as he wants and end up back where he started from. **FIGURE 1** shows a series of interconnecting loops that provide approximately $\frac{8}{10}$ of a mile of trail on 20 acres of forestland. The trail's width will depend largely on what it will be used for and on how much trouble the builder wants to go. A cleared area of three to five feet in width is adequate for most purposes, however.

The next step is to mark the trail out on the ground. It is a good idea to do this, as you may discover places where the trail needs to be moved a bit for one reason or another, and the best time to do this is before too much work



Tools used in trail construction

has been done. You can mark the trail out on the ground by blazing trees, painting spots on trees or using flagging tape. The tape is the easiest mark to get rid of once it has served its purpose.

You may want to incorporate existing forest roads or firebreaks or portions of them into your trail system. A trail that follows an existing woods road is easy to establish and maintain but will give limited enjoyment if it doesn't take you where you want to go. There is work involved in constructing a woodland trail from scratch; but, if you pace yourself and don't try to do too much at one time, it doesn't become oppressively difficult.

A forest trail can be constructed with simple hand tools. The procedure is to clear the trail by cutting brush and overhanging branches. A machete is a handy tool for doing this. The trail brush should be cut as close to the ground line as possible so that there will be no tall stumps or "stobs" to trip a hiker or horse or puncture the tire on a bike. Since there is no particular need for a trail to be straight, there is usually no reason to cut trees that are past the sapling stage. It is sometimes handy, however, to be able to cut through a downed tree or log that is in the way. A chain saw can save a lot of work if this is necessary.

You can usually reach high enough with a machete to make enough headroom for a hiker or biker, but you will probably need a set of long-handled pruning shears to open the trail up high enough for horseback traffic. A seven-foot overhead is high enough for most hikers. Horseback riders will



need another three or four feet of headroom. A good rule of thumb is that if you can reach the branch with the long handled shears, it needs to come out.

Sometimes you may want to move a few rocks that are in the trail. If they are too big to move easily by hand, the trail can be bent around them. You may occasionally have a stump hole or other depression that you want to fill in, and you can usually do so in a few minutes by picking up locally available rocks and dropping them in the hole. Of course, this is a trail and there is no need to do any more ground leveling than is necessary for safety and convenience.

If you want to cross a stream, you have two basic options. Use an existing crossing or lay out your trail so as to approach the stream at a place where

you can readily establish a crossing point. This can be done by utilizing a natural ford, by placing stepping stones, or setting up a foot log. If the stream is small enough, you may be able to just step across it. If it is wider, but shallow, and you plan to cross on a horse, bike or ATV, a ford would provide an adequate means of crossing. If you plan to cross on foot, however, you will probably want to keep your feet dry. Stepping stones and foot logs should be good enough to get foot traffic across most streams. If you are fording the stream, you will want to cross the stream at as close to a 90 degree angle as possible. This way you are in and out of the stream in the shortest distance, and don't unnecessarily disturb the stream bed.

Once the trail is complete, you can begin to enjoy using it. You will never be entirely through working on it, however, as sprouts will from time to time grow up from the ground and vines and branches will grow in from the sides. The easiest way to maintain the trail is to walk around it periodically with a machete or long-handled shears and cut back the out-of-place vegetation. You will also probably want to make changes in your trail's location from time to time. Maybe you will want to move a section of it up the hill to a dryer location, for example. You may want to add an additional loop, and this can be easily done by following the procedure that you used in establishing the earlier sections of the trail.

A trail can be a versatile and economical recreational facility. And come to think about it, building one can be fun, too. ♣

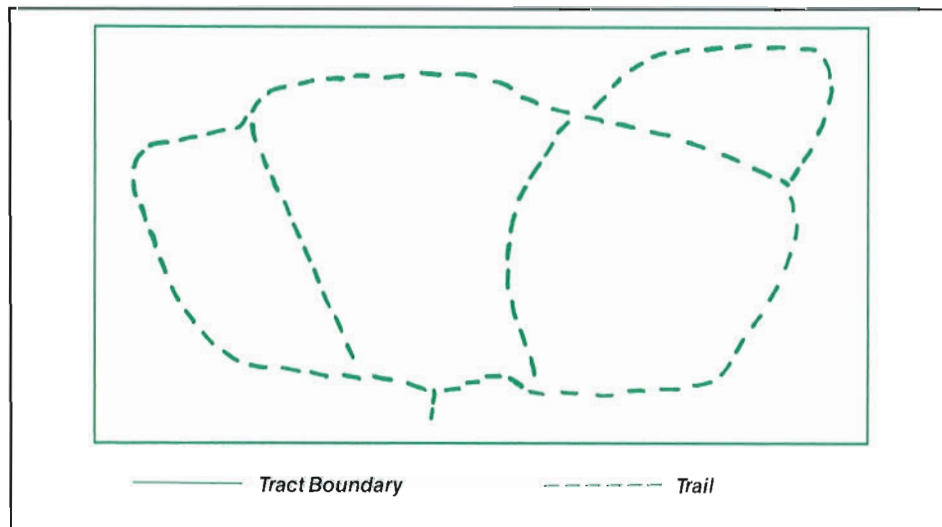


Diagram of a trail layout. This trail, laid out in interconnecting loops, has 8/10 of a mile of trail on a 20-acre forested tract.

Europe—A Growing Market for Southern Pine

by MIKE FLORENCE, International Trade Specialist, Alabama International Trade Center

The 12 countries composing the European Community (EC) currently represent a \$326 billion market—the world's largest—and are involved in 25 percent of all international commerce. If the figures seem staggering, by 1992—when the community is solidified economically—it should be even more formidable, challenging areas of trade where the U.S. and Japan are now dominant. Ironically, the union could have positive effects for Alabama lumber producers. A stronger EC means member countries will have more purchasing power, more investment, and more construction activity, which translates to greater demands for lumber and wood products.

Though the EC represents a powerful economy, it is weak in wood resources. The community claims less than 1.5 percent of the world's forest cover, and its forest area per capita is five times less than that of the U.S. Much of its timber has been reduced by atmospheric pollution, weak management programs, and a series of violent windstorms which have swept the region since the mid-1980s. At present the EC imports half of its forest products, and in the next few years consumption is expected to increase at a rate twice that of production.

The U.S. exports a wide variety of forest products to EC countries, totalling almost \$1 billion in 1989 (over \$24 million exported from Alabama). The leading products were hard and softwood lumber (\$243 and \$240 million), softwood plywood (\$202 million), hardwood veneer (\$90 million), and hardwood logs (\$88 million). In the last five years the U.S. wood products exports to the EC have increased 180 percent, and one of the biggest stories has been the growing demand for southern yellow pine.

A New Market

The recent popularity of southern pine is due, in part, to problems in the European softwood market. Traditional suppliers, such as Scandinavia (Sweden and Norway), Finland, Austria, the USSR, and Eastern Europe, have had difficulty meeting

the growing EC demand. Some countries are also producing less because of poor forest management or high operating costs. Sweden, the EC's largest supplier, has faced such problems and had to raise the price of its softwood 40 percent over the last two years. Concurrently, environmental groups and the Green Party have pressured governments to restrict the importation of tropical hardwoods. Buyers have been looking at high quality softwood as a substitute.

Changes have also taken place in the United States. West Coast softwood production has declined (primarily due to limited cutting), making it hard for western mills to take advantage of the European market. On the other hand, southern lumbermen can produce more softwood faster and ship it cheaper, giving them a competitive edge in exporting to the EC. Add to the equation a weakened U.S. dollar, and the market for southern pine looks even better.

Since the mid-1980s, southern pine exports to the EC have risen enormously. In 1989 exports totaled \$97,918,000 (see TABLE 1), a 240 percent increase

over the 1985 level of \$28,689,000. During this period the EC replaced the Caribbean as the primary southern pine export market. By the end of the decade the EC's market share for southern pine exports was 48.5 percent. The majority of the lumber is shipped rough (93 percent) and milled in Europe to specifications. The EC imports 58 percent of all rough southern pine exports from the U.S., while it has only a 15 percent share of the world market for dressed lumber, a market the Caribbean still dominates.

Almost half of the southern pine going to the EC is sold to Spain and Italy, with a substantial amount going to Germany, and lesser quantities to the United Kingdom and Belgium. Other markets within the EC have not been developed at this time, but as demand increases and familiarity with the product grows, there should be new pockets opening for aggressive exporters.

Uses and Specifications

Southern pine is used in Europe primarily for millwork, especially door and window frames, and other types of joinery and decorative finishes. The demand is usually for export prime, saps, and flitches, though Europe has many "niche" markets, allowing smaller companies specializing in various grades and dimensions to make sales.

European countries still favor masonry construction, so large markets do not exist for construction grade softwood. Most of this grade is employed for roof trusses and temporary construction uses and is supplied by Austria, Eastern Europe, and the USSR. These companies have an advantage over U.S. suppliers because of their proximity to the EC. With freight costs averaging 30 percent of delivery price, U.S. suppliers not only find it difficult to compete with European construction grade, but find it unprofitable to ship unless orders are large and longstanding.

Softwood is graded most often according to appearance rather than strength. The Scandinavian system

Table 1

Southern Pine Lumber Exports to the European Community, 1989

Spain	\$48,762,000
Italy	\$24,175,000
Germany	\$9,338,000
United Kingdom	\$5,009,000
Belgium/Luxembourg	\$4,691,000
Greece	\$2,097,000
Netherlands	\$1,741,000
France	\$1,220,000
Denmark	\$467,000
Ireland	\$256,000
Portugal	\$162,000
Total	\$97,918,000

Source: U.S. Department of Agriculture Foreign Agricultural Service

adapted for Norway spruce and Scotch pine is the primary method employed in the EC market. Since Scandinavian pine is denser, with smaller and fewer knots than southern pine, standards are high, and southern lumber must conform strictly to limitations on knots, stains, and wain. Thickness and width determine the size and number of characteristics allowed. Clears (a select grade of lumber free or practically free of all blemishes, characteristics or defects) are preferred by European buyers, who generally like a "sappier" wood to one containing a lot of heart.

In 1982 the Southern Pine Inspection Bureau (SPIB) and southern exporters established the Export Grading Rules, replacing the old Gulf Coast Rules (1923), as the definitive standard for categorizing U.S. southern pine. The new rules established standards which better reflected the type of pine available for export. Within these categories European importers select the grades with the most suitable characteristics.

New regulations have also affected humidity content. All coniferous lumber shipped to the EC since January 1, 1991 has been required by EC standards to be kiln-dried with a maximum 20 percent moisture content. Derogations to this requirement have been applied for by several member countries. They will allow the entry of green coniferous lumber, providing it is accompanied with a Certificate of Debarking and Grub Hole Control. Exporters seeking to ship green wood should check with the regulations of the destination country.

Exporting to the European Community

Most Alabama mills producing for Europe prefer to export "indirectly" through lumber export companies which deal directly with European importers. Selling to export companies eliminates the complexities of shipping overseas. The producer does not have to ship his product, insure it, or finance the sale. The transaction is more like a domestic sale to a U.S. buyer, and the risks are no greater. Though this method is safer for the producer, it is also less profitable, since he is essentially selling through a middleman, has no direct contact with the overseas market, and is unable to respond to market fluctuations.

Some companies, however, prefer a more direct approach, handling the



THE EUROPEAN COMMUNITY

transactions and shipments themselves. Exporting directly is the best method for developing a foreign market and making the most profit. It takes more time, money, and manpower, but these expenses can be effectively reduced by acquiring competent European agents. The risk of credit extension is also diffused to some extent, since European customers, by and large, have good payment histories. Still, this is a method best suited for medium to large-size companies, since delayed payment may cause cash flow problems with smaller firms.

Lumbermen wanting to sell to Europe should first decide how serious they are about exporting. Exporting requires a long-term strategy and commitment of company resources. It should be viewed as a means for company expansion or specialization, not a quick profit scheme or something to dabble in when the domestic market is down. Exporting to Europe also requires a high quality product and an ability and willingness to supply it. Just like domestic customers, Europeans like to

do business with reliable suppliers.

Sure, exporting is a little different. Mills are usually expected to ship to foreign destinations, and they must learn about shipping schedules and freight rates. They must learn how to protect themselves in payment agreements and how international law and export regulations affect them. Successful companies will be aware of what products are demanded in Europe and will keep in close touch with the market by employing agents and visiting their customers. Most of all, they will take special pains with their shipments, making deliveries exact and on time.

Many lumbermen beginning to export find the process easier than they imagined. While dealing with the "complexities" of international trade, they discover that most of the perceived problems solve themselves. Selling abroad is different in some ways than selling in the U.S.; but, nevertheless, it is still selling, and the basic rules for successful business apply in Europe as well as in this country. ♣

CENTER PROVIDES ENVIRONMENTAL INFORMATION

by BETTYE ANN FORCE, Environmental Education Program Coordinator,
Center for Environmental Research and Service, Troy State University

“Where can our school obtain tree seedlings for our students to plant?” “Where can I obtain a list of recycling companies in my area?” “What environmental education workshops and programs exist in Alabama?” “What agency is responsible for regulating solid waste management in Alabama?” “What species of plants should I plant to attract wildlife?” “What types of environmental careers exist?” “When is Earth Day?”

These are but a few examples of the questions answered almost daily by the Center for Environmental Research and Service at Troy State University. Established by an act of the Alabama legislature in 1985, the Center is a statewide public service unit of the University, providing up-to-date information on Alabama's environment.

Through its public service and education programs, the Center for Environmental Research and Service

works to promote an environmentally literate citizenry.

Give CECIL a Call!

Thousands of calls have been received on the Center's toll-free information line, CECIL. The Citizen Environmental and Conservation Information Line provides callers with information ranging from the name and telephone number of the appropriate agency and contact, to workshop requests, to informational publications which can best address the caller's request. The purpose of CECIL is to provide citizens, local and state governments, educators, organizations, and businesses with environmental and conservation information or assistance. The toll-free line is one means by which the Center fulfills its role as a clearinghouse for environmental information. CECIL is operated Monday through Friday during regular business hours.

ter with countless educational opportunities.

Through a contract with the Alabama Department of Environmental Management, the Center recently conducted a non-point source (NPS) water quality workshop. The workshop informed educators about the sources and impacts of NPS water pollution and provided them with curriculum materials and hands-on activities for the classroom and outdoors.

The Center was a founding member of the Environmental Education Association of Alabama (EEAA), a non-profit organization which seeks to promote the integration of environmental education into the K-12 curriculum. Initiating the networking of environmental groups, teachers, schools, museums, nature centers, zoos, state and federal agencies, and others, the Center hosted the First Environmental Education Symposium in 1987. Discussions initiated at this symposium led to the creation of EEAA. The annual en-

Educating about the Environment

The Center has worked with thousands of educators and students statewide to provide hands-on learning experiences in the natural world. Environmental education programs utilized by the Center include Project Learning Tree, Project WILD, the National Wildlife Federation's Nature-Scope, and the Center's very own Nature's Way Series. Other examples of educational services provided by the Center include outdoor education workshops that provide field experiences, community recycling workshops and presentations, environmental education credit courses at Troy State University, and nature trail development.

The Troy State University Arboretum is a 75-acre certified TREASURE Forest. An outdoor learning area with natural springs and a pond, the arboretum provides the Cen-



BOB JOSLIN

Students learning about wildlife!



BOB JOSLIN

Student discovering natural patterns.

environmental education symposiums have been successful in drawing hundreds of educators from across Alabama to participate in environmental education programs and activities.

The Center is also a founding member of Alabama People Against a Littered State (PALS). The popular *Alabama PALS Litter Education Activity Guide* was developed by the Center for PALS along with other informational materials on solid waste and recycling.

Trees and Your Community: A Guide to Successful Tree Programs and a companion Instructors Manual,

distributed by the Alabama Forestry Commission, are products of a contract between the AFC and the Center. This guide has been supplied, upon request, to individuals and organizations in a majority of the 50 states. Another cooperative project with the AFC was the production of a video about the TREASURE Forest program.

Working with Auburn University, the Center produced a video on Alabama's Well Head Protection Program. The video is designed for use by water system operators and the general public.

Since 1985, the Center has per-

formed contract services for the Alabama Department of Environmental Management, the Alabama Forestry Commission, the Alabama Department of Economic and Community Affairs, the Geological Society of Alabama, and the City of Troy.

The Center for Environmental Research and Service welcomes input and/or questions on behalf of environmental quality in Alabama. Questions about Alabama's environment? Call CECIL! 1-800-642-2377. You may also write to the Center for Environmental Research and Service at Troy State University, Troy, AL 36082. ♠

COYOTE: Predator on the Rise

by MIKE SIEVERING, Supervising Wildlife Biologist,
Alabama Department of Conservation and Natural Resources

Coyotes. Just the name can stir up a variety of reactions, ranging from anger to concern.

The coyote is a native of the West, but also ranges from Eastern Alaska and Northwest Canada, down into Mexico. It occupies ranges in all of the Western states and in many of the Midwestern and Northeastern states. Coyote sightings are now becoming commonplace in many of the Southeastern states.

Coyote populations in Alabama seem to be on the increase. This is a direct result of an ample and readily available food source. In the past, coyotes and coyote sightings were a rarity. However, over a period of decades, coyote numbers have increased. Increases in population levels have occurred on several fronts. Natural migration or range expansion is largely responsible for the increase in coyote numbers. Constantly looking for desirable, vacant habitat, the coyote appears to have moved from Texas and Louisiana to Alabama and many other Southeastern states. Not only did natural range expansion attribute to an increase in coyote numbers, the unintentional introduction of the species has also assisted in spreading the coyote throughout the Southeastern U.S.

Coyotes live in a variety of habitats. They can be found in farmlands, brushy thickets and swamps. They seem to prefer open lands that are bordered with woodlands. This habitat



JAY BURNETT

type is beneficial from both a feeding aspect and from a denning or pup rearing aspect.

The coyote breeding season occurs in late winter or early spring. After a gestation period of 60 to 63 days, a litter of four to nine pups is born. The young are born blind and have a coat of yellowish-brown fur. The pups' eyes open at approximately 10 days of age. Pups are weaned at approximately nine to 10 weeks. At this age the pups are on a diet of animal matter and can be seen practicing their hunting skills on quarry such as grasshoppers.

Den sites are usually abandoned burrows of other animals, such as woodchucks, skunks or foxes. The coyote den does not have nesting materials associated with it, as does the typical fox den. However, it does have a somewhat

enlarged denning chamber in which to raise the pups.

Coyotes are opportunistic feeders. The bulk of their diet is composed of animal matter. Mice, rabbits, birds, reptiles, deer, poultry, insects and other small mammals comprise 95 percent of their diet. Seasonal conditions have a direct impact on the diet of coyotes. They eat a variety of plant matter, fruit and berries during summer. During winter months, deer are a larger part of the coyotes's diet. Much of this is carrion from dead deer.

As many stockmen know, during the birthing period there seems to be a higher frequency of predation by coyotes. This seems to hold true during deer fawning season. Researchers in both Minnesota and New York have noted high fawn mortality during such times. Several Minnesota researchers have estimated the predation rate at one fawn per coyote annually.

In most areas of the country, predation on deer by coyotes usually affects either fawns or adult deer that have abnormalities. Coyote predation on deer is density-dependent and varies according to other food sources in the immediate area. In locations with relatively low-population deer herds, coyotes may have a negative impact on those local populations. In such cases, local coyote control is the solution to the problem.

Being classified as a predator, the coyote has a certain reputation to live up to. In general, most people are of the belief that predators are vicious, blood-thirsty killers. The fact is that predators, even the coyote, play an important role in nature by limiting the spread of disease within certain wildlife populations and keeping those populations in balance with the habitats they occupy. ♠

Fundamentals of Bowhunting Success

by DUNCAN DOBIE

Deer season is right around the corner. If you're one of the thousands of avid whitetail hunters who plans to try your hand at bowhunting this year, now is the time to start getting ready.

Whether you're a beginner or a seasoned veteran with a number of bucks under your belt, you won't go wrong by taking a little time this summer to evaluate some of the fundamentals of bowhunting. After all, being prepared is one of the keys to success. Unfortunately, hunters who go into the woods not properly prepared usually run into serious problems—and problems contribute to failure.

Let's take a look at four problem areas that can be eliminated with good planning. If for no other reason, the quarry we hunt deserves every bit of respect that we bowhunters can muster to make a quick, clean kill.

1. Get the right equipment.

There is a vast array of new and innovative archery equipment on the market this year. If you plan to purchase new gear this year, do yourself a favor: before you spend one dime, go to a reputable archery shop and ask one of the pros to help you choose the right equipment.

As a beginner, you may have dozens of questions. For instance, what kind of bow should you buy? What kind of draw weight should you be shooting? What kind of sight should you put on your bow? Should you use a release or a finger tab? The questions can seem endless.

Your local archery pro will go to great lengths to insure that you buy equipment suited to your personal needs. All too often, well-intentioned hunters buy certain equipment solely because someone they know uses that same type of gear. Just because your buddy shoots an 80-pound bow does not necessarily mean you should be shooting one, too. In fact, it could be a tremendous mistake. Don't buy something just because your friend uses it! The item in question may be grossly mismatched to your shooting specifications or to your particular level of skill.

Many archery pros are dedicated bowhunters themselves. They usually have a great deal of expertise that will help you choose the proper gear. A

good archery pro can give you tips about your shooting, also. He'll tell you what you're doing wrong, and he'll show you how to improve. Often, this kind of invaluable advice is free for the asking. This year, before you head for the woods, seek the help of an experienced archery pro, and buy only those pieces of equipment that are right for you!

2. Know your equipment, and make sure it's in top condition.

Every now and then, I hear a story about some lucky, first-time bowhunter who purchases a bow one day, and then goes out the following day and shoots an outstanding buck. "There's nothing to this bowhunting," he says. "It's easy!"

Well, I've got news for you. There is nothing easy about bowhunting for deer! In reality, those "dream" situations are few and far between. First-time bowhunters can botch the chance of a lifetime because (a) they are not familiar with their equipment, and (b) they have not practiced enough to be proficient with it.

Don't put yourself in this position. If you plan to purchase new equipment, make sure you are familiar with it and know how to use it well before opening day arrives.

If you're shooting a bow that is several years old, take it to your local pro shop and have it thoroughly inspected. Do the cables need to be replaced? Do they need a new string? How about your hunting arrows and broadheads? Do they need to be replaced? Makes sure all of your equipment is in good working order. Don't let faulty equipment cost you a buck this season.

3. Practice—often.

Many top bowhunters shoot every day—365 days a year. Some shoot in tournaments during the off-season; others continue to hunt groundhogs or other game just to stay in shape for deer season. Even if you don't participate in tournaments or hunt year round, *now* is the time to begin practicing and getting in shape for the upcoming season.

For one thing, it takes time to get your shooting muscles toned. You simply can't do it in one or two weeks. Being in shape is so important when

you have to hold at full draw for a long period of time, or when you have to make a difficult shot from an uncomfortable position.

By setting up a good program at least 90 days before the season opens, you'll be intimately familiar with the workings of your equipment. If you're familiar with your equipment, you'll be a lot more confident in the woods, and a confident bowhunter is a successful bowhunter!

Be sure you practice shooting broadheads at life-size targets. Practice from elevated positions as well as on the ground. Practice difficult shots, like shooting through holes in the brush. With ample practice, you'll have a lot more confidence in your ability, and you'll be ready when that big chance comes.

4. Know when not to shoot.

Knowing when to pass up a marginal shot is vital. I know excellent bowhunters who have passed up 15-yard shots at record-class deer because the deer were never positioned right for a sure kill. My hat goes off to these hunters.

Bowhunting requires a great deal of fortitude and patience. Each hunter should know his own level of proficiency, and he should try to stay within that level. Having to pass up an impossible shot is all part of the challenge. And remember, if you do pass up a shot at a buck because conditions are not right, there is always a chance you'll see him again—perhaps the next day or the next week. If you spook him by taking a wild shot that has no hope of connecting, you'll probably never see him again!

This year, be prepared when opening day arrives. Get good equipment and know how to use it. Shoot often and learn good form. Know your strengths and don't take wild shots. Wait for the right opportunity, then place your shot carefully when that chance arrives.

By practicing some of bowhunting's fundamentals, you'll be well on your way to putting a good buck in the cooler this year. Keep those broadheads sharp, and good hunting!

This article first appeared in The Christian Outdoorsman. Reprinted with permission. ♠

Eighth Alabama Landowner and TREASURE Forest Conference

Lakepoint Resort—Eufaula, Alabama—October 10-11, 1991
Registration Form

Name _____

Company _____

Address _____

City _____ State _____ Zip _____

Phone _____ County _____

County where you own land _____

(Only one county please; if you own land in more than one county, list the county in which you own the majority of your land)

Category of Participant (Check appropriate categories)

_____ Private Forest Industry _____ Landowner
_____ Government Agency _____ TREASURE Forest Landowner

Check Appropriate Choices:

_____ I will attend Thursday's session.
_____ I will attend Friday's session.
_____ I will attend the Banquet on Thursday night.
_____ I need _____ additional banquet tickets at \$15.
_____ I need _____ additional Friday luncheon tickets at \$10.

Registration Fee

The registration fee includes both days' sessions, luncheon and banquet tickets.

Preregistration fee, paid before September 13, 1991, is \$20.
Registration will be from 10:00 a.m. until 2:00 p.m. October 10.
Registration fee at conference will be \$30.

Mail upper portion of form and fee (Payable to Alabama Forestry Conference) to:
Ms. Lenore Martin
AU School of Forestry
Auburn University, AL 36849-5418

Hotel/Motel Information

You will need to make your own reservations:

Lakepoint Resort
Highway 431
Eufaula, AL
(205) 687-8011
1-800-ALA-PARK

Holiday Inn
East Barbour Street
Eufaula, AL 36027
(205) 687-2021

Best Western Eufaula Inn
1337 South Eufaula Avenue
Eufaula, AL 36027
205-687-3900

Seminar on Forest Regeneration Options for Forest Landowners

Lakepoint Resort,
Eufaula, Alabama
October 9, 1991

As an added benefit to Alabama forest landowners, the Auburn School of Forestry is sponsoring a Seminar on Forest Regeneration Options for non-industrial private forest landowners.

The objective of this seminar is to familiarize landowners with the forest regeneration program at Auburn and provide them with forest management options that they may consider in their own forest regeneration plans.

Speakers will discuss:

- *The Importance of Planting "Morphologically Improved" Seedlings
- *Choosing the Correct Planting Spacing
- *Choices in Chemical Weed Control
- *Regeneration of Hardwood Stands
- *Landowner Attitudes Towards Reforestation

This program is open to landowners and forestry professionals who plan to attend the Eighth Alabama Landowner and TREASURE Forest Conference, October 10-11, 1991. However, this program is separate from the Landowner Conference. People interested in this seminar must register separately using the registration form below:

Registration Form Forest Regeneration Seminar

Name: _____

Address: _____

Phone: _____

Registration Fee: \$20
Includes Lunch and one break
Payable to Auburn School of Forestry

Send registrations and fees to:

Dr. Ken McNabb
School of Forestry
Auburn University, AL 36849
(205) 844-1044

Nominations Encouraged for Environmental Awards

The W. Kelly Mosley Environmental Awards Program seeks to identify, verify and publicly recognize achievements or proposed activities which, if broadly known, will result in wiser use of our renewable forest resources.

A total of \$15,000 will be awarded annually to youth, adults, practitioners, professionals, technicians and individual citizens who work in the areas of forestry, fisheries, wildlife and related resources.

The awards are made possible by a gift to Auburn University from Dr. W. Kelly Mosley of Atlanta, Ga., and the Franklin Foundation which he heads. Dr. Mosley, an alumnus of Auburn University and the first TREASURE Forest landowner (Marengo County), has himself received many awards for outstanding contributions to conserva-

tion and Auburn University.

The awards are limited to nominees whose achievements or proposed activities are directly related to some aspect of forestry, fisheries, or wildlife, and who are not eligible to receive awards or grant funding under ongoing professional, public or private recognition programs. The achievement or proposed activity must not have been previously recognized or funded.

Awards for outstanding achievement will normally be made in amounts of \$500. Examples of such awards include a biologist who helped others adopt improved management practices which enhanced wildlife habitat, an inventor of a tree planting machine which resulted in substantial savings of time and money, and a writer whose outstanding research report made a sig-

nificant impact on forestry, wildlife and related resources.

Grants to facilitate future achievements will range from \$500 to \$2,000, depending upon the demonstrated need and the merits of the proposed activity. For example, a grant of \$1,000 may be made to an organization to enable it to obtain an outstanding speaker for a resource management program which will be beneficial to all citizens of Alabama.

Nominations must be submitted in writing and may be made at any time during the year. To obtain a copy of the application form, write to Larkin H. Wade, Coordinator, Extension Forestry Programs, School of Forestry, Alabama Cooperative Extension Service, Auburn University, Ala. 36849-5627, or call 205/844-1040.



Alabama's TREASURED Forests
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Montgomery, AL 36130

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