



Alabama's **TREASURED** Forests

FALL 1994

STATE FORESTER'S MESSAGE

by TIMOTHY C. BOYCE, State Forester



Since I became the state forester, more and more I find myself searching the few historical documents I possess to help me get a perspective on the difficult challenges we face together as professional foresters and landowners. I guess I put some credence on the old quote by George Santayana, *The Life of Reason Volume 1, 1905*: "Those who cannot remember the past are condemned to repeat it." Or put another way, "History is the rear view mirror on the road of life."

My search has led me to some interesting observations about the past and its similarity to the present. Gifford Pinchot, the first chief of the Forest Service and founder of the Society of American Foresters, and President Teddy Roosevelt found themselves in a heated national debate over the use of federal land in the West. Preservationists led by John Mueir argued the lands must be preserved as a cathedral of nature, while Pinchot and Roo-

sevelt argued that the lands must be used for the benefit of society. The use/no use debate continues today, but has become hidden in broader issues such as the National Drinking Water Act, the National Clean Water Act, the National Endangered Species Act, the National Biological Survey, the National Historical and Preservation Act, and the list can go on and on.

Throughout the pages of history one thing is obvious; both political and social change have had and will continue to have a major impact on both the way we manage our forests and the things we get from our forests. Market changes driven by social pressure have been easy to identify, such as the effects of the pulp and paper industry on the South. But other political and social changes are less obvious, difficult to measure and manifest themselves into other issues such as taxes, government mandates, regulatory agencies and even attempt to shape consumer demand for products made from recycled paper or from sustainable timber management.

Above all, our history can be a source of optimism. Our southern forests have made a remarkable comeback thanks to the dedication of conscientious, intelligent, diligent, and conservative professional foresters, business leaders and landowners. Although I have mixed emotions as to public policy, I have faith in these people who manage our renewable forest resources.

Sincerely,

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

Timothy C. Boyce
State Forester

Commissioners

- Carol Jean Grisham, *Chairman*
- Cecil Tanner, *Vice Chairman*
- John Barfield
- Clifford J. Drouet
- Charlie Hamilton
- Randall Rogers
- Guice Slawson

State Forester

Timothy C. Boyce

Assistant State Forester

Richard H. Cumbie

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
- Governor's Liaison for Environmental Affairs
- 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, Southern Region, State and Private Forestry
- 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.

Editorial Board

- Brian Bradley John C. Kummel
- David A. Frederick Tommy Patterson

EditorKim Gilliland

Assistant To Editor.....Alexis London

TECHNICAL ADVISORS

- Don BurdetteWater Quality
- Tom CambreHardwoods
- James HylandForest Health
- Louis Hyman.....Taxes
- Neil LetsonUrban Forestry
- Tommy PattersonTREASURE Forest
- Stan StewartWildlife
- Walter Vest.....Forest Law Enforcement

Alabama's TREASURED Forests

Volume XIII. No. 4

Fall 1994

CONTENTS

Sturdy Oak Farms / by MADELINE HILDRETH4

Forest Health Monitoring Update, 1994 / by JAMES R. HYLAND7

Preventing Unwanted Fires / by CAL COBB8

Medicinal Value of Plants in Alabama's Forests / by NINA GALE THROWER10

Small Acreage Forest Landowner Conference / by DR. PETER MOUNT11

Considerations for Forest Management on Alabama Soils / by EDDIE KIRKLAND12

Alabama's Forests—A Timeline / by EDWARD BUCKNER14

Chain Saw Safety Is No Accident / by RONALD E. TRUE.....19

Helene Mosley Award Recognizes Landowners / by TOMMY PATTERSON22

Selecting a Tree Guide / by BILLY RYE23

Yes, You Can Have It All / by JOEL GLOVER and ALAN WILLIAMS26

Awareness Campaign Launched.....27

A View from Above / by BRIAN BRADLEY.....29

Forestry Champions / by JOEL D. GLOVER31

Order Seedlings Now32

DEPARTMENTS

State Forester's Message2

Editor's Understory6

Calendar9

Landowners Legislative Alert16

Hidden TREASURES22

Memorial24

Hardwoods of Alabama: Bald Cypress25

Threatened and Endangered Species28

COVER: 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 240-9355. Bulk rate postage paid at Montgomery, Alabama. POSTMASTER: Send address changes to: *Alabama's TREASURED Forests*, 513 Madison Avenue, Montgomery, Alabama 36130.

The Alabama Forestry Commission policy prohibits discrimination based on race, color, national origin, sex, age, religion or handicapping condition.



Wildflowers are abundant under the open pine stands.

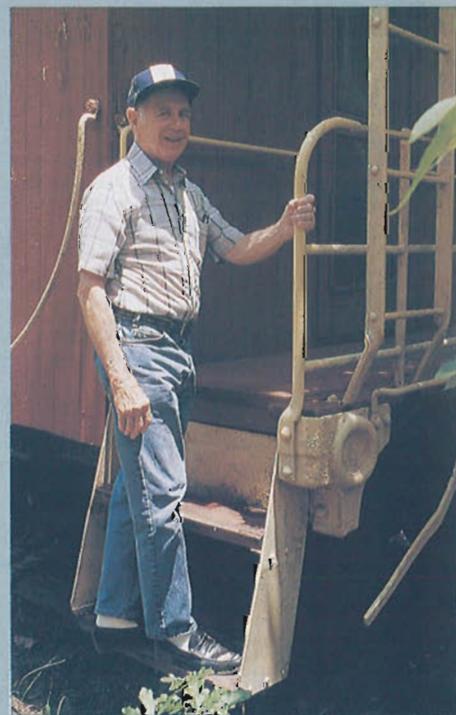
STURDY OAK FARMS

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

A section of land on Perdido Creek in Escambia County was bought, site unseen, as a financial investment over 25 years ago. Wanting to acquire some land in the name of a corporation Samuel Eichold and his partner founded, the two bought the first reasonably priced tract they found. Inspection of the 640 acres was disappointing. The entire area had been poorly managed for years. Forested areas were cut over and rutted. All the quality timber had been removed, leaving poor growing stock. Fields and drains were rapidly

eroding, creating gullies and filling streams with silt.

Samuel Eichold's love for the land and desire to leave things better than he found them has caused the property to become much more than a financial investment. Dr. Eichold wanted to return the land to productivity and restore a healthy and attractive environment. All income generated from the property has gone back into improving the land. The money produced from the property is the sole source of all improvements. When the partnership was dissolved, Dr.



Dr. Samuel Eichold

Eichold's involvement in the land management became increasingly important. The purely financial investment evolved into a source of pride for the Eichold family and a showcase of management practices. Sturdy Oak Farms, once an unappealing area filled with gullies, was a 1991 Helene Mosley district winner.

Erosion Control

Since "the largest gully in Escambia County" was located on the site, erosion control was the first priority. Working with the local Soil Conservation Service, a variety of erosion control methods were used to prevent further erosion and restore the land. Four major weirs, fence-like grade control structures, were erected to stabilize the bottom of the gully. Bales of hay were staked to the ground to divert water flow in certain areas. Vegetative plantings around the weirs were used to hold the soil in place. The property has been used in vegetative planting research, and over 100 types of seed or shrubs have been planted. Some were complete failures; others were very successful and are recommended to other landowners for erosion control.

Roads were stabilized using water bars and cropland was returned to its original slope. A pond was built at the bottom end of the mile-long gully to protect the area below it. All of the work has paid off. Today, there is very little evidence of gullies. The sediment pond is now much smaller in size and will eventually disappear. Creeks that were once cloudy and filled with sediment are now clear and free flowing.

Timber Management

Realizing that he had plenty of energy and ambition—but little forestry knowledge—Dr. Eichold consulted experts. Over the years, he has worked with consultant foresters, company landowner assistance foresters and the Alabama Forestry Commission. He participated in hands-on work and read constantly. He has gained a considerable understanding of the science of forestry and applied this knowledge to his management activities.

As with any property, some mistakes were made and lessons learned. Since the forested areas had been high-graded, in many places the best management was to clearcut and plant. Twenty-two acres of

slash pine were planted on a poorly prepared site. Another species of pine is probably more suited to the soil type. The off-site species, coupled with poor site preparation, resulted in a slow growing stand. Although the stand was thinned for release, the area is not very productive. Future plans include harvesting the slash pines and replanting with a more suitable species.

The poorly forested areas were reforested over the years as financing permitted. In 1989, the CRP program afforded the opportunity to plant pines on 80 acres of highly erodible cropland that was being leased for row crops. Another field was later planted in longleaf pine, but because of competition from bahia and bermuda



Magnolias are just one of many species growing in the cool hardwood bottoms.

grasses, survival was poor. Herbicides were used to reduce competition from the grasses, but survival was still inadequate. Finally, the area has been scalped, and the grass turf rolled back to mineral soil. Hopefully, an early winter planting will yield a well-stocked and healthy stand.

A prescribe burning program helps keep the forest healthy and also provides a better habitat for wildlife. Permanent firelanes surround the property and are planted in rye grass. Bahia is also planted on highly erodible sites. The pine stands are burned every three to five years once they are big enough.

Other Property Enhancements

Although trees are primarily planted for timber production, many trees are hand planted by Dr. Eichold for aesthetic purposes. A grove of sycamore trees is one of his favorite places. Dr. Eichold likes the quick results sycamores exhibit. When questioned why he planted sycamores, Dr.

Eichold responded, "I like all trees, but sycamores grow quickly and provide wonderful shade." Whenever any bareroot seedlings are given away, Dr. Eichold takes advantage of the situation. He takes them home and grows them in pots. When they are large enough, he transplants them to empty spots on the farm.

Having a place for the Eichold family to enjoy and learn to appreciate nature is now the primary management objective. The hardwood bottoms have been left primarily untouched. Trails through the cool bottoms are maintained. Perdido Creek, once filled with sediment, offers excellent swimming and fishing for the grandchildren. A picnic table is placed near the major swimming hole for relaxing after-

noons. A family camphouse and a converted train caboose make overnight trips possible. Road signs give first-time visitors a sense of familiarity.

A grassy field has been turned into a certified airstrip. Son Burt enjoys the convenience of landing his airplane on the property. A windsock and sheds on the strip's perimeter provide important weather information and storage.

A small pond once provided water for cattle. The pastures are now in pines, but a picturesque windmill that once pumped water still remains.

Since no one in the family hunts, wildlife is not a primary management objective. For years, the hunting rights were leased. Recently, the rights have been restricted to family, friends and the caretaker who lives on the property. Although not a primary objective, wildlife plays a role in the management of the property. Wildlife food plots are planted

(Continued on page 6)

Editor's Understory

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

Samuel and Charlotte Eichold both believe in leaving the world better for future generations. During their 50 years of marriage, they have put their beliefs into action. A retired physician and member of a university faculty, Dr. Eichold's interests are as varied as his life. He serves on the boards of 25 different organizations. Health and medicine, arts and natural resources are only some of the causes the Eicholds support. Sam and Charlotte have both been honored many times for their contributions to worthwhile causes. Dr. Eichold was Mobilian of the Year in 1990. He was recently recognized with the first Urban Forestry Lifetime Achievement Award in May 1994.

With so many interests, it would be easy for the Eicholds to neglect their TREASURE Forest, but it is evident the property and the TREASURE Forest program are important. "One doesn't have spare time, one makes it," is Dr. Eichold's explanation of how he manages to support so many causes. Each year, the Eicholds make the time to attend the TREASURE Forest Landowner Conference. Dr. Eichold also made time to serve on this magazine's editorial board.

The Eicholds make time to spend with their three children and six grandchildren

at Sturdy Oak Farms. It is important to them that the future generations appreciate nature and her many gifts.

So that the family could comfortably spend more time on the property, Dr. Eichold decided to procure a unique camp-house. While he was a surgeon for the L&N Railroad, he acquired a 1926 wooden caboose. Figuring out a way to move 46,000 pounds of scrap steel to the community of Nokomis was difficult. The caboose was eventually trucked to the site and set on 40 feet of track (which weigh 125 pounds per foot). The caboose, set across from Cypress Point, seems to belong on the property. The casual observer can't possibly imagine the effort required to have this unusual camphouse. Since the new camphouse was added, the caboose serves as picnic headquarters. The working pump beside the caboose is perfect for washing pears picked from the nearby tree.

The grandchildren love the quiet life Sturdy Oak Farms offers. They all love to fish and are involved whenever possible in the labor and projects on the property. The road system offers a wonderful place to learn to drive, and the grandchildren have taken advantage of this, "wrecking everything," according to their grandfather.

The Eichold children, Burt, Alice and

Beth, actually own Sturdy Oak Farms. The land first belonged to a corporation Dr. Eichold and his partner formed, CAL-AL. When the partnership was dissolved, the land was put in Charlotte's name. Each year for several years, the children were given as much of the land as tax laws allowed. Eventually, the six grandchildren will own the 640 acres. If Sam Eichold has his way, the ownership will come with strings attached. Working with the Forever Wild program, he hopes to "put a dead man's fist" on the land's management by designating certain rights. This is a pioneer program and a learning process for the Eicholds.

Being a pioneer and learning along the way come naturally for Samuel Eichold. He is always trying new ideas. Goats have been used for land clearing until their visits to neighbors became a problem. Ducks were brought in to enhance the pond, but were eaten by other critters. When Dr. Eichold explained his latest venture, a crayfish pond, his grandson, Samuel, pointed out failures with goats and ducks and advised, "You need to stick with trees." So simple a management suggestion would never be possible on Sturdy Oak Farms, where innovative ideas are commonplace. ♣

Sturdy Oak Farms

Continued from page 5

annually. Sawtooth oaks have been transplanted to different areas after being grown from bareroot seedlings in containers at the Eichold's Mobile home. Shooting houses are scattered across the property. Duck houses and bluebird boxes are strategically placed in different areas.

Dr. Eichold takes advantage of any opportunity to utilize the land. Beehives are nestled in a wooded area. In return for letting the beekeepers maintain hives on the land, the Eicholds enjoy several jars of honey from Sturdy Oak Farms.



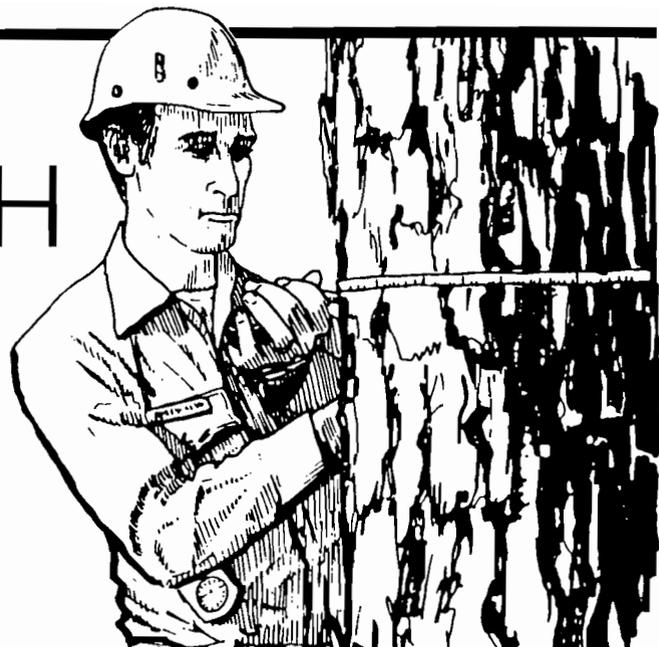
This weir is one method used for erosion control.

Always interested in new projects, Dr. Eichold recently had a crawfish pond constructed. Working with the Resource Con-

servation and Development Council, the pond was stocked in May. The results of these efforts will be evaluated in the fall.

Dr. Eichold has a difficult time choosing his favorite area on the property. "I never dreamed we could do what we did. No single thing stands out. The overall concept of TREASURE Forest is what makes this place so special." Sturdy Oak Farms has come a long way in 25 years. The serene hardwood bottoms, clear, cool streams and majestic pines have replaced the gullies and eroding cropland. Sturdy Oak Farms is no longer an eyesore; it is most definitely a TREASURE to be enjoyed for generations. ♣

FOREST HEALTH MONITORING UPDATE, 1994



by JAMES R. HYLAND, Chief, Forest Health Section,
Alabama Forestry Commission

Healthy forests are vital to our country. They provide clean water, wildlife habitat, wood for building materials and paper products, solitude for our souls, and a wide range of recreational opportunities. Our country's need to protect and expand these and other important forest benefits is the foundation for the Forest Health Monitoring (FHM) program.

The Forest Health Monitoring program is jointly managed and largely funded by the USDA-Forest Service and the U.S. Environmental Protection Agency (through its Environmental Monitoring and Assessment Program) in cooperation with other program participants. FHM partners—participating state forestry agencies, the U.S. Department of Interior Bureau of Land Management, the Tennessee Valley Authority, and the USDA-Soil Conservation Service—provide additional funding and personnel support.

Program Goal and Objectives

The overall goal of FHM is to monitor, assess, and report on the status, changes, and long-term trends in the health of the nation's forest ecosystems. To do this, the program has three objectives. The first objective is to determine the current status, changes, and trends in indicators of forest ecosystem health. The second is to identify associations between changes or trends in ecosystem-health indicators and indicators of natural and human-caused stress. The third is to report on the health of the nation's forest ecosystems to those who make resource manage-

ment, protection, or policy decisions, and to the public.

How We Monitor Forest Health

Although forest health can be defined in several ways, there is general agreement on a few important attributes of healthy forest ecosystems. These include a balance among growth, mortality, and regeneration; appropriate biological diversity; and the ability to withstand or recover from impacts of various stressors such as insect or disease outbreaks, adverse weather and climate, and air pollution. The entire plot component for the lower 48 states is a network of approximately 12,600 (about 3,800 forested) permanent plots on which survey teams will make periodic measurements of forest status on the forested plots.

On the forested plots, survey teams collect data on forest health indicators. These data include recorded observations of stand structure, growth, mortality, crown condition, damage, regeneration, biodiversity, wildlife habitat, soil characteristics, and air pollution indicator plants. This list of measurements will change as researchers discover new and better indicators of forest health.

In Alabama, the Forestry Commission began collecting data in the summer of 1991. The permanent plots were remeasured in 1992 and 1993. The measurements taken are the following: species, DBH (diameter at breast height), crown class, forest type, damage, crown ratio, crown diameter, crown density, foliage transparency, and crown vigor. In 1994,

three more indicators were added: vegetation diversity, lichens, and ozone bioindicators.

Preliminary early data shows that the forests in Alabama are healthy. There is damage and mortality occurring, but these may be "normal." The first few years of data will be used to determine the definition of "normal." Then each succeeding year can be rated against a norm.

These forests provide us with a wealth of economic, social, and environmental benefits. Healthy forests are forests capable of sustaining these benefits into the future. Yet, a healthy forest is not a static forest or one without dead and dying trees. Rather, forests are constantly changing as a result of natural forces, such as insects, disease, weather, fire, and human activities that affect them directly or indirectly. When these changes occur at a rate or in a direction that threatens the values we place on the forests, forest health concerns arise.

The Alabama Forestry Commission, in cooperation with the U.S. Forest Service and the forest landowners of Alabama, will continue to monitor the health of the forest. This way we will be better prepared to react to changes that may threaten Alabama's healthy forests.

References

- "America's Forests: 1994 Health Update," U.S. Forest Service, Agriculture Information Bulletin G96, April, 1994.
National Forest Health Monitoring Program Brochure, Southeastern Forest Experiment Station, 1994. ♣



Preventing Unwanted Fires

by CAL COBB, Fire Control Section, Alabama Forestry Commission

Of the 32 million acres that make up the state of Alabama, over 21 million are forested. Forestland is one of Alabama's most significant resources and its protection is an important responsibility. As we enter the 1994 fire season, we need to be aware of the risk that wildfires pose on the land and understand how to prevent being affected by them.

But is all fire bad? We now know that fire plays a very important role in the ecosystem. Let's explore the two types of fire: prescribed fire and wildfire.

Prescribed fires are planned, constructive fires used in forest resource management for many reasons: to clear a site to prepare for planting; improve wildlife

habitat; control insects and disease; manage competing vegetation; improve access and reduce hazardous fuels, just to name a few. In Alabama, prescribed burning has been used as an agricultural tool for generations.

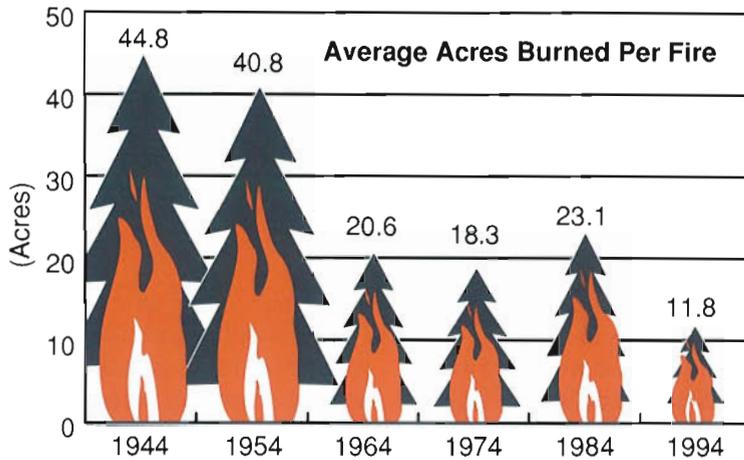
Wildfires are destructive, free-burning fires that require suppression action. These fires deface natural beauty by destroying countless trees and spoiling scenic vistas. They make forest recreation areas, roads, trails and streams less attractive. They contribute to serious erosion; with no bed of leaves and mulch to absorb rainfall, the water runs quickly over the bare ground. Soil and ash are then washed into streams, rivers and lakes, damaging their ecosystems. When rains are heavy in burned-

over areas, rivers fill quickly and their banks overflow. Damage to communities and farmlands downstream is often severe. Fires damage habitat for game and non-game wildlife, and kills young trees—the timber of tomorrow.

Over the last 10 years, Alabama has had a statewide average of 7,009 wildfires burning 83,213 acres annually. Each fire during this period averaged 11.8 acres in size. Through the cooperative efforts of the state's volunteer fire departments and the Alabama Forestry Commission, as well as prevention campaigns, the wildfire problem has been declining during this 10-year period.

The 1993 total of 3,582 fires burning 26,635 acres is a great reduction from the

Figure 1: History of Wildfire in Alabama



devastating 1988 totals of 13,048 fires burning 245,970 acres. Figure 1 shows the 10-year average fire sizes. Granted, weather played an important part in the wildfire situation, but the efforts of each of our cooperators can not be ignored.

Over the last 10 years, 93 percent of the state's wildfires were man caused, with incendiary or arson accounting for 56 percent of that total. Figure 2 shows the causes of these fires.

The wildland fire environment depends on the interaction of three naturally occurring factors: topography—physical features of the land, weather conditions and available fuels.

The most important effect on the environment, however, is the tremendous human impact on wildland fuels. Changes in natural vegetation may result from timber harvesting, timber stand improvement, road construction, grazing, watershed development, recreation, and wildlife management practices. All can change the character and distribution of the fuel. The

exclusion of periodic fire through intensive fire protection also may change the amount and characteristics of fuel. We also complicate the fire problem by building homes in the wildland fire environment. The area where homes are being constructed in what is considered forestland is called the "interface."

There are ways to prevent wildfires from being a threat to the private landowner. Permanent firebreaks need to be established and fuel build-up must be controlled through the use of a regular prescribed burning program. Establishing "green-belts," clearing vegetation around buildings, reducing roadside hazards, having spacing requirements, and using fire resistant building materials for homes within the interface are all ways to reduce risk.

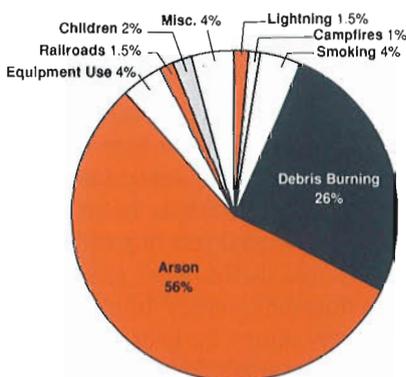
Many fires are started accidentally when landowners burn debris. Debris burning is an area where we can be much more careful. The rules are:

- Contact the Alabama Forestry Commission and obtain a permit before burning.
- Never burn trash outside in dry weather on windy days.
- Always have plenty of available help, tools or water nearby.

Promptly report any fire or suspected incendiarism to the Alabama Forestry Commission. The toll-free number can be found in your telephone book.

Fire has important uses in the forest, but uncontrolled wildfires can do much damage to the land. Always be careful with fire in the forest. As Smokey Bear reminds us, "Only YOU Can Prevent Forest Fires!" ♣

Figure 2: Wildfire Causes



October 9-15—
National Fire Prevention Week.

October 12—Sheffield, AL.
Ecosystem Management Seminar for Alabama Forest Owners. Registration fee \$25. Contact Alwina Spurlock, (205)844-1042, for more information.

October 13-14—Sheffield, AL.
Eleventh Annual Alabama Landowner and TREASURE Forest Conference. Indoor sessions and outdoor tours will revolve around this year's theme, "TREASURE This: Woods, Water and Wildlife. . ." Contact Iva Sanders, (205)241-8114, for registration information.

October 16-22—
National Forest Products Week.

November 3—Tuskegee, AL.
Small Acreage Forest Landowner Conference. This year's theme is "Alternative Sources of Income from Small Forested Tracts." For more information, contact the Tuskegee Extension Service at (205)727-8808.

November 8—Mobile, AL,
November 17—Birmingham, AL and
December 8—Huntsville, AL
"Timber and the Federal Income Tax," an Auburn Univ. short course. For more information contact Chris Isaacson, (205)844-1042.

November 9-10—Andalusia, AL..
"Managing a Longleaf Pine Ecosystem," an Auburn Univ. short course. For more information contact Chris Isaacson, (205)844-1042.

December 7-8—Athens, GA.
"Uneven-aged Management," a Univ. of Ga. short course. For more information contact Dr. Richard Field, (706)542-3063.

December 13-14—Auburn, AL.
"Forestry Herbicides: Regulatory Compliance," an Auburn Univ. short course. For more information contact Chris Isaacson, (205)844-1042.

MEDICINAL VALUE OF PLANTS IN ALABAMA'S FORESTS

by NINA GALE THROWER, Tribal Historian for the Poarch Creek Indians

The Southern Indians lived outdoors much of the time when the weather was good. The forest was their home and provided food, water, shelter, and medicine. Southern Indians had considerable knowledge and a lot of experience using plants in treating sickness and injuries. Some of their knowledge has been preserved to the present day as each generation of tribal elders shared what they knew with younger people. We encourage our youth to listen and learn our traditions, so they can share these things with their children and grandchildren. Oral traditions have kept this information alive for many generations; it must not be lost.

The plants I have written about were used for common household medicines and would not have required the wisdom of a tribal medicine man. They are familiar plants and almost any Indian would have been able to identify and locate them in a short time.

Please remember, this information is written for historical purposes and must not be used as medical advice. If you are sick or need medicinal advice, please consult with your doctor.

Ointments and salves were used to keep healing medicine in contact with the skin. They were prepared ahead of time and stored until needed. Medicines for external wounds were made by mixing medicinal plants with bear grease, hog lard, or pole cat (skunk) grease. Animal fat/medicinal plant mixtures were used by some of our tribal people up until about World War II. Pole cat grease ointment was used for colds and bronchial congestion. The sick person was rubbed down with this ointment and put to bed. Our tribal elders confirm this treatment was very effective. Most people got well very quickly. I strongly suspect a fear of a second treatment was largely responsible for rapid recovery of the patient. It is possible the treatment was more serious than the illness.

The bark of oak and hickory trees contain tannic acid and was useful as medicine when soaked in water and used externally. Hickory nut hulls were soaked in water to remove the tannin for medicine. Tannin is important as an astringent. Plants containing high amounts of tannin were utilized for treatment of minor wounds and inflammation from burns, cuts and insect bites. Tannin solutions were used to treat poison ivy and poison oak irritations and itching.

BLACKBERRY: The blackberry may be the most valuable wild fruit in this country. The fresh fruit is an extremely rich source of Vitamin C. Blackberries were an important source of food for the Indians. A tea made from blackberry roots was the most frequently used remedy for diarrhea. When in season, the fresh berries were used. Blackberry juice and sometimes blackberry wine was used to treat stomach disorders. Berries were used in large quantities in the past and are still picked by our people for food, and the juice is still used for upset stomach. A tea made from green or dried blackberry leaves was used as a gargle for sore mouth and inflamed throat.

BONESET: Boneset was used by the Indians as a tonic for colds, body pain, gout, rheumatism and stomach problems. Medicinal teas were made from the flowers and leaves. A hot tea of boneset would cause profuse perspiration. It was a common remedy for fevers, especially recurring fevers, such as malaria. Made into a syrup, it was used for a bad cough. Boneset has an extremely bitter taste and was usually mixed with a little honey to improve the taste.

The leaves and flowers were mixed with animal fat to make a salve for external wounds and sores. This plant grows in damp soil near swamps and streams. It has white flowers and blooms from July

until August in our area.

MINTS: Mints are numerous and widespread. Mints are hardy perennials and easy to identify because of their pleasant fragrance and square stems. The medicinal value of mints was well known to the Indians. The leaves were cooked with meat as a seasoning and used, fresh or dried, to make medicinal teas. Indians used combinations of mints for medicines to relieve colds, colic, bronchitis, rheumatism and fevers. They even prepared special teas for female problems. Hot mint tea was used to soothe an upset stomach and a cup of hot tea was recommended at bedtime for relaxation to ensure a good night's sleep. Mint teas were made and used just because they tasted good. Some mints were crushed and applied externally as an insect repellent.

Inhalants were used for coughs, colds and sinus problems. Special medicinal mints, usually horsemint, were placed over heated stones or put in a container of hot water. The resulting steam, containing the oils and substances in the plants, was inhaled. This helped promote mucous drainage and relieved congestion in the chest and nose.

Horsemint was gathered in large quantities and dried for use during the winter. Its leaves have a very medicinal smell and reminds me of a familiar odor that some of our over-the-counter medicines have today. You can gather mint by removing the leaves or pruning the plant. This does not destroy the permanent root of the plant.

MULLEIN: Mullein is a very beautiful plant with tiny fuzzy white hairs covering its large leaves. Its long leaves form a large, beautiful rosette near the ground.

During the second year of growth, the plant produces a tall spike of yellow flower buds from the center of the plant. The spike is very sturdy, the buds thick, and the flowers are small. I have found some flower stalks taller than five feet. Fresh

mullein stalks were cut, dipped in melted animal fat and used as torches when light was needed at night and during special ceremonies.

Mullein resembles a tobacco plant and its leaves were cut and hung up to dry, just like tobacco. Dried mullein leaves were mixed with other herbs and smoked to relieve bronchial and chest congestion. Mullein was used as a medicine for all respiratory ailments.

SASSAFRAS: American Indians used an infusion of sassafras to bring down fever and for antiseptic purposes. A hot tea made from sassafras roots was used to increase urination and perspiration, purify the blood, and was a spring tonic. Everyone was encouraged to drink a good dose of sassafras tea in the spring.

Sassafras tea was prepared by boiling the roots and root bark in water. It has the same color, smell and taste of our modern beverage, root beer.

Green sassafras leaves were crushed and applied to insect stings to relieve pain and swelling. Some of us still use this remedy, if we are near some sassafras trees when the bugs bite.

Sassafras leaves were gathered and dried to be used as a condiment in fish chowders and soups.

Today, we still use sassafras leaves if we buy a modern seasoning called gumbo "filé." If you read the label, you will discover the ingredient is dried sassafras leaves, nothing more.

SPHAGNUM MOSS: Sphagnum moss was gathered, washed to remove the dirt and dried in the sun. It is very absorbent and was used as a bandage.

WILLOW: Many Indians boiled the inner bark of willow and drank the tea in strong doses to relieve pain and reduce fever. Science has proven that willow bark has the same medicinal properties as aspirin.

YELLOW ROOT: The small rhizomes and roots of yellow root were also used for medicine. Yellow root was boiled in water and used for stomach and digestive disorders. The fresh roots were chewed for mouth ulcers and sore mouth. Powdered yellow root was used for medicine on sore feet and toes of older people and diabetics in later years. Yellow root has a very bitter taste, but it was one of the most frequently used plants by our tribal members.

This article was written to share the his-

torical use of plants by our Indian people.

NO MEDICINAL RECOMMENDATIONS ARE SUGGESTED OR IMPLIED.

Please remember that you are required by law to ask permission of the landowner before you gather plants or visit someone's property.

It is reassuring to know that landowners, the Alabama Forestry Commission and the forest industry representatives are protecting our forests and plants through good management practices. Their efforts have been successful, because all of the plants I have included in this article are still around for you to see. ♣

Small Acreage Forest Landowner Conference

by DR. PETER MOUNT, Tuskegee Extension Service

Almost every meeting, seminar, short course or field trip that is held concerning resource management deals with tracts in excess of 500 acres; yet most of the timber in the state is owned by people who own 200 acres or less. With this aspect in perspective, a program was established eight years ago at Tuskegee University to specifically address the needs of the owners of 200 acres or less. This program originally started out as a "Minority Landowner Conference," but very early the title was changed to "Small Acreage Forest Landowner Conference."

This event, held annually on the first Thursday in November, is a one day affair that concentrates on different subject matter each year. On November 3, 1994, the theme will be "Alternative Sources of Income from Small Forested Tracts," and will deal with such subjects as pine straw, shiitake mushrooms, hunting cooperatives, recreational development, and others. Dr. Booker T. Whatley, author of "Making It on 40 Acres or Less," has been invited to be the keynote speaker.

Over the course of the years this conference has dealt with many topics of interest to small landowners. The first year dealt with "Sources of Help" and featured various governmental agencies with programs to assist small landowners. Bill Moody, the former state forester, was the keynote speaker and launched what has become an annual event. The second year's program dealt with examples of forest management on small tracts and featured a field trip, including a fish pond management demonstration by Dr. John Jensen of Auburn University.

The third year's program concentrated on "Success Stories" in which small acreage forest owners that had been particularly successful were brought to Tuskegee to tell their stories. The fourth year's theme was "Emphasis on Youth," during which a panel of high school students spoke about their management experiences. Also, winners of a statewide essay contest were featured in the program.

The fifth year's theme was "Managing Wildlife on Small Tracts." This program featured Dr. Lee Stribling and Dr. Keith Causey from Auburn, plus Wildlife Federation President Mickey Easley. A highlight of this event was a hands-on safety and driving lesson with all-terrain vehicles. The sixth year's program was entitled "Private Property Rights—An Endangered Species," and featured an analysis of issues impacting private landowners, including a field trip to a wetlands area to see how the Corps of Engineers defined a wetland.

Last year's program dealt with "Marketing Timber on Small Tracts," and featured a panel of timber buyers who talked with those present. Also, a panel of consulting foresters talked with those present about how they could help on small tracts.

For anyone who has attended the session over the years, this has been an educational experience. Do come join us this November—no charge and a good time for all present.

For more information, contact the Tuskegee Extension Service at (205)727-8808. ♣

Considerations for Forest Management on Alabama Soils

by EDDIE KIRKLAND, State Lands Supervisor, Alabama Forestry Commission

In establishing tree plantations, the forest manager or landowner must decide which species to plant on a particular site and how productive that site will be in growing those species. Usually the forest manager desires to plant the most productive or fastest growing species or combination of species for a particular site.

Tree Growth and Site Quality

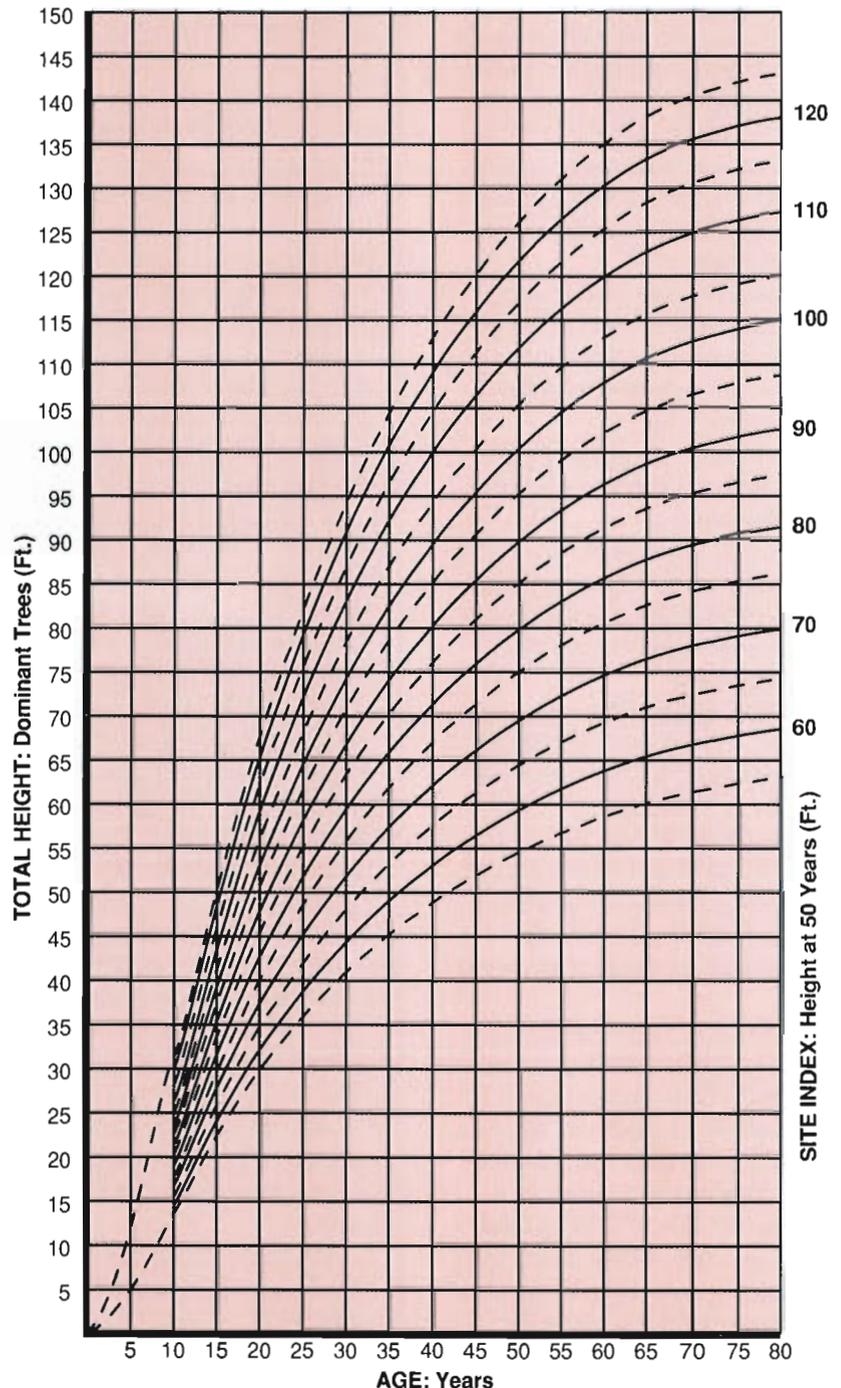
Tree growth is influenced by the genetic makeup of a species in interaction with the environment. Environmental influences on tree growth include climate—temperature, precipitation, wind, sunlight; soils—physical condition, moisture availability, nutrient availability, aeration; topography—slope, elevation, aspect; and competition—influences of other trees, lesser vegetation, and animals. The interaction of all of these factors defines the relative productivity of a site for a particular species and is referred to as site quality. In layman's terms site quality is the ability of the site to grow trees, and in particular, the ability to grow merchantable wood volume. Since environmental conditions may favor certain species over others, site quality will also vary with species. So, a good site for loblolly pine may not be a good site for cherrybark oak.

Site Index

In order to decide which species to plant on a given site, some measure of site quality is useful. The most common measure of site quality is site index, or the height of dominant and co-dominant trees in even-aged stands at a given index age (50 years is most commonly used in the South). The higher the site index the more productive the site, and the more productive the site, the higher the final yield in wood volume. Since site quality and therefore site index will vary by species,

Figure 1. Site Index Curve for Loblolly Pine

For example, if a 50-year-old tree is 85 feet in height, the site index is 85.



Basis: 146 Sample plots

in order to maximize the productivity of a site, the species most suitable for planting is the species with the greater site index.

Site index determinations for a particular site may be made by plotting average measurements from an existing timber stand of total tree height and age on a site index curve (see Figure 1). However, previous mismanagement or absence of existing timber stands may make this impossible. In the absence of field measurements, the forest manager may look to the soil. While all environmental factors interact to determine the quality of a site for a given species, soil factors are perhaps the most important.

A modern county soil survey published by the Soil Conservation Service is one source of information regarding site index and species suitability. The woodland management and productivity section of the survey not only gives site index and species suitability, but also has information on various forest management concerns. However, many counties in Alabama either have no soil survey or the surveys are out-of-date, and many of the surveys contain erroneous information. In order to fill this gap and make needed corrections, the Alabama Forestry Planning Committee has published information compiled by the Soil Conservation Service and the Alabama Forestry Commission giving a concise listing of recommendations on forest management concerns for all soil series mapped in Alabama.

Soil-Site Publication

This publication, *Considerations for Forest Management on Alabama Soils*, while similar in format (tabular) to the woodlands productivity sections in county soil surveys, contains added and more up-to-date information. In addition, it combines data on all soil series occurring in Alabama in one booklet. Presented in this publication are (1) soil series, (2) management concerns, and (3) potential productivity and recommendations. There are currently 343 soil series mapped in Alabama. Many of these soils are further broken down into phases based on significant differences in slope, texture, erosion, flooding, and soil moisture of AFFR (annual frost-free rainfall).

Management concerns such as erosion hazard, equipment limitations, seedling mortality, windthrow hazard, and plant

competition are included to aid in various management decisions. These management concerns can be important when considering timber harvesting, road building, site preparation, tree planting, chemical release, and other silvicultural activities.

Ratings of slight, moderate, and severe are presented for each management concern. A rating of slight for any concern would indicate little or no limitation or problems for management activities. Moderate or severe ratings would indicate that the forest manager should take certain precautions in his activities. For instance, erosion may be a problem on soils because of steepness of slope or high sand content. Equipment use may need to be limited on soils because of steepness of slope, stoniness or rockiness, excessive wetness, or high sand or clay content. Seedling mortality may be a problem on soils with south or west-facing slopes, high sand content, shallow rooting depths, high stone or coarse fragment content, or excessive wetness. Soils with shallow rooting depths, excessive wetness, or high coarse fragment content may be predisposed to windthrow. Plant competition may be a problem on highly productive or wet soils.

The section in the publication of most importance gives potential productivity and recommendations for Alabama soils. The tree species most commonly occurring on the soil are listed. Certain of these species such as elm, maple, hickory, beech, hemlock, spruce pine, some oaks, and others are not included in the species to plant or manage because of their low merchantability or value. Also listed are tree species (pine and hardwood) to plant or manage. These are species that forest managers generally favor in regeneration because of their marketability. They are also species which may be favored in timber stand improvement work, thinnings, and other management activities. Priority of species will be determined by site index, local marketability, landowner preferences, and quality of wood products for a given species. Not only can a single species be chosen, but a landowner may choose to grow timber in a pine/hardwood mixture or a mix of one or more hardwood species. By choosing species with similar growth rates and cultural requirements, this can be readily accomplished.

Site index data for the publication was obtained from two sources: (1) field data collected by the Soil Conservation Service and (2) computer projection models developed by the USDA-Forest Service. Where available SCS field data were used, data taken from Alabama sites were given priority over data from adjoining states. In the absence of field information, computer models were used to project growth of various species based on information from SCS soil interpretation records (blue sheets) for each soil series. Site indices were derived for loblolly and longleaf pine using the Forest Service models PTSITE and PPSITE respectively. SITEQUAL was the model used to derive site indices for 12 bottomland hardwood species (cherrybark oak, nuttall oak, shumard oak, swamp chestnut oak, water oak, willow oak, cottonwood, green ash, sugarberry, sweetgum, sycamore, yellow-poplar). It should be noted that all three site index models have compared favorably with actual field measurements.

In order to use *Considerations for Forest Management on Alabama Soils* in making management decisions, the user must first identify the soil series applicable to his or her specific site. Soil surveys and soil maps are both available from the SCS for this purpose. As with any management aid, there are limitations to using this publication. The soil series as mapped may be rather broadly defined, causing site indices to vary within a soil. Site index for a particular mapped site may vary according to past land use differences, erosion, slope position, aspect, and other micro-site factors. The site indices given in this publication are averages over a range of conditions within a soil series.

Whatever its limitations, *Considerations for Forest Management on Alabama Soils* should prove to be a valuable aid to forest managers when making decisions on species suitability and productivity and other forest management concerns. The publication may be obtained from most Alabama Forestry Commission and Soil Conservation Service offices.

References

- Husch, Bertram, et. al. **Forest Mensuration**. Ronald Press Company, 1972.
Wenger, Karl. **Forestry Handbook**. John Wiley and Sons, 1984. ♻️

ALABAMA'S FORESTS — A TIMELINE

by EDWARD BUCKNER, Overton Professor of Forestry, Department of Forestry,
Wildlife & Fisheries, The University of Tennessee

If you go back far enough—there were no forests. The geologic period during which forests first appeared (Devonian) goes back some 360 million years. In fact, when forests first evolved on the proto-continent we now call North America, most of what is now Alabama was under a sea that separated Eastern and Western North America. Between then and now both the land and vegetation have changed dramatically.

Once Alabama “surfaced,” early forests developed rapidly (geologically speaking) giving rise to dense forests during the Carboniferous Period—286 million years ago (MYA). Today we mine remnants of these forests as the coal that fuels modern technology. Thus, ancient forests captured and stored the sun’s energy from long ago to serve our current energy needs. Primitive members of the group we call conifers (gymnosperms) were a part of that flora. The flowering plants (angiosperms), which include hardwood trees, evolved during the Mesozoic Era—the time of the dinosaurs (65-245 MYA). These plants exploded across the landscape along with the insects which were their primary pollinators. Today hardwoods are the dominant species on good sites, relegating conifers to poorer situations or where disturbances maintain them against the more aggressive hardwoods. By the end of the Tertiary Period (2.5 MYA) most modern tree species had evolved.

The following Pleistocene Ice Age provided the next milestone in the development of Alabama’s forests. Although not glaciated by any of the 16-20 Pleistocene glaciations, Alabama is located at the southern end of the corridor along which plants migrated in response to the warming-cooling cycles, thus providing a sanctuary during the glacial periods and a source for northward migration during the interglacials. These repeated progressions

of species interacting with a topographically diverse landscape are responsible for Alabama’s rich flora and diversity of forest types. So much for the “natural” setting in which the modern forests of Alabama evolved. The time in which we are living is known as the Holocene—the period of “man.” It began 12,000 MYA (10,000 BC) and roughly coincides with that time when modern humans were clearly present in this landscape. They entered the western hemisphere via a land bridge (Berengia) connecting Siberia with Alaska. This was a time when boreal forests extended as far south as Atlanta, Georgia and continental glaciers covered much of Canada.

Fire a Valuable Tool

These original settlers were primarily meat eaters and were likely following herds of large animals—woolly mammoth, caribou, mastodon, bison, muskox, camels, horses, etc. when they entered the Americas. Suitable habitat for most of these animals was grassland or open forest, conditions that disappear quickly where natural forest succession is allowed to progress. Fortunately these original Americans brought with them a tool that would maintain the desired landscape condition—fire. That frequent fire was a part of the pre-historic landscape throughout most of North America is now well documented in the archaeological record. These same records suggest that most fires were human-caused.

The various cultural periods in the pre-history of the Southeast are: Paleo-Indian—10,000 to 8000 BC; Archaic—8000 to 1000 BC; Woodland—1000 BC to AD 800 and Mississippian—AD 800 to AD 1500. While both the Paleo- and Archaic Indians were hunter-gatherers, toward the end of the Archaic period agriculture like-ly replaced the hunter-gatherer tradition

as the primary mode of subsistence. As with maintaining grasslands, this required holding back the forest. Again, fire was the only tool available to a stone-age culture for accomplishing this. Using fire along the moist, fertile floodplains that were farmed required its use when the surrounding uplands were highly flammable. This maintained much of the upland as grassland or woodland (open woods)—habitats favorable to the animals (deer, bison, caribou, etc.) and plants (blueberry, blackberry, small grains, etc.) that were primary food sources in these cultures.

Historic records indicate that the native American tradition at the time of European contact was to fire the woods “... twice a yeare, vix, at the spring and at the fall of the leafe...” Such cultural manipulation of the landscape would create tremendous biodiversity. Fire behavior and the area covered by a fire would depend on many factors, including: time since last burn (fuel accumulation), wind, time since last rain (fuel moisture) and time to the next rain, relative humidity, slope percent, aspect, etc. The heterogeneous landscape created would provide the diversity of habitat necessary for the wide range in both flora and fauna native to the region.

Influences of Civilization

The productive landscape produced by this cultural manipulation enabled “rapid” population growth which gave rise to “cities” such as Cahokia (near present-day St. Louis), considered at its zenith (AD 1200) to have been larger than the London of that day. While estimates of the pre-Columbian population of North America are highly speculative, current thinking is that it was high—revised estimates range between 20 and 100 million.

The cultural manipulations that main-

tained this highly productive landscape influenced the forest. While fire enabled farming and perpetuated grasslands, it also caused adaptations in trees such that essentially all regions of North America have fire-types that require this vector for their perpetuation. In Alabama it is the longleaf pine (*Pinus palustris* Mill.) type. The "original" range of this species in the Southeast is estimated to have covered 90 million acres—today it is less than 3 million. Its demise over most of its original range is attributed to effective fire protection. Thus the vectors driving the evolution of the post-glacial, pre-historic forests of Alabama were both natural and cultural.

The "Columbian Exchange" that began in 1492 precipitated events that greatly altered Southeastern forests. Most significant among the exchanged items were European diseases, to which native Amer-



icans had little resistance. Mortality estimates ran as high as 90 percent. Abandoned villages were described by DeSoto's chroniclers who traversed the region in 1540. This release of the landscape from cultural pressure in the early 1500s enabled the development of the "wilderness" described by historians in the late 1700s. This 200-250-year interval provides ample time for the development of "old-growth" forests, examples of which we are currently trying to preserve. A frustrating aside in this endeavor is that the old-growth condition identified is often the "last gasp" of an early successional (pioneer) stand (e.g., longleaf

pine), for which protection-only will eventually see its replacement by another forest type.

The rapid exploitation of Alabama's forests that followed Indian removal is a matter of history. That they were composed largely of pioneer species (e.g., longleaf, slash, shortleaf pines) is testimony to the frequent disturbances (fire) required for the perpetuation of these species. In contrast is today's corollary, whereby strict preservation on some areas is resulting in hardwoods replacing pines.

Future Forests

Since the "cut out-get out" days that marked the beginning of the 20th Century, resource managers have assumed responsibility for managing Alabama's forest resources—hopefully for "the greatest good, for the greatest number in

the long run." The current public mood suggests that future forests in Alabama will be of 3 types:

1. "Preserved" forests in which, to the extent possible, all disturbing influences (natural and cultural) are eliminated. Succession will eventually move these areas to their climax condition—various hardwood combinations depending on site conditions. While such forests likely had only limited representation in earlier landscapes, maintaining a significant representation of these conditions is both good science and good sociology.

2. For want of a better term, "simulation" or "benchmark" forests in which the forest conditions that prevailed in 1492 are re-created. There appears to be strong public sentiment that, even though cultural impacts were widespread, these were "natural" forests. There is little question but that dramatic changes in the forest ensued from the consequences of the Columbian Exchange. Maintaining representative forests subject to the vectors at work in pre-Columbian times, as best scientific investigation reveals them, is both good ecology and good psychology. Opportunities for both this and the forest condition described under (1) above will likely be restricted to public lands.

3. There is no question but that good forest stewardship will require that the bulk of our forest product needs come from intensively managed forests. Intensive forest management incorporating the genetic gains that have been, and will be, realized can produce on one acre an output that would, under other management schemes, require 3-4 acres. Guidelines are currently available (Best Management Practices) that enable accomplishing this with minimal environmental degradation—much less than from even the best agricultural practice.

As has always been the case, Alabama's forested landscape is changing. The challenge is to assure that it changes in an orderly manner, under the guidance of resource managers endowed with good science and a sensitive social conscience.

References

- Chapman, Jefferson. "Tellico Archaeology." Occasional Paper No. 5. Knoxville: Frank H. McClung Museum, The University of Tennessee, 1985.
- Fiedel, Stuart J. **Prehistory of the Americas.** Cambridge University Press. 1992.
- Hagen, William T. **American Indians.** Chicago: The University of Chicago Press. 1993.
- Joseph, Alvin M. Jr. **America in 1492.** New York: Alfred A. Knopf, Inc. 1992.
- Pileau, E.C. **After the Ice Age.** Chicago: The University of Chicago Press. 1991. ♣

LANDOWNERS

LEGISLATIVE • ALERT

NATIONAL

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



With members of Congress headed home to seek

either reelection or other employment, it is a good time to evaluate the work the 103rd Congress did on natural resource, environment, and forestry issues, and to look ahead to the 104th. The picture for forestry is, at present, muddled, although there is reason to have hope for the future.

Out with the Old Consensus, In with the New

The 103rd Congress did not manage to pass any major environmental law with significant impact on forestry. The Clean Water Act and the Endangered Species Act, two of the nation's major environmental laws, will likely remain expired until next year. Congress' inability to take action on these laws reflects the disintegration of an old consensus, and, perhaps, the beginnings of a new one.

Where in the past the environmental community could count on the votes to pass laws they agreed with, the private property rights and wise-use movements have, over the last three years, gathered enough strength to effectively counter the environmental community. Their message has been extremely well organized, and several very effective members of Congress have taken on leadership roles to further their causes.

Several instances over the 103rd Congress illustrate the power of this new movement. They succeeded in attaching a series of amendments designed to protect private property rights to both a bill authorizing the National Biological Survey and a bill to protect millions of acres of desert in California. Threats of similar amendments prevented floor consideration of a bill to make the EPA into a cabi-

net department, and prevented the Clean Water Act from ever leaving committee in the House.

Also coming into prominence this year were the issues of risk assessment and unfunded mandates. A group of freshmen Congressmen and Senators led the charge to get a bill requiring more extensive use of risk assessment in the development of environmental regulations. As we go to press, these bills seemed ready to pass.

Advocates of this issue argue that they are simply trying to establish priorities to get the most bang for the buck spent on regulations. Their opponents in the environmental community argue that risk assessment is an imprecise tool that invites number crunching to obscure health risks.

As an interesting side note on this issue: While the Clinton Administration has opposed risk assessment amendments and legislation in Congress, President Clinton's most recent appointee to the U.S. Supreme Court, Stephen Breyer, is one of the most well-known and respected advocates of the issue.

What does all this mean? For one thing, it means that at the moment there is no consensus in Congress on how to proceed on environmental laws. While the wise-use, private property rights and risk assessment advocates have thus far shown an ability to stop the progress of laws they don't like, they do not necessarily have the votes to carry the day in the major reauthorization debates. The leadership in Congress does not seem to be willing to settle the debate amongst members of their own parties.

So, while bills dealing with public land set asides (which are very popular) have still proven viable, even they have had to accept what just two years ago would have been unacceptable amendments. Larger

questions, like the regulation of wetlands and the protection of endangered species, have been avoided altogether.

Next Congress

This leaves the Clean Water Act, the Endangered Species Act, and possibly others, to be dealt with by the 104th Congress, which will convene in January of next year. The picture for environmental laws is still quite fuzzy, but we can take some educated guesses.

For one thing, it is decidedly possible that we could find ourselves back in the days of divided government. The Republicans are well positioned to make substantial gains in the U.S. Senate. The picture in the House is less clear, but the ramifications of one House of Congress switching over to the other party would be serious.

Republicans have tended to be more amenable to the private property and wise-use arguments, and they would join a group of conservative Democrats led by Alabama Senator Howell Heflin in seeking amendments to the Endangered Species Act and the Clean Water Act. Senator Heflin has led the efforts by farm state senators to block new, mandatory restrictions on nonpoint sources of water pollution. Even as part of a Democratic minority, he would play a role in addressing these and other questions.

Final approval of Clinton Administration priorities, such as elevating the EPA to cabinet status and officially authorizing the National Biological Survey, if they can pass at all, will take on a decided different flavor. Needless to say, the Clean Water Act and Endangered Species Act will undergo at least some revision as well.

Of course, there is no guarantee that the Republicans will take over the Senate. Even if they don't, it seems likely that the issues of private property rights, unfunded

mandates and risk assessment will dominate natural resource debates in the 104th Congress.

Farm Bill

1995 will also see the reauthorization of the Food, Agriculture, Conservation and

Trade Act (FACT Act, otherwise known as the 1990 Farm Bill). The 1990 bill created the Forest Stewardship and Stewardship Incentives Programs, which are both administered by the Alabama Forestry Commission. Participants in the TREASURE Forest program are eligible to participate in these programs.

Whether or not these programs will be tinkered with in the 1995 Farm Bill remains to be seen. It will be an opportunity to review the current programs designed to assist private landowners in managing their forests, and develop new programs or revamp old ones to better meet landowner's needs. ♣

ALABAMA



You can walk into any baseball park or football stadium in the country and hear the hawkers shouting: "Programs! Programs! You can't tell the players without a program!"

And so it may be with Alabama lawmakers who will be in the starting lineup for the Regular Session of the 1995 legislature. Many of the tested veterans are gone. Many new faces will take their places in the legislative lineup for the new quadrennium. Court-ordered redistricting in 1993 was largely responsible for many of these changes.

To acquaint our readers, we are devoting this Legislative Alert column to a preview of those legislators who are coming and those who are going. Keep in mind that there is still the general election that will decide a number of races on November 8. The outcome of most seats was determined as early as the June 7 primary; others in the June 28 runoff. Still others were fortunate enough to be unopposed in their quest for another term.

The Senate

First, let's consider the following senators who will not be returning for the 1995-99 term.

- President Pro Tem Ryan deGraffenried, Tuscaloosa, chose to run for lieutenant governor.
- Senator Ann Bedsole, Mobile, opted to run for governor.
- Senator George Bolling, Fayette, was defeated in his bid for reelection.
- Senator Ray Campbell, Town Creek, was ousted in the June 28 runoff.
- Senator Danny Corbett, Phenix City, was turned back by the voters in east Alabama.

by FRANK SEGO, Legislative Liaison, Alabama Forestry Commission

- Senator Frank "Butch" Ellis, Columbiana, did not offer for reelection.
- Senator Crum Foshee, Red Level, retired after serving five terms in the Senate, preceded by one term in the House.
- Senator Fred Horn suffered a stunning upset in Birmingham.
- Senator Mac Parsons gave up his seat to run for Commissioner of Agriculture and Industries.
- Senator Bill Smith, Huntsville, stepped down after serving four terms.
- Senator Jim Smith, also of Huntsville, bowed out of the Senate after four terms to seek a circuit judgeship in which he won Madison County on June 28.

Those 11 senators constitute almost a third of the upper chamber, making way for one of the most dramatic turnovers in recent memory.

Incumbents who came away without opposition were Senators Bobby Denton, Tuscumbia; Lowell Barron, Fyffe; Gerald Dial, Lineville; John Amari and Sundra Escott-Russell, Birmingham; Hank Sanders, Selma; Charles Langford, Montgomery; Chip Bailey, Dothan; Wendell Mitchell, Luverne; and Michael Figures, Mobile.

Senator Jack Floyd faces opposition from fellow Etowah Countian Roy Smith, who gave up his House seat to run for the Senate. Other incumbents with November 8 opponents are Senators Bob Wilson, Jr., Jasper; Hinton Mitchem, Albertville; Odell Hill, Jr., Alpine; Doug Ghee, Anniston; Walter Owens, Centreville; Pat Lindsey, Butler; Larry Dixon, Montgomery; Ted Little, Auburn; Albert Lipscomb; Magnolia Springs; Steve Windom,

Mobile; Don Hale, Cullman; and J.T. (Jabo) Waggoner of Birmingham.

Senator Jeff Underwood, Homewood, did not seek reelection for his place, choosing instead to battle it out with Republican Representative Mark Gaines for the House. He lost that bid to Gaines in the June 7 primary.

House members Tom Butler and DeWayne Freeman, Huntsville Democrats; E.B. McClain, Brighton; Phil Poole, Moundville; George Clay, Tuskegee and Jack Biddle, Gardendale, exited the House for a run at the Senate. McClain and Poole are already in without November opposition. Poole succeeds the departing Ryan deGraffenried.

Former House member Tommy Ed Roberts, Hartselle, defeated incumbent Senator Ray Campbell in the June 28 runoff. Roger Bedford, Russellville, who left the Senate to run for Attorney General in 1990, will return to that body after unseating Senator George Bolling in the June 7 primary.

Newcomers Sylvia Jean Sullivan (D) and Hap Myers (R) both of Mobile, will face off in the general election for the seat held by Ann Bedsole. Two others who will take first-time seats in the Senate are Rodger Smitherman of Birmingham, who outdistanced the veteran Fred Horn and one other opponent on June 7; and Charles Steele, Jr., Tuscaloosa, who won a runoff campaign for the newly-created 24th District, which encompasses Greene, Hale, Marengo, Perry, Sumter and Tuscaloosa Counties.

Interestingly, State Auditor Terry Ellis makes his first bid for the Senate against Republican Dwight Adams for the Crum Foshee seat. Former Ethics Commission Chairman James Anderson of Montgomery will challenge Larry Dixon, who

(Continued on page 18)

seeks a fourth term in the upper chamber.

Add to this scenario the fact that the Senate will have a new presiding officer when former attorneys general Don Siegelman and Charlie Graddick square off for lieutenant governor in November.

The House

Redistricting probably had more effect on sitting House members than it did in the Senate. Examples: In District 3, Incumbents Marcel Black and the veteran Joe Goodwin of Colbert Co. were thrown against each other. The same held true for Speaker Jimmy Clark who fought off Rep. John Beasley of Columbia in District 84.

In another case, Rep. Tony Petelos goes against Rep. Frank Rogers in Jefferson County District 51.

Also gone are House veterans Bob Harvey, Oneonta; Bobby Crow, Anniston; Bobbie McDowell, Bessemer; Ben Richardson, Scottsboro; Bill Bowling, Hanceville; Horace Powell, Prattville; and David Barnes, Birmingham. All were defeated by newcomers in the primaries.

G. J. (Dutch) Higginbotham, Opelika; W. F. (Noopy) Cosby, Selma; Mike Mikell, Millbrook; Morris Anderson, Decatur; Harold Blakeney, Thomasville; James Cullins, Alexander City; Jane Gullatt, Phenix City; Clarence Haynes,

Talladega; Jimmy Holley, Troy; and Claud Walker of Montgomery declined to run for reelection. Higginbotham is a candidate for the State Board of Education, Haynes for Circuit Clerk in Talladega.

Getting to Know Them

Your Legislative Alert columnist has spent a portion of the summer meeting as many new legislators as possible to acquaint them with the Forestry Commission and the state's forestry program.

The organizational session will be held in January. The regular session begins in April 1995. ♣

Candidates in the November 8 General Election for the House of Representatives are as follows:

House 1 *Nelson R. Starkey, Jr. (D) Duane Phillips (R)	House 22 *Albert Hall (D)	House 43 David Romei (D)	House 65 *Jeff Dolbare (D) James K. Wilkins (R)	House 86 *Joe R. Carothers, Jr. (D)
House 2 *James H. (Goat) Hamilton (D)	House 23 John Robinson (D)	House 44 *Arthur Payne (R)	House 66 *F.P. "Skippy" White (D) Michael H. Thomson (R)	House 87 *Nathan Mathis (D) Riley Seibenhener (R)
House 3 *Marcel Black John Smallwood (R)	House 24 *Ralph Burke (D)	House 45 *Albert Morton (R)	House 67 Edward A. (Ed) Mauld (D)	House 88 H. (Mac) Gipson, Jr. (D) Terry Templeton (R)
House 4 Ross Smith (D) Nelson Papucci (R)	House 25 Howard Hawk (D)	House 46 Richard L. (Rick) Jones (D)	House 68 Thomas E. Jackson (D)	House 89 *Steve Flowers (D)
House 5 Nominee to be determined by committee (D)	House 26 *Frank McDaniel (D) Annette E. Holcomb (R)	House 47 *Jim Carns (R)	House 69 *James Louis Thomas (D)	House 90 *Charles Newton (D)
House 6 Sue Schmitz (D) Lee Jorgensen (R)	House 27 Jim Murphree (D) Dennis (Dink) Mart.in (R)	House 48 *Mark Gaines (R)	House 70 *Bryant Melton, Jr. (D)	House 91 Terry Spicer (D) W. Garreth Moore (R)
House 7 *Sam Letson (D) Byron L. Randolph (R)	House 28 *Joe Ford (D) Billy (Bill) O'Barr (R)	House 49 *John H. Hawkins, Jr. (R)	House 71 *Lucius Black (D)	House 92 *Seth Hammett (D) Bill Martin (R)
House 8 Bill J. Dukes (D)	House 29 *John G. "Jack" Page, III (D)	House 50 Hugh Holladay (D) Dave Thomas (R)	House 72 Andrew Hayden (D) (Fills slot of the late Jenkins Bryant)	House 93 *R. Nolan Williams (D) Steve Clouse (R)
House 9 *Paul Parker (D)	House 30 Blaine Galliher (D) Phillip Hodges (R)	House 51 Harold L. Smith (D) Jim Townsend (R)	House 73 Ray Vaughan (D) *Perry O. Hooper, Jr. (R)	House 94 *Walter E. Penry, Jr. (R)
House 10 *Jim Haney (R)	House 31 *Jack B. Venable (D)	House 52 *Frank Rogers (D) *Tony Petelos (R)	House 74 *Bob McKee (R)	House 95 Rita Hadley McNair (D) *Steve McMillan (R)
House 11 *Tom Drake (D) Jeremy H. Oden (R)	House 32 Barbara Bigsby Boyd (D) Ralph Bradford (R) James Donald Montgomery (I)	House 53 John W. Rogers, Jr. (D)	House 75 *John Knight (D)	House 96 *Mike Box (D) Horace L. Long (R)
House 12 Neal Morrison (D) William Leland "Bill" Hollis (R)	House 33 *Demetrius C. Newton (D)	House 54 George Perdue (D) Ted Pearqon (R)	House 76 Thad McClammy (D) R. Todd Merren (R)	House 97 *Yvonne Kennedy (D)
House 13 *Tom Hogan (D)	House 34 *Ron Johnson (D)	House 55 George Perdue (D) Ted Pearqon (R)	House 77 *John Knight (D)	House 98 *William "Bill" Clark (D)
House 14 Ken Guin (D)	House 35 *Gerald Willis (D)	House 56 Warren A. Minnifield (D) Obie Evans (R)	House 78 *Alvin Holmes (D)	House 99 *James E. Buskey (D)
House 15 Philip L. Sharp (D) *Johnny Curry (R)	House 36 Pat Wayne Shaddix (D) Larry P. Sims (R)	House 57 Lawrence McAdory (D)	House 79 *Pete Turnham (D) Betty Pierce (R)	House 100 *Victor Gaston (R)
House 16 *Sam Collins (D)	House 37 *James M. Campbell (D) Mike Rogers (R)	House 58 Tommie L. Houston (D)	House 80 *Pete Turnham (D) Betty Pierce (R)	House 101 *Mary S. Zoghby (D) Chris Pringle (R)
House 17 *Mike Millican (D) Ray Harper (R)	House 38 *Richard Laird (D)	House 59 Earnest Johnson (D)	House 81 Lesley Vance (D) Ray McCraime (R)	House 102 *J.E. Turner (R)
House 18 *Johnny Mack Morrow (D)	House 39 *Bill Fuller (D)	House 60 *Lewis G. Spratt, Sr. (D)	House 82 *John Hilliard (D) Jim Wright (R)	House 103 Joseph Mitchell (D)
House 19 *Laura Hall (D)	House 40 *Richard J. Lindsey (D)	House 61 *John Hilliard (D) Jim Wright (R)	House 83 Betty Carol Graham (D)	House 104 *Lois M. Rockhold (D) Mike Dean (R)
House 20 *Howard Sanderford (R)	House 41 John C. (Chuck) Martin (D) *Al Knight (R)	House 62 *Allen Layson (D)	House 84 Thomas Reed (D)	House 105 *Taylor Harper (D) R.P. "Phil" Crigler, Jr. (R)
House 21 Randy Hinshaw (D) Charles L. Florida (R)	House 42 *Mike Hill (R)	House 63 Gerald Allen (D) W.E. (Bill) Copeland (R)	House 85 George "Tootie" Bandy (D)	Incumbents
	House 43 *Mike Hill (R)	House 64 *Tim Parker (D)	House 86 Locy (Sonny) Baker (D) Harold Raley (R) Chuck Hess (I)	

Chain Saw Safety Is No Accident

by RONALD E. TRUE, Loss Control Representative, Association Self Insurance Services, Inc.

In this century, few inventions have revolutionized the work site and accelerated worker productivity like the chain saw. However, this modern-day machine presents serious safety problems to its legions of users.

The earliest models of chain saws were heavy, cumbersome, and had few—if any—safety features. The first saws were constructed from steel or iron and had side pull crank ropes for starting. The snatching-cranking motion of the rope caused the saw to pivot when starting and it usually cut anything that it touched. Modern-day saws are lighter, better balanced, and much more maneuverable. More power is produced from smaller, easier to start engines, and recent safety features include chain brakes, (guards on certain designs) anti-vibration devices, and newly designed trigger guards.

A chain saw can pose considerable danger to its user as evidenced by these facts. In 1981, the U.S. Consumer Product Safety Commission estimated that 123,000 Americans were injured annually in chain saw accidents. Of these, approximately 64,000 required emergency room care.

What are the reasons for such alarming numbers of people being injured by the chain saw each year? It matters not that the operator is a logger, firewood cutter, farmer clearing fence rows, or a home handyman. They all share common characteristics when it comes to injuries. The failure to wear personal protective equipment (PPE), a lack of training, inexperience, or failure to properly maintain, or equip the chain saw with a chain brake leads to most injuries.

The failure or refusal of saw operators to wear the proper personal protective equipment is cited as the number one cause for injuries. Persons operating chain saws should wear hard hats, eye protection, chaps over the front part of the legs, safety footwear designed to deflect or resist cuts, gloves or mittens and hearing protection. These devices afford the operator maximum protection against those known injuries associated with chain saw use.

In 1991, the Alabama Forestry Association's Workers Compensation Fund for



Equipment such as a hard hat, chaps, safety footwear, gloves, eye and ear protection should be worn when operating a chain saw.

the logging industry reported 3,462 total logging accidents, of which 350 were the direct result of chain saw use. Chain saw accidents resulted in 14 people having arms or legs amputated, and one person became a quadriplegic. Visits to logging crews in the first quarter of 1992 revealed few loggers wearing the OSHA required protective equipment. Of those crews surveyed, only 36 percent wore hard hats, and 29 percent were wearing the appropriate steel toe safety boots. While only 17 percent were using eye protection, only 10 percent were using ear protection. And, only one in four were wearing chain saw chaps. It is therefore little wonder that the average injury cost to the 350 chain saw-related injuries was an astounding \$5,096 per injury.

The recently released report of logging accidents to the same fund for 1993 reveals some dramatic reductions in chain saw-related injuries. For example, only 106 accidents were reported, as compared to the previous 350. The average cost of these claims dropped to \$3,573 per injury. Why the dramatic change? There were several reasons. First, an increase in the use of mechanical means to fell trees. Others include increased emphasis in log-

ging safety, especially where felling and the use of chain saws is prevalent; a statewide effort to provide training; a dramatic increase in the use of personal protective equipment; and the improvements that have been made in this equipment.

In the most recent survey, 82 percent wore hard hats, 91 percent wore safety boots, 63 percent used eye protection, 89 percent wore gloves, and 68 percent were wearing chain saw chaps. Quite clearly, use of required protective equipment makes a big difference. Further evidence that supports the need for chain saw operators to use PPE is found in the 1989 U.S. Consumer Product Safety Commission report, which shows a nationwide picture of injury locations to the body. Of the 37,277 injuries surveyed, 40.9 percent were to the upper, lower leg and knee area. A total of 38.6 percent involved the hands, while 8.3 percent were to the head or face.

So, whether the saw operator is a weekend firewood cutter, a handyman, a farmer/rancher or a professional logger, wearing PPE, reading instruction manuals, and using a little common sense can do much to prevent most chain saw-related accidents and injuries. ♣

Marywoods

by VICTOR HOWELL, County Supervisor,
Alabama Forestry Commission, Conecuh County

Marywoods is a 960-acre TREASURE Forest in Conecuh County. The TREASURE Forest was named to honor the memory of a mother who taught her children a love of the land. The land is full of history and memories.

Between 1825 and 1835, George H. Bedingfield acquired the property through four land grants signed by Presidents John Quincy Adams, Martin Van Buren and Andrew Jackson. The original grants have been passed down through the family and hang in the house today. George was survived by his wife, who left the property to her daughter. The property has continued to be passed down through the female side of the family, from mother to daughter.

Mary Higdon inherited the property at an early age in 1923 from her mother. Her father, Ely (Dock) Higdon, was known throughout the community as Uncle Dock. At that time the land was used primarily for cattle and row crops. Remnants of a cotton gin are still visible. The land and Uncle Dock were able to provide Mary with a college education. Her home economics and chemistry backgrounds were valuable assets to the government during World War II.

Mary met and married Richard Stem during this time. They moved to Huntsville, a long way from her Conecuh County home, but Mary made sure her son and two daughters spent time each year at "the farm." Uncle Dock was there to instill a deep love for the land. The children learned about nature at his side. In 1963, Uncle Dock



Back row: Susan Stem Webb holding Willis Webb, Thayer Stem and Harriet Stem West. Front row: Mary Brooke Webb, Taylor West and Allison West.

died. Mary was now an absentee landowner, with no one to take care of the property on a daily basis. New objectives that did not require the hands-on care Uncle Dock provided were defined. Although Uncle Dock had planted a few acres of pine trees under the Soil Bank program, managing timber was never a top priority. Mary made timber management a primary objective during the 1970s. Planting was accelerated in the 1980s with the CRP program. Erodible fields and pastures were converted to pine plantations.

In 1982, Mary and Richard built a house on the property and moved back to Conecuh County. She was now active in the management of the land she loved. When Mary heard about the TREASURE Forest program, she immediately liked the its concept and goals. She became determined to achieve TREASURE Forest status for the property. Unfortunately, Mary was never able to hold the TREASURE Forest cer-

tificate for which she had worked so hard. She died in 1989, the same year the property was certified as a TREASURE Forest.

Thayer Stem, Harriet Stem West and Susan Stem Webb formed a partnership called Marywoods in 1990. Their immediate goal was to improve property access by connecting roads and building and repairing bridges. The roads also serve as firebreaks for the prescribed burning program. The roads proved useful recently when salvaging timber damaged by southern pine beetles.

The same lessons on nature and stewardship that Uncle Dock and Mary Stem taught are being passed down to another generation. The grandchildren find the TREASURE Forest a wonderful outdoor classroom. Recently a chrysalis was found on an exploration. It was put in a critter cage in the kitchen, where four wide-eyed children were able to watch a butterfly emerge, unfold its wings and dry. Brownie troops have learned that snakes slither but are not slimy, and that every tree has a name. The children are tested on the trees as they explore the property.

The future goals for Marywoods are difficult. The family wants to keep the TREASURE Forest together and pass it to the next generation. Allison Kay West, 11, Taylor Lee West, 9, Mary Brooke Webb, 7 and Willis Webb, 2, stand at the threshold of the future, learning about the challenges they will face. The love of the land, the natural beauty that abounds and roots that go deep will keep this TREASURE Forest together. ♣

Juniper Valley

by ROBERT C. KNOWLES, County Supervisor, and
JAMES R. CANNON, Forest Ranger, Alabama Forestry Commission, Escambia County

Charles Northcutt is no stranger to the woods, having been born and raised in Evergreen, Alabama. In 1955, Northcutt and his wife Marguerite purchased an 80-acre farm from two of Marguerite's aunts. The farm came complete with a house (Wee Pine Fo-Rest), a barn, and 12 acres of farmland. The remainder is timberland. "Cotton was the main crop back then," according to Mr. Northcutt.

A few years later they added 20 acres that had been clearcut on the north side and 12 acres on the west side, which gives them a total of 112 acres.

Having two ponds totaling approximately 10 acres, 20 acres of pasture with some cows, a 5-acre pecan orchard, and approximately 77 acres of timber makes Juniper Valley an ideal place to relax and enjoy the surrounding beauty.

The property is named after little Juniper Creek, which heads up at the northwest corner of the property, and the junipers that grow along the creek. "Quite a few of the junipers have died over the years at Juniper Valley; however, we have planted many back, especially around the ponds, and they are doing quite well," Mr. Northcutt said.

Back in the 1930s someone planted about five acres of blueberries on the property. All the neighbors used to come and enjoy them. However, most of the bushes are gone now, and the natural blueberries have taken their places.

Throughout the years the Northcutts have been involved with several forestry practices. "We have planted some pines, let some come back naturally, and thinned so some could regenerate naturally, and even done a little burning," said Mr. Northcutt. Some of the pine seedlings were planted under the cost-share program called Soil Bank.

Although not open to the general public,



Many friends and neighbors enjoy recreational outings at Juniper Valley. Louisa Thompson, left, and Sarah Abbott were recently visitors when the Northcutt's hosted a church picnic.

the Northcutts enjoy taking the children from the Sunday classes at their church fishing. They also invite family and friends to participate in the activities. Because of the location of the property and the Northcutt's love of wildlife, they discourage any type of hunting. "We have even turned down our own family when they've asked to hunt," says Mr. Northcutt. They have planted several food plots for wildlife, and have also erected bluebird houses. Canadian geese are known to make their home in the ponds at Juniper Valley.

"We have a place where we erected a wooden cross and crossies to sit on for the vesper services we used to have out here," Mr. Northcutt said.

There is a small area the Northcutts like

to call "the wilderness" because of the thickness of the timber and the small brush.

In 1962 Juniper Valley was designated as a Tree Farm. In 1984 it was named a TREASURE Forest and has been recertified once. "We feel lucky and enjoy being good stewards of our 112 acres and sharing it with others."

Juniper Valley is located some 10 miles north of the Northcutt's home in Brewton. The family has commented that the good neighbors around Juniper Valley have helped them to keep the integrity of their place.

When asked about future plans, they want to continue to manage Juniper Valley so they and others can continue to enjoy its beauty and recreation. ♣

Helene Mosley Award Recognizes Landowners

by TOMMY PATTERSON, Forest Management Chief, Alabama Forestry Commission

Every year since 1978, the Mosley Awards Committee has sponsored the Helene Mosley Memorial TREASURE Forest Landowner of the Year Award. The late Mrs. Helene Mosley was the wife of Mr. Kelly W. Mosley when their property was certified as the first TREASURE Forest. The Helene Mosley Memorial Awards are given to the best TREASURE Forests nominated from across the state.

The goal of the award is to honor the achievements these TREASURE Forests and landowners have made to Alabama.

TREASURE Forest is a program of the Alabama Forestry Planning Committee. The Mosley Awards Committee requested that the Alabama Forestry Planning Committee conduct the selection process.

The selection process formally begins in late fall. An information package is mailed to members of each county forestry planning committee. This package requests that counties nominate a landowner and includes the proper forms and timetable of the process. It is explained that the appraisal of nominations will be made on how well the landowner displays the TREASURE philosophy of good stewardship. This philosophy is reflected by accomplishments the landowner has made on the property and activities on the property that promote good forest stewardship to others.

In late January or February, the nominations must be completed and sent to the chair of the Services Subcommittee of the Alabama Forestry Planning Committee. The Services Subcommittee has responsibility for certification of TREASURE Forests and coordination of the program.

All nominations are grouped into one of three geographic areas of the state. These

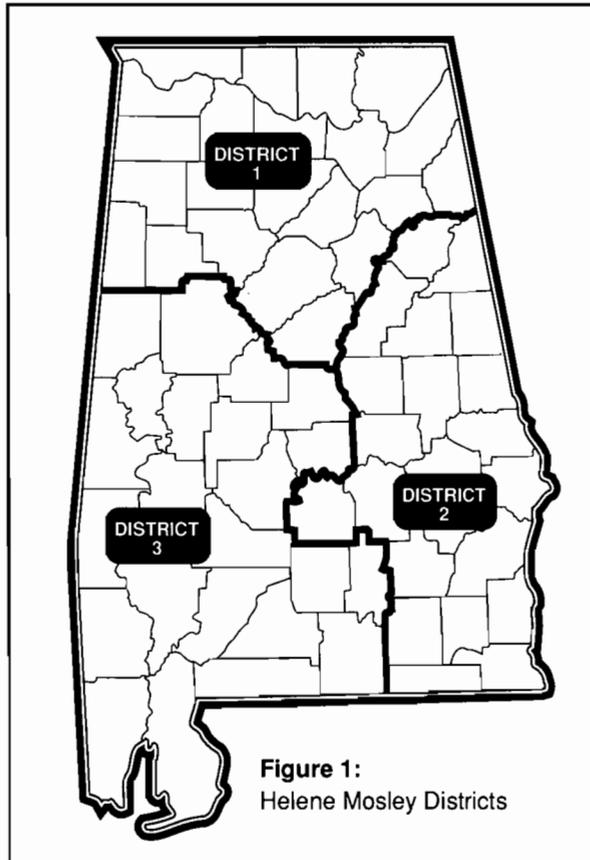


Figure 1:
Helene Mosley Districts

are known as Mosley Districts (see map), and roughly correspond to the Alabama Cooperative Extension Service's three districts. A statewide, ad-hoc committee of "middle managers" from the Alabama Forestry Planning Committee reviews each nomination and selects the best **four** nominations from each district. The Services Subcommittee then reviews the nominations of the 12 finalists and selects the best **two** from each district. All reviews have been from written nominations through this point in the process.

The Services Subcommittee requests and selects three field judges to visit each of the two properties selected in each of the three districts. The judging team is made up of a registered forester, a certified wildlife biologist and a TREASURE landowner. A great effort is made to select

judges who do not have any affiliation with or prior knowledge about the properties they will visit.

During April or May the field judges are escorted to each of the six properties. They visit with the landowner and tour the property. This is usually a fast-paced and grueling week for the judges. When all properties are visited the judges vote on their selection of a winner and runner-up in each district. A state winner is selected from the three district winners. All decisions are given to the Services Subcommittee chair. The district selections are made public. The state winner is kept secret until the awards presentation at the annual Alabama Landowner and TREASURE Forest Conference held each fall.

A short video is made about the landowners and their properties. These videos are shown for the first time at the Landowner Conference, where they are the highlight of the awards banquet. The state winner is revealed during the end of these

videos.

Each district runner-up receives a \$250 cash award and certificate. The district winners each receive a \$500 cash award, a plaque and a framed, limited edition print. The state winner receives an additional plaque and an additional \$500 cash award. All winners and runners-up are recognized with local ceremonies and publicity. The three district winners and state winner receive their plaque and painting at the annual Landowner Conference.

The whole process sounds like a lot of work, and it is. That work pales, however, beside the efforts of the participating landowners. The reward comes when you see the tears of emotion from the audience as they hear about and view the works of the **best** TREASURE Forest landowners. ♣

Selecting a Tree Guide

by BILLY RYE, Forest Management Specialist, Alabama Forestry Commission, Florence

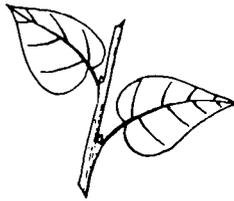
Trees provide us with many benefits and are the dominant feature of our TREASURE Forests.

Whether it is for forest management purposes or as a hobby, many people enjoy the challenge of correctly identifying some of the trees found here in Alabama. Thanks to our great diversity in soils, temperatures, and elevations, our state has the opportunity for many different types of trees to occur. Some botanists estimate that there are around 300 native woody plants in "The Heart of Dixie." This does not include the plants which cross-pollinate or mutate to form new species each year. In addition, those trees and shrubs which were introduced to this area for landscaping, fruit production, erosion control, or other uses were not counted.

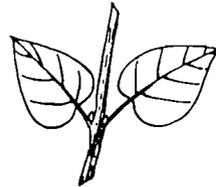
Despite this large number of woody plants, learning to identify most of them can be fun if you have a proper understanding of some basic tree identification principles and a good guide. Tree guides can be as simple as one page in length or they may require several volumes. The intent of these guides is to help the reader correctly identify the specimen in question as simply as possible. However, accurately describing a tree feature with words can often be difficult to do. For instance, imagine yourself trying to describe what a pine tree looks like without using your hands or saying "you know" to someone who is unfamiliar with the tree. You can see why scientists need to use somewhat technical terms to describe tree features. Fortunately, most guides contain either definitions or pictures of the terms used to describe trees somewhere in the text.

There are many tree guides which are readily available, each with its own set of definitions, region of coverage and intended audience. It is therefore important to select a guide which is designed for your area and level of understanding. For instance, most tree guides which are
(Continued on page 24)

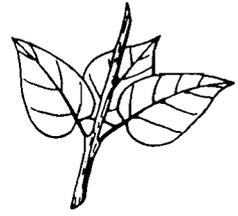
LEAF ARRANGEMENT



Alternate



Opposite

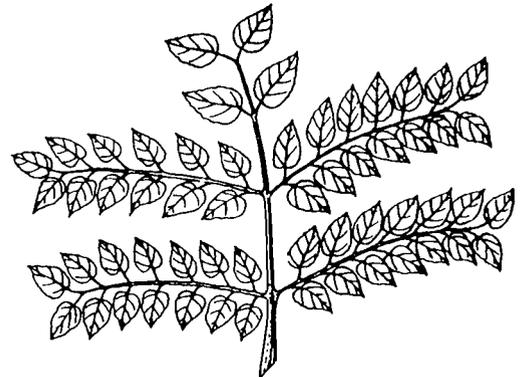


Whorled

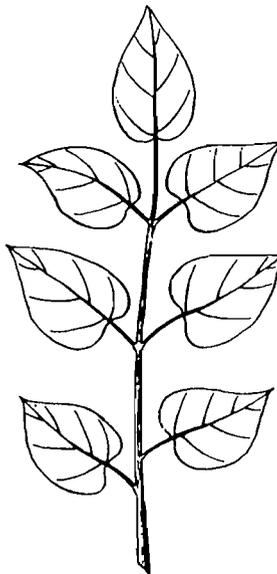
LEAF COMPOSITION



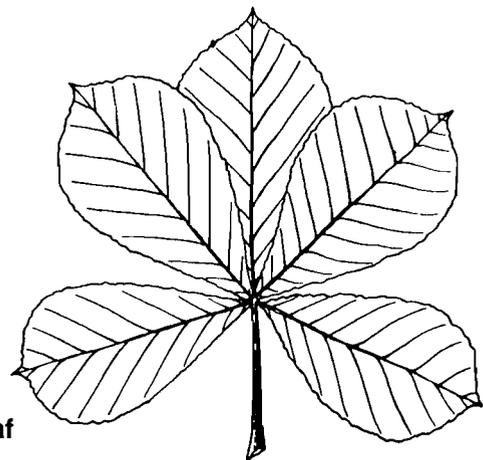
Simple Leaf



Bi-Pinnately Compound Leaf



Pinnately Compound Leaf



Palmately Compound Leaf

Leaves are often used to help identify a tree. Some guides contain drawings or photos of leaf characteristics used to aid identification.

found on the shelves of retail bookstores are introductory in nature and would be a great place to start for the beginner. However, the manual *Trees, Shrubs and Woody Vines of Northern Florida and Adjacent Georgia and Alabama* is technical in nature and would be best suited for those with advanced identification skills.

When considering the purchase of a tree guide, be sure to examine the publication for additional features that may be beneficial to the reader. For instance, I

strongly suggest an index with both the scientific and common names for a tree. This feature can speed up the search when you have at least some idea of what the specimen may be. An introductory section which explains how trees are classified and the characteristics used to identify them in the text are also necessary. As stated earlier, a thorough glossary can aid in explaining the tree terms which are used in the publication.

Some guides have a useful key in the

front or back of the text which can lead to proper identification of the specimen by using a series of short questions or pictures. Illustrations are found in most guides and usually are presented in one of four ways: color picture, black and white picture, color drawing, or line drawing. These illustrations usually concentrate on the leaves but may also include fall colors, fruit, and flowers. Finally, a section which lists other helpful references is also a nice addition.

Over the years I have come in contact with some of the best in the business when it comes to knowing trees in the South and have asked them for suggested references. Table 1 is a summary of recommended tree guides for beginners based on these recommendations. The texts and suggested references for the dendrology classes at Auburn and Mississippi State Universities are listed in Table 2 and would be excellent guides for those with advanced identification skills. If you are interested in purchasing one of these tree guides, I suggest that you visit your local retail bookstore. Even if the particular book of interest is not stocked on the shelves, the manager should be able to obtain the book or at least put you in contact with the publisher. In addition, your public library may have copies which you can check out if you only intend to use the guide occasionally. The key is to select a tree guide that is easy for you to understand and which is useful for your particular region.

A special thanks to Dr. Watson of the M.S.U. Biological Sciences Department, Dr. Jones of the Auburn School of Forestry, and Anderson's Bookland in Florence for providing a list of suggested references. ♣

Table 1. Suggested Tree Guides for Beginners.

Title	Author/Publisher
\$10 - \$20	
"Audubon Field Guide to North American Trees: Eastern Region"	Audubon Society
"Guide to Trees"	Simon
"Peterson Guide to Trees: East Region"	Petrides
"Trees of North America"	Golden
Less than \$10	
"Familiar Trees of North America: East"	Audubon Society
"Peterson Guide to Trees"	Petrides

Also, contact your local Alabama Forestry Commission office for publications on tree identification.

Table 2. Texts and Suggested References from the Auburn and Mississippi State Dendrology Classes. (In Bibliography Format)

- Brown, C.L. and L.K. Kirkman. **Trees of Georgia and Adjacent States.** Portland, OR: Timber Press, 1990, 292 pp.
- Dirr, M.A. **Manual of Woody Landscape Plants: Their Identification, Ornamental Characteristics, Culture, Propagation And Uses.** Champaign, IL: Stipes Publishing Co., 1990, 1007 pp.
- Duncan, W.H. and M.B. Duncan. **Trees of the Southeastern United States.** Athens, GA: University of Georgia Press, 1988, 322 pp.
- Foote, L.F. and S.B. Jones. 1989. **Native Shrubs and Woody Vines of the Southeast.** Portland, OR: Timber Press, 1989, 199 pp.
- Godfrey, R.K. 1988. **Trees, Shrubs And Woody Vines of Northern Florida and Adjacent Georgia and Alabama.** Athens, GA: University of Georgia Press, 1988, 734 pp.
- Harlow, W.M., et al. **Textbook of Dendrology,** 7th ed. New York: McGraw-Hill, 1991, 501 pp.
- Harrar, E.S. and J.G. Harrar. **Guide to Southern Trees.** New York: Dover Publications, 1962, 709 pp.

MEMORIAL

Mobile County TREASURE Forest Landowner **Ernest Gaston** died August 10, 1994, at the age of 76. A native of Mobile County, he spent a lifetime in the farming and timber business. Son Terry, brother Emmett, and nephew Victor Gaston, who is the District 100 Representative to the Alabama Legislature, will continue to manage the TREASURE Forest.

BALD CYPRESS *Taxodium Distichum*

by TOM V. CAMBRE, Statewide Hardwood Specialist, Alabama Forestry Commission

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

Planting can be accomplished very easily in beaver pond areas by simply lowering the water level to where the seedling is placed and by not allowing the existing water to cover over one-third of the seedling. Remove any existing competition around the tree and any overtopping competition. Cypress must receive overhead sunlight in order to achieve a normal rate of growth. Planting of cypress stands in many ways is much easier than relying on natural regeneration.

In natural regeneration, even though cypress produces some seeds each year, good crops of seed are produced only every three to five years. Then nature's optimum conditions have to follow. First the seeds fall from the tree, sink to the bottom of the pond, and remain until the hard



outer covering or seedcoat is softened to permit germination. This usually takes three months or more. After this is accomplished the water has to be removed through drought or draining, and a wet mulch is left to provide a good seedbed. Once the seedling is established, it grows rapidly and its moisture requirements decrease. The area must then be free of flooding, since newly germinated seedlings will usually die after a few days of being submerged. Older seedlings can

survive periodic flooding.

After these steps are completed and the trees are growing, the water around them keeps any competing vegetation from coming up. These conditions occur in nature about once every 30 years without man's intervention.

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

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

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

References

- Krinar, R. M. and R. L. Johnson. "21-year growth and development of baldcypress planted on a food-prone site," U.S.D.A. Forest Service Research Note SO-217. New Orleans: So. Forest Experiment Station, 1976, p. 4.
- Williston, H.L. "Baldcypress Growth." *Southern Lumberman*, 219 (2728): 130, 1969. ♣

Yes, You Can Have It All

by JOEL GLOVER, Wildlife Biologist, Alabama Department of Conservation and Natural Resources
and ALAN WILLIAMS, Forest Management Specialist, Alabama Forestry Commission

The wildlife biologist and forester listened as the forest landowner lamented, "Well, I'd like to manage my property for wildlife, but I really need the income that I could get from cutting the timber and I know I can't have it both ways." The spontaneous replies from the two natural resources professionals were, "Why not do both?" Unfortunately, many forest landowners are unaware that you can and should manage forest land for more than one objective.

Why did this landowner feel that it had to be one way or the other? Could it be that he has heard the rhetoric of certain groups or individuals who claim to be concerned about the environment but have forgotten the idea of compromise? Has he heard a "radical environmentalist" say that trees provide homes for wildlife and therefore shouldn't be cut? Has he listened to a "radical forester" who claims we're growing trees, not wildlife, and providing jobs? Although both viewpoints are based on facts, each view is quite narrow.

Some species of wildlife do live in trees; but, does that mean you never cut a tree? Foresters are in the business of growing trees, but at the cost of all other species? Unfortunately it's these attitudes and their accompanying confusion that often reach landowners, leaving them to draw erroneous conclusions concerning the management of their forestland. Forest landowners can and should manage their property using a multiple use idea. Today, the management options available to forest landowners are more numerous and varied than ever before. A key ingredient in developing a good management plan for your property is to first select your objectives. Early planning for your desired outcome is important. Your objectives should be part of a written plan used to manage your resources.

Mutually Beneficial Practices

The landowner had made it clear he wanted good wildlife habitat, but also needed a return from his timber. We related to him that there are many management practices mutually beneficial to wildlife and timber. As we began a walking tour of the property, our first stop was in a crowded 15-year-old-pine plantation. When the landowner asked, "What would you do here?" the simultaneous response was, "Burn it." We explained that prescribed fire is an inexpensive management prac-

*The future of
our natural
resources is in the
hands of today's
landowners and
their children.*

tice that provides multiple benefits for timber and wildlife. Burning removes ground litter, decreases fire hazard, returns nutrients to the soil, and promotes the growth of new, palatable food sources for wildlife. The forester advised that fire should normally be excluded from hardwood areas. This could be accomplished with firelanes. Besides controlling the fire, firelanes also provide necessary access. The biologist added that when these lanes are in the interior of the property, they can be widened and planted with forages beneficial to wildlife.

As we continued along an old logging road, we entered a stand of natural pines

that were approximately 20 years old. The forester showed several poorly formed and diseased trees and indicated that thinning would improve the stand and provide some income. Next, the biologist pointed out the abundance of seed-producing plants in the logging road and the absence of plants beneath the crowded trees. He stated this was due in part to the lack of sunlight reaching the forest floor. Thinning would also open the canopy and improve the wildlife habitat.

At this point, it was evident the landowner was surprised by the continuity of our recommendations. However, he figured our like-mindedness would soon change as we got into the big hardwoods along the creek. As we walked along the bottom, the landowner reminisced about squirrel dogs and gobbling turkeys. He again said that he didn't want to destroy his wildlife habitat; however, he needed some income. A local timber buyer has offered to buy the hardwoods. The biologist explained that the hardwoods along the bottom were an extremely important component of his wildlife habitat, providing both food and a necessary travel corridor for wildlife. He also recommended leaving the hardwoods alone. The landowner wasn't surprised by this until the forester concurred. The forester then explained the purpose of a streamside management zone (SMZ) and the importance of protecting water quality. The biologist reiterated that a SMZ was always necessary; however, it could vary in size according to the terrain and objective of the landowner.

The hardwood area expanded into an upland site where it joined some mixed pine-hardwood. The forester informed the landowner the hardwoods on the upland site could be harvested up to and along an existing logging road. The biologist stated the irregular shape of the stand would also increase the amount of edge present on the

property. The term "edge" prompted the landowner to ask for some clarification. The biologist then explained that many species of wildlife are edge animals. They spend a lot of their time in areas where two or more habitat types come together. It is in these transition zones that you find the greatest abundance and diversity of plants. He also said diversity is the key to wildlife management. An ideal situation for wildlife consists of various habitat types positioned to form a patchwork quilt pattern. The forester relayed that a hardwood stand between pine stands was an effective barrier to some forest problems, such as the southern pine beetle.

As we were returning to the farmhouse, we walked through an old field that the landowner had once tended and let go. He said it really was becoming an eyesore should be cleaned up. The biologist pointed out that the encroaching vegetation not only provided excellent browse, but also was a good nesting area. He recommended the area be maintained in various stages of resurgence by mowing or disking. The forester commented the area could be converted to pine if the landowner was so inclined. Suddenly a hen turkey flushed from a nearby nest and the decision was made. After some parting comments the resource professionals went on their way and allowed the landowner to ponder the situation.

Use Forethought and Planning

What you have just read is a scenario that could be played out anywhere in Alabama. Unfortunately, it is unrealistic to expect a wildlife biologist, forester and landowner to wholeheartedly agree on all aspects of forest and wildlife management. However, many management techniques exist which complement one another when properly used in a land management scheme. It is evident today the art of compromise has fallen by the wayside in many arenas. One answer to proper land management lies in removing the radical viewpoint and factoring in some common sense and compromise.

One other extremely important component of selecting objectives and management activities is that many practices, once implemented, will affect the resource for many years. Keep this in mind when making decisions affecting our environment. As mentioned earlier, many practices are mutually beneficial for timber

and wildlife. However, other practices may be detrimental to one resource while benefitting another. At that point, compromise is often the answer, and the assistance of a professional is needed.

Far too often foresters and wildlife biologists are called in to try to salvage something from an abused piece of property. Preplanning is always beneficial. There are many programs available to assist landowners in managing their property. Technical guidance in the form of a written management plan is available through your local Alabama Forestry Commission office. AFC foresters and Alabama Department of Conservation and Natural

Resources wildlife biologists are available to provide technical guidance to assist landowners in reaching their goals.

The future of our natural resources is in the hands of today's landowners and their children, who will be tomorrow's landowners. Each landowner should strive to manage the precious gift they have been entrusted with and pass on a reverence and love for the land to future generations.

As the professionals drove away, the landowner looked out across his property and realized what a precious gem he had. He also realized that with some forethought and planning, maybe he *could* "have it all." ☸

Awareness Campaign Launched



The TREASURE Forest Landowners Association, in cooperation with the Alabama Forestry Commission, has launched an intensive public awareness campaign. The purpose of the campaign is to promote stewardship among landowners and to inform the public of the economic and environmental impact of the TREASURE Forest program on the quality of life in Alabama.

The campaign's theme, "Alabama's TREASURE Forests: An Environmental and Economic Success Story," focuses on several objectives:

enhancing public perception of private landowners; promoting stewardship among forest landowners and the general public; and increasing landowner participation in the program.

Elements of the campaign include:

- Development of feature articles on TREASURE Forest landowners specific to Huntsville, Birmingham, Tuscaloosa, Auburn/Opelika, Dothan, Mobile and Montgomery, including scheduling radio and television talk shows in these major markets.
- Development of a direct mail campaign to selected audiences utilizing a full-color TREASURE Forest brochure.
- Creation and implementation of a statewide speaker's bureau targeted for presentations to civic groups.
- Design of an eight-page insert to be included in selected newspapers in Alabama.

According to Dan James, president of the TREASURE Forest Landowners Association, "We have a wonderful success story to tell. Aside from promoting stewardship, the campaign should make it perfectly clear that individuals are managing their property for the good of future generations. We are accomplishing our desired objective without governmental and regulatory intervention."

Tapley & Associates, Inc., a Montgomery-based marketing and communications firm, is assisting the Association with the campaign.

The campaign kicked off the second week in September with a mailing of the TREASURE Forest brochure to 18,000 selected landowners. ☸

Alabama Canebrake Pitcher-Plant

by TIM L. GOTHARD, Alabama Forestry Commission

Pitcher plants are carnivorous herbs most noted for their hollow, tube or pitcher-shaped leaves. The Alabama Canebrake Pitcher-Plant is an endangered species of pitcher-plant which occurs along the fall-line in Autauga, Chilton, and Elmore counties. The known distribution of this species lies north of the Alabama River, west of the Coosa River, and east of the Mulberry River. Sites where this pitcher-plant occurs consist of sandy and gravelly bogs; wet, peaty sandhill seeps and springheads; and in swamps within the general distribution. Soils are typically sands or clays that are highly acidic and highly saturated.



The Alabama Canebrake Pitcher-Plant displays two different types of leaves: the traditional pitcher or hollow leaves, and flattened leaves called phyllodia. The pitchers also differ depending on the time of season. Spring pitchers are smaller, about 7 to 19 inches, curved, and have a deformed appearance. Summer pitchers are larger, from 7 to 27 inches, stand erect, have a light yellow-green color, and are covered with fine hair. Summer leaves often possess areole-like whitish blotches near the opening of the pitcher. Flowers typically appear in April-June, are deep maroon in color and droop from the end of stalks that arise from the base of the plant. The stalks, which support a single flower, may be up to two feet in length.

Pitcher plants in general grow best in open conditions where they are readily exposed to sunlight. The Alabama Canebrake Pitcher-Plant grows best under these same conditions, but seems to tolerate

light shade better than most other pitcher-plants. Some common woody plants that may be found in association with the Alabama Canebrake Pitcher-Plant include poison sumac, wax myrtle, sweet bay, red maple, cane, and bamboo-vine. Non-woody associates often include cinnamon fern, yellow-eyed grasses, orchids, beak rushes, and butterworts.

Past records indicate 30 sites have been known to support the Alabama Canebrake Pitcher-Plant. In 1990 only 12 sites were known to support this species. Only four of the 12 were known to support more than 70 plants; the remainder supported less than 50 plants each.

Many factors have resulted in the decline of the Alabama Canebrake Pitcher-Plant. Decreased fire occurrence in Alabama Canebrake Pitcher-Plant sites has allowed the development of vegetation that competes for light and nutrients. Some of the known sites were used for pond development. Others have suffered

from encroachment by fierce competitors such as Japanese honeysuckle as a result of decreased wetness due to water table declines. Some sites along railroad rights-of-way have been lost due to vegetation control using herbicides. In addition, pitcher-plants are highly prized by plant collectors and several populations have been degraded or lost due to over-collecting.

Sites supporting Alabama Canebrake Pitcher-Plants can be positively managed by ensuring the hydrology of the site is maintained and by controlling the encroachment of competing vegetation so that full light conditions exist. For more informa-

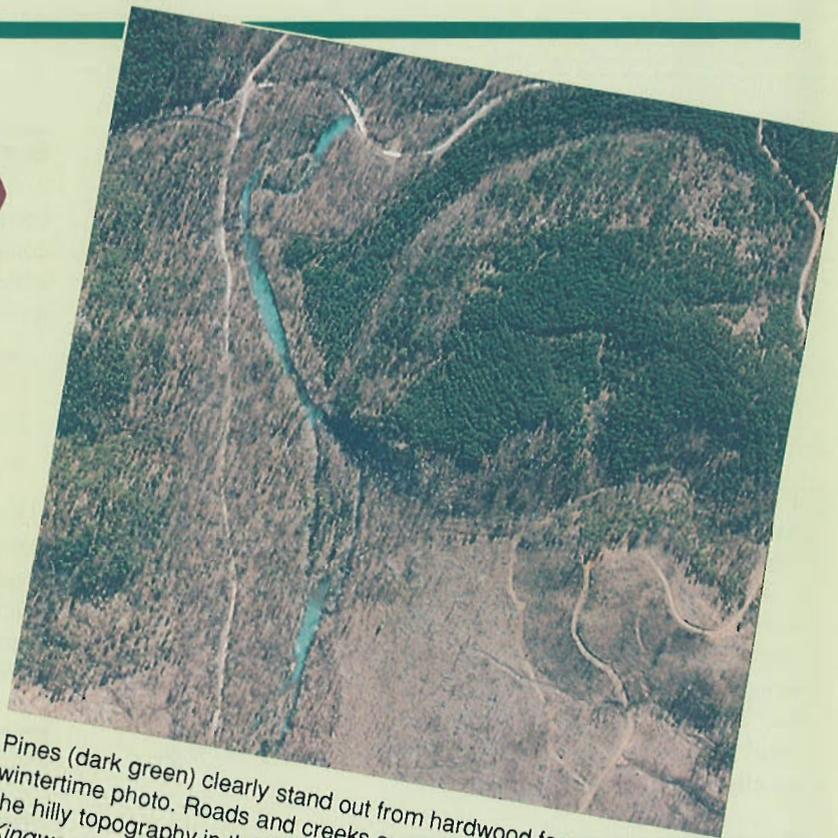
tion on the Alabama Canebrake Pitcher-Plant and its management, contact the Alabama Natural Heritage Program at 242-3469, or the U.S. Fish and Wildlife Service at (601)965-4900.

References

- U.S. Fish and Wildlife Service. "Alabama Canebrake Pitcher-Plant Recovery Plan." Jackson, Mississippi, 1992, 21 pp.
- Kral, R. **A Report on Some Rare, Threatened, or Endangered Forest-Related Vascular Plants of the South.** USDA, Forest Service, Tech. Pub. R8-TP2, 1983, pp. 549-552.
- U.S. Fish and Wildlife Service. **Endangered and Threatened Species of the Southeast United States (The Red Book).** Prepared by Ecological Services, Division of Endangered Species, Southeast Region. Washington, DC: Government Printing Office, 1992, 1070 pp. ♻️

A View from Above

by BRIAN BRADLEY,
Forest Management Specialist,
Alabama Forestry Commission,
Huntsville



Pines (dark green) clearly stand out from hardwood forest with this wintertime photo. Roads and creeks are also easily visible. Notice the hilly topography in the lower right quarter of the photo. Kingwood Forestry Services



The boundaries of a recent timber harvest clearly show the location of uncut streamside management zones. The acreage to reforest can quickly and accurately be determined with this photo. Woods roads show up as white lines throughout the harvest area. Kingwood Forestry Services

If asked to describe their forestland, most landowners could mentally visualize an image of their property. It might be an image of a special place like a pristine creek or an overall view of the property.

Consider for a moment a hawk's view when flying directly over a piece of land. This "bird's-eye view" lets one see roads and trails, meandering creeks and streams, rocky cliffs and valleys, boundaries of recently harvested forests and other unique aspects of a property.

Actually, a "bird's-eye view" photo, or an aerial photograph, is a management tool that has been used for years by natural resource agencies, foresters, forest industries and others. Some common uses of aerial photos are to determine acreage, select wildlife food plots, plan timber sales, map out streamside management zones, locate and mark hunting stands and lay out new road locations.

Many landowners like to see what they own, and aerial photos provide a complete view at a glance. Recent photos also showcase the various management activities that have been carried out on the land. Fortunately, individualized aerial photos are becoming increasingly available to owners of all sizes of forestland.

Choices

Depending on a landowner's specific needs, aerial photographs can be obtained in black and white, color, or color infrared.

(Continued on page 30)

Landowners are probably most familiar with black and white photos, which are the type used by the local Agricultural Stabilization and Conservation Service (A.S.C.S.) offices. These photographs are commonly included in the management plans written for both federal and state cost-sharing programs.

Color photos are the most popular format requested by private landowners, in part due to the reproduction of the natural colors owners routinely see on their land. Interestingly, there is little, if any, difference in price between black and white and color pictures using today's technology.

On the other hand, color infrared, with its very unique color patterns, is usually requested by experienced users who don't mind paying the additional one-third to one-half the cost of regular color photos.

Shelby County landowner and TREASURE Forest recipient Chuck Lewis uses his color aerial photographs to clearly distinguish the forest types occurring throughout his 380 acres, along with the network of woods roads and firelanes. He stated, "The photos are a nice compliment to the existing property maps mounted on my office wall. Moreover, they provide an excellent orientation of our property."

Season

Another factor to consider regarding the use of aerial photos is the season of the year the picture is taken. Summer is usually the most difficult time to get clear pictures, due to frequent hazy conditions. Table 1 lists various landowner activities and the best time to photograph the property.

For some consultant foresters like Wayne Cauthen of Rome, Georgia, recent photos are crucial for successful aerial herbicide applications. "An accurate determination of the acres to be reforested is one of the most vital benefits," according to Cauthen. He added, "Aerial photos are a fast and accurate method to obtain the correct acres, and since my goal is to get the best job for a client at the lowest cost, I use them on a regular basis."

Table 1: Aerial Photography Timetable

Management Activity	Best Time to Photograph Property
Timber Sale Preparation and Layout	Winter
Reforestation Planning	Anytime
Acreage Determination	Anytime
Mapping Tree Species	Winter
Selecting Wildlife Food Plot Sites	Winter
Identifying Creeks, Roads and Firelanes	Winter

Scale

A photograph's scale indicates the distance on the photo that corresponds to the actual distance on the ground and is used to compute acreage. For example, the ASCS aerial photos have a scale of 1" = 660', meaning a one inch length on the photo represents 660 feet on the ground.

Some of the more common scales include:

1" = 660' (8 inches equals 1 mile)

1" = 1,000' (5.2 inches equals 1 mile)

1" = 1,320' (4 inches equals 1 mile)

Landowners purchasing individualized aerial photos can order pictures with a scale that provides the best degree of coverage for their particular situation. A good idea for potential purchasers is to first look at the local ASCS photographs as an example of scale. Then talk with an aerial photography company for specific advice.

Vendors

Aerial photographs are available from several different companies. Rates vary depending on the services offered and type of equipment available.

Some firms specialize in servicing large land holdings, while others cater to smaller ownerships. A unique arrangement with the Alabama Forest Owners Association (AFOA) enables its members to obtain photographs of up to a section of land (640 acres) for a special discounted price. A listing of firms specializing in aerial photo services is found at the end of the article.

Conclusion

Whether a landowner desires to lay out a timber sale, locate the best spot for a wildlife food plot or simply enjoy looking at his/her property from a "bird's-eye view," up-to-date aerial photos can play an important role in forest ownership.

Below is a list of firms that specialize in providing aerial photographs to landowners in Alabama. The list was obtained from a telephone survey and may not include every firm in operation. Also included is the phone number of AFOA, which has a special aerial photo discount for new and existing members.

Atlanta Aerial Survey, Inc.

Huntsville, AL (205) 722-0555

Kingwood Forestry Services, Inc.

Monticello, AR (501) 367-8567

Marengo Aerial Service

Thomasville, AL (205) 636-0450

Thigpen Photography

Mobile, AL (205) 666-2851

Alabama Forest Owners Association

Michael Burrow (205)987-8811

A special thanks to Glen Dabney, Kingwood Forestry Services, Inc. for information and photos used in this article. ♣

Forestry Champions

by JOEL D. GLOVER, Wildlife Biologist, Coosa County

As forest landowners, we should continually strive to become more knowledgeable about the forest and its many varied components. I feel it's safe to say that if most landowners were asked to identify all the trees on their property, or to tell how many board feet of lumber a single tree could produce, they would be at a loss. What if someone gave you a compass and told you to find a few bearings, or maybe asked you to identify a Nantucket pine tip moth or the symptoms of a tree disease such as annosus root rot?

Well, many of us would fall short in these areas. However, if you live in Coosa County, you could solicit some assistance from several youths who are well trained in all these areas.

The Senior 4-H forestry judging team from Coosa County recently took top honors at the State 4-H Forestry Judging Contest, which was held at the 4-H Center in Shelby County. Team members Bryan Wood, Heather Neighbors, Jessica Kelley and Rance Neighbors dominated the two-day event.

The contest is comprehensive and the competition is always stiff. This year there were 12 senior and 17 junior teams from across the state in competition. In addition to the teams, individuals are allowed to compete at the state level. Areas included are tree identification, tree measurement, compass and traverse, insect and disease identification and a written test on forestry.

This type of event requires a substantial amount of preparation. The Coosa County team is coached by County Extension Agent Roger Vines, County Forester Blake Kelley, and County Forest Ranger Joel Neighbors. Team practice sessions are held in a variety of locations. Several Coosa County TREASURE Forest landowners have made their properties available to the team for practice, and Horten and Gayle Adcox have hosted an area contest for the past several years.

At the state contest the Coosa County team took first place in tree identification,



Front row, l-r: Extension Agent Roger Vines; Team Members Bryan Wood, Jessica Kelley, Heather Neighbors, and Rance Neighbors. Back row, l-r: Joel Neighbors, Blake Kelley and John Kummel, all of the Alabama Forestry Commission.

tree measurement, compass and traverse and insect and disease identification, as well as a forestry knowledge bowl. Individually, Bryan Wood finished as the highest scoring individual in the state and Jessica Kelley finished third. The team returned home with a record total of 47 trophies and ribbons.

The team went on to the national competition in West Virginia and finished third in the nation. Jessica Kelley was the highest scoring team

member and finished fourth overall.

The success of the Coosa County Senior 4-H Team, as well as other winning teams in years past, is a result of hard work and dedication on the part of team members, coaches and community members who have supported them. If you have the opportunity to provide support for a 4-H judging team in your county, please consider doing so. The future of our natural resources and our way of life may depend on it! ♣

Is Your Mailing Label Correct?

Are you receiving *Alabama's TREASURED Forests* at the correct address? If not, please complete the following form and return to:

Alabama's TREASURED Forests Magazine, 513 Madison Avenue, Montgomery, Alabama 36130

New Address

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Old Address as it appears on mailing label

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Please check here if receiving duplicate copies and enclose both mailing labels.

ORDER SEEDLINGS NOW!

The Alabama Forestry Commission is continuing to accept seedling orders for the 1994-95 planting season. All slash and loblolly pine, including the second generation loblolly, are **SUPER TREES**, genetically improved for sites in Alabama. All seedlings are guaranteed to be of high quality, healthy and vigorous. Orders are being accepted now on a first-come, first-served basis.

For delivery information or to obtain an order form, contact your local Forestry Commission office or write:

Nursery Section
Alabama Forestry Commission
513 Madison Avenue
Montgomery, AL 36130
205-240-9345



A landowner's seedling order is loaded for transportation.

PINES

	Per 1,000	Per 500
2nd Generation Loblolly—SUPER TREES Piedmont Seed Source	\$35.00	\$22.00
Loblolly Pine—SUPER TREES Coastal Seed Source Piedmont Seed Source	\$30.00	\$20.00
Slash Pine—SUPER TREES	\$30.00	\$20.00
Longleaf Pine	\$42.50	\$28.00
Virginia Pine (Christmas Trees)	\$42.50	\$28.00
LESPEDEZA THUNBERGII (quail cover/food)	\$40.00	\$26.00

HARDWOODS

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

Prices for all hardwood species:

Number of seedlings ordered	100-1,900	2,000 +
Price per 100 or 1,000	\$20/100	\$150/1,000

Minimum hardwood order is 100 per species.



Alabama's Treasured Forests
 513 Madison Avenue
 Montgomery, Alabama 36130

Bulk Rate
 U.S. Postage
PAID
 Permit No. 109
 Montgomery, AL