

STATE FORESTER'S MESSAGE

by C.W. Moody, State Forester



A s you know, the Education, Government and Tax Reform package proposed by Gov. Hunt's Task Force did not make it through the regular legislative session. The Alabama Forestry Commission supported the tax reform package because of the benefits it would bring to all the citizens of Alabama.

From the beginning, this appeared to me a potential opportunity to do a most visionary thing for Alabama. Regardless of the outcome, I am moved to share my views with you on a different kind of stewardship from which we normally talk about.

We hear so many negative things about elected and appointed officials—we certainly need to hear about some of the things they are doing right! This letter has to do with outstanding stewardship by certain elected and appointed officials with regard to tax, government and education reform.

Gov. Guy Hunt has provided outstanding leadership. Tom Carruthers, Chairman of the Governor's Tax Reform Task Force has gone far beyond polite public service. His tenacious, gentle, persuasive, and tactful conduct were key to keeping this issue alive. Speaker of the House Jimmy Clark must be acknowledged as a strong and effective supporter from the beginning. Ways and Means Chairman Taylor Harper was fearless, as usual, in helping move the package along.

Lieutenant Gov. Jim Folsom displayed leadership and courage in getting the package through the Senate and into the Conference Committee. President Pro Tem Ryan deGraffenried also made the difference in the Senate on several occasions. Paul Hubbert of AEA and John Dorrill of the Alabama Farmers Federation were key contributors to the effort.

Several legislators have been diligent in leading the effort to protect and enhance the more direct interests of forest owners in this process. Among these have been Representatives Jimmy Holley and Richard Laird and Senators Jim Preuitt and Ann Bedsole.

There have been many others who worked diligently to keep the package of bills alive and meaningful to Alabamians of this and future generations, but these have been mentioned because I personally observed their efforts and believe they are worthy of special mention.

The leadership provided by these people is one reason Alabama is such a great place for TREASURE Forest owners and others to live and work!

Sincerely,

C.W. Moody

State Forester

COMMISSIONERS

Milton Loughridge, *Chairman*Carol Jean Grisham, *Vice Chairman*John Barfield
John Goodson, Jr.
Guice Slawson
Claude S. Swift

STATE FORESTER

C.W. Moody

Cecil Tanner

ASSISTANT STATE FORESTER

Charles A. Pigg

ALABAMA FORESTRY PLANNING COMMITTEE

- Alabama Department of Conservation and Natural Resources
- Alabama Department of Education, Vocational Division, Agribusiness Education
- · Alabama Farmers Federation
- · Alabama Forestry Association
- · Alabama Forestry Commission
- · Alabama Soil and Water Conservation Committee
- Alabama TREASURE Forest Landowners Association
- Alabama Wildlife Federation
- Association of Consulting Foresters, Inc., Alabama Chapter
- Alabama Agricultural Experiment Station, Auburn University
- Alabama Cooperative Extension Service, Auburn University
- · College of Agriculture, Auburn University
- School of Forestry, Auburn University
- Tennessee Valley Authority
- USDA—Agricultural Stabilization and Conservation Service
- USDA—Farmer's Home Administration
- USDA—Forest Service, National Forests in Alabama
- USDA—Forest Service, Southeastern Area State and Private
- USDA—Soil Conservation Service

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.

John C. Kummel

EDITORIAL BOARD

Tilliotily C. Doyce	John C. Kummer
Richard H. Cumbie	Cynthia K. Page
Dr. Samuel Eichold	Dorothy R. Reynolds
David Frederick	
EDITOR	Kim Gilliland
ASSISTANT TO EDITOR	Lee Helms
TECHNICAL ADVISORS	
Mike Breedlove	Tree Improvement
Don Burdette	Water Quality
Tom Cambre	Hardwoods
Sharon Clark	TREASURE Forest
James Hyland	Forest Health
Louis Hyman	Taxes
Neil Letson	Urban Forestry
Stan Stewart	Wildlife
Reggie Summerlin	RCFP
Walter Vest	Forest Law Enforcement
Robert Wiggins	Forest Fire Protection

Alabama's TREASURED Forests

Volume XI. No. 3

Summer 1992

CONTENTS

A TREASURE to Share / by TILDA MIMS
A "Forever Wild" Alabama / by DR. DOUG PHILLIPS7
Firewood from Timber Stand Improvement / by PAT WALDROP
Order Seedlings Now
Leasing Hunting Rights: How Much Should I Charge? by C. WILLIAM McKEE11
Timber Theft / by WALTER VEST
N.E. Alabama Landowner Association Formed
How to Grow Beetle Bait! / by JIM HYLAND and TIM GOTHARD
How a Consulting Forester Can Help You / by DAVID WEBB22
Do You Need Assistance from a Wildlife Biologist? by STAN STEWART
Landowner's Responsibility During Logging / by BOBBY LANFORD25
Turn Your Beaver Problem Into a Waterfowl Area by J. WAYNE FEARS
Landowner Conference Registration Form31
Conference Offers Something for Everyone / by ANITA BENTON
DEPARTMENTS
State Forester's Message
Editor's Understory
Calendar
Hidden TREASURES
Landowner's Legislative Alert
Hardwoods of Alabama
Memorials

COVER: This stand of water tupelo and baldcypress trees is growing on an Autauga County site that most people would accept as a true forested wetland. Wetlands generally include swamps, marshes, bogs and similar areas. *Photo by Kim Gilliland*.

Alabama's TREASURED Forests (ISSN 0894-9654) is published quarterly by the Alabama Forestry Commission, 513 Madison Avenue, Montgomery, AL 36130. Telephone 240-9358. Bulk rate postage paid at Montgomery, Alabama. POSTMASTER: Send address changes to: Alabama's TREASURED Forests, 513 Madison Avenue, Montgomery, Alabama 36130.



Hardwoods cover a third of the Ogden TREASURE Forest.

A TREASURE TO SHARE

by TILDA MIMS, Information Specialist, Alabama Forestry Commission, Tuscaloosa

REASURE Forests come in all shapes and sizes. Some are small, lovingly tended tracts managed for quiet pleasures. Others are vast holdings, equally loved yet managed with an emphasis on productivity. Regardless of size, each represents Alabama forest management at its best.

Ogden Management Company (OMC) owns and operates a 13,000-acre TREA-SURE Forest in Lamar County. Although well above the 1,800-acre average size TREASURE Forest, each acre is managed for optimum production in timber, recreation, aesthetics and wildlife.

Billy Ogden is president of OMC. His sister, Tallulah Ogden Hargrove, is vice president and his wife, Pat, is secretary/treasurer. "We were already administering several family estates, so in 1975 we decided to form a management corporation," Billy said. "My sister and I poured our resources into it."

The land has been in the Ogden family for several generations but was not actively managed until the early 1960s



Each acre is managed for optimum production in timber, recreation, aesthetics and wildlife.

when Billy Ogden and E.H. Rasbury, Jr. initiated a plan to improve the productivity of the forestland. Described by Ogden as a "self-made forester," Rasbury is credited with helping him begin OMC's successful forest management program.

Early Management

"Our original plan was to convert poor upland hardwood sites into pines and keep the bottomlands in hardwoods," recalls Ogden. "We began thinning with a mule team to remove poor timber for pulp or firewood, and planted the land back in pine."

He remembers once using pine seeds because seedlings weren't yet available. "We disked up the little five- to ten-acre fields no longer cropped, broadcast the pine seeds and disked it over," he said. The trees grown from seeds have not matured into quality timber. According to Ogden, genetically improved seedlings planted years later have easily surpassed in size and quality those grown from seed.

Modern Changes

Thirty years later, hills once dotted with blackjack oak and scrub pine boast healthy pine plantations. Roughly two-thirds of the acreage is loblolly and short-leaf pine plantations and pine-hardwood mixtures.

The pine stands are on 30- and 40-year rotations. Some trees will be used for pulpwood; others will mature into saw-timber.

4 / Alabama's TREASURED Forests Summer 1992

A new demand exists for the vigorously growing hardwoods covering the remaining third of the forestland. Ogden remembers when OMC tried to get rid of the hardwood trees. "We used to poison hardwoods and now we get a good price for them," he said. OMC now owns a thriving hardwood pulpwood operation that sells to Alabama River Woodlands.

One hardwood that is definitely not for sale is the state champion American beech. The beech is 162 feet in height, 124 inches in circumference and has a 72-foot crown spread. The Ogdens are also the owners of a recently dethroned state champion slippery elm.

Genetically improved seedlings, aerial herbicides, mechanized logging equipment, and computer generated maps have enhanced the total productivity of this TREASURE Forest. Yet, massive Belgian draft horses can often be seen logging sensitive areas, and important forestry decisions may still be made over the dining table at the OMC office.

Modern technology blends easily with tradition and community spirit in this family owned TREASURE Forest.

Wildlife Management

Over 3,000 acres of OMC forestland lies within the Lamarion Wildlife Management Area, operated by the Department of Conservation and Natural Resources. The OMC leases hunting rights to the wildlife area while retaining ownership of the property.

The Department of Conservation coordinates with OMC forestry practices by converting logging decks into wildlife food plots planted in crimson clover, bicolor and sawtooth oaks. The Department also provides road maintenance, and assists with fire patrols and fire control efforts.

The Lamarion area includes 25,150 acres in Lamar and Marion counties. Public hunting areas, hiking trails and primitive camp sites are among the facilities available for public use.

Hunting Permits

The Ogdens have resisted the opportunities to lease hunting rights on the majority of their property. "Our objective for as long as it's possible is to preserve hunting privileges for local citizens.

Lamar Countians deserve a good place to hunt," said Ogden.



Sulligent Lake.

The OMC issues around 300 hunting permits to Lamar County citizens annually. A specially designed permit includes information on forest fire prevention, the telephone number of the Vernon fire tower, the toll free number to report wildfires, and the home phone numbers of all Alabama Forestry Commission personnel in Lamar County.



Horses are used to harvest environmentally sensitive areas.

Wildlife enhancement is encouraged in their forest management plan. Deer, turkey, squirrels, quail and rabbits enjoy food plots featuring sawtooth oak and bicolor. OMC also has an extensive agricultural program that routinely plants grasses on the perimeter of 1,200 acres of soybean, wheat and corn.

Sulligent Lake

Sulligent Lake is a 100-acre lake built on OMC land and leased at no charge to the Sulligent Recreation Association. The OMC supports the lake through actual maintenance work beyond what the club can afford, including maintenance of the levy and spillway. Harvesting operations near Sulligent Lake are designed to preserve the natural beauty of the area.

Originally built in 1948 and expanded in 1968, Sulligent Lake boasts excellent fishing and other outdoor recreational opportunities. Boat rentals, picnic facilities and a walking trail meet the needs of any outdoor enthusiast. Hikers and horse lovers are sure to enjoy an additional nature trail currently being developed by Pat Ogden.

Bluebird and other bird boxes, native flowers and well kept public areas are perfect for nature photographers. An attractive lodge by the lake is perfectly suited for OMC meetings and family retreats.

It is often said that good things come in small packages. However, for OMC this large tract of land has meant big opportunities.

The opportunity to manage family owned land, the opportunity to practice good stewardship and—equally important—an opportunity to enjoy their blessings with their neighbors.

They have created a TREASURE to share. $\boldsymbol{\Theta}$

by TILDA MIMS, Information Specialist, Alabama Forestry Commission, Tuscaloosa

he Ogden family has lived and worked in Lamar County for generations.

Billy Ogden's grandfather, W.W. Ogden, was a founding father of Sulligent. He operated a cotton gin and a grist mill outside the community of Moscow until the railroad came through the center of town. Moscow was renamed Sulligent in honor of Sullivan and Sargent, surveying engineers for the railroad.

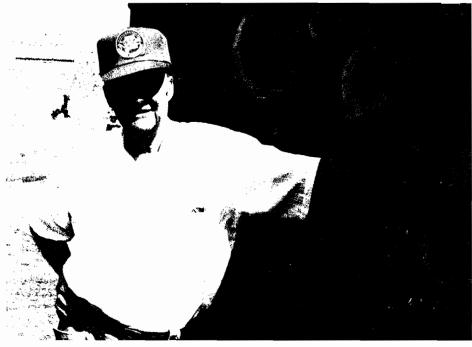
The advent of rail service boosted the local economy by attracting new businesses and industries utilizing local farm and forest resources.

W.W. Ogden moved his family into Sulligent and in 1906 founded the Sulligent Cotton Oil Company, declared the world's largest cotton mill under one roof in the early 1930s. He later established the Interstate Milling Company, a general store and a bank. Some years later, Billy's father William founded the Sulligent Planing Mill.

Ogden worked in and around the family businesses while growing up, and when he returned home following service during the Korean War, he assumed the reins of the diverse family holdings. Changes in the economy after the war required certain modifications but he remained committed to the family business.

Ten years after the Korean War, Billy Ogden and a family friend and career employee of the cotton oil mill, E.H. Rasbury, Jr., initiated a forest management program that would ultimately result in TREASURE Forest nomination by Wayne Strawbridge, now district forester for District 3 of the Alabama Forestry Commission.

"Wayne and I grew up together in Lamar County, and he liked to come home to hunt each year," said Ogden. "One day he came by our office to get a hunting permit and we started talking about our forest management program. Junior Rasbury and I were managing the



Billy Ogden

land for multiple use already, but Wayne had some good suggestions for improvements, like adding wildlife food plots."

In Strawbridge's 1979 TREASURE Forest nomination, the OMC received praise for maintaining a "perpetual forest" with ecological balance and a better habitat for wildlife. The primary objective is timber production and the secondary objective is outdoor recreation and wildlife. The OMC was recognized as a Helene Mosley Memorial TREASURE Forest Award district winner in 1980.

Billy Ogden's wife Pat is actively involved in all aspects of OMC. She is a knowledgeable partner in the timber management aspects of the business, and a dynamic force behind the aesthetic and recreational developments.

They met in 1968 during a blind date at the Columbus Air Force Base where Pat was a civilian employee. They married a few years later and recently celebrated their 21st wedding anniversary.

Their son, William, III (Trip) is a sophomore majoring in fine arts at a Mississippi University. He is managing a 30-acre tract enrolled in the FIP program. Their daughter, Leila Teresa (Terri) is in her first year at Ole Miss majoring in business. Terri enjoys being involved in the computer operations at OMC during school breaks.

The OMC owned lodge at Sulligent Lake is a wood and glass structure featuring a generous back porch overlooking the lake. It is used frequently for gatherings of family and friends, as well as company retreats.

Although the Ogdens have a second residence in Aberdeen, MS, the quiet pleasures of life in Sulligent often draw them home to Lamar County. Their love of the land is best illustrated by a willingness to share with their friends and neighbors, and their heritage of community spirit.

A "FOREVER WILD" ALABAMA

by DR. DOUG PHILLIPS, Alabama Museum of Natural History

labama—the State of Surprises!" Alabama's official state slogan is not just a cute play on words. It's an actual fact. Surprise is what visitors to the state really feel when they learn of Alabama's many special features.

Ours is one of the most beautiful and biologically unique states in the union. Alabama is famous for its hunting and fishing. It has more geologic provinces than any state except California, and ranks second only to Tennessee in the diversity of fish, with over 300 known species. Alabama's coastal areas provide prime resting places for thousands of migratory birds in the fall and spring. Alabama rivals any state of similar size in the number of native species of plants.

Many other regions are rapidly **losing** the kinds of qualities still found in Alabama. You don't have to be a social scientist or an environmentalist to see that human society is growing rapidly. Many parts of the nation have already experienced extensive social and environmental impacts from this rapid growth. Spend a few days in Los Angeles, for example, and your return to Alabama will seem like coming home to a haven of peace and tranquility.

Forever Wild Land Trust

Many Alabamians have come together to express a new concern about the important relationship between our cultural heritage and our natural heritage. They believe that the valuable aspects of Alabama's heritage should be maintained and passed onto our children to help enrich their lives. Their concern for the future is the motivation for a proposed Constitutional Amendment in the November 3, 1992 election establishing the *Alabama Forever Wild Land Trust*.

In the summer of 1991, the Alabama Legislature passed the "Forever Wild" bill, calling for a constitutional amendment to create The Forever Wild Land Trust. This amendment is subject to a statewide referendum, scheduled for November 3, 1992, to obtain voters' approval. This referendum deserves the support of all Alabamians.

Though Alabama is still a great place to live, now is the time to build the right balance between the need for continued economic growth and the need to protect the natural values that help set our state above so many others.

... a positive vote for the Forever Wild program is a vote to secure a favorable quality of life for Alabamians of today and for those of future generations.

A recent inventory of important natural features in the state shows that we have several hundred wonderful wild areas that are without protection and could be lost if something isn't done. These range from outstanding scenic areas to hidden habitats essential for the survival of rare plant and animal species. In between are other special features, including general wildlands that are some of the nation's last and best areas for wildlife and outdoor recreation.

It would probably surprise a lot of people to learn that Alabama is losing more of its native features than sometimes meets the eye. For example, some of our native plants like the green pitcher plant, or wildlife like the bald eagle, are species that once thrived in many parts of the nation. Environmental disruption caused them to become endangered.

Alabama has 61 species now officially

listed as threatened or endangered and at least 250 additional species are being considered for such listing.

On the recreational side of things, lands accessible to the public for recreation in Alabama have been steadily declining for several years. For example, hunting opportunities are already getting sparse for John Q. Public, who can't afford membership in private hunting clubs. Meanwhile, the state owns only around 98,000 acres. That's far less than any other Southeastern state.

How Will It Work?

The Forever Wild Program will provide for state purchase and protection of many of Alabama's special natural areas. The program is the result of a strong consensus among business leaders, environmentalists, sportsmen, and governmental agencies. There are several reasons for this broad support of Forever Wild.

First, the Forever Wild program requires **no new taxes**. Once approved by the state's voters, it will begin receiving about \$2 million annually, which will increase gradually over the next 8-10 years to as much as \$15 million annually. The program will be funded from a small percentage of the interest income earned by the Alabama Trust Fund, a fund set up several years ago to hold and invest revenues generated by Alabama's offshore oil and gas. No new taxes will be assessed and it will not impact on the General Fund or Education Fund of the state.

Second, lands purchased by the Forever Wild program will be acquired only from willing sellers. The program will not have powers to obtain property through condemnation. Lands to be included in Forever Wild can be donated or purchased. A 15-member advisory board will review nominated tracts. The Advisory Board will consist of the Commissioner of Conservation and Natural Resources, the State Forester, four profes-

(Continued on page 9)

Firewood from Timber Stand Improvement

by PATRICK WALDROP, Economic Development and Utilization, Alabama Forestry Commission

t's difficult to think of firewood in the middle of the summer, but now is the time to restock the woodpile. For the forestland owner, restocking the woodpile could present an opportunity to improve a stand of timber at the same time.

Why cut firewood now and not when the temperature is more reasonable? Wood takes three to six months of air drying to be cured properly, so if you want dry wood next winter, you must cut it now. The biggest advantage to burning dry wood is the increase in heat efficiency. Before wood can actually burn, any water present in the wood must be heated to steam first. Have you ever noticed the amount of very white smoke a green log will produce when it's thrown on a hot fire? Most of the white smoke is water vapor. In other words, instead of the heat being expelled into the room, it is used to convert water to steam, which decreases the efficiency of the fire in a fireplace.

Another advantage of burning dry wood is that it's much safer. When wood is burned slowly, or cooler as is the case with green wood, it produces tar and other organic vapors, which combine with expelled moisture to form creosote, an undesirable byproduct. The creosote vapors condense in the relatively cool chimney flue of a slow burning fire. When ignited, the creosote makes an extremely hot fire.

Many people think only conifers, such as pine, produce creosote and that if you burn oak and hickory you won't have a creosote buildup. Pine does not produce as many BTU's of heat as oak, so it will produce more creosote when green. But the creosote problems arise from burning too much green wood, regardless of the species. It is still not recommended to burn much pine or gum, but if you must, make sure it is dry. Your chimney flue



Epicormic branching

should be visually inspected each year for creosote buildup and appropriate measures taken to correct it.

Each species of wood has different burning characteristics, with the production of heat (BTU's) usually being the most important to the homeowner. Most purchasers of firewood know hickory and oak are overall the best firewood species available in Alabama, so most commercial firewood operators only deal with these species. A commercial operator with a firewood processing machine not only restricts his logs in species, but generally has to have fairly straight logs relatively free of knots and limbs. As a forestland owner you must think in terms of utilizing some of the other species and crooked trees that would not be of interest to the commercial operator. In other words, it is generally not feasible to have a commercial firewood operator contract a thinning for timber stand improvement since the trees he wants are usually the

trees you want to leave.

A timber stand improvement (TSI) cut is exactly as the name implies, a timber cut with the intention of improving the remaining trees by allowing more sun, less competition, and removal of diseased or insect problem trees.

A TSI cut in a pine stand is very simple, since pine is not a preferred firewood and the trees you want to save are well spaced and in rows. If you have a commercial species of hardwood that is growing well, has good form and might develop a sawlog or two, it might be a good idea to let it grow. Other trees you may want to spare are mast producers and den trees for wildlife. When cutting in a pine stand in the summer, extra care must be taken not to damage the remaining pines. Southern pine beetles love those damaged and stressed pines. Even if

you don't notice any residual damage, it is best to check the area periodically for pine beetle infestation.

Importance of Trainer Trees

TSI in a hardwood stand requires more thought because the trees you want to save are not always as easy to select. I've heard a hardwood forester describe a TSI cut as simply, "Leave the best and cut the rest." This may be oversimplifying it, but it is a good thought to keep in mind while marking your stand. Commercial species with good form, free of insects or disease and growing the best should be identified. Other trees you want to save, such as wildlife or aesthetic trees, should also be identified. Then the critical part of TSI comes. You must select which "trainer" trees to leave. Hardwoods react differently when the stand is opened up and gets more sunlight. One of the biggest mistakes you can make is to open up a hardwood stand too much. Because of this, it is critical that the proper trainer trees be

Pines, by genetic characteristics, spend most of their energy on the terminal buds. Hardwoods don't mind spending energy on lateral buds or terminal buds, whichever is in a position to capture sunlight. If a hardwood is suddenly exposed to extra sunlight, the tree's dormant lateral buds might break in an effort to capture more sunlight and produce more food. Technically this is called "epicormic branching," and will appear as sprouts along the main bole. This obviously devalues the tree and is something you want to avoid.

Trainer trees are those that keep sunlight from hitting the main bole and thus prevent epicormic branching. One of the keys to a TSI cut is to recognize these trainer trees and to leave them. As a general rule, a hardwood with a full, developed crown is not as likely to need trainer trees as one with a sparse crown. Some species, such as water oak, have more of a tendency for epicormic branching than others. The easiest way to observe this effect is along roadsides where the right of way has been cleared.

Diseased and insect infested trees should be removed during any TSI cut, as well as trees with poor form and obvious defects. But keep in mind that although trainer trees can have poor form, you need to leave them because their role is to prevent epicormic branching.

A good knowledge of tree identification and your local timber market is very helpful when planning a TSI cut. Although black walnut is a good firewood species, it is usually of more value to the landowner to let it grow, regardless of form. You must be able to identify it first and know that it is valuable.

Consider Safety

During a proper TSI operation the remaining limbs should be left scattered on site, preferably bucked up enough so they are close to the ground. Getting the limbs close to the ground will help them become part of the litter floor more quickly. Never, under any circumstances, burn the limbs on site. Fire should always be avoided in hardwood sites. Although foliar herbicides have been selectively used in hardwoods, it is generally a good idea to exclude herbicides in a hardwood stand, particularly soil active herbicides. Roots of trees in a forest will easily graft, so introducing a herbicide might kill more than you want.

If you are doing the chainsaw work yourself, make sure you have your chaps, hard hat, visor, gloves, good boots, and a properly checked saw with safety features. During Alabama's hot summers it's cooler not to wear some of these items, but it's not worth the risk.

Utilization of these normally unmarketable trees for firewood can bring an immediate income for the forestland owner and increases future income by having healthier, larger trees at the stand's maturity.

Firewood Species in Alabama

Excellent	Good	Fair
Hickories (including pecan)	Hazel alder	Basswood
Oaks	Black cherry	Blackgum
Beech	Magnolias	Elm
Hackberry	Red maple	Pines
Dogwood	Sassafras	Redcedar
Black walnut		Sweetgum
Ash		Sycamore
Black locust		Yellow-poplar
		Cottonwood
	1	1

A "Forever Wild" Alabama

Continued from page 7

sional biologists, and nine members representing all regions of the state.

Based on their knowledge and expertise, along with the help of the scientific community and state and federal agencies, the board will select properties to be purchased. A committee made up of the governor, lieutenant governor, and speaker of the house will have final approval.

This is a 20-year land buying program. In 2013, all unspent funds will go to the state general fund. A separate Stewardship Fund will be set up and its interest used to manage the Forever Wild lands.

Finally, lands acquired through the Forever Wild programs will be **managed under a stewardship philosophy** to ensure proper resource protection and also allow for proper use and enjoyment by the public. These wild lands will be set aside, managed and maintained for use as wildlife management areas, woodlands, state parks, natural preserves and recreation areas to provide for a range of public needs such as hunting, hiking and nature study.

Looking to the Future

The challenges for Alabama's future are many. There are some serious problems-the status of our economy and our schools, just to name a couple. Most supporters of the Forever Wild program are actively involved in helping to address a number of the problems facing our state. Even with our continued dedicated efforts, solutions to these often complex dilemmas will likely take years to implement. Meanwhile, without the right protection, much of the state's wonderful natural heritage may soon be forever lost. If we cast a positive vote on November 3, 1992, many of Alabama's natural areas can remain forever wild.

Most importantly, a positive vote for the Forever Wild program is a vote to secure a favorable quality of life for Alabamians of today and for those of future generations. Decades from now when many regions are void of all native natural qualities, life in Alabama will still be a very pleasant surprise.

For further details about the Forever Wild program, please call 1-800-3AL-WILD. 🏟

CALENDAR

July 24-26

Huntsville, Ala. Bama Hunting Classic at the Von Braun Civic Center. Exhibits of hunting products and accessories; speakers on a variety of topics; trophy deer contest; airgun range and more. Admission: adults \$6, youth \$2.50. For more details call 205-773-2467 or 1-800-733-3990.

August 6

Mobile, Ala. "Computer Technology in the Landscape Industry: A Sampling of Available Software." A unique, hands-on computer workshop. For more information, call 205-844-5102.

August 28-29

Birmingham, Ala. "LandCADD: Computer-Aided Design with a Comprehensive Landplanning Package," a two-day computer studio workshop. For more information, call 205-844-5102.

September 29-30

Athens, Ga. "Wood Procurement," a Univ. of Ga. forestry short course. For more information, call 404-542-3063.

October 29-30

Tuscaloosa, Ala. Ninth Alabama Landowner and TREA-SURE Forest Conference. Read more about the conference on page 32; registration form on page 31.



ORDER SEEDLINGS NOW



The Alabama Forestry Commission began accepting seedling orders for the 1992-93 planting season on June 1. All loblolly and slash pines 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-served basis.

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

Nursery Section

Alabama Forestry Commission 513 Madison Avenue Montgomery, AL 36130

PINES	Per 1,000	Per 500
Loblolly Pine—SUPER TREES	. \$27.50	\$18.00
Coastal Seed Source		
Piedmont Seed Source		
Slash Pine—SUPER TREES	. \$27.50	\$18.00
Virginia Pine (Christmas Trees)	. \$42.50	\$28.00
Longleaf Pine (Benlate treated for better survivability)	. \$36.50	\$25.00
Lespedeza Thunbergii	. \$40.00	\$26.00

HARDWOODS

Oaks:	Other Hardwoods:
Cherrybark	Autumn Olive
Nuttall	Dogwood
Sawtooth	Redbud
Shumard	Green Ash
Northern Red	Sweetgum
Swamp Chestnut	Sycamore
Water/Willow	Yellow Poplar
White	•

There is a special order form this season for ordering hardwoods. The minimum order for hardwoods is a bundle of 100.

All hardwood orders under 2,000 will be shipped UPS.

The prices for orders under 2,000 include the shipping fee.

Price for Orders Under 2,000. (Price includes UPS shipping fee)

100 - \$29.00	750 - \$137.50	1,500 - \$213.00
200 - \$56.00	800 - \$140.00	1,600 - \$229.50
250 - \$69.00	900 - \$145.00	1,700 - \$244.00
300 - \$82.00	1,000 - \$150.00	1,800 - \$257.50
400 - \$108.00	1,100 - \$158.50	1,900 - \$271.00
500 - \$108.50	1,200 - \$173.00	2,000 - \$284.00
600 - \$132.50	1,300 - \$186.50	
700 - \$135.00	1,400 - \$200.00	

PRICE FOR ORDER OVER 2,000. (No shipping fee included)

\$125 per thousand seedlings

If UPS shipment is desired for orders over 2,000, please call Hauss Nursery (368-4854) or the Montgomery office (240-9345) to have a delivery fee quoted.

LEASING HUNTING RIGHTS: **How Much Should I Charge?**

by C. WILLIAM MCKEE, PhD, James River Timber Corporation, Pennington, Alabama

labama's commercial forests occupy 21.96 million acres, or approximately 68 percent of the total land area. Most commercial forestland — 71 percent, or 15.7 million acres — belongs to private, nonindustrial owners

In recent decades the demand for all forest resources has increased substantially with population and income growth. Visitor days for recreation, wildlife, and other amenity uses on National Forests increased from less than 50 million in 1955 to 235 million in the 1980s. This increased national demand for outdoor recreation has placed intense user pressure on public or private forestland. As competition for hunting opportunities continues to accelerate, high quality, safe hunting opportunities have deteriorated. Consequently, many hunters are leasing exclusive hunting and recreation rights from private landowners.

The purpose of this article is to discuss a procedure private landowners can use to put a value on wildlife habitat. It is specifically applicable to well managed forests.

Habitat Evaluation

Habitat is the key to wildlife survival. It is defined as the "home" or where an animal lives. While many things contribute to a productive wildlife habitat, one of the most important is habitat diversity. A particular animal may be able to survive in a given habitat, but a diversity of habitat provides for a wide variety of wildlife.

Forestry practices have an immediate and long-term effect on wildlife habitat diversity which ultimately determines the dollar value of a hunting lease. Several factors should be considered when attempting to derive an appropriate lease rate: average stand size, presence or absence of hardwood mast producers, land quality (site index), acres of permanent openings, water sources, accessibili-

ty, tract size, game diversity, and percent of the tract that has been burned and/or thinned within the last five years. The procedure discussed in this article assumes that each factor can be assigned a numerical value and their composite score will determine the tract's quality and desirability or lease rate class. Listed below is a detailed explanation of each habitat factor and how it is used to establish the lease rate class.

Stand Size/Diversity

Ecotones (the edge effect) occur when two or more habitat types adjoin. This condition develops, for example, when two or more individual timber management stands meet. A stand is defined as an area of relatively uniform tree species, age, stocking, and productivity which can be harvested in a single year and regenerated using one or more treatments. Minimum stand size varies from owner to owner, but for the purposes of this article a minimum stand size of five acres will be used. Stands are considered to be different if they are separated by a minimum five-year age class difference or if a streamside management zone at least 200 feet wide divides the stand. A tract's habitat diversity is profoundly affected by average stand size. Point values for a range of stand sizes are presented in Table 1.

TABLE 1. Point Values for Average Stand Size Average Stand Size Point Value 50 acres or smaller 30 100 acres or smaller 25 150 acres or smaller 20 200 acres or smaller 15 250 acres or smaller 10 Greater than 300 acres 5

SMZs are areas, usually a mixed hardwood-pine or pure hardwood stand, adjacent to a permanent or intermittent stream. When SMZs are identified and managed separately from the adjacent stand, they provide an edge effect which is extremely important from a habitat diversity perspective. SMZs also provide high quality wildlife cover and food and serve as travel corridors when the adjacent stands are initially harvested. SMZs also help protect water quality and reduce sedimentation.

The point values assigned to the SMZs are based on the average SMZ width of all SMZs on the tract that are at least ¹/₄ mile long or traverse at least ¹/₃ of the tract (*Table 2*). This includes both sides of the stream or drainage as well as the stream itself.

Mast producing hardwood trees are quality food sources and produce den sites for a number of wildlife species. The presence of mast producing hardwoods significantly improves habitat diversity. Without a hardwood component on the tract, opportunities for squirrel hunting are minimal.

Forest inventory information should be used to estimate the percentage of mast producing hardwoods. The total hardwood percentage includes all stands managed for hardwood, SMZs where the timber type is hardwood or hardwood-pine, and the percentage of hardwood (mast producing size) in natural stands (*Table 3*).

Site index, as well as other factors, affects the quality and quantity of understory herbaceous vegetation. The higher

TABLE 3. Point Values for Hardwood Mast Production Capability

Percent Hardwood Mast Producers	Point Value
35 or more	25
25 or more	20
15 or more	15
10 or more	10
5 or more	5
Less than 5	0

the site index, the more productive the tract becomes for wildlife and wildlife management opportunities. Point values are assigned based on the tract's average site index (*Table 4*).

TABLE 4. Point Values for Average Site

Index, Lobiolly Pine, Base Age 25		
Average Site Index (Base 25)	Point Value	
90 +	30	
85 +	25	
80 +	20	
70 +	15	
60 +	10	
50 +	5	
Less than 50	0	

Permanent Openings

Permanent openings enhance habitat diversity, especially for deer and turkeys. Many plant species occur in permanent openings that are absent or infrequent under a dense forest canopy. Research has documented that turkeys use openings throughout the year, but they are extremely important as brood habitat.

TABLE 5. Point Values for Percentages of Permanent Openings

Percentage of Tract in Permanent Openings	Point Value
8.0	25
5.0	20
1.0	15
.5	10
Less than .5	0

Habitat quality can be improved if openings are planted. Many hunters prefer to hunt these areas and usually have a high hunter success ratio. Permanent

TABLE 6.

Point Values for Presence of Streams, Ponds, and Permanent Water		
Description	Point Value	
Lakes, 5+ acres	25	
Lakes, 1-4 acres	20	
Private access to a public lake, river, or fishable stream	15	
Permanent water on tract but will not provide sport fishing	10	
Stable, year-round supply of water is absent	0	

openings include power line and gas line right-of-ways, old logging roads, and road back slopes. If timber production is the primary goal, you may limit openings to not more than 1 percent of the forested acreage. Additional acreage can be used as a permanent opening if a power/gas line right-of-way crosses the tract. Values for permanent opening percentages are presented in *Table 5*.

Streams, Ponds, and Permanent Water

The presence of a private fishing area on a tract enhances its lease value. In lieu of fishing opportunities, the presence of permanent water on a tract remains an important habitat factor for deer and turkey. When comparing tracts, those that have a permanent water source are considered to be superior in habitat quality (*Table 6*).

Road Access, Tract Size, Game Species Diversity

Accessibility to and through the tract is very important to hunting club members. Points are awarded based on road quality and tract access (*Table 7*).

TABLE 7. Point Values for Road Access

Tour values for House Access		
Type of Road Access	Point Value	
High Quality (Paved)	15	
Good (Gravel on all roads)	10	
Fair (Some gravel)	5	
Poor	0	

Larger tracts provide more opportunities for wildlife management and outdoor recreation than smaller tracts. Management of wide ranging species such as deer and turkey require large areas. Higher point values are awarded to larger tracts because they are usually more diverse and offer increased opportunities for management (*Table 8*).

TABLE 8 Point Values for Various Tract Sizes

Acres	Point Value
3,000 +	25
1,000 +	20
750 +	15
500 +	10
200 +	5
Less than 200	0

Recreational opportunities are directly related to the number of game species occurring on a tract. The presence of many wildlife species on a tract indicates good wildlife habitat diversity. *Table 9* indicates the appropriate points for game species diversity.

Prescribed Fire

Prescribed fire is probably the best and cheapest wildlife management tool. Researchers have shown that prescribed burning in the winter can double food and insect populations, which are extremely important to upland game and nongame birds. The increase in yield is accompanied by improved forage quality and palatability. However, fire should not be used in hardwood management areas. In addition, late spring and early summer burns are detrimental to nesting birds, particularly those that nest on the ground. Negative point values are assigned if burns are conducted during this time of the year. Frequency and percent of the lease area burned are the predominant criteria used in assigning point values (Table 10).

Thinning

Forage yields remain low while the overhead canopy is closed. With thinnings, light penetrates to the understory and forage yields increase in proportion to the degree of timber harvest.

Thinning operations temporarily alter

the plant composition in favor of herbaceous plants. The greater the disturbance, the greater the influx of annual herbs. In general, the cuttings increase plant species richness and diversity, habitat attributes that are considered favorable to most wildlife species. Point values for thinnings are presented in *Table 11*.

Negative Tract Impacts

The presence of subdivisions, housing developments, excessive cattle grazing, or

public roads traversing the tract are conditions that detract from the recreational or habitat value. Consequently, points should be subtracted from the tract's composite score to determine an equitable price structure. Points are also subtracted where a tract has been converted into one stand without any SMZs or other features to enhance habitat diversity (*Table 12*).

TABLE 9. Point values for Game Species Diversity

TABLE 10.

TABLE 11.

TABLE 12.

Point Values for Negative Tract Impacts	
Condition	Point Value
Adjoining subdivision or housing development	25
Livestock presence when grazing is severe enough to adversely impact deer browse and forage	25
Entire tract treated as one stand without streamside management zones or any other feature to provide habitat diversity	

TABLE 13.

Composite Point Ranges for Five Land Classes						
Class	Total Point Range	Wildlife Habitat	Lease Fee (\$/Acre/Year)			
1	220 +	Exceptional	10			
2	165-219	Excellent	7			
3	110-164	Above Average	5			
4	55-109	Fair	3			
5	0-54	Poor	2			

Lease Rate Classes

After the tract's composite habitat evaluation score has been calculated, a lease rate can be determined. Five lease rate classes ranging from poor to exceptional wildlife habitat are presented in Table 13. The lease fee for each habitat class can be determined by using published data or by simply consulting with State Game and Fish personnel and/or adjacent landowners. In other words, the landowner must determine what is happening in the marketplace. Unfortunately, wildlife is a non-market good and, as such, established demand and supply curves do not exist. Table 13 lease rates are not applicable to all southern forests and are not the rates used by James River Timber Corporation.

Conclusions and Limitations

The approach presented has the attributes needed to allow timberland owners/managers and individuals who desire to lease hunting rights a way to determine an equitable lease fee. Conversely, hunters would be able to assess if the lease fee is actually buying the type of wildlife habitat they desire.

Forest resource managers should find the approach straightforward and easy to understand. It can be used on large or small tracts and, with the use of a microcomputer, point values for each habitat factor can be calculated quickly. Landowners who do not have a computerized inventory system will spend considerably more time determining the appropriate lease class.

Lease fees for each lease class should be realistic. Consultation with wildlife professionals is advised. Large landowners should consider using the opportunity/cost approach to determine foregone timber revenue as wildlife habitat diversity is intensified. Resulting per acre values could be incorporated into the lease class fee structure.

HIDDEN



TREASURES

A Risk Worth Taking

by EARNEST EDMONDS, Greene County Supervisor and TILDA MIMS, Information Specialist, Alabama Forestry Commission

immy Watson had a case of cold feet the day he and his wife Addalyne purchased 709 acres of Greene County forestland. To reassure himself, he made a quick drive to the Boligee tract after closing the deal.

He recalls with a chuckle that he never saw the property that day because the creek had flooded the entire area making the roads impassable.

"All the way back to Tuscaloosa I wondered why on earth we had bought that property. I was thinking of all that we could do with the money," he remembers.

The land originally belonged to Addalyne's father and was inherited by her brothers, George and B.L. Abrams. When the Watsons bought the acreage in the late 1950s the timber was valued at only \$15,000 and wildlife was scarce.

"We concentrated on thinning and removing diseased and forked trees for many years, until at one time we had an estimated volume of one million log feet," Watson recalls.

Years of responsible management including thinnings, prescribed burns and establishing wildlife food plots have resulted in productive, healthy forestland receiving TREASURE Forest certification in 1991. The Watsons were nominated by their consultant foresters,



Addalyne and Jimmy Watson

Gary Butler and Steve Gardiner.

A rustic cabin built of logs hand hewn by Addalyne's brothers over 40 years ago serves as the focal point of this TREA-SURE Forest. It not only provides a central meeting spot for family gatherings, it also represents the beginning of active forest management on the property.

Watson notes that although the pine stand was inadvertently thinned when building the cabin, the enhanced growth in that stand makes a valid illustration of the benefits of thinning. The remaining trees were released and rapidly grew to merchantable size. The portion of the plantation not "thinned" is now crowded and undersized.

Harvests are carefully planned with the future in mind. "When we cut, when we prepare for a sale, replanting is part of that project. We plan the sale, site prep and replant at one time. The replanting money comes out of the profits right away," said Watson. All timber sales contracts include Best Management Practices.

Many years have passed since Jimmy Watson first saw his newly purchased forestland under water. Their children now have children of their own, trees have been harvested and replanted, and once scarce wildlife is now plentiful.

When reflecting back on that long ago pur-

chase, Jimmy and Addalyne Watson are happy to see their investment paid off. "It amazes me that we have paid for the place several times over in timber sales. We have more timber than we started with and we are going to have something to leave our grandchildren," said Watson.

Land purchased at a risk just to "keep it in the family" has now become a vital part of the family tradition. This forestland is certain to be a Watson family TREASURE for many generations to come.

HIDDEN



TREASURES

Working With Nature

by MELANIE SHOCKLEY, Information Specialist, Alabama Forestry Commission, Bay Minette

or several generations the Kennedy land has provided the family with many resources. The first two generations of the Kennedys planted agricultural crops to support their families. Today, they plant trees to ensure that future generations will also benefit from the land.

The property, which is in the small Clarke County community of Chance, was certified as a TREASURE Forest five years ago.

Susie Kennedy manages the TREA-SURE Forest with the help of her son, Edd Kennedy III, who is a forester with MacMillan Bloedel. Their primary objectives are timber production and wildlife. They are continuing the management activities of Susie's husband, Edd Kennedy, Jr., who passed away in 1990.

The pine sites are intensively managed while other areas are left in their natural states. They have pine plantations of various ages, ranging from 15 to over 30 years old. One plantation was established some years ago when Edd and his father planted 1,000 loblolly pine seedlings as a 4-H project.

A few years ago the Kennedys had the task of controlling the Southern pine beetle (SPB). After the SPB attack they went in and salvaged the timber but decided not to replant with trees. They saw this incident as an opportunity to increase the aesthetics of their property by building a 2 ½-2-acre pond on the site. In addition to the fishing, the pond is an ideal place for resting and relaxing.

Pines are not the only consideration though. The diversity of the hardwoods is impressive. They have uneven-aged mixed stands of pine and hardwood, upland hardwood and some bottomland hardwood. The upland hardwood site, stocked with oak and hickory, is Mrs. Kennedy's favorite place. "I just enjoy



Susie and Edd Kennedy, right, take a stroll through a natural hardwood area with Benji Elmore and Madeline Hildreth of the Alabama Forestry Commission.

walking through this area; I want to leave it just like it is."

The Kennedy's forest is a haven for wildlife. Game species such as white-tailed deer, Eastern wild turkey and squirrels are plentiful. Mast producing trees provide food, while den trees and snags are left on the property as cover. The Kennedys have also improved the area for wildlife by creating openings and planting food plots. The natural contour of the land and streams helps create irregular shaped stands of timber which are ideal for wildlife.

The Kennedys are also managing for non-game species such as the Eastern bluebird. Bluebird boxes can be found scattered along a trail that runs throughout the property. Before his death, Edd Kennedy Jr. took time to go around and check the boxes for signs of bluebirds; the boxes were numbered and he kept notes on how many eggs were found in each box.

A creek through the property provides clean water for wildlife. Streamside management zones are in place to ensure that the water quality is maintained during harvesting operations.

Family and friends enjoy hunting, fishing, photography and the natural aesthetics of the property.

Mrs. Kennedy has transplanted several wildflower species from the woods into her yard. Her yard is landscaped with oak-leaf hydrangea and wild ferns.

The Kennedys not only take care of their own land, they are also concerned with the overall appearance of their community. For some time now they have been involved with cleanup projects. Along with their neighbors, they organize cleanup days and pick up litter along the road they live on. They've posted a Woodsy Owl anti-litter sign hoping to discourage some of the littering.

It only takes a short visit at the Kennedy TREASURE Forest to appreciate the natural aesthetics of the woods and leave with a greater appreciation of the people who are working with nature to protect, conserve and wisely use the earth's natural resources. This is what TREASURE Forest is all about.

LEGISLATIVE · ALERT

NATIONAL

by TERRI BATES and BILL IMBERGAMO,
Washington Office, National Association of State Foresters



ongress has continued to debate the president on the

question of whether to make major reductions in defense spending. As international relations have stabilized and the need for national security apparently diminished, Congress has encouraged the president to give increasing attention to domestic needs. Environmental and conservation programs, including forestry, could significantly benefit with the reevaluation and re-ordering of national priorities.

Rescissions

However, the appropriations process may be complicated as well as compromised this election year as the president and Congress publicly debate their "porkbarrel" spending projects. In late March, the president announced he had developed a list of Congressional special "pork" projects that were funded this year that he wished to see rescinded—that is, to withdraw and return federally committed funds to the U.S. Treasury. **President Bush** subsequently asked Congress to rescind more than \$5 billion appropriated for the current year.

The Democratic Congress turned the tables and came up with their own rescission lists that exceeded in dollars the president's list. Their lists, in turn, targeted many of the president's special projects.

One potential casualty on the Senate's rescission list as of press time is the Stewardship Incentives Program (SIP). The Senate would take back as much as \$19 million of the \$40 million currently avail-

able for this year, claiming that SIP is an administration tree planting program that duplicates existing programs. Although SIP is considered to be one of a number of federal programs working to achieve the goals of the president's America the Beautiful program, much overlooked in this case is the fact that it was Congress that wrote and approved SIP under the 1990 Farm Act. The first signups for the program began in February of this year. In addition to offering federal cost-share assistance to small forest landowners who have developed comprehensive forest management plans for tree planting and timber stand improvement, SIP also offers cost-share assistance for practices such as fish and wildlife habitat establishment and management, soil and water conservation, and recreational activities. The president is known not to hesitate in vetoing legislation he believes to be overly partisan in tone; this is the anticipated fate of the current rescission bills.

FY 1993 Appropriations

During the debate on rescissions, Congress is also reviewing the president's recommendations for federal spending next year. Administration funding recommendations for forestry programs that help in the management and protection of state and private forestlands are highly imbalanced. Programs such as the Forest Stewardship, Stewardship Incentives (SIP), and Urban and Community Forestry programs have received strong support from the president; however, funding for forest health and fire protection programs would be seriously reduced. Similarly, forestry research has been reduced. Research reductions have

occurred in the following areas: forest inventory & analysis, insect and disease suppression, forest health monitoring, fire protection, and forest product marketing and utilization. Traditionally, Congress has always restored some sense of funding balance to these programs.

Capital Gains

President Bush has continued to advocate a capital gains tax break which has met opposition from the democratic leadership in Congress. Congress did advance a tax and economic recovery package earlier in the year that contained a capital gains provision, but the president vetoed the Democratic package. Capital gains is unlikely to be revived this year, but President Bush is unquestionably committed to this agenda and can be expected to continue to advance it while in office.

Clean Water Reauthorization

Congress began debating reauthorization of the Clean Water Act (formally called the Federal Water Pollution Control Act of 1987) last year. Election year politics will probably delay completion of this bill until next year. Key issues of interest to the forestry community are non-point source pollution (i.e., Section 319 of the Act) and wetlands protection (Section 404).

There has been only one comprehensive reauthorization bill introduced in Congress thus far—Senate Bill S. 1081. It currently does not address wetlands protection and many organizations have expressed serious concerns with S. 1081's non-point source provisions. These are modeled after legislation enacted last year that called for coastal states participating

in the Coastal Zone Management program to develop coastal non-point source programs. The U.S. Environmental Protection Agency (EPA) was charged with the task of developing recommended Management Measures to control specific sources of non-point source pollution, including that resulting from silviculture activities. The proposed guidelines and Management Measures that EPA produced seemed more like national mandates that lacked adequate consideration of regional conditions and state non-point source control programs that were already in place.

Wetlands protection has been a volatile issue on the House side that has brought private property rights into the debate. A plethora of bills have been introduced. One appearing to have the most momentum is *HR 1331*. Introduced by Rep. **Jimmy Hayes** (D-LA), the bill has been cosponsored by more than 160 representatives and endorsed by the forest products industry. The bill addresses the issue of private property rights by requiring the federal government to purchase wetlands

from private landowners and to manage them as wildlife refuges.

No further action has occurred relative to the "Manual for Identification of Federal Jurisdictional Wetlands." EPA received tens of thousands of comments on the 1989 Manual which potentially classified many southern upland pine areas as wetlands. The administration originally jumped into the fray under the auspices of the Council on Competitiveness headed up by Vice President Quayle, but has appeared to back off and is reportedly pondering sending the issue to the National Academy of Sciences for direction on the science of wetlands delineation.

Old Growth/Spotted Owl

The issues of old growth forest management and protection of the endangered northern spotted owl are ones that Congress has tried to resolve for several years. Although they most directly impact the Northwest and seem far removed from the Southeast, many believe the res-

olution of these issues will have major implications for this region in the future in terms of both public and private forest management. The issue is currently very visible in the House Agriculture (Forestry Subcommittee) and Interior Committees, as senior committee members have made serious attempts to settle the issue of timber harvests from the National Forests. Although the House is showing some signs of producing a bill this session, environmental and industry organizations are entrenched on the issue and the outlook is not bright.

National Grove of State Trees

Alabamians visiting Washington, D.C. can enjoy seeing Alabama's state trees planted on a 30-acre site at the U.S. National Arboretum. Six loblolly pines representing Alabama were planted this spring at the National Grove of State Trees and join state trees planted from 30 other states. The remaining states will complete the Grove's three-year implementation schedule next year.

ALABAMA

-

pportunity
knocked . . .
and knocked
again . . . but the knock of
opportunity was ignored during a mid-May midnight ses-

sion of the Alabama Legislature as the much-heralded, much-maligned Tax Reform Package faded into the pre-dawn hours at the statehouse—possibly never to return.

True, it was an opportunity. Yes, an opportunity for the people of Alabama to decide whether to accept or reject a 28-bill package conceived to increase tax revenues as well as accountability in government and education.

The revolutionary tax reform proposal was originally drafted by a 33-member task force appointed by **Gov. Guy Hunt** to project over \$500 million in new revenue. The intent was to reform Alabama's archaic tax system and produce needed revenues for state services. Funding for education was a key concern of the task force.

Forestry was represented on the com-

by FRANK SEGO, Legislative Liaison, Alabama Forestry Commission

mittee by TREASURE Forest landowner James Hughes of Cottonwood. John Dorrill, executive vice president of the Alabama Farmers' Federation was also a member of the task force and worked tirelessly to perfect a 2.5 mill ad valorem increase that would greatly benefit forestry, farmlands and volunteer fire departments.

Of the projected \$43,185,495 in new revenue from the ad valorem tax, the state's volunteer fire departments could have realized a sum of \$8,125,083, while the Alabama Forestry Commission stood to gain \$4,145,711.

Senate Subdues Plan

It was not to be, however, as after months of concentrated efforts by Chairman **Tom Carruthers** of Birmingham and his committee, the package met its doom in the Senate just minutes before midnight on the 30th and final day of the 1992 Regular Session.

So much of the original proposal was whacked away or watered down that the package brought to the Senate on that fateful night hardly resembled the initial draft.

Gov. Hunt, however, did have strong praise for Chairman Carruthers and the team he had appointed to take on this monumental task. At the same time, the governor declared he would not call a Special Session to deal with it any further.

If those remaining tax reform measures had squeezed through the Senate, voters would have been given an opportunity to vote "yes" or "no" in a special referendum slated for August 18.

Workers' Compensation Approved

All was not lost in the '92 regular session — to the relief of many — as the Legislature finally passed a 102-page workers' compensation bill that reforms the state's 73-year-old laws covering onthe-job injuries.

Gov. Hunt was quick to praise and to sign the bill, stating that the newly enacted law should stop runaway insurance costs and keep many businesses in Alabama from being forced to shut down. Rep. John Beasley, D-Columbia, chairman of the House Business and Labor Committee and sponsor of the House bill, said he and the governor believe the law will stem the rising tide of litigation and medical costs. Senator **Ryan deGraffenried** (D-Tuscaloosa) authored the Senate version

Tuscaloosa) authored the Senate version which was adopted.

Workers' compensation is mandatory for businesses with a minimum of three employees. The new law covers at least five employees and medical expenses for injured workers along with a portion of their lost wages.

The workers' compensation issue hit the fan over a year ago when proposed legislation failed in the '91 regular session. Gov. Hunt called a special session to deal with the matter in January '92, and again it failed. Proponents were not to be denied, however, even though it took the full 30 days of the regular session and close scrutiny by a House-Senate conference committee to make it happen.

Volunteer Fire Departments Covered

Included in the new law is a provision for Alabama's certified volunteer fire departments and their members to be covered for the first time. This access had been sought for some time by the volunteers and received the backing of the Alabama Forestry Commission, Legislative Forestry Study Committee and the Rural Community Fire Protection Institute.

Budgets at Midnight

Again, as in so many past sessions, it took frenzied, last-minute maneuvering to hammer out the final version of the state's \$806 million general fund and \$2.63 billion education budgets for fiscal 1992-93.

Even in proration, the 1992-93 general fund is some \$20 million larger than this year's operating budget. State agencies

will soon be digging into a budget that totals \$828 million for the fiscal period beginning October 1. The general fund transfer appropriation for the Forestry Commission is \$12,835,492, a decrease from the 1991-92 budget. The Alabama Forestry Commission's total budget, including earmarked funds, lines out at \$23,638,484, also less than the Commission's present operating vehicle.

Earlier in the session, the Legislature passed a 5 cents per gallon gasoline tax, proceeds from which will be matched by federal funds to finance a broad-based highway construction program in the state.

In retrospect, one would have to give the '92 regular session a fair rating for its success in passing several issues vital to the people of Alabama, in spite of its failure to enact tax reform legislation.

TIMBER THEFT

by WALTER VEST, Chief, Law Enforcement, Alabama Forestry Commission

hen trees are taken from someone's property without the owner's consent, or when trees are damaged or destroyed, the owner should always take some kind of action to recover his losses.

There are laws in the Alabama Code which the landowner can use to help determine the amount of damage.

Law 35-14-1—Damages for Destruction, Injury or Removal of Trees.

- (a) Any person who cuts down, deadens, girdles, boxes, destroys or takes away, if already cut down or fallen, any cypress, pecan, oak, pine, cedar, poplar, walnut, hickory or wild cherry tree, or sapling of that kind, on land not his own, willfully and knowingly, without the consent of the owner of the land, must pay to the owner \$20.00 for every such tree or sapling: and for every other tree or sapling, not hereinbefore described, so cut down, deadened, girdled, boxed, destroyed or taken away by any person, he must pay to such owner the sum of \$10.00.
- (b) When one person owns the land and another person owns the trees standing

- thereon, the owner of the trees is the owner of the land within the meaning of subsection (a) of this section.
- (c) Actions under this section may be joined with actions for trespass, for cutting, injuring or removing timber.

§ 9-13-60. Unauthorized cutting, removal, transportation, etc., of timber or other forest products.

Any person or persons who shall:

- (1) Willfully and knowingly cut, kill, destroy, girdle, chop, chip, saw or otherwise damage timber or forest products not his own or without authority of the legal owner;
- (2) Willfully and knowingly remove timber or other forest products other than his own or without authority of the legal owner.

§ 9-13-62. Liability of violators to owners of timber, etc.; entitlement of defendants to exemptions.

Any persons who shall violate Section 9-13-60 and any persons who shall aid and abet or assist any other persons in so doing shall be jointly and severally

liable to the owner in double the value thereof of the timber and trees damaged or destroyed or cut and removed.

What Can You Do?

If the owner decides to prosecute, a warrant for theft of property is obtained. A person commits the crime of theft of property if he knowingly obtains or exerts unauthorized control over the property of another with the intent to deprive the owner of his property.

Theft of property which does not exceed \$100 in value is theft of property in the third degree.

Theft of property which exceeds \$100 in value and does not exceed \$1,000 in value is theft of property in the second degree.

Theft of property which exceeds \$1,000 in value is theft of property in the first degree.

If trees are taken from your property without your consent, you should use this information as a guide to determine what action you should take. For further assistance, contact your local Alabama Forestry Commission office.



NUTTALL OAK

by TOM CAMBRE, Hardwood Specialist, Alabama Forestry Commission

uttall oak (*Quercus nuttalli*) is one of the few commercially important species found on poorly drained clay flats and low bottoms of the Gulf Coastal Plain and north in the Mississippi and Red River Valleys.



The native range of this oak is on bottomlands along the Gulf Coastal Plain from Florida, west to southeastern Texas. North in the

Mississippi Valley, it is found in Arkansas, southeastern Missouri, and western Tennessee. Nuttall oak grows and develops best on the alluvial bottomlands of the Mississippi River and its tributaries. It is also found in west Alabama in Pickens, Tuscaloosa, Bibb, Perry, Autauga, Hale, Greene, Sumter, Marengo, Dallas, Lowndes, Wilcox, Clarke, Choctaw and Washington Counties.

Nuttall oak's associated forest cover is mainly with sweetgum, willow oak and water oak, and also sugarberry, green ash and American elm.

The life history of the nuttall oak unfolds in the following manner: the male flowers appear in March and April at the time of leaf flushing 10 to 14 days before the female flower appears. The acorns ripen from September to October of the second year and fall between September and February. The tree must be around 20 years of age before it begins to produce seed. The best natural seedbed for nuttall oak is a moist soil, covered with an inch or more of soil or leaf litter with partial shade.

Although deer, turkeys, wild hogs, and rodents eat many of the seeds, natural reproduction in the bottomlands is usually

abundant. Nuttall seedlings become established in the open and in the shade and can survive 5 to 10 years in the shade before released to the sunlight.

Saplings and pole-sized trees grow rapidly on good sites, but on poor sites the wood of the oak is knotty and insect damage and mineral stain are severe. Lowering of the water table through channelization or drought for prolonged periods of time will cause trees of all ages to die. The special uses of these trees is in green tree reservoirs for producing food for ducks. It is also a good wildlife food for deer, turkey, and squirrels since the trees disperse acorns from September through January.

Nuttall seedlings are grown by the Alabama Forestry Commission in their nurseries for landowners. Information on obtaining these and other seedlings for the 1993 planting season can be found on page 10.

N.E. Alabama Landowner Association Formed

To better serve landowners in the area, the TREASURE Forest Association of Northeast Alabama, Inc. was recently established. The purpose of this association is to:

- Serve present and future TREA-SURE Forest landowners of Northeast Alabama and educate the public concerning the importance and value of the TREASURE Forest multipleuse management programs.
- Sustain all ideas of TREASURE Forest and to act as a forum, catalyst, liaison and advocate for such ideas.
- Provide a forum for the presentation, discussion and exchange of information and concepts by individuals, organizations and for TREASURE Forest enhancement.

If you own property in Calhoun, Cherokee, DeKalb, Etowah, Jackson, Limestone, Madison, Marshall, or Morgan Counties, you may be interested in joining this organization. You do not have to be a TREASURE Forest landowner to become a member; however, you must have signed the TREASURE Forest commitment form and be working towards certification.

Annual membership dues are \$25. For further information, contact Harold Herring, 204 Gates Avenue S.E., Huntsville, AL 35801.

How to Grow BEETLE BAIT!

by JIM HYLAND and TIM GOTHARD, Alabama Forestry Commission

he level of susceptibility of pine stands to attack by the Southern Pine Beetle (SPB) is a result of the interaction of stand variables such as site index (how productive the site is), age, stocking level (number of trees per acre), site competition, and cultural practices. All of these variables contribute to the single-most important factor in a pine stand's susceptibility to SPB attack — stand vigor. In the absence of injury due to cultural practices or weather, stand vigor is influenced primarily by the basal area present on a given site at a given time.

Initial stocking levels play an essential part in determining stand basal area at any time during the stand's rotation. It therefore plays an essential part in the susceptibility of pine stands to SPB attack as the stands progress through time.

Low initial stocking levels can prolong the entry of pine stands into preferred sites for SPB attack. But is it economically feasible, in terms of stand productivity and financial return, to use lower initial stocking levels?

As demonstrated by the graphs of SPB susceptibility (Figures 1 and 2), when initial stocking levels increase the following can be observed: 1) stands enter hazard categories at earlier ages relative to stands on the same site but at lower initial stocking levels, and 2) the degree of hazard within a certain hazard rating is more pronounced than for stands on the same site at the same point in time.

These two occurrences relate, on the ground, to a higher risk of attack by the SPB as initial stocking levels increase. Likewise, the severity of infestations can be more pronounced in stands of higher initial stocking levels due to the more widespread occurrence of trees susceptible to attack. For a forest landowner this could lead to unplanned activities detrimental to the overall profitability of the stand.

For example, on highly productive old-field sites where SPB hazard reaches concerning levels at early ages, an infestation can occur before trees are of merchantable size. Therefore, the landowner could be forced to salvage (at a reduced stumpage price) or cut and leave the infested portion of the stand in order to control the outbreak. Furthermore, the situation could dictate a complete pre-commercial thin in order to reduce the risk of further loss. Often this is not a desired cultural practice within the financial framework of a forest landowner, particularly when cash-flow is considered.

By using lower initial stocking levels in appropriate situations, the chance of this type scenario occurring can be greatly reduced. This reasoning makes a very good argument for using low initial stocking levels in reducing SPB hazard of stands, but is it economically feasible?

Economic Feasibility

Economic feasibility is based not only on the product you are growing, but also the landowner's management objectives (pulpwood company feeding a mill, a Tree Farmer, a sawmill company, a multiple-use landowner, a TREASURE Forest, or a combination of any of these). In this article we are using pulpwood production and chip-n-saw as objectives. Comparisons were made using the Mississippi B SPB Hazard Rating System (Nebaker and Honea 1984) and YIELDplus with SMART version 2 (TVA, 1990).

Table 1. Economic Comparison of Six Common Tree Spacings

Pulpwood Rotations of 20 and 25 Years with Product Merchandising Old-Field Lobiolly Sites

Site Index: 65 @ Age 25

A. PULPWOOD AND SAWTIMBER PRODUCT MERCHANDISING

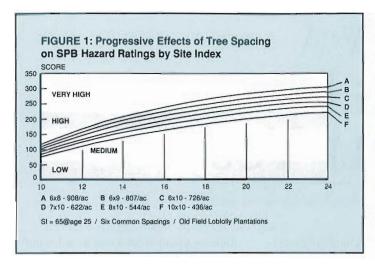
Trees/Acre	Age 20			Age 25		
	NPW	AEV	IRR	NPW	AEV	IRR
908	\$255	\$21	13.2%	\$254	\$18	11.7%
807	\$248	\$20	13.4%	\$252	\$18	11.9%
726	\$247	\$20	13.7%	\$256	\$1.8	12.2%
522	\$246	\$20	14.0%	\$262	\$19	12.5%
544	\$244	:\$20	14.3%	\$267	\$1:9	12.8%
436	\$241	\$19	14.7%	\$267	\$19	13.2%

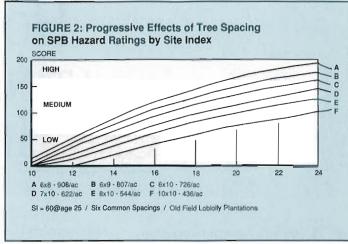
B. PULPWOOD, CHIP-N-SAW AND SAWTIMBER PRODUCT MERCHANDISING

	Age 20		1	Age 25		
Trees/Acre	NPW	AEV	IRR	NPW	AEV	IRR
908	\$413	\$33	15.4%	:\$421	\$30	13.4%
807	\$407	\$33	15.7%	.\$405	\$29	13.5%
726	\$405	\$33	16.0%	.\$397	\$28	13.7%
622	\$397	\$32	16.3%	\$385	\$27	13.9%
544	\$383	\$31	19.5%	\$371	\$26	14.0%
436	\$368	\$30	16.7%	\$361	\$26	14.4%

Note: All values are per acre.

NPW: Net Present Worth / AEV: Annual Equivalent Value / IRR: Internal Rate of Return





As seen in the comparisons, for instance, where fiber production is the objective, higher initial stocking levels make the best use of most all sites on shorter rotations with no merchandising possible or planned at the time of harvest. This results from the higher yield in terms of cords produced per acre over the rotation. However, based on economic indicators, when product merchandising is implemented certain sites perform better at lower initial stocking levels.

Table 1 is the comparison of different number trees per acre, rotations, products, and economic indicators. For simplicity, we will use Annual Equivalent Value (AEV) as a factor to determine if lower spacings are economical.

Although in most instances the economic indicators support the use of the higher initial stocking levels for pulpwood rotations, the AEV offers a more graspable interpretation of the difference between the initial stocking levels in terms of profitability. The AEV expresses the Net Present Worth (NPW) in terms of an annual per acre payment (in 1990 dollars). This figure can be used in a more comprehendible fashion. By comparing the difference in AEV between the different initial stocking levels for the same set of circumstances with the difference in SPB hazard between the same initial stocking levels, an idea of the validity of using one initial stocking level over that of another can be more readily evaluated.

For example, in *Table 1A* the AEV for 908 trees/acre for a 25-year pulpwood rotation with no chip-n-saw market is \$18/acre. The AEV for 436 trees/acre is \$19. Comparing this benefit to the differ-

ence in SPB hazard rating (*Figure 1*) for the 25-year period, we see that another benefit afforded by 436 trees/acre over 908 trees/acre is the reduced SPB hazard throughout the rotation. This information should offer few questions as to the most suitable stocking level to use.

In *Table 1B*, comparing the same two initial stocking levels but implementing an existing chip-n-saw market, we see that 908 trees/acre has an AEV of \$30/acre while 436 trees/acre has an AEV of only \$26/acre. Immediately the increased revenue leans towards the use of the higher initial stocking level. By referring to the SPB hazard rating (*Figure 1*) for the two stocking levels we see again the lower hazard afforded by the lower initial stocking level.

Is It Worth the Risk?

The question to be asked is whether or not the increased risk of SPB attack and potential value loss is worth the potential increased revenue. More precisely, is \$4/acre/year worth the added risk associated with the higher initial stocking level? In relevant terms, \$4/acre/year is roughly less than the loss of ten, 5" DBH, 30-foot pine trees. Questions such as these must be evaluated by the prescribing forester and landowner.

The sawtimber rotations reveal the same total volume (total cords produced per acre over the entire rotation) trend as does the pulpwood rotations. The only exception is that although total volume is less in the lower initial stocking levels, the volume in MBF/acre produced increases as the initial stocking level decreases. For old-field sites under the rotation and parameters used in this comparison, the advantage of using lower ini-

tial stocking levels is expressed through all of the economic indicators and compounded by the lower SPB hazard ratings for the periods preceding the first thinning at age 15.

Cutover sites, however, are not as pronounced yet are relatively constant with the middle range of initial stocking levels providing the better of the economic indicator levels. Again, the economic indicators compared with the related SPB hazard can offer insight in making the proper initial stocking level decision.

Summary

Initial stocking levels play an important role in the level of susceptibility of stands to attack by the SPB. Low initial stocking levels can reduce the rate at which stands progress into preferred sites for SPB attack. Although higher initial stocking levels often produce more pure volume (cords, tons, etc.) per acre, the true economic feasibility must be evaluated for each site and management objective. This, combined with an evaluation of the progressive effects of initial stocking levels on the level of susceptibility of stands to SPB attack, can allow for accurate decision making.

Low initial stocking levels can offer lower risk during the pre-merchantable phases of stand development, lower levels during the merchantable phases, and under the proper site conditions can offer greater financial return.

Reference

Gothard, Tim. "Using Low Initial Stocking Levels in Southern Pine Beetle Management — Feasibility Comparison." Alabama Forestry Commission, Unpublished, 1992.

How a Consulting Forester Can Help You

by MICHAEL WEBB, A.C.F., Webb Forestry Consultants

onsulting foresters offer a great diversity of valuable services to you as a timberland owner. Their greatest value, however, is in removing major stumbling blocks that you might find to practicing forestry.

For instance, consultants provide the expertise needed in designing forest management programs specifically for your particular interests, needs, and goals. Consultants also help provide you with the continuity necessary for the implementation of management plans. As an owner, you probably have many other commitments which often make it difficult to give adequate attention to ongoing management projects. For the consultant, however, this is his full-time commitment.

On the other hand, timberlands are often major financial assets of a landowner. Therefore, an efficient consultant will provide the confidential guidance needed to make sound financial decisions. As a result and in spite of the consulting fees, most forest farmers find forestry a better investment, as their consultant reduces costs and increases returns.

Guiding Forest Management

In recent years, there has been some confusion among private landowners as to what forest management means. Often good forestry is seen as synonymous with "intensive" forestry practices, such as clearcutting, expensive site preparation, and plantation reforestation. While many landowners want their land to be productive, they see other values such as hunting, aesthetics and family recreation threatened by the only method of forest management they know.

But these more familiar practices are only a few of many forest management practices which consultants use to help landowners care for and improve timberlands. As a matter of fact, regardless of a landowner's needs or desires, be it for long-term investment, hunting, family recreation or other, a consultant can develop and implement a forest management plan which will greatly enhance the achievement of these goals. An important value of a consultant, then, is his ability to understand and work with the forest to return the greatest level of satisfaction the landowner receives from his land. To what degree that level is measured in dollars, peace of mind, hunting success, or serenity is up to the timberland owner.

To assure a landowner's management goals are achieved, consultants provide land and timber appraisals and brokerage; computer application, estate and tax planning; contractual services including marking, prescribe burning, herbicide applications, site preparation and planting; and forest management evaluation, guidance, and protection.

Yet to simply view the value of consultants as the sum of these individual services is to miss their true potential. In the course of management, a consultant provides valuable continuity interweaving these services to meet landowner needs:

- · Improve forest productivity
- Increase the return on all woodland values
- · Protect the owner and his forest land
- Reduce costs and management headaches

You will note from the order given, "An increased return" is listed second. One mistake many people make is considering using a consultant only when they are ready to sell timber. Even while a consultant can and usually will increase an owner's final timber price, by far the greatest opportunities for a consultant to

improve a landowner's return for his timber are well before the sale.

Forest Productivity

With respect to the financial value of a tree farm, the volume, condition, and type of timber have a more significant impact on the net value than do timber market prices. This is particularly significant because we can control the former but not the latter.

Studies indicate that a well-managed stand can grow three to five times more valuable timber than the same stand if left unmanaged. For this reason, the earlier in the life of a stand a consultant is retained to develop and implement a management plan, the greater the payoff.

This is particularly significant as these improved values are reasonable even while managing for seemingly diverse goals. For example, among pine timberlands being managed for deer and turkey populations, three key tools for improved habitat are prescribed burning, thinning, and spot harvesting with regeneration. Basically, the same tools would be used on properties where family recreation or timber production might be priority goals. The difference in management to achieve these goals is then one of precision in application.

Increased Financial Return

The key is marketing and, for the greatest payoff, it should begin three to four years before the sale. There are three steps to improve the sale of a product: (1) enhance the product; (2) identify and offer it to those most interested; (3) offer it when they want it most.

Any steps taken to make your timber more attractive to potential buyers can significantly increase the potential return of a sale. A consultant will develop rec-

22 / Alabama's TREASURED Forests

ommendations to merchandise your timber most effectively. Specific recommendations will range from tract to tract but include accurate boundary lines, carefully prescribed burning, and good right-ofway and access to the timber. These factors are almost universal and can mean thousands of dollars more on timber sales.

A consulting forester can help you offer your timber to those most interested. An important aspect of the management plan will be the identification of the different timber products on the property, as a common fallacy is to think of the timber market as a single entity. In truth, forests contain many products, each with its own market and, to a degree, these products fluctuate in value independently of one another.

A consultant can utilize his knowledge of available markets to assure each product is presented to those buyers who would be most interested and willing to pay the best prices.

What about timing? Demand for each product varies during the year and over the years. Your consultant is able to have his finger on the pulse of these markets and can take advantage of market peaks. Simply through marketing, consultants can help the landowner earn additional income over and above the cost of their fees. A study conducted by Dr. Donald G. Hodges and Frederick W. Cubbage at the University of Georgia, School of Forest Resources, showed that private landowners working with consulting foresters received as much as 50 percent greater return on their timber.

Protection

A consultant's responsibility is to protect his clients and their forests. By experience gained solving problems of many

other clients, a consultant can many times save a landowner thousands of dollars in losses from unexpected sources.

Consider, for instance, timber deeds. A consultant works for you; he is there to look after your best interests. On the other hand, most timber deeds are drawn up by the purchaser of the timber and are written to look after their interests. Your consultant will be able to work with your attorney to assure the timber contract adequately protects you.

Your consultant also has a responsibility to stay up-to-date on current trends which might impact your forest, and he will be aware of potential forest insect or tree disease epidemics. From his knowledge of your timber, he will be able to keep a closer watch on your stands and be able to take remedial action early.

Many consultants even make periodic airplane flights to check for southern pine

Do You Need Assistance From A Wildlife Biologist?

by STAN STEWART, Game and Fish Division, Wildlife Section, Alabama Department of Conservation and Natural Resources

he potential of non-industrial private forests to produce a host of forest-related resources to benefit the landowner, the economy, and society is substantial. But conservation measures on these lands are often deficient due to lack of knowledge of proper resource management. Managed forestlands can supply wood products, provide fish and wildlife habitats, create aesthetics and outdoor recreational opportunities, and contribute to the protection of soil, water and air quality. To produce these benefits on privately held forestland, good stewardship and the application of multiple-use forest management is necessary.

In recognition of the importance of private forestlands and the need for additional management assistance to non-industrial private forest landowners, the Forest Stewardship Program (FSP) and the Stewardship Incentives

Program (SIP) were authorized by Congress in the Forest Stewardship Act of 1990. These programs are administered by the USDA-Forest Service in association with state forestry and other resource management agencies. FSP and SIP are administered in Alabama by the Alabama Forestry Commission (AFC) in cooperation with other state and federal agencies.

Alabama's forest landowners can benefit from these programs in numerous ways. One opportunity now available is wildlife technical assistance for landowners who want to improve the ability of their forests to produce wildlife as well as timber. Through a memorandum of understanding between the AFC and the Department of Conservation's Game and Fish Division, FSP funds are being utilized to maintain a wildlife biologist on staff with the Game and Fish Division. The

biologist works jointly with the AFC to provide wildlife management assistance to forest landowners.

Landowners may utilize this service to receive on-site management assistance and technical guidance for formulating forest resource management plans. Wildlife habitat assessments may be performed and management practices recommended to improve wildlife habitats and populations. Effective wildlife management must be based on ecological principles that control wildlife populations, and a wildlife professional can offer useful advice in this regard. Forest landowners needing wildlife technical assistance may request this service by contacting Stan Stewart, Alabama Game and Fish Division, Wildlife Section, Montgomery, AL 36130; or call 205-242-3469 or any Alabama Forestry Commission office. •

MEMORIALS



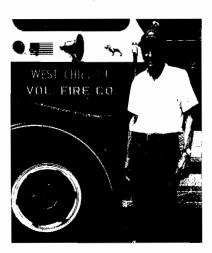
Dr. Hoyt A. Childs, Sr., a TREASURE Forest landowner in Geneva County, passed away on March 19, 1992. He was 73. Childs practiced medicine in the city of Samson for 38 years after graduating from medical school and serving his internship. Dr. Childs and his wife, Ouida, were featured in the winter 1992 issue of *Alabama's TREASURED Forests*. The Childs' 120-acre TREASURE Forest was a District Helene Mosley Memorial Award winner in 1989. Managed for recreation and timber, the prop-

erty is a productive forest and home to abundant wildlife, including waterfowl, deer and quail.



Douglas Ray Tucker, Sr., director of the Alabama Forestry Commission's Rural Community Fire Protection Division, died May 2, 1992 at age 57. Tucker retired from the Montgomery Fire Department after 23 years of service and subsequently became employed with the AFC. He served as volunteer firefighting program coordinator and RCFP section chief before being promoted to division director. Tucker was instrumental in the establishment of the RCFP Institute in 1989. His years of service to the Mont-

gomery Fire Department and the Alabama Forestry Commission, as well as his assistance to hundreds of volunteer fire departments across the state, will be remembered with fondness and respect.



Gaston Wilson, Sr., a Chilton County TREASURE Forest landowner, passed away May 7, 1992 at the age of 71. He was a resident of Jemison, Alabama. Wilson was retired from Sears, Roebuck and Company, and was a charter member and former chief of the West Chilton Fire and Rescue Unit. Wilson's property was certified as TREASURE Forest #249 in 1983. The 245 acres are managed for timber and wildlife. Over the years, Wilson personally oversaw and did much of the site preparation and tree planting on the

property. Mr. Wilson's wife, Lois Elizabeth, passed away August 22, 1991. She was also very involved in the management activities.

beetles during major outbreaks. This provides an effective, inexpensive service to landowners which can save thousands of dollars in lost timber through early detection.

Reduce Cost

Many consultants act as representatives for their clients, providing or supervising recommended work such as prescribed burning, thinning, site preparation, hardwood brush control, reforestation, or road construction. Buy combining the work of a great number of clients, a consultant can negotiate for bid work to the contractors and thereby assure more reasonable prices for the landowner. Contractors also have a greater interest in providing dependable work since a consultant can provide a great deal of work for the future.

Regarding state or federal forestry costsharing, consultants are fully aware of various programs which will help reduce the burden of reforestation expenses. Consultants can take much of the burden off the landowner to assure approval of the application and the work.

Moreover, while a consultant should not replace a CPA, he can provide valuable insights for the landowner and the landowner's accountant to help assure that management activities are carried out to benefit from reforestation tax advantages.

The relationship between a client and his consultant is built on trust. A client must have a trustworthy professional forester to represent his interest for timber sales and with contractors. At the same time, proper timing of activities is often dependent on other financial considerations of the client. To be effective, some of this information must be available to the consultant. Therefore, a consultant has an obligation of confidentiality and his files are closed to the public. The National Association of Consulting Foresters has set high standards of conduct, education, and experience for those of us who are members. Throughout the association, ethical responsibility for both the timberland owner and the resource is preached and, I believe, adhered to.

Reprinted with permission from the May 1987 issue of **Forest Farmer**, an official publication of the Forest Farmer's Association.



Landowners should have adequate streamside management zones marked before negotiating or soliciting bids for timber sales.

Landowner's Responsibility During Logging

by BOBBY L. LANFORD, Associate Professor, School of Forestry, Auburn University

est Management Practices
(BMPs) are not just the responsibility of contractors who are impacting the environment by harvesting timber. Proper execution of BMPs should be the goal of all parties involved in forestry operations. This includes the buyer of timber products, the forestry consultant who administers the sale, the harvesting contractor who cuts the wood, and the landowner who gets paid for the harvested products. In this article, the options of the landowner will be discussed in an effort to highlight

the fact that all logging is not the same and landowners do have alternatives when they want to harvest timber.

BMPs are not only linked to timber harvesting. Site preparation and planting, road building not associated with harvesting, herbicide application, fire line construction, controlled burning, and many more forestry activities are subject to BMPs. This article concentrates on timber harvesting because it is probably the activity which draws the most public attention and concern.

Timber Harvesting Alternatives

Many timber landowners do not understand their options in terms of timber management. Clearcutting is not the only alternative. Partial cuts may better meet their financial and recreational objectives. If a logging contractor or timber buyer tells a landowner that clearcutting is the only option, they should talk to another buyer. If a timber company representative advises that a young stand should not be thinned because his company doesn't thin, landowners should seek another buyer.

If a landowner is not well schooled in timber sale administration, he would be well advised to seek the help of a consulting forester. A consultant should give various options for selling based on the landowner's goals and objectives. If the consulting forester doesn't try to understand the immediate and long-term objectives associated with the management of his client's land, another consulting forester should be located. If a consultant can't explain his recommendations, something is wrong because forestry is not that complicated. Landowners paying for a consultant's service deserve that service.



Some loggers today are using mechanical tree-felling machines that can drop trees away from stream channels.

Many forestry consultants work on a percentage of sale receipts which gives an incentive to cut as much as possible. An hourly rate may get advice more in line with a landowner's objectives. If a consultant is hired to oversee the complete harvesting operation, he should understand that he is expected to be on the site through the completion of the operation. This doesn't require him to be on the site at all times, but he should be there periodically during the harvest and should inspect the site after the harvest is completed.

In Alabama and across the South, there is no shortage of markets, loggers, or forestry consultants. Competition is keen in the wood products business and is getting even more competitive as government regulations take more land out of timber production. Forest landowners have every right to get what they want from their land. At the same time, landowners have the responsibility to have plans for their lands which are environmentally sound and should be aware of what is happening to their forest during forestry operations. Even though a con-

sultant may be hired to oversee an operation, he would probably appreciate confirmation of his work.

Planning a Timber Sale

Pre-harvest planning prevents many problems before they happen and will save money by not investing it in roads, landings, and stream crossings that are not needed. If you ask a logger how many acres he will log to a single landing, or what is his break-even skid distance, or how many miles of push-out roads he normally needs per forty, he may tell you he doesn't know. Logging operations aren't always planned out to the extent they could be.

When moving onto a new sale, many logging contractors only ask about road access and boundary lines and then have their crew start working. They work from front to back on the tract and may not take into full consideration the best schedule, or what will happen when it rains.

Planning may involve drawing out the sale on a topographic map showing boundaries, streamside management zones (SMZs), road access, landing locations, connecting temporary roads, and stream crossings. Aerial photos may be helpful for identifying timber conditions not shown on the topographic maps. Soil survey maps can also give useful information about trafficability of soils.

As the owner of the timber and land, landowners have the right and responsibility to know the details of what is going to happen to their land. Wood products companies, consulting foresters, and many loggers have the capability to develop planning maps for timber sales, if requested. Current practices bypass planning and as a result, many sites are unnecessarily damaged. Most BMP errors could have been avoided by proper planning prior to the execution of timber sales.

Landings

Landings are where haul trucks are loaded for highway transport. An area of a half-acre or more is cleared. Trees are skidded or forwarded from the stump area to the landing for loading onto trucks. The landing is a high impact area and subject to erosion. Soils on landings are bared and compacted by numerous trips by inwoods and highway transport vehicles.

Landings should be kept to a minimum.

Pre-harvest planning is the best way to determine a minimum number of landings. Landings should be as small as possible, thus reducing potential for erosion. Landings should be located outside SMZs and on well-drained soils with a slight slope (2 to 5 percent). Ground with a little slope will reduce puddling. If erosion is expected, diversion devices such as water bars on the uphill side can reduce soil movement and divert water rather than concentrate it. A dry landing will not only reduce erosion but will cut harvesting costs materially.

Push-out Roads

Push-out roads are the connecting links between landings and permanent roads. Push-out roads are probably the worst cause of erosion during logging. They are usually installed with equipment not capable of proper shaping to control runoff, used immediately after construction without allowing time to setup, traversed by woods vehicles with deep cleats which tend to highly disturb the soil, constructed from native materials which have poor strength properties, and considered temporary and therefore not located properly.



It doesn't take much for skidder operators to slow down erosion on skid trails with logging debris.

Proper road location can best be accomplished during pre-harvest planning. Landing locations are established first to address the most wood from a given location. Then roads are located to connect these landings to each other and permanent haul roads. Push-out roads are relatively inexpensive in southern forests and should be laid out on the contours in a manner similar to permanent roads.¹ Stream crossings are special situations associated with roads and should be executed very carefully.²

Logging in Streamside Management Zones (SMZs)

SMZs are left to protect the stream bank integrity. Logging is not prohibited in SMZs, only restricted.3 Following guidelines for SMZs, trees can be cut and extracted. Trees should be felled away from streams and skidded or forwarded out of the SMZ in the most direct and least disturbing manner. Trees accidentally felled into a water way should be removed as soon as possible in a manner which does the least bank damage. Without careful attention, a tree across a creek could destroy the benefits of this filter zone. A good way to take trees out of an SMZ is with a feller-buncher which carries the tree upright out of the SMZ before dropping it.

In-woods Transportation

Wood is moved from the stump area to landings by skidding, forwarding, yarding, or aerial methods. Skidding is the most common method and perhaps the most detrimental because trees are dragged, causing exposed soil and creating ruts where tires and trees have traveled. Skidding impact can be reduced by not skidding up and downhill. On slopes over 15 percent where safety dictates uphill pulls, long straight skid trails which create erosion ditches should be avoided.

Forwarding involves carrying logs rather than dragging them and is more desirable from a site impact viewpoint. Forwarders carry greater payloads and thus require less trips. Forwarder tires roll over the soil unlike skidder tires which pull and spin leaving more soil disturbance. By carrying greater payloads, forwarders need fewer push-out roads and landings. Rather than building truck roads across streams, forwarders can cross streams with minimal bank disturbance. This also reduces wear and tear on haul trucks. Yarding uses cables to extract wood and is best applied in steep ground conditions. This is a low impact method but is not being used in Alabama or other parts of the southeast because terrain and timber conditions are not suitable.

Aerial logging uses helicopters to extract logs. In wet, boggy ground conditions typical to some areas in southwest Alabama, helicopters are being used successfully. This very low impact method is highly desirable but restricted due to harvesting costs. Only where aerial logging is the only feasible method and timber values warrant its use, can it be economically justified.



You don't have to put up with this! Insist on removal of all trash from the logging operation.

In wet areas where ground based equipment is used (skidders and forwarders), wide tires are recommended to reduce ground pressure. Ruts should not exceed a depth of 10 inches. Where rutting is occurring, skid trails should be concentrated to reduce the area being impacted. Other wet ground alternatives include moving to a dryer site or stopping operations altogether.

Closing Out a Sale

When a sale is finished or is left for a period of time, erodible areas should be protected. Any temporary stream crossings should be removed and restored. Landings, skid trails, and temporary roads may need water diversion devices like water bars and mulching and seeding. Landings may need scarifying and seeding. Permanent roads, stream crossings, ditches, and culverts may need repair. Fences and gates don't cause erosion but should be repaired where necessary. Water ways should be inspected for excessive limbs and tops. Garbage should be collected and removed from the site. Petroleum products such as grease, oil, hydraulic fluid, and coolants should be removed and disposed in approved collection points. Used tires, filters, cables, food wrappers, and containers should be removed and disposed of in approved dispensers and, hopefully, recycled. Trash should not be burned or buried.

Timber Sale Contracts

Without getting into the details of contracts, it is recognized that these legal instruments are designed to accomplish the desired results of all parties involved in the timber sale. Even without the legally binding nature of contracts, the contract acts as a blueprint for proper execution of a sale. It should spell out the responsibilities of all parties.

Much timber is sold without a contract or with contracts which are merely duplicated forms with little or no specifics. Some landowners accomplish the desired results by having a trusted logging contractor. Owners of timber are not required to use a contract. Contracts create additional overhead expense and reduce profits. As mentioned earlier, if a landowner doesn't have experience in timber sales administration, a consulting forester is a worthwhile investment. Consultants can help landowners structure contracts which accomplish desired results. All lawyers can write legally correct contracts, and some lawyers are very knowledgeable about timber sale contracts.4

Conclusion

Landowners along with wood products companies, consulting foresters, and loggers have a responsibility to protect their forestlands. BMPs give us guidelines on how to properly execute forestry activities. Landowners should consciously get involved with the management activities on their land and should be aware that there are alternatives, especially in timber harvesting. Logging does not have to look unsightly or ignore BMPs. The South must shoulder the major duties of providing wood for our nation. We can do it and do it in an environmentally acceptable manner. By being aware of problems, planning our work, and proper stewardship, our southern lands can produce wood products forever.

References

- ¹ Tufts, R.A. 1992. "Forest Roads." *Alabama's TREASURED Forests*, vol. 11, no. 1, pp. 12-13.
- ² Lanford, B.L. 1991. "Stream Crossings." *Alabama's TREASURED Forests*, vol. 10, no. 4, pp. 20-22.
- ³ Burdette, D.R. 1991. "Streamside Management Zones." *Alabama's TREASURED Forests*, vol. 10, no. 3, pp. 22-24.
- ⁴ Brinker, R.W. and C.F. Raper. 1990. "Timber Sale and Harvesting Contracts." Alabama Cooperative Extension Service, Cir. ANR-560, Auburn University, AL.

The first step in converting the beaver pond into a waterfowl area is to drain the pond.

Convert Your Beaver Problem Into a Waterfowl Area

by J. WAYNE FEARS

hroughout Alabama, forest landowners are suffering the effects of an exploding beaver population. Valuable timberlands are being flooded and trees are being cut by this industrious rodent. At the same time, there is an ever-growing shortage of wetlands suitable for wintering waterfowl to feed and rest.

What do the forest landowner's beaver problems have to do with the plight of migratory waterfowl? Plenty! The beaver problem can be converted into a waterfowl management area for duck hunting and/or the enjoyment of watching wintering waterfowl.

Studies conducted by several southern universities and the Soil Conservation Service have shown that many beaver ponds can be developed inexpensively into attractive waterfowl feeding and resting areas. It requires drawing down the impounded water during the summer to allow hardwood trees to survive, a benefit to the landowner, and reflooding the pond in the winter to attract waterfowl, something the duck hunter or wildlife observer will enjoy. Tree farmers have received several hundred dollars per year for the rights to hunt their converted beaver ponds.

Here is how you can convert a beaver pond into a wintering waterfowl area.



Seeding the drawn-down mud flats is accomplished with a cyclone seeder.

With this three-log drain in place, the beaver pond will be reduced to a channel of water. Until you are ready to flood the pond, the three-log drain should be checked weekly to keep it open and free-flowing. Often the beavers cannot figure out why their dam leaks, but occasionally they manage to stop it.

Seeding and Flooding

Having successfully drawn down the water, the next step is to sow the exposed mud flats with Japanese millet seed at the rate of 20 pounds per acre. It is important that only Japanese millet seed be used, as most other plants will not grow under beaver pond conditions. Japanese millet seed requires moist ground and best conditions appear to be when the ground is ankle-deep in mud. No further land preparation is needed. The sowing can best be

Draining the Water

First, make sure your beaver pond has at least three acres of shallow water (two to 30 inches deep). Sunlight should reach large areas of the pond at least half of the day.

Your development should begin in mid-June by breaking the beaver dam at the existing channel (see *Figure 1*, page 30). This break should be made in the form of a narrow, deep "V." Allow the water to drain from the pond area; this usually requires several hours. When the swift flow of water has become slack enough to work with ease, construct and install a three-log drain as follows:

- 1. Fasten three logs together with nails or wire, stacking one on top of the other two. The logs should be green or waterlogged for weight and should be approximately seven to 10 inches in diameter and 10 to 16 feet long.
- 2. Place a piece of roofing tin over the top of the logs and nail to the bottom two logs (see *Figure 2*, page 30).
- At the bottom of the break in the dam, place a piece of tin approximately 2¹/₂ feet wide and six to eight feet long.
 Using rocks, a log, etc., prop the downstream end of the tin at least a foot higher than the upstream end.
- 4. Place the three-log drain on top of this tin with the upstream end of the logs completely covered by water. Hold in place with stakes. Pile some mud and sticks on top (see *Figure 3*, page 30).



The TREASURE Forest owner's waterfowl management area can provide a valuable conservation service by furnishing a resting area for winter waterfowl while providing enjoyment for the owners.



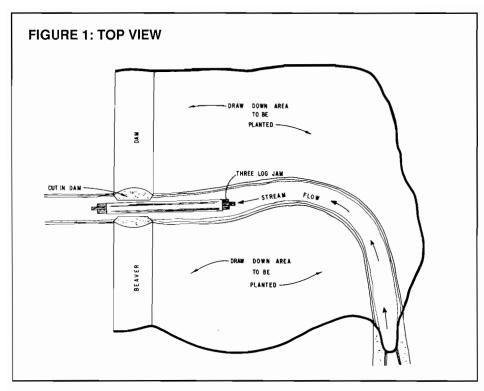
Japanese millet will grow mature seedheads in about 60 days.

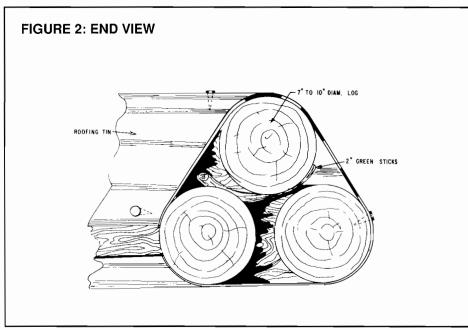
done by using a cyclone seeder and wading through the mud. Fertilizer is usually not necessary the first two years. The Japanese millet crop matures in approximately 60 days, so you should plant it in time to mature before the first frost.

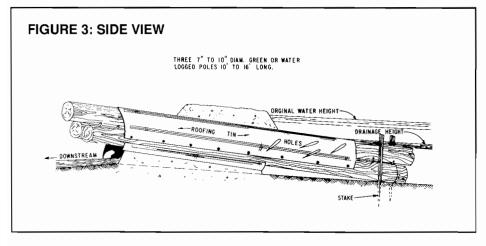
By the time the millet has matured, you should have your duck blinds constructed and be ready to flood the planted areas.

Flooding your duck pond is done by removing the three-log drain and letting the beavers plug up the hole. If for some reason the beavers are slow in doing the job, a few sandbags will work just as well.

(Continued on page 30)







Pond Management

Since most beaver ponds converted into duck ponds are small, shooting management is a must. You cannot shoot ducks on these small ponds from dawn to dusk and expect the ducks to stay. For best results, start shooting ducks on your pond one morning each week and let experience dictate the rules of how often you can shoot.

The same pond management procedure is necessary each year with a few changes. Occasionally, the original seeding of millet provides enough hard seed that further seeding is not necessary, but don't depend on it. It is best to re-seed each year. You should also begin fertilizing the pond in the third year; if the millet is slow to grow prior to that, check with your Cooperative Extension Service agent for fertilizer recommendations.

The Soil Conservation Service offers a booklet entitled "Land Management for



The forest owner's waterfowl area can produce excellent duck hunting.

Wild Ducks in Alabama," and the Cooperative Extension Service agent in your county can get you a copy of circular ANR-611. Both have information on managing beaver ponds for waterfowl.

As with any land management venture, experience will help your waterfowl management area become more productive each year, and you, as a forest owner, can turn your beaver problems into a source of enjoyment for your family and friends.

For more information write Fears & Associates, P.O. Box 217, Heflin, AL 36264.

Ninth Alabama Landowner and TREASURE Forest Conference

Paul Bryant Conference Center • Tuscaloosa, Alabama • October 29-30, 1992

REGISTRATION FORM

Name(s) of Attendees:			
#1			
#2			
#3			
#4			
Company:			
Address:			
City:			Zip:
County where you own land:(Only one county, please; if you o CATEGORY(IES) OF ATTENDES #1 #2 #3 #4	wn land in more than one county	r, list the county where you ner JRE Forest Landowner	own the majority of your land)
I am attending the conference and \$20 preregistration x	d am enclosing attendees =		\$
NOTE: The TREASURE Forest L	attendees, plus \$9 x	luncheon attendees = . st landowners only. Lunche	eon is by preregistration only.

CONFERENCE INFORMATION

- The first day of the conference is indoors. The second day is an outdoor tour of a TREASURE Forest. Please dress appropriately.
- The registration fee includes both days' sessions, banquet and luncheon on second day. Registration will be from 10:00 a.m. until 2:00 p.m. Oct. 29. Preregistration fee for conference **per person** if postmarked by Oct. 9 is \$20.
- Preregistration fee for conference and TREASURE Forest Luncheon per person if postmarked by Oct. 9 is \$29.
- **NOTE:** The TREASURE Forest Luncheon is for TREASURE Forest landowners only. <u>Luncheon is by preregistration only.</u> Luncheon will begin at 11:30.
- Registration fee for the conference after Oct. 9 is \$40.
- Mail upper portion of form and fee payable to Alabama Forestry Conference to:
 Myrtle Kizziah, Alabama Forestry Commission, P.O. Box 599, Northport, AL 35476

HOTEL/MOTEL INFORMATION

You will need to make your own reservations.

Sheraton Capstone Inn 320 Paul W. Bryant Dr. Tuscaloosa, AL 35401 205-752-3200 (adjacent to conference center) La Quinta Inn 4122 McFarland Blvd. E. Tuscaloosa, AL 35405 205-349-3270 **Days Inn** Hwy. 82 Bypass Northport, AL 35476 205-759-5000 Ramada Inn 631 Skyland Blvd. E. Tuscaloosa, AL 35405 205-759-4431

CONFERENCE OFFERS SOMETHING FOR EVERYONE

by ANITA BENTON, Education Division, Alabama Forestry Commission

undreds of landowners are expected to attend the Ninth Alabama Landowner and TREASURE Forest Conference October 29-30, 1992 to exchange information and ideas on forest management practices. They will have an opportunity to hear presentations on specific forestry topics at the Bryant Center in Tuscaloosa and to participate in a tour where they can see some of the management practices being implemented on Dr. Bill Sudduth's property in Hale County.

Concurrent sessions scheduled for the afternoon of October 29 cover topics such as Remote Sensing Studies and Landowner Attitudes; Accomplishments of the Outstanding County Forestry Planning Committees; Stewardship; TREASURE Forest; the Stewardship Incentives Program (SIP); and Best Management Practices. The program is designed so that the groups rotate, which allows participants to attend all sessions.

There will be a banquet that evening, the highlight of which will be three videos. The first presentation will outline the accomplishments of the county forestry planning committee designated as the winner for 1992; the second will show management practices used by the three district Helene Mosley Memorial

TREASURE Forest Award winners; and the third will announce the state winner of the Helene Mosley Award and provide additional information on the property.

The following morning, October 30, attendees will travel from Tuscaloosa to Hale County where two tours are scheduled. Participants may select the tour best suited to meet their needs.

One tour is dedicated solely to wildlife management. Participants will see food plots, mast producing and fruit bearing trees planted for wildlife, natural wildlife foods, how prescribed burning enhances wildlife forage, the "edge effect" and its effect on wildlife habitat, and a demonstration on determining the age of deer.

The forestry tour includes the following stops:

Fisheries—Information will be provided on keeping a lake or pond in balance, how and when to fertilize.

Best Management Practices—Participants will see an area that was clearcut and planted; buffer strips were left to protect water quality. In fact, water bars are used throughout the property to divert water and prevent erosion.

Hardwood Management—There will be a discussion about species on the site and management techniques, including regeneration.

Natural Pine Stand Management-

How the existing stand evolved, management practices implemented, future plans for the site, and the current value of the stand will be discussed. Though this stop relates to pine management, mast-producing hardwoods are left for wildlife.

In addition to the tours, participants will see demonstrations on prescribed burning; mechanical harvesting; a portable saw-mill; black powder; and archery. Exhibits will include the use of native shrubs and plants for landscaping and a "miniature" food plot to show how a landowner can attract game to his or her property.

Doug Link, Landowner Assistance Forester, Alabama River Woodlands, has prepared management plans for the Sudduth property since 1983. Doug, as well as Dr. Sudduth and Jim Junkin, Alabama Forestry Commission, will be on hand to answer questions throughout the day.

The tours officially end shortly after lunch; however, participants are welcome to stay longer if they are interested in seeing specific management practices on the Sudduth property.

Dr. Sudduth wants the day to be fun for all and plans to "learn much more from those who visit his property than they learn from what they see."



Alabama's TREASURED Forests

513 Madison Avenue Montgomery, Alabama 36130 Bulk Rate
U.S. Postage
PAID
Permit No. 109
Montgomery, AL