



Alabama's **TREASURED** Forests

WINTER 1999

**Forest Inventory Analysis
Natural Resources Conservation Service
Recreational Trails
Woodpeckers of Alabama**

STATE FORESTER'S MESSAGE

by TIMOTHY C. BOYCE, State Forester



One of my responsibilities as state forester is to serve as chairman of the Forest Stewardship Education Committee, the 10-member committee that administers proceeds from the sale of the "Alabama Forests" license plate. I believe this is an appropriate time to give you a status report on monies deposited in the Forest Stewardship Education Fund and how the funds are being used.

From January 1, 1997, through September 30, 1997, \$122,757.49 was deposited in the Fund. During fiscal year 1997-98, an additional \$259,701.26 was added to the Fund, making a grand total of \$382,458.75 available for forestry education in Alabama.

In May 1998, grant proposals totaling \$197,575.85 were approved in amounts ranging from \$465 to \$20,000, which was the maximum allowable for any one project. Once all approved grants are paid, we still have a balance of about \$180,000. A list of approved projects for 1998 appears on pages 20-21 of this issue.

The Committee will accept grant proposals again in 1999. If you know of an organization, agency, or association that needs financial assistance in implementing a forestry educational project in your area, encourage the appropriate person to submit a grant proposal for consideration by the committee. An individual may obtain grant proposal forms by writing to Anita W. Benton, Forestry Tag Coordinator, Alabama Forestry Commission, P.O. Box 302550, Montgomery, AL 36130-2550. **The deadline for submitting grant proposals for next year is April 1, 1999.**

Committee members and the organizations they represent are as follows: The four permanent members are Richard W. Brinker, School of Forestry in Auburn; John McMillan, Alabama Forestry Association; Leonard G. Breeman, Board of Registration for Foresters; and as stated above, I serve as chairman. The six rotating members are Eddie Carlson, Association of Consulting Foresters; James Hughes, Alabama TREASURE Forest Association; Jennifer Stringer, Alabama Urban Forestry Association; Vaughn Stough, Society of American Foresters; Steve Guy, Alabama Farmers Federation; and Harry Murphy, Alabama Forest Owners Association.

The production and sale of the forestry tag has been and will continue to be a tremendous boost in our efforts to educate the people of this state about the importance of forestry. I, along with other committee members, appreciate your support of this effort.

Sincerely,

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

Timothy C. Boyce
State Forester

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- USDA-Natural Resources 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.

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COVER: Forest trails are popular recreational and educational uses of your TREASURE Forest. This one, found on Barnett and Edna King's property in Crenshaw County, is a good example. Read more about forest trails on pages 23-25. Photo by Kim Gilliland.

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Forest Management “Mountain Style”



Paint Rock River

Take a visit to Jackson County in the extreme northeast corner of our state, and you’ll soon realize that many years ago a higher power had a hand in doing something wonderful. That is the only explanation for the wondrous and breathtaking natural beauty of Jackson County. Tucked snugly between the blue mountains and green valleys of Jackson County, along the winding banks of the lazy Paint Rock River, is “Little Nashville,” the TREASURE Forest of Jack and Mary McQuinn of Huntsville.

Little Nashville farm totals around 972 acres, made up of nine adjacent parcels of land. Jack and Mary purchased the original 126 acres in 1984. The name Little Nashville comes from what was once a thriving village by the same name located near the farm. Local lore says the village got the name from a nearby steel bridge across the Paint Rock River that was fabricated in Nashville.

Around 660 acres of the farm’s timber resource is mountain hardwood, while 312 acres are open. Because the land lies in the Paint Rock River Valley, about 225 acres are in the floodplain. The McQuinns have been working closely with the Paint Rock River Initiative to reclaim the open areas in forest to help stop soil erosion and siltation into the

by COLEEN VANSANT,
Information Specialist,
Alabama Forestry Commission,
N.E. Region, Cullman.



Little Nashville is named after a village that once thrived near the McQuinn property.

river. Pine, water oak, sawtooth and cherrybark oak have been planted, and Jack is currently in the process of planting pine

and wild pecan on around 100 acres that he recently purchased.

Wildlife Management

Wildlife management is the primary objective on the farm. Much of the mountain hardwood is over 60 years old and provides an excellent habitat for whitetail deer, turkey, and squirrel. In 1992, under the Stewardship Incentives Program, about one mile of hedgerow was planted to attract game and non-game wildlife to the farm. The hedgerow includes 550 crab apple trees, 400 sawtooth oaks, 5,500 bicolor lespedeza, 375 autumn olives, 700 dogwoods, and 400 persimmon trees.

About the same time, seven green fields were planted, each averaging about one acre in size. The McQuinns believe that a good steward of the land never finishes his work and simply “sits down.” Supplemental wildlife plantings are made each year. Since 1995 they have planted 200 crab apples, 600 wild plums, 600 dogwoods, 100 wild pecans, 100 persimmons, 1,000 bicolor lespedeza, 250 redbud trees, 250 gobbler sawtooth oaks, and 500 loblolly pines. This past December an additional 600 wild pecans, 100 each of crab apples and persimmons, and 500 loblolly pines were planted to

enhance wildlife habitat and help strengthen runoff areas along the Paint Rock River.

In 1998, cost-share approval was obtained for quail management under the federal Wildlife Habitat Incentive Program. This will incorporate bicolor lespedeza plantings in 10 plots located in a water oak plantation.

All hunting on the property is carefully managed—only enough game to prevent over population is harvested. Jack is a cooperator in our state's Deer Management Program. He also takes advantage of assistance provided by state wildlife biologists in planning for wildlife habitat on Little Nashville.



A scenic waterfall on Little Nashville Farm.

Timber Production

Timber is the secondary objective at Little Nashville. Existing mature hardwood that was readily accessible was harvested in 1986. It was done on a selective basis according to stump diameters. The area has naturally regenerated so well that the casual observer can't tell it was ever logged.

In 1991 a new hardwood plantation consisting of a little over 62 acres was established in the flood prone area along the river. Around 14,000 water oaks were planted and have done well. The McQuinns recently acquired around 100 acres. The previous landowner had planted 2,100 sawtooth oaks in 1990 and 6,616 cherrybark oaks in 1993 on this tract. Jack says he and Mary are very fortunate to acquire land that has been so well taken care of by the previous landowner. The new trees are thriving and the sawtooth oaks are already producing acorns.

Under the Conservation Reserve Program, 46.5 acres of improved loblolly pines were planted in 1990 and three years later 21.5 acres of land in Frazier Cove was planted under the Forestry Incentives Program. In December 1994, under FIP, the McQuinns planted an additional 30,000 second generation loblolly pines.

Almost seven acres of firelanes exist around the plantation in Frazier Cove and the 2.5 miles of interior, all-weather gravel roads also help serve as firebreaks for timber areas.

Recreational Value Important Also

Providing a place for their family and friends is very important to the couple and much has been done to enhance the non-hunting aspect of recreation on the farm. The Paint Rock River offers fishing

and swimming, which are particularly enjoyable for the grandchildren. Hiking trails through the hardwood mountains provide excellent opportunities to view wildlife and wildflowers. Two campgrounds have been established on the property for camping and family visits. Most of the interesting places on the property carry the name of one of the couple's six grandchildren: Camp Laurel, Katie's Cove, Jordan's Fern Trail, Ethan's Turkey Trot, Jake's Spring, and Christina's Nature Trail.

Little Nashville also provides unusual things to see and do, like hiking Jordan's Fern Trail to a beautiful natural waterfall and visiting the cave on the property that is home to bats year round.

There are two old homesteads on the property. One house is still standing and Jack has plans for its renovation; the other has just the chimney stones and corner rock foundations still evident. He enjoyed doing research to find out the history of the homes and the names of the families who last lived there.

Technical Assistance Invaluable

Jack is quick to tell you that it would have been hard to accomplish as much as he has without technical assistance from natural resource agencies and cost-share assistance from several programs. His background was in the U.S. Navy and the construction business, so he knew very little about forest management. Agencies providing assistance include the Alabama Forestry Commission, Farm Service Agency, Department of Conservation, Fish and Game Division, and the Natural Resources Conservation Service. He is also quick to credit John T. Moss of Moss Lumber Company, who sold him part of the land, and Moss Lumber Company forester Steve Garland for assistance in his land management. Along

(Continued on page 6)



This hedgerow provides forage and habitat for many wildlife species.

Editor's Understory

by COLEEN VANSANT, Information Specialist, Alabama Forestry Commission, N.E. Region

Although wildlife and timber are Jack and Mary McQuinn's primary and secondary management objectives, during the last two years the couple has added an additional personal objective to their management plan: education. Jack says that including school programs has given Mary an additional interest in the farm. Before, she felt like the farm was just a place for him to go hunting.

In 1997 the pair became active participants in the Alabama TREASURE Forest Association's Adopt-a-School program. According to Jack, it has been a "real joy" to have the fourth and fifth grade students from nearby Paint Rock School visit the farm on field trips the last two years. The couple gets assistance with their school programs from various resource professionals in the area. The children come to Little Nashville and get hands-on instruction at one of the most beautifully managed forests in our state. The education factor has not been limited to school children. In the past few years the couple has been host to many groups

including tours by the Nature Conservancy, teachers and landowners.

One of the greatest education factors for Jack and Mary has been getting to watch the learning and enjoyment of their grandchildren as they run and romp across their farm. During playtime at their grandparents' farm, these children are absorbing what many children in Alabama never get to experience—learning about forestry and wildlife through the work and examples of their grand-parents.

It is evident that both Jack and Mary love to share what they have accom-



Jack McQuinn (center, back row) enjoys a class from Paint Rock School

plished. They particularly seem to gain personal satisfaction from just watching other people, especially children, enjoy and experience Little Nashville Farm. ♣



Forester Lynn Washington talks with Jack and Mary McQuinn.

Forest Management "Mountain Style"

Continued from page 5

with a lack of know-how, Jack says he and Mary also didn't have a lot of money to begin their programs. Resource professionals assisted the couple in obtaining cost-share assistance.

Because of their outstanding efforts in forest management, the McQuinns' Little Nashville Farm was awarded the 1997 Helene Mosley Memorial TREASURE Forest Award for the Northeast Region. As one forester who has provided assistance on the farm once put it, the McQuinns are practicing forest management "north Alabama mountain style." ♣

Alabama Lampmussel and Pale Lilliput

by JIM GODWIN, Aquatic Zoologist, Alabama Natural Heritage ProgramSM

What is so unique about the Paint Rock River watershed in northeastern Alabama? The Paint Rock River supports the only known populations of the Alabama lampmussel (*Lampsilis virescens*) and the pale lilliput mussel (*Toxolasma cylindrellus*) in the world. These are two species of endangered pearly mussels that once had a wider distribution in the Tennessee River drainage of Alabama and Tennessee. Both mussels previously ranged further west in Alabama and north into Tennessee. Habitat alteration and degradation have eliminated these species everywhere except the Paint Rock River.

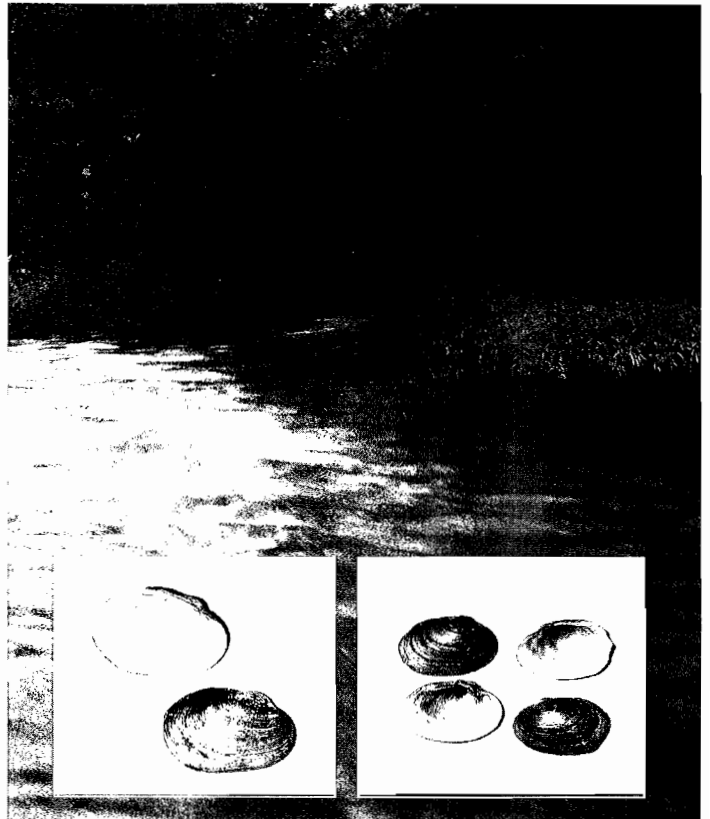
The shell of the Alabama lampmussel is yellowish-brown in color, 2 to 3 inches in length, and elliptical to obovate in outline. The lining of the shell is glossy and whitish. Smaller than the Alabama lampmussel, the pale lilliput has a maximum shell length of about 1 1/2 inches. Outer shell coloration is yellowish-green; inside the shell the lining is white along the edge and varies from white to yellow to blue and purple toward the center.

Both mussel species inhabit riffles and shoals of the headwater tributaries of the Paint Rock River. Riffles that support these mussels have a stable, gravelly substrate and are swept clean by the action of the flowing water. Recent survey work conducted by the Alabama Natural Heritage Program found that a water willow (*Justicia americana*) bed is often associated with riffles where the Alabama lampmussel, pale lilliput, and other species live. The roots of the water willows stabilize the gravel and coarse sands of the stream bed.

Very little is known about the ecology of these species. They are presumed to have a life history similar to that of other freshwater mussels. Freshwater mussels

have a reproductive cycle that is intimately linked with fish. Larval mussels hitchhike on the fish; otherwise, mussels could not move long distances up and down streams. After fertilization occurs, the mussel eggs develop into ectoparasitic larvae that attach to the fins or gills of fish. Female mussels will produce a lure to attract the fish host, which may be limited to only a few suitable species. The larval mussels remain hooked to the fish for several days, then drop off. If the young mussel lands in a favorable habitat, it will have a chance to develop into an adult.

The southeastern United States is the worldwide center of diversity for freshwater mussels; in other words, we have more species than anywhere else. The state that can claim the number one position for the most species of freshwater mussels is Alabama. Although we have the greatest diversity, we have also suffered great losses. Unfortunately, the mussels have suffered more declines than any other group of aquatic animals. The Nature Conservancy considers nearly 70 percent of the mussel species in the United States to be at risk or extinct.



The Paint Rock River in Jackson County is home to the Alabama lampmussel (left) and pale lilliput mussels.

Declines of mussels have been attributed to impoundments, excessive siltation, dredging and channelization and pollution. These impacts also affect the fish that the mussels depend upon for hosts. If the host fish is lost from a stream then the life cycle of the mussel is broken.

In recent years freshwater mussels have been brought to the forefront of conservation. This is important because the freshwater mussels live in the very waters that we need. So, as we improve the waters of Alabama for the freshwater mussels, we improve the waters for ourselves, our children, and all who may use, enjoy, and depend upon the waters. ♣

Loblolly Pine

by DAVID C. HORNSBY, MacMillan Bloedel Packaging Inc., Pine Hill Operations

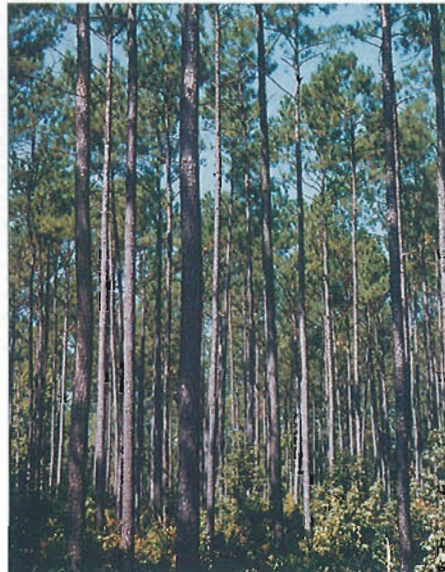
The Loblolly pine (*Pinus taeda L.*) is one of the most economically valuable tree species in the southeastern United States. It often overtakes old field sites and spreads to form relatively pure stands, thus the nickname “old field pines.” Loblolly pines are often planted because of the tree’s cylindrical form and fast growth characteristics. Its wood is utilized for construction, utility poles and pulp and paper production among other uses. Loblolly is one of a group of four pines, shortleaf pine (*Pinus echinata Mill.*), slash pine (*Pinus elliottii Engelm.*) and longleaf pine (*Pinus palustris Mill.*), known as “Southern yellow pine.” The Southern yellow pine range extends from as far north as southern Delaware and as far west as eastern Texas.

Loblollies will live for 200 to 300 years and grow to a height of 90 to 120 feet and an average diameter of 24 to 30 inches at breast height. However, a specimen has been recorded to reach 185 feet tall and better than 5 feet in diameter. Its bole is long and cylindrical with a denser crown than the other Southern yellow pine species.

The leaves are from 6 to 9 inches long and are clustered in bundles, or fascicles, of three. These characteristics distinguish the loblolly from the shortleaf and slash



Needles measure 6 to 9 inches.



Loblolly pine is one of the Southeast's most prized economic species.

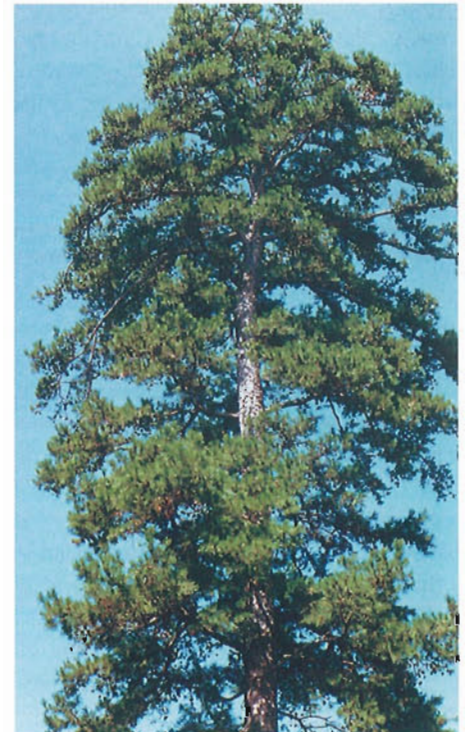
pinus that have combinations of 2 and 3 needles per fascicle, and longleaf pine that has needles from 10 to 18 inches long. The loblolly’s individual needles are yellow to blue-green and are often slightly twisted. The twigs are yellow to reddish-brown and have buds covered with reddish-brown scales.

The bark is composed of thin, tightly compressed plates. These plates are stacked to a thickness of 1/4 to nearly 2 inches. The color ranges from brown to reddish and even slate gray. Due to the bark thickness, loblolly pine is relatively resistant to the effects of fire.

The cones are from 3 to 6 inches long and are ovoid-cylindrical to somewhat conical in form. The cones are composed of numerous flattened scales that are affixed to the longitudinal center of the cone. The scales are woody and are wider on the dorsal end than at the point of attachment. At the end of each scale,

there is a sharp stout spine. The seeds are positioned between the scales, which remain closed until the seeds are mature; at this time the scales open and allow the seeds to fall. Seeds are around 1/4 inch long and are dark brown with black markings. Each seed is equipped with a papery wing, which is approximately 3/4 inch long, to assist in dissemination.

Loblollies grow well in a wide variety of soils ranging from Coastal Plain river bottoms to the drier soils of the Piedmont. They are, however, best suited for soils that have deep surface layers with plenty of moisture and poor surface drainage. These type areas are sometimes called “loblollies,” thus the name loblolly pine.



Loblolly pines have reached 185 feet tall.

Programs and Services of the Natural Resources Conservation Service in Alabama

by JOAN L. SMITH, Public Affairs Specialist, USDA-NRCS, Auburn, AL, JERRY JOHNSON, State Staff Forester, USDA-NRCS, Auburn, AL and TOMMY COUNTS, Wildlife Biologist, USDA-NRCS, Auburn, AL

The mission of the USDA-Natural Resources Conservation Service (NRCS) is to work in partnership with the American people to conserve and sustain our natural resources. Assistance is provided to NRCS customers through numerous programs and initiatives. A description of many of these programs is provided in this article. Additional information is available from local NRCS and soil and water conservation district offices, USDA Service Centers, the NRCS State Office located in Auburn, Alabama, and the Alabama NRCS home page—<http://www.ga.nrcs.usda.gov/al/>.

Conservation Technical Assistance

NRCS assists land users, communities, units of state and local government, and other federal agencies in planning and implementing conservation systems. These systems are designed to reduce erosion; improve soil, water, and air quality; improve and conserve wetlands; enhance fish and wildlife habitat; improve pasture and range conditions, reduce upstream flooding; and improve forestlands. Conservation planning and technical assistance have been the mainstay of NRCS programs throughout the agency's existence.

Environmental Quality Incentives Program

Through this program, NRCS provides technical, educational, and financial assistance to landowners to address soil, water, and related natural resource concerns on their lands in an environmentally beneficial and cost-effective manner. EQIP provides assistance to farmers and ranchers in complying with federal, state, and tribal environmental laws, and encourages environmental

enhancement.

Forestry Incentives Program

The Forestry Incentives Program, administered by NRCS, supports good forest management practices on privately owned, non-industrial forestlands nationwide. FIP is designed to benefit the environment while meeting future demands for wood products. Eligible practices are tree planting, timber stand improvement, site preparation for natural regeneration, and other related activities. FIP is available in all 67 Alabama counties. Priority is based on productivity.

Wetland Reserve Program

WRP is a voluntary wetland restoration program in which landowners maintain control of access to their land. Participating landowners can establish permanent or 30-year easements on their land and receive land value based payments as well as cost-share payments for wetlands restoration. In addition, landowners may choose to enter a cost-share agreement where no easement is involved.

Wildlife Habitat Incentives Program

The Wildlife Habitat Incentives Program is a cost-share program for people who want to develop and improve wildlife habitat primarily on private lands. It provides both technical assistance and cost-share payments to help establish and improve wildlife habitat. There are five resource concerns that receive priority consideration:

- Restoration and development of migratory waterfowl habitat.
- Restoration of bobwhite quail and associated wildlife habitat.
- Restoration of habitat of the Eastern wild turkey.

- Restoration of the habitat of Neotropical migratory birds.
- Restoration of certain declining wildlife habitat.

NRCS and the participant enter into a cost-share agreement for wildlife habitat development. This agreement generally lasts from five to 10 years from the date the agreement is signed. Under the agreement: 1) The landowner agrees to install and maintain the WHIP practices and allow NRCS or its agent access to monitor the effectiveness of the practices, and 2) NRCS agrees to provide technical assistance and pay up to 60 percent of the cost of installing the wildlife habitat practices.

Conservation Buffer Initiative

In April 1997, the USDA officially launched the new National Conservation Buffer Initiative and pledged to help landowners install 2 million miles (up to 7 million acres) of conservation buffers by the year 2002. The purpose of the initiative is to encourage the use of conservation buffers by agricultural producers and other landowners in both rural and urban settings. Riparian Forest Buffer is one of the buffer practices which involves the establishment of trees to protect streams, lakes, and wetlands.

Soil Survey Program

The National Cooperative Soil Survey Program is a partnership led by NRCS, state agricultural experiment stations, and state and local units of government that provides soil survey information necessary for understanding, managing, conserving, and sustaining the nation's limited soil resources. Soil surveys provide valuable information on site productivity and soil-related management concerns.

Conservation of Private Grazing Land Initiative

The goal of the Conservation of Private Grazing Land Initiative is to ensure that technical, educational, and related assistance is provided to those who own private grazing lands. Instead of cost-share assistance, this program is providing technical assistance for better grazing land management, protecting soil from erosive wind and water, using more energy-efficient ways to produce food and fiber, conserving water, providing habitat for wildlife, sustaining forage and grazing plants, using plants to sequester greenhouse gases and increase soil organic matter, and using grazing lands as a source of biomass energy and raw materials for industrial products.

Outreach and Assistance for Socially Disadvantaged Farmers and Ranchers

Section 2501 of the Food, Agriculture, Conservation, and Trade Act of 1900 (Public Law 101-624) requires the Secretary of Agriculture to provide outreach and technical assistance to socially disadvantaged farmers and ranchers. The overall goal of the program is to increase the number of small or limited resource and minority producers and directly improve the farm income of these producers. The objective is to make grants and enter into agreements with community-based organizations and educational institutions to provide outreach and technical assistance.

Conservation Plant Material Centers

The purpose of the Plant Materials Centers is to provide native plants that can help solve natural resource problems. Beneficial uses for which plant material may be developed include biomass production, carbon sequestration, erosion reduction, wetland restoration, water quality improvement, streambank and riparian area protection, coastal dune stabilization, wildlife food, and other special conservation treatment needs. Plants such as sawtooth oak, autumn olive, and bahiagrass have been advocated through the Plant Materials Program.

Backyard Conservation

A new Backyard Conservation campaign explains how conservation prac-

tices used to conserve and improve natural resources can be adapted for use in urban landscapes and backyards. These practices help the environment and can make yards more attractive and enjoyable. Ten conservation practices have been scaled down for homeowners and urban residents to use in their own backyards. For additional information call 1-888-LANDCARE.

Watersheds Operations—Small Watershed Program and Flood Prevention Program

The Small Watershed Program works through local government sponsors and helps participants solve natural resource and related economic problems on a watershed basis. Projects include watershed protection, flood prevention, erosion and sediment control, water supply, water quality, fish and wildlife habitat enhancement, wetlands creation and restoration, and public recreation in watersheds of 250,000 or fewer acres. Both technical and financial assistance are available.

Resource Conservation & Development Program

The purpose of the RC&D program is to accelerate the conservation, development, and utilization of natural resources; improve the general level of economic activity; and enhance the environment and standard of living in authorized RC&D areas. It improves the capability of state, tribal, and local units of government and local nonprofit organizations in rural areas to plan, develop, and carry out programs for resource conservation and development. The program also establishes or improves coordination systems in rural areas.

All counties in Alabama are included in an RC&D area. Current program objectives focus on improvement of quality of life achieved through natural resources conservation and community development, which leads to sustainable communities, prudent use (development), and the management and conservation of natural resources.

Earth Team Volunteers


Individuals and groups interested in helping conserve and protect our natural resources are invited to volunteer for the Earth Team. Volunteers can learn new

skills while working side by side with professionals from NRCS. For more Earth Team information, contact your local Natural Resources Conservation Service office or call 1-888-LANDCARE. Bring a friend!

The Partnership

Soil and water conservation districts in all 67 Alabama counties are the heart of the conservation delivery system. These units of local government, organized by citizens under state law, operate on the premise that local people know about local needs. They work with NRCS and other partners to establish local soil and water conservation priorities, augmenting the work of NRCS employees with district programs and their own technical support staff.

Summary

NRCS provides a multitude of services to landowners and the citizens of Alabama. We work cooperatively with other agencies and organizations to develop and improve the natural resources of our state. If you need technical assistance or would like information on any of the programs administered by NRCS, contact your local NRCS office. A directory of these offices is found on page 11. 

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To file a complaint of discrimination, write USDA, Office of Civil Rights, Room 326 W, Whitten Building, 14th and Independence Ave., SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.

Directory of USDA-NRCS County Offices

Autauga County

2226 Hwy 14 W., Ste. #A
Autaugaville, AL 36003
334-365-5532

Baldwin County

1504-C Hwy. 31 S.
Bay Minette, AL 36507
334-937-3297

Barbour County

Courthouse Bldg., Room 103
P.O. Box 67
Clayton, AL 36016
334-775-3266

Blount County

Agricultural Service Center
415 5th Ave. E.
Oneonta, AL 35121
205-274-2363

Butler County

320-C Greenville Bypass N.
Greenville, AL 36037
334-382-8532

Calhoun/Cleburne Counties

1413 B Hillyer-Robinson
Pkwy.
Anniston, AL 36207
256-835-0512

Cherokee County

132 Federal Building
999 West Main St.
Centre, AL 35960
256-927-8732

Chilton County

USDA Service Ctr., Ste. 102
731 Logan Rd.
Clanton, AL 35045
205-755-0210

Coffee County

3 Coffee County Office Bldg
Highway 84 E.
New Brockton, AL 36351
334-894-5581

Coosa/Tallapoosa Counties

1995 Cherokee Rd., Ste. B
Alexander City, AL 35010
256-329-3084

Colbert County

117 Neil Morris Rd., Ste. A
Tuscumbia, AL 35674
256-383-4323

Conecuh County

102 Liberty St.
Evergreen, AL 36401
334-578-1520

Covington County

370 Southern Bypass
P.O. Box 1796
Andalusia, AL 36420
334-222-3519

Crenshaw County

Rt. 3, Box 9-C, Hwy 331 S.
Luverne, AL 36049
334-335-6507

Cullman County

Federal Building, Rm 210
P.O. Box 456
Cullman, AL 35056
256-734-6471

Dale County

1702 Hwy. 123 S., Ste. E
Ozark, AL 36360
334-774-4749

Dallas County

Fed Bldg, U.S. Courthouse,
Rm 104
908 Ala. Ave.
Selma, AL 36701
334-872-2611

DeKalb County

200 Main St. West, Ste. 105
P.O. Box 968
Rainsville, AL 35986
256-638-6398

Elmore County

105 Glossom Switch Rd.
Wetumpka, AL 36092
334-567-2264

Escambia County

175 4-H Ag Science Dr.
Ste. A
Brewton, AL 36426
334-867-3185

Etowah/St. Clair Counties

312 B. South 3rd St.
Gadsden, AL 35901
256-546-2336

Fayette County

Courthouse Annex
103 1st Ave, NW
P.O. Box 307
Fayette, AL 35555
205-932-8959

Franklin County

13150 Hwy. 43, Ste. 7A
Russellville, AL 35653
256-332-0274

Geneva County

103 N. Lincoln St.
Geneva, AL 36340
334-684-2254

Greene/Sumter Counties

307 Wilson Ave.
P.O. Box 406
Eutaw, AL 35462
205-372-3271

Hale County

P.O. Box 98
212 First St.
Greensboro, AL 36744
334-624-3856

Henry County

Agricultural Service Center
810-B Columbia Rd.
Abbeville, AL 36310
334-585-2284

Houston County

1849 Ross Clark Cir., Ste. 3
Dothan, AL 36301
334-793-2310

Jackson County

2345 South Broad St.
Scottsboro, AL 35768
256-574-1005
Jefferson County
600 Vestavia Pkwy., Ste. 250
Vestavia Hills, AL 35216
205-823-6400

Lamar County

Bevill Building, Room 4
P.O. Box 399
Vernon, AL 35592
205-695-7622

Lauderdale County

2431 Hermitage Dr., Ste. B
Florence, AL 35630
256-764-5833

Lawrence County

13075 Ala. Hwy 157, Ste. 4
Moulton, AL 35650
256-974-1174

Lee County

Lee County Ag Center
600 South 7th St., Ste. 2
Opelika, AL 36801
334-745-2511

Limestone County

1795 B Hwy 72 E.
Athens, AL 35611
256-232-4025

Lowndes County

15 N. Washington St.
P.O. Box 37
Hayneville, AL 36040
334-548-2767

Macon/Bullock Counties

USDA Building
106-1 Torrence Rd.
Tuskegee, AL 36083
334-727-3763

Madison County

Charles H. Stone Ag Serv Ctr
819 Cook Ave., Ste. 137
Huntsville, AL 35801
256-539-1677

Marengo/Choctaw Counties

210 North Shiloh St., Ste. B
Linden, AL 36748
334-295-8724

Marion/Winston Counties

285 Laurel Ln.
Hamilton, AL 35570
205-921-3103

Marshall County

1206 Gunter Avenue
Guntersville, AL 35976
256-582-3923

Mobile County

1070 Schillinger Road, N.
Mobile, AL 36608
334-441-6505

Monroe County

334 Agricultural Dr., Ste. 103
Monroeville, AL 36460
334-743-2587

Montgomery County

3048 Dorchester Dr.
Montgomery, AL 36116
334-223-7257

Morgan County

400 Chestnut St., NW
Hartselle, AL 35640
256-773-6541

Perry/Bibb Counties

1309 Washington St.
Marion, AL 36756
334-683-9017

Pickens County

Service Center Bldg, Rm 301
Courthouse Square
P.O. Box 232
Carrollton, AL 35447
205-637-8168

Pike County

22 Henderson Hwy.
Troy, AL 36079
334-566-2301

Randolph/Clay Counties

794 W. Broad St., Ste. 3
Wedowee, AL 36278
256-357-4561

Russell County

1001 B 25th Ave.
Phenix City, AL 36867
334-297-6692

Shelby County

Shelby County Ag. Center
54 Kelley Lane, Suite 3
Columbiana, AL 35051
205-669-5121

Talladega County

Federal Building (USPO)
151 East St. N.
P.O. Box 59
Talladega, AL 35160
256-362-8210

Tuscaloosa County

901 22nd Ave.
Tuscaloosa, AL 35401
205-758-7525

Walker County

Federal Building, Rm. 207
1710 Ala. Ave.
Jasper, AL 35501
205-387-1879

Washington/Clarke Counties

1310 B Hwy 43 N.
P.O. Box 366
Jackson, AL 36545
334-246-0245

Wilcox County

Agricultural Service Center
Three Camden Bypass
Camden, AL 36726
334-682-4117

Alabama's Forest Inventory Analysis

by BRIGETTA GILES and BRIAN BRADLEY, FIA Foresters, Alabama Forestry Commission

At the beginning of this century, America's timber supplies were declining due to the heavy reliance on wood in our daily lives. As a result, the nation's future forest resources were questionable. Directed by the McSweeney-McNary Act in 1928, the U.S. Forest Service began conducting nationwide forest inventories to provide detailed information on the condition of the forests. These initial forest surveys began in the early 1930s.

Currently, the fieldwork for Alabama's seventh Forest Inventory Analysis (FIA) survey is being gathered and completion is expected in early 2000. An important difference with this survey as compared with those in the past, is that Alabama Forestry Commission (AFC) employees are collecting the field data. The use of state field crews will result in more frequent inventory updates, which is vital in these days of rapid change. The Forest Service's role in Alabama is to provide overall coordination and quality control of the field work, along with compilation of all the data from Alabama's 5,825 plots. In addition, they will publish the survey results starting in mid 1999 based on the current schedule.

Survey Basics

The permanent field plots established in the 1930s are located every three miles on a grid similar to a checkerboard layout. Plots fall on both public and private property, with some landing on lakes, rivers, houses, highways, industrial sites, and even islands accessible only by boat. Since the plots are basically statistically accurate samples of Alabama's land, in reality the data at each plot represents about 5,760 acres. From these samples, a snapshot of our state's landscape is developed that identifies trends and changes over time. The state has been divided into six survey "units."

Nine two-person AFC field crews are working across the state, obtaining assistance from AFC county personnel as needed. Field

crews usually work from county to county, completing all the plots in a 20 percent strip (working east to west) and then moving to another county. This process of working strips or portions frees up AFC county people for their other job responsibilities.

Locating the Plots

When starting a portion of a county, the first job is to visit the courthouse and determine the current ownership of each plot. Landowner notification by phone or mail provides the opportunity to explain the survey briefly. On rare occasions, a landowner doesn't want the plot surveyed, and in these cases his or her decision is honored. However, 99 percent of the time the field crew's next step after notification is to find the plot.

Using recent aerial photographs with plot centers marked for reference, along with a sketch map drawn by the last crew in 1989, the task of locating the plot on the ground is somewhat simplified. Finding each plot's starting point (SP), which is a permanent landmark such as a tree with an "X," the intersection of two roads, or a corner of a house or barn, is critical. In some parts of Alabama, SP's can be especially difficult to find, such as the one located 6.5 miles from a dirt road along a four-wheeler path in the mountains of eastern Madison County. At the other end of the state, the swamps of the Mobile Delta have provided for some

interesting adventures searching for remote SP's.

When the crew finds the starting point, they refer to the plot sheet from 1989 that lists the compass direction (azimuth) and distance to the center of the plot. Following these directions and other information, the crew begins the sometimes arduous task of searching for the plot center. Many a landowner has gotten a belly laugh when told that a small metal pin on their land marks the center of the plot, and the field crew is going into the woods to find the pin. It is somewhat like looking for a needle in a haystack, but in nearly every case the pin marking the plot's center is found. It helps that the previous crew selected three witness trees and marked them with "X's" facing the center pin. Even if these witness trees have been harvested, they still yield a clue to the location of the plot because a brass tag was attached to the base of the tree. Often a search of nearby stumps results in a tarnished brass tag facing the pin. Knowing the azimuth and distance from the tree or stump to the pin, the crew usually discovers the pin under leaf litter. Some of the most difficult plots to relocate are those that have been harvested and mechanically site prepared, so no trees or stumps remain. Fortunately, since the last survey in 1989, there have been relatively few plots of this type.

Gathering Data

Once a plot's center is found, the time-consuming work begins. Due to the many variables measured, a forested plot takes about three to five hours to complete. A new "fixed radius" design with four subplots is being implemented this survey instead of the 1989 method of 10 "variable" radius plots. Each of the four subplots has a 24-foot radius in which all trees 5 inches in diameter at breast height (d.b.h.) and greater are measured. To get tree growth information, the crews re-measure the trees on approximately half of the previous 10 sub-



Witness trees are used to locate the plot center, which is marked by a metal pin.

plots recorded during the last survey. With this data the Forest Service can determine how much growth has occurred with these trees from 1989 to 1998. Even standing dead trees are tallied for wildlife purposes. But before trees are measured, a significant amount of information about the forested area surrounding the plot is recorded. Forest type, stand origin, average tree age, slope, management treatments, damages to the forest and physiographic class are examples of data collected. A vegetative profile outlining the amount of shrubs, vines, grasses, ferns, forbs and tree seedlings growing on the plot is recorded for biodiversity data.

Recognizing that the next survey crew will be coming back to these same plot centers, Global Positioning System (GPS) units are being used to obtain the latitude and longitude of the pin's position. A GPS uses a satellite network to accurately identify one's location on the ground by latitude and longitude. The next crew will use GPS units to help them navigate to the pins by entering the lat/long coordinates and following the directions indicated by the GPS unit. Of course, they will still have the old-fashioned witness trees with the X's and brass tags pointing to the plot centers in case the new technology fails them.

There are up to 22 variables to consider for each 5-inch and greater tree recorded on a plot. Some variables, such as tree grade and percent of the tree not usable for lumber, only come in to play if the tree is sawlog size. Trees less than 5 inches and greater than 1 inch d.b.h. are considered saplings and fewer items are tallied with these trees. Seedlings (less than one 1 inch d.b.h.) and saplings are only counted if they fall within a 6.8 foot radius "microplot." Some of the variables such as tree diameter, total height, distance to pin, etc. are measurable. Others, such as percent cubic foot cull and a tree's crown class are more subjective determinations by the field crew. Nevertheless, the intensive amount of data is necessary to give an accurate and complete picture of Alabama's forestland.

In addition, mortality percentages, either from weather, diseases, insects or timber harvesting, can be computed using the tally of trees that have died since the last survey. This growth and



Survey crews gather extensive data and measurements at each plot.

mortality data provides Alabamians with the very important "growth versus drain ratios" that may be familiar to some readers. The 1989 survey results indicated a much higher growth, statewide, for hardwood trees than drain. However, data for pine trees showed a slightly higher drain than growth in several portions of the state. While there are some significant variables to consider with this growth-drain ratio, it is one important aspect of the inventory data that bears watching.

On completing the measurements of the four subplots and five re-measured plots, the two-person crew is usually ready to go to the house, especially if the area has been full of briars, covered with water, a mile or more from the nearest road or up the side of a mountain. However, a few items remain to be done. To help the next crew find the plot location, detailed sketch maps are drawn on the current plot sheets, reference angles and starting points are indicated on the most recent aerial photos and other significant ownership information is recorded. It is finally at this point that the crew can say the plot is finished and go on to the next one.

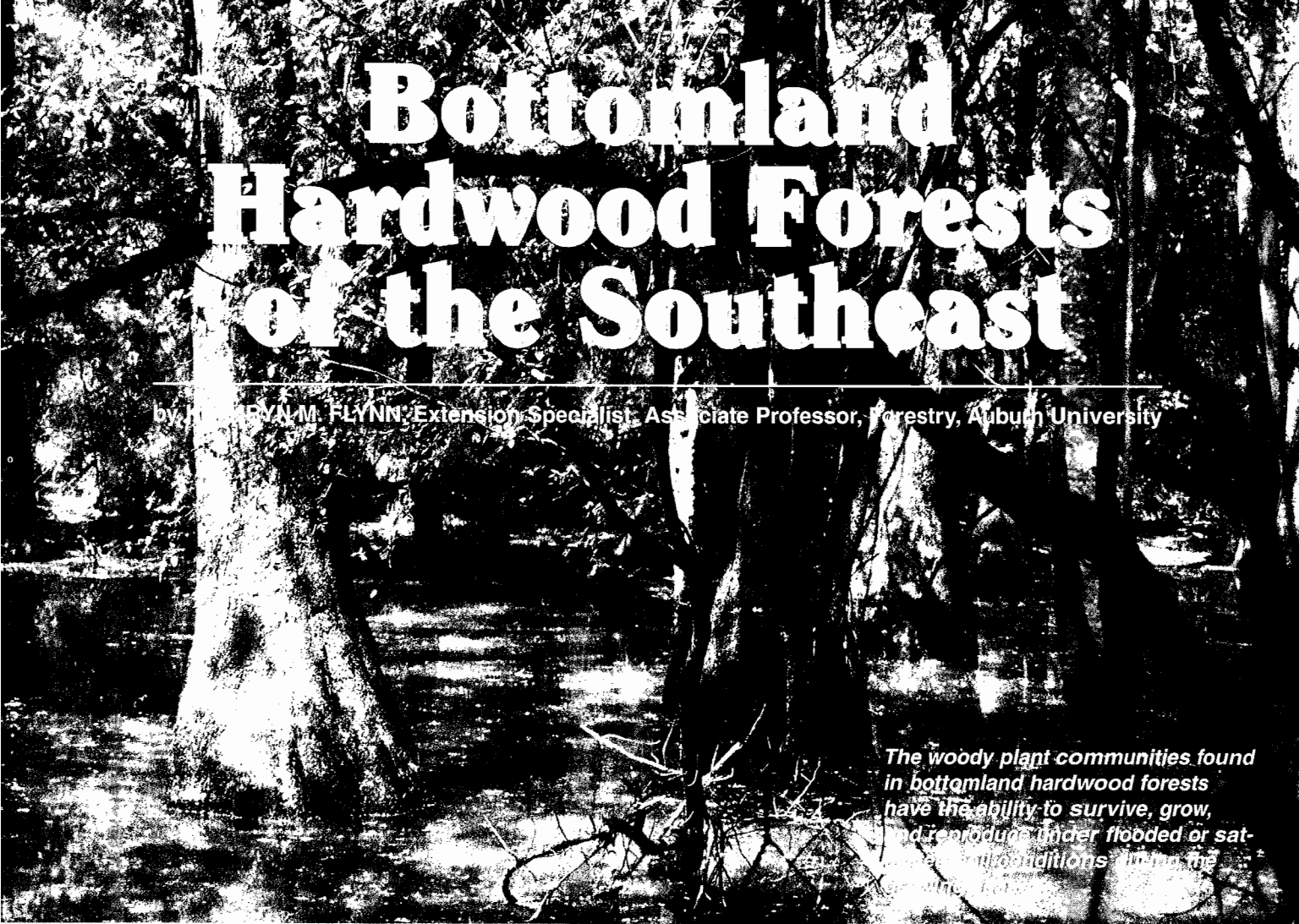
Summary

Forest inventory surveys are being conducted throughout the Southern states. Alabama and a few other states

are opting to use their state agency resources for field work while others depend on Forest Service field crews. The coordination and logistics of different organizations and scores of people are Herculean tasks. As one would imagine, a manual outlining the do's and don'ts is vital to provide consistency and continuity. The current manual is the third version and consists of almost 90 pages of main text followed by 72 pages of appendix. Some may say this is bureaucracy at work, but when you take the time to go out on a survey plot and encounter the sometimes dizzying array of variables God has put in nature, you quickly realize that even a manual this size doesn't answer all the questions.

Current projections indicate Alabama's seventh forest inventory will be completed in early 2000 and publication of results will begin as each of the six units in the state is completed. Statewide publications of the data should be available from the Forestry Commission in 2000.

Forest inventory data collected since the 1930s has provided resource managers with a picture of Alabama's changing landscape and no doubt will continue to influence decisions concerning the stewardship of Alabama's forestland. For more information on the survey, contact Tim Albritton, State FIA Coordinator, at 334-240-9370.



Bottomland Hardwood Forests of the Southeast

by **HAROLD M. FLYNN**, Extension Specialist, Associate Professor, Forestry, Auburn University

The woody plant communities found in bottomland hardwood forests have the ability to survive, grow, and reproduce under flooded or saturated conditions during the growing season.

Anyone who has lived in or traveled through the Southeast knows there are abundant rivers and streams in this part of the United States. These rivers empty into either the Atlantic Ocean (to the east) or the Gulf of Mexico (to the south). They have been an important force in shaping the topography of this region, particularly the Coastal Plains.

The floodplains adjacent to these rivers range in size from very large to quite small. The extent of a floodplain is determined by the size of the associated river, the frequency and severity of flooding which occurs in the area, and the proximity of hills and mountains.

The dominant woody plant communities found within these floodplains are known as riparian forests. Here in the Southeast they are commonly referred to as bottomland hardwood forests. Riparian or bottomland hardwood forests develop adjacent to rivers or streams and

generally exist in a linear form following the river banks. The Gulf and Atlantic Coastal Plains of the southeastern U.S. are flat enough that extensive bottomland hardwood forests have developed within these floodplains.

The Nature Conservancy has estimated that prior to European settlement there were 52 million acres of riparian forest within the Gulf and Atlantic Coastal Plains. By 1991 only 12 million acres of that forest remained. Along the Gulf Coast, the huge expanses of bottomland hardwood forests that once existed have been reduced to remnants usually less than 250 acres in size and surrounded by agricultural fields. In contrast, large unbroken areas of bottomland hardwood forests still exist along the Atlantic Coastal Plain. Most, if not all, of the remaining forested areas on both coastal plains have been utilized for recreation, timber, hunting, trapping and other activities.

The floodplains located within the Gulf and Atlantic Coastal Plains exhibit a number of interesting topographic characteristics. First, although we tend to think of rivers as being located within a permanent channel, the rivers within these areas can and do shift course (usually during flood events). This shifting has resulted in the development of what are called meandering river channels. If you were to look at an aerial photo of many of these rivers and their floodplains, you would probably be able to locate abandoned river channels. These abandoned channels, called meander scrolls, exist as ridges (remnants of the natural river levee) and depressions (remnants of the river channel).

Natural levees develop along river banks due to the deposition of heavier sediment in the area adjacent to the river channel during flood events. These natural levees are often the highest points within a floodplain, and they usually

Enjoy Your TREASURE Forest

by JAMES D. MALONE, TREASURE Forest Landowner

The mist rose slowly from the creek swamp and adjoining hardwood bottom. The hunter slowly and ever so quietly shifted his position at the base of a huge water oak that he had chosen as “the place to be” on this morning. The stand was textbook perfect. The air current was slight but steady coming into his face. The sun had risen directly behind him, filling the woods with beautiful patches of sunlight and shade. Less than 30 yards in front of the hunter’s temporary blind ran a deer trail worn almost to bare earth. It led from a primary food source back into the protective cover of the creek bottom. Just enough low growing brush would hide the slight movement he would need to make if he was lucky enough to see an animal.

The forest around him was alive with sights, sounds, and smells, filling the hunter with a deep sense of gratitude toward God for allowing him to have temporary stewardship over this land. The ground on which he sat was comfortable enough, but occasionally he would find a twig or acorn that he had missed when he first sat down. He had just discovered another acorn and slow-



ly started to get it out from under himself, when movement to the right stopped him in mid shift. Angling down the slope of the small hill, following the worn deer trail as if on a magic lead line, walked a deer. The deer was old; you could tell at a glance that the buck had seen many Januaries come

and go. His head was heavily grayed from his nose to the back of his ears. His body was big and made to look even bigger because of the thickness of his neck and the size of his shoulders and chest. The deer’s antlers were massive, and from this distance it appeared that the antlers were in motion and the rest of the deer’s body seemed to follow.

As the buck moved down the path getting steadily closer, the man was also moving. He dared not move quickly, for the buck would surely see him. But to move too slowly meant the deer would pass by before he was ready. His heart was beating fast and loud and his hands shook slightly, but it was his breathing that he thought would surely give him away. Despite the self-perceived loudness of the hunter’s breathing, the buck continued down the path. He was at the nearest point between the man and the trail and was starting to pass through the last sun-filled opening. The hunter realized he was not going to be able to get the optic to his eye and steady himself before the deer made it to the thicker brush. But as some-

Continued on page 21

develop different plant communities than do lower lying areas within the floodplain.

Oxbow lakes are often formed within floodplains when meanders are cut off from the main river channel. These oxbow lakes hold water permanently and are often quite popular as recreational spots. Sloughs are smaller than oxbows and form within the meander scrolls previously discussed. Sloughs also hold water but they are often dry during part of the year.

The formation of meander scrolls, natural levees, sloughs, and oxbow lakes result in a fairly complex floodplain topography. This complex topography means that plant species composition can and does change dramatically over short distances within an area. These changes occur because relatively small changes in elevation can have a major impact on the conditions experienced by the plants growing within a floodplain. As you

might expect, the major factor affected by elevation and the one that determines which species are found in an area is soil moisture. Obviously, the soils of lower sites will experience more frequent and longer periods of flooding or saturation than will higher sites. The woody plant communities found in these forests have the ability to survive, grow, and reproduce under flooded or saturated soil conditions during the growing season.

Bottomland hardwood forests have a diverse collection of tree species because of the complex topography and the occurrence of flooding during the growing season. Stands of baldcypress and water tupelo are usually found in the wettest areas, which can experience virtually continuous flooding. Black willow, silver maple, overcup oak, water hickory, green ash, red maple, river birch, and sometimes cottonwood occur in areas that are semi-permanently flooded or saturated. Laurel oak, green ash, American

elm, sweetgum, hackberry, red maple, willow oak, and sycamore are found in areas which experience flooding for one to two months during the growing season.

The highest floodplain elevations may experience temporary flooding that lasts no more than one to four weeks during the growing season. Swamp chestnut oak, cherrybark oak, water oak, and hickories will be found in these areas. Spruce and loblolly pine can often be found growing on the edges of these higher areas.

As you can see, bottomland hardwood forests have developed in areas which are topographically complex and which undergo significant changes in environmental conditions—often several times during a year. Our understanding of these diverse systems is still incomplete. However, their value, both ecologically and economically, is well recognized. ♣

LAND OWNERS

LEGISLATIVE • ALERT



NATIONAL

by JAY JENSEN, Washington Office,
National Association of State Foresters



Members of Congress have finally packed up their bags and bid farewell. And

with the wrap-up, the general public was given its first look at the tightly kept final funding figures for federal programs, including the major State and Private forestry related programs. Overall, the complete S&PF budget received an outlay of \$170.7 million for programs relating to Forest Health Management, Cooperative Fire Protection and Cooperative Forestry. This represents an increase of nearly \$10 million over FY '98 figures, or about a 6 percent increase. Unfortunately, the one casualty to come out of the budgetary process was the Stewardship Incentives Program (SIP). Appropriators decided to zero out the program, citing that the Forest Stewardship Program (FSP) "adequately addresses the interests represented" by SIP.

State & Private Forestry

There was good news and bad news for the primary forest *landowner assistance* programs administered by the Forest Service: FSP, SIP, Forest Legacy, Urban & Community Forestry, and Economic Action Programs. There was good news for FSP, which matches state funds providing technical assistance to landowners in the drafting of Forest Stewardship Management plans. The program received a sizeable increase of \$5 million over FY '98 figures to bring the total to \$28.8 million. The bad news is that SIP, the cost-sharing complement to FSP, was zeroed out based on the appropriators' rationale that cost-sharing of "small field projects should be a local or state responsibility." Fortunately, the SIP money was kept within the Cooperative Forestry line item,

being split between FSP and the Forest Legacy program, reinforcing appropriators' commitment to State & Private Forestry.

With that extra money, the Forest Legacy program will have just over \$7 million in FY '99 to assist in acquiring sensitive forestlands threatened by development and maintain the working landscapes upon them. This nearly doubles last year's expenditures on this program.

The *Urban & Community Forestry* program works through volunteers who undertake tree plantings, educational workshops, restoration efforts and resource maintenance activities to benefit the trees and the overall quality of life for the majority of the American population living in cities. Reflecting an increased awareness of our urban tree resource, U&CF received a boost of \$4 million to bring its total funding to over \$30 million.

Funding for the *Economic Action Program* (EAP) also fared well, coming in at a healthy \$17.3 million. EAP money funds a set of programs which help local communities diversify and strengthen their local economies through a whole range of forest-based resources including cultural, wildlife, recreation, timber and non-timber special forest products, minerals, scenic, and human resources. However, after taking into account the amount of money earmarked for specific programs across the country, the base funding for EAP drops to the same level as last year's appropriation, just over \$11 million.

The *Forest Health Protection* program combats threats to our nation's public and private forests including such pests as the European and Asian gypsy moths, which attack various hardwood species. The program received a \$1 million increase over the FY '98 figure of \$53.49 million.

Unfortunately, efforts to convince legislators to beef up the Slow the Spread program, which specifically addresses the gypsy moth threat, was not adequately funded to effectively deal with that forest pest.

The *Cooperative Fire Protection* program is the main federal funding source for state wildland firefighting efforts. With the increasingly dangerous and volatile wildland-urban interface, these scarce funds are becoming more and more important for the protection of lives, property and natural resources. The \$23.5 million allocated this year will be split between State Fire Assistance (\$21.5 million) and the newly created Volunteer Fire Assistance line item, which assists volunteer fire departments in making ends meet (\$2 million). It is hoped that these two programs, which make up the Cooperative Fire Protection program, will gain increasing visibility as to their importance and effectiveness at quelling the wildland fire threat.

Other Forestry Related Programs

The *Forestry Incentives Program*, designed to help cost-share the planting of trees on private land greater than 10 acres, received a substantial increase of over \$10 million from last year's level. Of the \$16 million allocated for FY '99, \$10 million has been provided for emergency reforestation needs to areas struck by natural disasters this last year. The only restriction is that the president must declare the spending an emergency, which is not likely to be an issue in places like the South, which was hard hit last year by drought and fires.

A roughly \$10 million increase was allocated to the *Forest Service Research* line item, bringing the total funding for the year to close to \$200 million, reflecting the strong commitment of legislators to improving the way we manage our forests. Included in the legislative directive, \$6 million is channeled to the *Forest Inventory and Analysis* (FIA) program, which is moving to an annualized inventory schedule. Putting FIA on a yearly cycle will provide more accurate information on the entire country's forestland that will enable all interests, including private landowners, to make better, more informed forest management decisions. ♣

ALABAMA

by FRANK SEGO, Legislative Liaison,
Alabama Forestry Commission



It was a springtime afternoon in 1976. As I walked toward the Capitol, I met a friend who said, "I want you to meet a very special person—Don Siegelman." She said that he was going places in Alabama politics. "You wait and see." With that, Don smiled as we exchanged pleasantries. I wished him well and we went our respective ways.

Not until the fall of 1977 did I hear any more about Don Siegelman. Our earlier meeting flashed back to me as I learned that he would be a candidate for secretary of state in the 1978 elections.

Prior to that time, women politicians had rotated the offices of secretary of state, treasurer and auditor. Siegelman broke that cycle by being elected in 1978 and reelected in 1982.

During his eight years as secretary of state, he was instrumental in transforming the secretary's office from a "ho hum" post to a political stepping stone to higher office by pursuing modern voting methods and campaign reform. He showered voters with cards of congratulations on birthdays, anniversaries and other special occasions. He remembered every visit made to his office.

"Who Is This Man?"

As his name became more and more popular, people were asking, "Who is this Don Siegelman?" They soon found out as he sought the office of attorney general in 1986. He was elected and never looked back as he announced his intentions to run for governor in 1990.

In 1990, he suffered the only statewide loss of his career. He was out-pollied by Alabama Education Association executive Paul Hubbert in the Democratic primaries of that year. Undaunted, Siegelman pledged to keep running because he felt that politics was the way to change things, and he was determined to be a part of it. He would hasten to tell you that one lesson he learned from the 1990 campaign was "not to run out of money."

Opting not to make a rerun for the governor's chair in 1994, he entered the race for lieutenant governor and won handily.

That set the stage for his "big run." He lost no time in building a campaign chest that enabled him to outspend incumbent Fob James by a \$7 million to \$6 million margin in the general election. He catapulted into the state's top office with 58 percent of the vote. His 752,000 votes were the most ever received by a candidate for governor. No previous candidate had ever broken the 700,000 mark.

Education Lottery

His message was clear to the people of Alabama: A statewide Georgia-style education lottery. He would be quick to tell you that his November 3 victory was a mandate for a referendum on the proposed education lottery. It must first be approved by the Legislature, then be offered to the voters in either a special election or the 2000 statewide election. Exit polling at the general election found that more than half the voters said they favored the lottery.

Speaking of the Legislature, its first order of business will be the organizational session that begins January 12, extending through January 21. The top priority is the election of a Speaker of the House. The House elects its Speaker and Speaker Pro Tem. The Senate elects its President Pro Tem, who presides in the absence of the lieutenant governor.

Hammett Gets the Nod

The overwhelming choice for House speaker was Rep. Seth Hammett of Andalusia, who faced no opposition in the November election. Hammett was a popular Speaker Pro Tem during Jimmy Clark's reign as Speaker.

Both chambers will use the organizational session to formulate rules to follow during the next four years. Committee memberships and committee chairpersons will also be chosen at that time.

No Republican Gains

The makeup of the legislative bodies showed no gains for Republicans in the House, leaving them with 36 seats compared to the Democrats' 69 seats. Each party actually gained and lost five seats.

Meanwhile, the Senate suffered a loss in Republican seats, dropping its number to 12, while the Democrats gained for a total of 23. Newcomers in the Democratic column are Zeb Little, Cullman; Larry Means, Attalla; Jimmy Preuitt, Talladega; and Jimmy Holley, Elba.

The lieutenant governor-elect will welcome six fellow Republican members to the upper body. They are Curt Lee, Jasper; Jeff Enfinger, Huntsville; Del Marsh, Anniston; Steve French, Irondale; HarriAnn Smith, Slocomb; and George Callahan, Theodore.

It all begins for real on March 2. 'Till then . . .

Promote and Support the TREASURE Forest Program Join the Alabama TREASURE Forest Association

The Alabama TREASURE Forest Association is composed of people who practice TREASURE Forest management, people who encourage others to practice it, and people who believe that management of Alabama's forestlands according to the TREASURE Forest concept is good for both present and future generations.

Membership in the Alabama TREASURE Forest Association is open to certified TREASURE Forest owners (Full Members), any forest landowner who is not certified (Growing Member), and persons, companies, corporations, or organizations that do not own forestland (Associate Member), but want to support and promote the sustainable and wise use of our forest resource for present and future generations.

Yes, I would like to join the Alabama TREASURE Forest Association

Date: _____

Name: _____

Address: _____

City: _____ County: _____

State: _____ Zip: _____ Telephone: (____) _____

Check each category and fill in the blanks as appropriate:

Associate Member Enclosed is \$15 annual membership fee

Growing Member Enclosed is \$20 annual membership fee

Full Member Enclosed is \$25 annual membership fee

primary objective _____

secondary objective _____

Mail to: Alabama TREASURE Forest Association, P.O. Box 145, Chunchula, AL 36521

For more information about the Alabama TREASURE Forest Association contact James Malone, Executive Director, at (334) 679-6087.

Become a TREASURE Forest Landowner 6 Steps to Success

Anyone owning 10 or more acres of forestland can be considered for the certified TREASURE Forest award. To be eligible, a landowner must do the following with respect to all their forestland in Alabama:

1. Identify one primary and at least one secondary management objective for the property based on the following list of choices: Timber Production; Wildlife; Recreation; Aesthetics; Environmental Education.
2. Possess or acquire a written multiple-use management plan for the property. Your local Alabama Forestry Commission office can help you identify options for obtaining a written management plan if one does not exist.
3. Actively practice multiple-use management on the property. Your local office of the Alabama Forestry Commission can supply you with information on the level of management activity necessary.

Once these items are in place, the following must occur to earn the award:

4. The property must be nominated by someone associated with one of the member agencies or groups of the Alabama Forestry Planning Committee. You may contact them and suggest a nomination if you feel your property or that of someone you know qualifies for the award.
5. The property must be inspected by a registered forester and wildlife biologist. Your local Alabama Forestry Commission office will arrange the inspection.
6. The nomination and inspection report must be submitted to the TREASURE Forest Subcommittee of the Alabama Forestry Planning Committee for review and approval.

If you would like to be considered for the certified TREASURE Forest award, or know of someone else who may qualify, contact your local office of the Alabama Forestry Commission or other member agency/group of the Alabama Forestry Planning Committee. These organizations are listed on page 2 of this magazine. They will be happy to assist you with the certification process.

Landowner Conference Rescheduled for March 4-5, 1999

The Fifteenth Annual Alabama Landowner and TREASURE Forest Conference originally scheduled for October 1998 has been rescheduled for March 4-5, 1999. The host city of Mobile was hit hard by Hurricane Georges, which forced the cancellation. The conference, now in its 15th year, will benefit forest landowners and others with an interest in conservation. It continues to be the premier event in the state each year for landowners to acquire technical information on how to better manage their forestland. It also offers an opportunity for landowners and those who work in the field of forestry to meet each other and share knowledge and experiences.

There is still time to register for the conference, using the form on page 19. If you previously registered for the conference and did not request a refund, you don't need to fill out another form. All activities scheduled for the October conference will still take place.

The first day of the conference will be at the Mobile Clarion. A luncheon hosted by the Alabama TREASURE Forest Association will begin at 11 a.m. Following the luncheon will be the indoor sessions, which begin at 1:15 p.m. Conference attendees will choose four sessions to attend from the following topics:

- Herbicide Recipes for Tough Vegetation Problems
- Alabama Black Bear Alliance
- Considerations Before Constructing a Pond
- Perspectives on the Future Demand for Solid Wood vs. Fiber
- Getting the Most Out of Genetically Improved Seedlings
- Roles and Benefits of County Forestry Planning Committees and Alabama TREASURE Forest Association County Chapters, a Panel Discussion

A silent auction sponsored by the Alabama TREASURE Forest Association will also take place Thursday. Bids will be received during the day and items awarded to the highest bidders that evening. Items to be auctioned will include handmade crafts and forestry-related items. If last year's auction serves as an example, there will be items of interest to everyone.

A banquet on Thursday night will honor some outstanding TREASURE Forest landowners and county forestry planning committees. It will also take place at the Clarion.

Friday morning participants will take a tour of several interesting sites near Mobile, with specific emphasis on the longleaf pine ecosystem. The tour will make stops at property owned by the Mobile County School Board, International Paper and James and Joan Malone.

The tour also offers an opportunity to step back in time. The Malone TREASURE Forest blends modern timber and wildlife management practices with old-fashioned principles. A replica of a turn-of-the-century homestead will be the center of activities that will show how people lived before modern amenities were available. "Neighbors Helping Neighbors" will be the theme, with a smokehouse, syrup cooker, springhouse, quilting, candle-making, and wash pot canning on display.

Lunch will be served following the tour, which is accessible by bus only. Buses will transport conference attendees from the Clarion and return them after lunch.

Registration for the conference is \$40 per person if postmarked by February 24, 1999. This includes the indoor sessions, breaks and banquet on Thursday, and both the tour and lunch on Friday. The luncheon on Thursday is an additional \$18 per person. After February 24 the registration fee increases to \$60.



Fifteenth Annual Alabama Landowner and TREASURE Forest Conference

Clarion Hotel • Mobile, Alabama • March 4-5, 1999

REGISTRATION FORM

Name(s) of Attendee(s):

#1 _____
 #2 _____
 #3 _____
 #4 _____

Company: _____

Address: _____

City: _____ State: _____ Zip: _____

Will Attend Tour on Friday:

Yes No
 Yes No
 Yes No
 Yes No

Bus transportation will be provided for the tour. No personal vehicles can be driven.

CATEGORY(IES) OF ATTENDEES (Check one category only)

Total number attending Friday's tour _____

#1	#2	#3	#4	
___	___	___	___	TREASURE Forest Landowner
___	___	___	___	Government Agency/TREASURE Forest Landowner
___	___	___	___	Landowner
___	___	___	___	Government Agency/Landowner
___	___	___	___	Government Agency
___	___	___	___	Private Forest Industry/Consultant
___	___	___	___	Other

Thursday, March 4: Luncheon begins at 11:00; Indoor session begins at 1:15 p.m.; Banquet begins at 7 p.m.

Friday, March 5: Outdoor tour in the morning. Lunch will be provided after the tour.

I am attending the conference and am enclosing

\$40 preregistration x _____ attendees = \$ _____

I am attending both the conference and the TREASURE Forest Luncheon, and am enclosing

\$40 preregistration x _____ attendees, plus \$18 x _____ luncheon attendees = \$ _____

NOTE: Luncheon is by preregistration only.

CONFERENCE INFORMATION

- The first day of the conference is indoors. The second day will be an outdoor tour. **Please dress appropriately.**
- The registration fee includes indoor session and banquet on Thursday; tour and lunch on Friday.
- Registration will be from 10 a.m. until 2 p.m. March 4.
- **Preregistration fee for conference per person if postmarked by February 24 is \$40.**
- **Preregistration fee for conference and TREASURE Forest Luncheon per person if postmarked by February 24 is \$58.**
- Luncheon is by preregistration only. Luncheon will be from 11:00-12:30.
- Registration fee for the conference after February 24 is \$60.
- Mail upper portion of form and fee payable to Alabama Forestry Conference to:
Fran Whitaker, Alabama Forestry Association, 555 Alabama St., Montgomery, AL 36104; 334-265-8733.

HOTEL INFORMATION

- You will need to make your own reservations.
- The Mobile Clarion is offering a special room rate of \$69 for up to 4 people. *To receive this room rate please specify that you are attending the TREASURE Forest Conference when you make reservations.*
- Check-in time is 3 p.m.

Mobile Clarion, 3101 Airport Boulevard, Mobile, AL 36606; 334-476-6400

- A registration confirmation, map, agenda, and complete list of area hotels will be sent to everyone who preregisters.

License Plate Sales Fund Education Projects

Proceeds from the sale of the "Alabama Forests" license plate are being used to fund forestry education projects. Following is a list of projects approved for funding during 1998. The applicant is listed first, followed by the name of the project and amount of funding it received.

Dothan Landmarks Foundation, Inc.

"Longleaf Pine/Wiregrass Restoration Project"\$20,000.00

ALA-TOM Resource Conservation & Development Council

"Southwest Alabama Outdoor Learning Center Development and Directory".....\$19,380.00

Florence Tree Commission

"Education Program for Teaching Forest Stewardship through Design and Use of Interpretative Signs"\$18,565.00

The Longleaf Alliance, Auburn University

"Longleaf Pine Outreach Program".....\$14,577.00

Huntsville-Madison County Botanical Garden

"Enhancing Public Perceptions of Forestry in Alabama through Teacher Training Workshops"\$12,300.00

Alabama TREASURE Forest Association

"Neighbors Helping Neighbors"\$10,890.00

Alabama Family Alliance

"Facts Not Fear Revision and Distribution to Alabama Science Teachers"\$10,000.00

Russell County School District

"Treasures to Treasures: Students as Stewards of the Environment"\$10,000.00

Alabama Cooperative Extension System

"Trees 'N Us".....\$9,651.50

Tuscaloosa Co. Soil & Water Conservation District

"Shirley/Real Environmental Day Camp, Tannehill State Park—Phase I"\$8,295.00

Alabama Forestry Commission

"Alabama Forestry Camp"\$7,000.00

Gulf Coast Resource Conservation & Development Council

"Baldwin County High School Outdoor Learning Center".....\$5,800.00

Coosa Valley Resource Conservation & Development Council, Inc.

"Purchasing Plan-It 3 CD ROMs for 11 counties in the Coosa Valley RC&D area"\$4,700.00

Cullman County Forestry Planning Committee

"Purchasing Forestry Awareness Week Now (FAWN) T-shirts"\$4,200.00

Chambers Co. Forestry Planning Committee

"Basic Forest Information Resources for Educators/Libraries"\$4,000.00

Cawaco Resource Conservation & Development Council, Inc.

"Birmingham Zoo Outdoor Learning Center and Nature Trail"\$3,000.00

Bullock County Extension

"Forestry Education for Youth"\$2,700.00

City of Gordo and Gordo Tree Commission

"City of Gordo Book, Video and CD ROM Purchases"\$2,500.00

Clarke Co. Forestry Planning Committee

"Purchasing Forestry Awareness Week Now (FAWN) T-shirts"\$2,500.00

Lauderdale County Forestry Planning Committee

"Purchasing Forestry Awareness Week Now (FAWN) T-shirts"\$2,500.00

Crenshaw Co. Forestry Planning Committee

"Fall Forest and Environmental Education Program"\$2,300.00

TREASURE Forest Association of Northeast Alabama

"Purchasing Plan-It 3 CD ROMs for Schools in Madison County"\$2,000.00

Winston County Forestry Planning Committee

"Purchasing Forestry Awareness Week Now (FAWN) T-shirts"\$1,750.00

Randolph Co. Forestry Planning Committee

"Nature Trails and Outdoor Classrooms for Randolph Co. Middle Schools".....\$1,691.43

Cleburne Co. Forestry Association

“Purchasing Plan-It 3 CD ROMs for High Schools in Cleburne County”\$1,600.00

Butler Co. Forestry Planning Committee

“Natural Resources Youth Camp”\$1,550.00

Jefferson Co. Forestry and Wildlife Planning Committee

“Urban Forestry Fair”\$1,500.00

Russell County Forestry Planning Committee

“Purchasing Forestry Awareness Week Now (FAWN) T-shirts”\$1,400.00

Alabama Cooperative Extension System

“V.O.I.C.E. (Valuing Our Involvement and Caring for Environment)”\$1,365.00

Fayette, Lamar and Marion Co. Forestry Planning Committees

“Forest Management Seminar Targeting Minority Landowners”\$1,255.00

Pickens County Forestry Planning Committee

“Purchasing Forestry Awareness Week Now (FAWN) T-shirts”\$1,225.00

Jackson Co. Soil & Water Conservation District

“Jackson County Envirothon '99”\$1,140.00

Fayette, Lamar and Marion Co. Forestry Planning Committees

“Multiple-Use Forest Management Short Course”\$1,000.00

Coosa Co. Forestry Planning Committee

“Coosa County Multiple-Use Managers Guide Revision”\$1,000.00

St. Clair Co. Forestry Planning Committee

“Purchasing Plan-It 3 CD ROMs for Schools in St. Clair County”\$1,100.00

Lamar County Forestry Planning Committee

“Purchasing Forestry Awareness Week Now (FAWN) T-shirts”\$1,050.00

Monroe Co. Forestry Planning Committee

“Teachers Forestry Workshop”\$900.00

Southern Union State Community College, Biology Dept.

“Establishment of a Native Arboretum, Wetlands Boardwalk, and Outdoor Classroom on the Wadley Campus of Southern Union State Community College”\$725.92

Chilton Co. Forestry Planning Committee

“Confederate Park, Nature Trail, Phase 1, Tree ID Signs”\$465.00



Enjoy Your TREASURE Forest

Continued from page 15

times happens, the good Lord looks down and gives us one more undeserved blessing. The deer simply stopped, turned his head slightly and looked at the form underneath the oak tree. The man got the buck fully in his optic and slowly squeezed.

The big deer slowly turned his head back down the trail and moved on through the opening. As the buck disappeared down the path, the TREASURE Forest landowner put his camera back in its case.

It makes no difference if you own 10 acres or 10,000. It doesn't matter if you enjoy hunting, fishing, photography, wildflowers, tree identification, hiking, swimming or plain relaxing in the woods. What matters is that you ENJOY what God has provided and you share it with others. Take time to enjoy your TREASURE Forest!



**Show Your Care
Purchase an Alabama Forests
License Plate**

- Cost: \$50 above fee required by law for regular license plates.
- No additional cost for personalization.
- The additional \$50 is a charitable contribution and is tax deductible.
- Proceeds will be used for educational projects that promote healthy and productive forests, clean water, and abundant wildlife.

Wise Management Benefits Landowner, Wildlife and Timber Industry

by KIM GILLILAND, Editor

Because so much of the forestland in Alabama is privately owned, the forest products industry must rely on many landowners to provide the raw materials for the products they manufacture. One of those landowners is Gary Fortenberry, who owns 2,000 acres of timberland in Choctaw County. Mr. Fortenberry started managing forestland in the late 1950s, and realized early on that a good investment up front will yield profits in later years. "The decisions that a tree farmer makes are not ones he can easily change. When you plant trees, you're talking about a product that will be there for 30 or 40 years. The decisions I make today my children will have to live with."

First, he believes, every landowner should get some kind of professional assistance, whether it be from a state agency like the Alabama Forestry Commission or a private company. Mr. Fortenberry has hired a consultant forester to advise him on when to cut, prescribe burn, use herbicides, and conduct other necessary practices on his land. This has paid off most importantly in profits realized from timber sales. His consultant cruises the timber which is to be cut and knows how much volume will be involved in the sale. Invitations to bid are then sent out to area timber buyers, with Mr. Fortenberry having refusal rights if the offers don't reflect what his consultant has determined the timber is worth. With literally thousands of dollars involved in a timber sale, having someone like a consultant to represent a landowner is a definite advantage. "Some people say they can't afford it," says Mr. Fortenberry, "but it pays to know what you've got, and to know whether you've gotten a good deal or not."

After a buyer is chosen, Mr. Fortenberry and his consultant sign a contract with a logger to cut the timber. This contract includes some money up front by the logger. If the roads are not left in good condition by the logger, this money can be used afterward to repair any damages. As a precaution, video and still "before" photos are taken of the area prior to the harvest.

Mr. Fortenberry stresses that landowners should be aware of and have their logger follow Best Management Practices during



Gary Fortenberry plants many trees, such as this crab apple, specifically for wildlife.

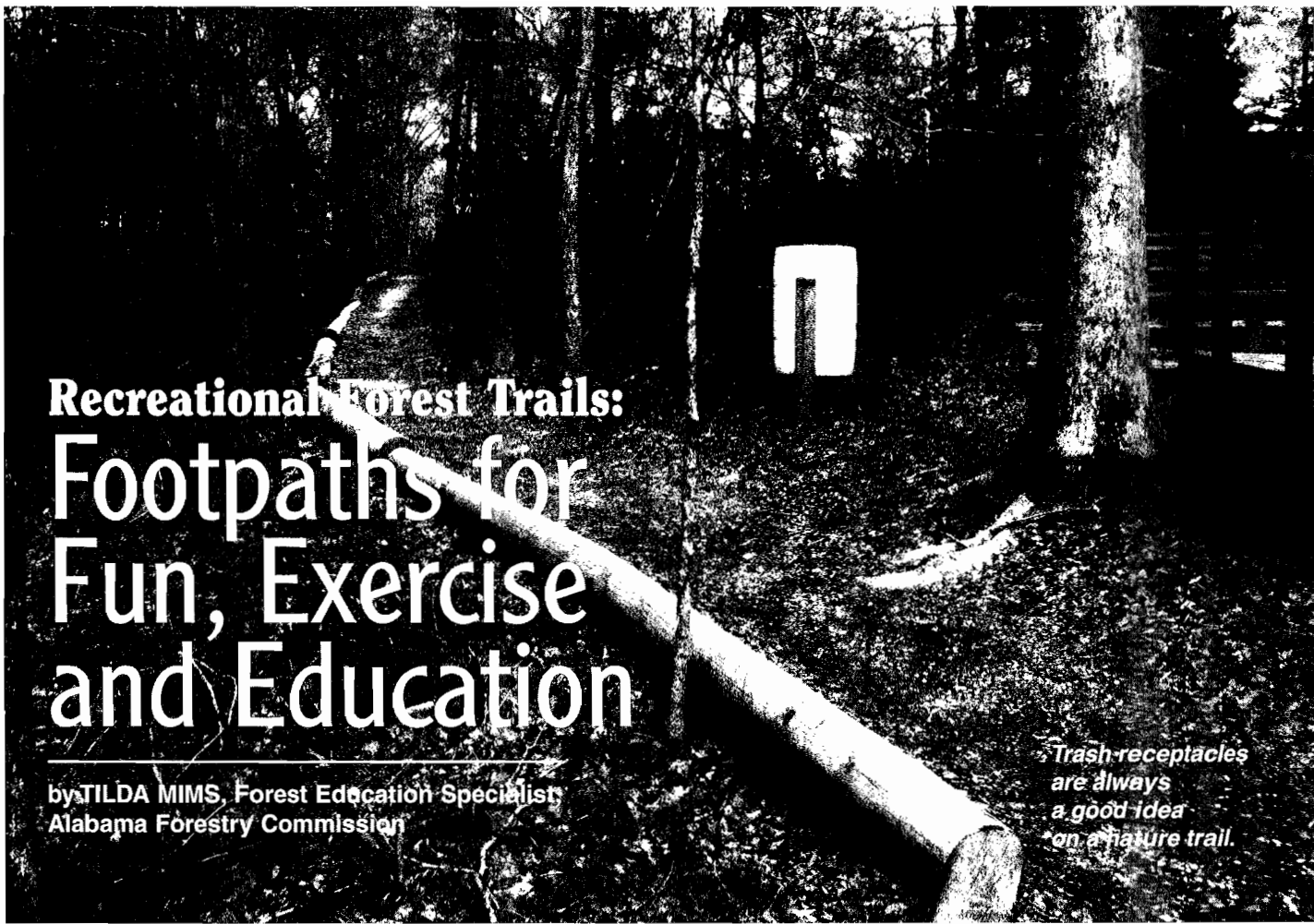
any harvest operation. Best Management Practices, or BMPs, are voluntary guidelines issued by the state to ensure water quality standards. A buffer zone of trees left along streambanks is an important part of BMPs. "We leave even more buffer than the state asks," he said.

In his years of managing trees, Fortenberry has experimented with different species. He has become convinced that longleaf will grow some of the best quality timber for the products he wants to supply. "I'm growing my trees predominantly for sawlogs, poles and pilings." In January 1997 he planted 35 acres of containerized longleaf seedlings using a special "3-in-1" plow. Mr. Fortenberry believes using this plow has several advantages. One, the soil's hardpan is broken up, and two, the topsoil is turned over and up into a bed where the seedlings are planted. The nutrients in this rich topsoil give the seedlings a good start.

Although Mr. Fortenberry is growing his trees for a profit, his overall management scheme is truly multiple use. His property has been certified as both a Tree Farm and a TREASURE Forest. In this multiple-use scheme, wildlife management is of utmost importance to Mr. Fortenberry. "I just felt like I could have my cake and eat it, too. I thought there should be a way that I could provide for wildlife and grow trees for production," he said.

Plantings for wildlife are integrated into every part of the property. Sawtooth oaks have been planted along the edges of pine plantations. Strips of trees like Chinese chestnut, crab apple, black cherry, paw paws, persimmons and many species of oaks are planted throughout the acreage. In fact, there are 86 different species of fruit- and nut-bearing trees planted on the property. Mr. Fortenberry describes these areas as "Meccas for wildlife."

All of the resources a private landowner has are important to the state, environmentally and economically. The supply of wood that Alabama's forest products industry needs hinges on landowners managing their land wisely. Landowners like Gary Fortenberry are the key to keeping this industry productive. ♣



Recreational Forest Trails: Footpaths for Fun, Exercise and Education

by TILDA MIMS, Forest Education Specialist
Alabama Forestry Commission

*Trash receptacles
are always
a good idea
on a nature trail.*

If you like to walk around your property for exercise or just to keep an eye on things, you may want to consider constructing a nature trail. Frequent foot or vehicular traffic will create one anyway, so you may as well make one that is pleasant to hike and will cause minimal damage from erosion and trampled vegetation.

Many landowners are finding that a nature trail is also an invaluable tool for giving children, teachers and other landowners an opportunity to see a true working forest up close. Planned trails provide users with access to areas to learn, recreate, exercise and to observe and interpret nature.

What Type of Trail?

Successful trails begin by matching the tract's resources with the user's needs. Decide the purpose of the trail before beginning the planning process. Educational, recreational and scenic trails differ in layout and design. Is the trail simply for family recreation, or do you plan to allow it to be used for school

groups or forestry field days? Your intent may be a combination of some or all of the following categories.

General nature or education trails focus attention on scenery, history, geology, forest management and ecology, wildlife, wildflowers, flowering shrubs, or landscape features such as bottomlands, uplands or wetlands.

Forest stewardship or ecology trails exhibit the history of forest management and succession, the differences between natural and planted stands, differences in site productivity, the impact of fire control and fire use, past cutting history, species diversity, tree or plant identification, stand maturity, seedling development, differences between hardwood and softwood stands, and wildlife uses of various forest types.

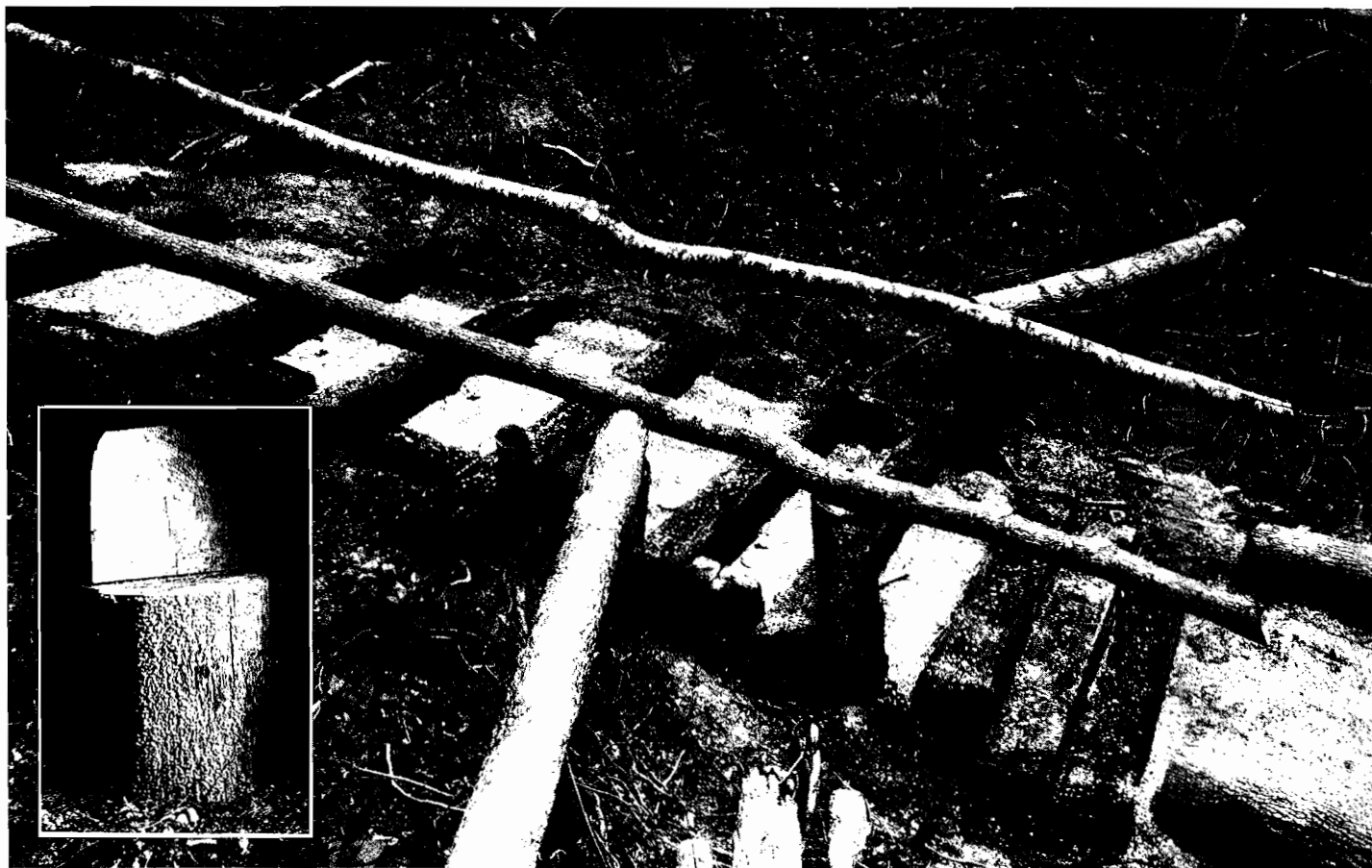
Wildlife management or wildlife observation trails explore animal tracks, dens, nests, artificial nest boxes and nesting structures, signs of use, beaver dams and lodges, deer scrapes, den trees, bird nests, brush and cover piles, forest and

field edges, wildlife plantings, prescribed burning areas, unique and critical habitat areas, and wildlife travel corridors.

Designing Your Trail

A survey map of your property or an aerial photo are good tools for identifying major landmarks, roads, buildings and power lines as well as steep and difficult areas to be avoided. However, nothing is better than a thorough knowledge of the property, so walk over the area and record major points of interest on your map. Flag important areas that are likely to be included in the final trail and then begin a rough layout of possible routes on the map. In laying out the trail, avoid straight lines by winding the trail to conform to the land's contour. Favor trail placement areas with the following:

- Well-drained soils
- Natural openings
- Special historical, ecological and natural features
- Access to and a view of water bodies or streams



Using natural materials for steps, bridges and resting places can help your trail blend into its wooded surrounding.

- Seasonal differences
- Minimal conflict with existing land-use or management activities

Laying Out and Constructing a Trail

Your key to success in trail design is to define and follow clear objectives. Most important, keep it interesting!

- Vary trail alignment and direction.
- Take advantage of natural features and diversity.
- Keep trails inconspicuous, natural and suitable to the land by using native materials in construction such as natural bark, mulch, wood chips, sand and gravel.
- Change the grade periodically but strive to maintain the trail on mid slope positions to promote good drainage and minimize erosion.
- In wet areas with seasonal or standing water use boardwalks, decks or log bridges with handrails. Lumber that will be in contact with, or even in close proximity to, the ground must be decay-resistant. Because of the

chemicals used in its treatment, pressure-treated wood should not be used if it will come into direct contact with drinking water or food for humans or animals.

- Trail width should be a minimum of 2 to 4 feet with trailside vegetation cleared an additional 12 inches on each side. This will reduce maintenance as well as give wildflowers and grasses a chance to spring up. Trails that receive heavy use and trails on steep terrain should be 6 to 8 feet wide. Your trail should be wider if you plan to have two-way traffic.
- Maintain an overhead clearing of 7 feet for foot trails, 8 feet for bike trails and 10 feet for horse trails.
- You might want your trail to double as a firebreak or a place where crews can maintain a fireline. Discuss this option with someone from your county Alabama Forestry Commission office before finalizing your plan.
- Fallen logs and large rocks can be strategically placed to discourage vehicular use and add to the natural

variety of the trail. On trails to be used by school groups, make small clearings or turnouts so small groups can gather.

Experts say the grade or slope is the single most important factor in design and layout. The trail grade influences the length of the trail, the level of difficulty and the drainage and maintenance requirements. Avoid creating long, sustained grades that can be tiring and monotonous. Try to maintain gentle slopes of 10 percent or less (less than 1 foot of drop over a 10-foot stretch). Where steep grades are unavoidable, construct water bars to slow runoff and to avoid erosion.

Maintenance

Natural processes are constantly shaping the forest and nature trails are no exception. Periodic upkeep and repair of your nature trail will be necessary. Schedule maintenance in relation to the amount of use and weather conditions. Visiting your trail during or immediately following a rain storm will give you great insight on the effectiveness of water



Tree, flower and shrub identification signs add an educational element to a nature trail. There are many different types of signs and ways to use them. Shards of terra cotta flower pots make ideal signs when permanent markers are used (bottom left). For protection on a trail that receives heavy traffic, place signs up higher on the tree (top). The Web site www.arborworks.org has free tags of many species that you can download, print and laminate for use in tree identification.



Anniston Teacher Wins State Honors with TREASURE Forest Project

Jeannette Crow, a kindergarten teacher at Randolph Park Elementary in Anniston, is shown with her grand prize trophy at the Alabama State Social Studies Fair. Crow is pictured with her winning display, which was about TREASURE Forest. She has developed a conservation program for her class and has incorporated the TREASURE Forest concept into their environmental studies along with adapting the Plan-It 3 material to her grade level. Over the course of the school year her students study everything from wood products to fire prevention and their instruction includes field trips and special guests who come to their classroom. Mrs. Crow got the idea for the display from her husband's *Alabama's TREASURED Forests* magazine.

bars, turnouts and other erosion control structures.

Regular maintenance may include prescribed burning, planting wildlife food plots, pruning, tree planting, harvesting and insect control. These activities will only enhance the trail by providing a chance to see that active forest management is critical to the health and usefulness of Alabama's forest.

References

- Brown, C. "Building Basics for Yard and Garden Structure." Home Planners Publishing, 1995.
- Georgia Forestry Commission, "Outdoor Classroom Seminar," 1998.
- Margolin, M. "The Earth Manual," Houghton-Mifflin Co., 1975.
- North Carolina Cooperative Extension Service, "Woodland Owner Note 29," North Carolina State University, 1995.
- Web site: www.arborworks.org.

Alabama Students Excel at National Competitions

by ROGER VINES and WAYNE FORD, Alabama Cooperative Extension System

During the past year 4-H teams from Coosa and Tuscaloosa counties brought home national championships in forestry and wildlife judging. These students worked extremely hard and were coached by dedicated individuals. Programs like 4-H ensure that the youth of today are learning about good natural resource management techniques.



Coosa County, l-r: Pete Couth, International Paper Corp. (sponsor); team members Will Neighbors, Josh Baxley, Chase Luker, and John Goff; and coaches Joel Neighbors and Roger Vines.

Coosa County

Recently four young men from Coosa County returned from West Virginia where they won first place in the National 4-H Forestry Judging Invitational. Team members John Goff, Josh Baxley, Will Neighbors and Chase Luker competed with teams from 18 states to win the coveted national championship. Reaching this level of achievement took hours of training, much of which took place on TREASURE Forests all over Coosa County.

Coosa County 4-H'ers first began to learn about forestry about 13 years ago when a landowner, Col. Jack Walls, provided a free lease to 46 acres of land that the 4-H'ers developed into a 4-H Wildlife Refuge. Through this they began to have hands-on experience in forestry and wildlife management. The project was later certified as a Junior TREASURE Forest. As the 4-H'ers became more involved in the 4-H forestry judging program, the Coosa County Forestry Planning Committee began holding a Coosa Area Forestry Invitational as a warm-up to the state competition. For several years this event was hosted by TREASURE Forest landowners Buddy and Gayle Adcox in Weogufka.

Since then, other TREASURE Forest landowners have made their properties available. This year, the TREASURE Forest of Robert and Ruth Teel in Rockford was the site of numerous practice sessions in preparation for the state event. Later the club members traveled to the TREASURE Forest of Doug McConnell and Sara Baldwin for practice in tree identification along Hatchet Creek. Other practice sessions took place on the farm of Joel and Paula Neighbors, also TREASURE Forest owners. Then, just before the state event, the 15 club members trying out for the team had a local elimination to select the four-member senior and junior teams. This local contest was conducted on the TREASURE Forest of Chuck Welden near Bradford.

After winning the state 4-H forestry event in June, the senior team began preparing for the nationals. Since the national event is held in West Virginia, the team needed some large hardwoods to practice with on tree measurement. They found what they needed on the Vines TREASURE Forest near Weogufka.

The many hours of study and practice paid off during the first week in August when the team managed to take the national championship. The final team rankings were Alabama, first place, Arkansas, second place, and West Virginia, third place. Team members also won several individual awards. John Goff tied with a young man from West Virginia for the highest overall score, and the second highest score was earned by Josh Baxley. Will Neighbors finished with the seventh high-

est individual score, and the fourth team member, Chase Luker, finished not far behind.

The forestry contest is a very comprehensive program. The students must first learn to identify more than 80 species of trees from all across the country. The list includes some 60 trees native to Alabama, and about 20 trees native to western states, such as the Douglas fir and quaking aspen. The teams must also learn how to measure standing timber and to calculate the board foot volume of lumber the trees would produce. They then learn the biology and how to identify more than two dozen forest diseases and insect pests. They must master the skill of reading a compass and estimating distance. Teams must then evaluate a stand of timber and make management recommendations.

Additionally, the team members must study forestry reference manuals in preparation for a written exam and the forestry knowledge bowl. The bowl is an exciting event in which the moderator reads from a list of questions and the students must then "buzz in" if they know the answer. The participating states are paired off and begin the first round. The winning teams advance to play other winning teams until finally there are only two states left for the final round. This year those two teams were Kentucky and Alabama. When the last question was read, Alabama was declared the winner.

Winning a championship like this takes a lot of effort from the team members, their coaches and sponsors. Serving as coaches for the team were Roger Vines with the Alabama Cooperative Extension System and Joel Neighbors and Blake Kelley with the Alabama Forestry Commission. Sponsors included Five Star Plantation Hunting Lodge, the Coosa Action Network and numerous individuals who made contributions to the team.

While the four young men on this team learned a lot about forestry, they also learned some valuable lessons, like how to set a goal and then work to achieve it. As one coach told the kids, "luck is when preparation and opportunity meet." Thanks to the help of many TREASURE Forest landowners, these young men

found the resources to practice and prepare. It paid off when the opportunity came. While the TREASURE Forest program pays many dividends in trees and wildlife, there are even greater rewards through the educational opportunities they provide.

Tuscaloosa County

For the fourth time in 10 years, the Alabama 4-H Wildlife Judging Team has won the national championship. A group of youngsters from Tuscaloosa County received this honor recently at the 1998 National 4-H Wildlife Habitat Evaluation Invitational in Clemson, South Carolina. The contest was held in the foothills of the scenic Blue Ridge Mountains.

The Tuscaloosa County team of Chase Bowers, Allen Earnest, Charlaina Greene and Jacob Ramsey represented Alabama. The team won this opportunity by winning the Alabama 4-H Wildlife Contest held at Auburn University during July.

Teams from 27 states participated in this national event. Each team is comprised of three to four student members and either one or two coaches. States participating were from all across the United States, including Florida, Pennsylvania, Wyoming and Texas.

Preparing for the nationals was much different from preparing for wildlife habitat in Alabama. The main area of managing wildlife was classified as "wetlands habitat." The youths changed their ideas of managing wildlife such as turkey, deer and quail to managing for animals such as wood ducks, bullfrogs, muskrats and mink. To better prepare for this event, the Alabama team spent much time hiking through the Sipsey Swamp in west Tuscaloosa County and touring the Joe Wheeler Wildlife Refuge in Decatur.

The preparation paid off, for the Alabama team defeated the second place team from Ohio by 46.65 points. The other top scoring states were Kansas, Utah and Georgia.

The National 4-H Wildlife Invitational is designed to teach youth the fundamentals of wildlife management, the development of leadership skills, and the sharing of ideas with other youth and wildlife professionals from around the nation. Youth learn that "wildlife management" means managing wildlife habitat and providing for the needs of wildlife. The Invitational addresses five activities: (1) identifying common wildlife foods; (2) interpreting wildlife habitat from aerial photographs; (3) presenting oral reasons for decisions; (4) prescribing wildlife management practices; and (5) developing an urban and wildlife management plan.

In the overall individual scores among all competing youth, Chase Bowers had the highest score in the nation, with a score of 63.40 out of a possible 80 points; Allen Earnest won second place honors with a 59.94 out of 80 and Jacob Ramsey placed sixth with a 52.26 out of 80.

Also in individual awards, Ramsey had the highest individual score in identifying wildlife foods and Bowers and Earnest finished first and second respectively in habitat management practices. In team events, the Alabama team finished first in the written Urban Management Plan with 28 out of a possible 30 points and also a first place in the written Rural Management Plan with 26 out of 30 points.

Participants spent two days at field sites, first preparing for the event exam and second, doing actual "hands-on" requirements for the competition.

National sponsors of the Invitational were Champion International, the National Rifle Association, the Rocky Mountain Elk Foundation and the Cooperative State Research, Education and Extension Service.

Support for the Alabama 4-H Wildlife Contest included the Alabama Wildlife Federation, the Alabama Cooperative Extension System, Gulf States Paper Corporation, the Wildlife Society, Buchanan Timber Company, Georgia Pacific, Inc., Dr. Tony Dozier and Auburn High School.

Local sponsors assisting the youth's trip to the national contest in South Carolina consisted of RaCon, Inc., the Tuscaloosa Chapter of the National Wild Turkey Federation, the Tuscaloosa County Farmers Federation, the Kiwanis Club of Tuscaloosa, and McGiffert and Associates, Inc.

1998 marks the sixth time since 1990 that a group of Tuscaloosa County 4-H'ers has represented Alabama at this national event. During this time, Alabama teams have won three national championships, two reserve national championships and finished ninth.

Coaching this year's team was Tuscaloosa County Extension Coordinator Wayne Ford, who was assisted by 4-H volunteer leader Jan Greene.



Tuscaloosa County, l-r: Dr. James B. Armstrong, National WHEP chairman and Extension wildlife scientist; coach Wayne Ford; team members Allen Earnest, Chase Bowers, Charlaina Greene, and Jacob Ramsey; and assistant coach Jan Greene.

***Programs like
4-H ensure
that the youth of
today are learning
about good
natural resource
management
techniques.***

Get Involved

Both teams are grateful for the sponsorship they received from local landowners, businesses and others who helped them reach a national level of competition. For more information on how to become involved in this fun and educational program contact your local county Extension System office.



Woodpeckers of Alabama

by MARK A. BAILEY, Conservation Biologist, Conservation Services Southeast

Each state has officially adopted certain plants and animals as symbols to set it apart and enhance its image. For example, Mississippi has the Southern magnolia as its state tree and—along with Arkansas, Florida, Tennessee and Texas—the mockingbird as its state bird. It is easy to see why the longleaf pine is Alabama's state tree, but did you know that we are unique among the 50 states in having a woodpecker as our state bird? We see the familiar "yellowhammer" depicted everywhere, from phone books and highway maps to the new "Alabama Forests" license plate. That bird has become part of Alabama's history and cultural identity. We are, in a sense, the Woodpecker State.

The yellowhammer is one of nine woodpeckers native to Alabama. Six species are fairly common year round, and another arrives in autumn to spend the winter in large numbers. Take a walk through almost any wooded area with at least some mature trees and you will likely find one or more of these species. You are far less likely to encounter the rare and endangered red-cockaded woodpecker, and it is probable that no living person has seen the now-extinct ivorybill in Alabama.

It is not difficult to recognize a woodpecker, and most species are easy enough to tell apart. All of our woodpeckers are boldly marked and can be quite conspicuous on tree trunks and branches. Most are black and white, with some red generally visible on the head. The feet have strong, sharp claws, and unlike other birds, two toes point forward and two point backward. A stiff central pair of tail feathers is used as an additional point of contact to prop the bird up as it climbs or perches on a vertical trunk. The straight sharp bill is used to chisel insects from bark and wood as well as to excavate nest holes and to drum during courtship. All species nest and roost in tree cavities. Woodpeckers are not considered songbirds, but they do make a variety of harsh calls and cries.

Let's take a look at each species.

Yellow-shafted Flicker (Yellowhammer)

You won't find the "yellowhammer" listed in the modern field guides—the official common name is yellow-shafted flicker—but the name was being used in the South long before the members of an Alabama Civil War regiment identified themselves by wearing yellowhammer feathers in their hats. The story became folklore, eventually resulting in the Legislature declaring the yellowhammer as Alabama's state bird.

This is our only yellow-brownish woodpecker. Only males have the black "mustache." Flickers can be found in a variety of habitats, but seem to prefer open hardwoods, where they often feed on the ground. Ants account for about half of their food intake, and flickers reportedly eat more ants than any other North American bird. Their diet includes other insects as well as pokeberries, dogwood berries, wild plums, and seeds. Flickers have suffered greatly from competition for nests with introduced European starlings.



Alabama's state bird, the yellow-shafted flicker or yellowhammer. It feeds on the ground much more often than other woodpeckers, and is often seen on lawns.

Pileated Woodpecker

With the ivorybill gone, this crow-sized bird is Alabama's largest woodpecker. Mostly black, it has a red crest ("pileated" means crested) and white on the wings and neck. The "yucka-yucka-yucka" call is similar to the call of the flicker, but louder. It feeds heavily on carpenter ants and wood-boring beetles. This woodpecker declined dramatically with the initial logging of the old growth forest, but has adapted well to second growth woods, and it is now seen in back yards. Nests are typically in dead trees or dead branches of living trees, but one aristocratic pair has taken up residence in the hollow columns of a vacant antebellum home in Greene County. A new nest cavity is excavated each year, and old ones are often used by wood ducks.

Red-bellied Woodpecker

As the late Alabama ornithologist Tom Imhof observed in his book, **Alabama Birds**, this bird was named by someone who probably didn't realize that its reddish belly, usually pressed against a tree trunk, is not its most prominent feature. Look for the horizontally-striped zebra-like back pattern and the red nape and cap (females have the red nape only). The "churr-churr-churr" call is a familiar sound, even in the suburbs. A variety of animal and vegetable foods are taken, including wood-boring beetles and acorns. Red-bellies frequently come to feeders and are among our least shy woodpeckers.

Red-headed Woodpecker

With a head and neck that appear to have been dipped in blood, this black and white woodpecker is striking in appearance. This bird is found wherever there are numerous dead standing trees. New beaver ponds are ideal habitat, as are areas with beetle-killed or ice-damaged trees. Sometimes nest cavities are drilled into telephone poles in towns. Starlings frequently evict red-headed woodpeckers from their cavities. This species rarely drills into trees for insects. Because these woodpeckers often fly low and dart out from perches to snatch flying insects, they suffer surprisingly high mortality from automobiles.

Yellow-bellied Sapsucker

This is the only woodpecker that does not breed in the state. It is a common winter resident, but is often overlooked because it is usually quiet and doesn't fly often. It utters a mournful, catlike cry from time to time. About the size and color of the hairy woodpecker, it has a red crown, and males also have a red throat. Unlike our other woodpeckers, this bird makes a living by drilling rows of small holes in a variety of deciduous and coniferous shrubs and trees (including pines) and feeding on the sap and insects attracted to the sap. Scarred trees may look as though they were hit with small-caliber machine gun fire. The state champion tulip poplar in the Sipsey Wilderness has large sapsucker scars that, with the tree's growth, have expanded to several times their original size. The bird that drilled those holes may have lived a century ago.

Hairy Woodpecker

Except for being larger and having a longer bill, this woodpecker is very similar in appearance to the downy woodpecker. Named for its slightly shaggy appearance, this black and white woodpecker has a solid white back (not barred like the sapsucker's) and males have a small red patch at the back of the head. The call is a sharp "peek" that is similar but much louder than that of the downy. Preferred food is the larvae of wood-boring beetles (the stomach of one hairy woodpecker contained 100 round-headed wood-borers) and other insects. This is a shy bird; when approached it will dodge around the other side of the tree to stay out of sight.

Downy Woodpecker

The little downy is our smallest woodpecker, but is easily confused with the hairy. Its bill is much shorter and its call is lower in pitch and volume. More common and tamer than the hairy, the downy is a frequent visitor to feeders in suburbs. It generally nests in dead snags and it eats beetles, ants, caterpillars, moths, and some wild fruits. This trusting woodpecker frequently allows people to approach to within a few feet before flying to a nearby tree.

Red-cockaded Woodpecker

This is another poorly-named bird. It actually has **no red** visible on the head, at least 90 percent of the time. Males display a tiny spot, or "cockade," of red when excited. A better name would be the pine woodpecker. Most forest owners have heard of this bird (often as the "RCW") because of its federal endangered status, but few have seen it. This was formerly a common species of mature pine forests, but it is gone from most of its

historic range. In Alabama, the RCW has declined to probably fewer than 500 birds in a dozen or so locations, and fragmented small populations continue to disappear. The RCW lives in small family groups, which cooperate in feeding of young and the excavation of nest and roost cavities in living pines. Its endangered status is mainly due to its strict habitat requirements: expanses of open, park-like pine forest, such as that maintained by fire, and mature pines for nesting. The

(Continued on page 31)



Alabama's woodpeckers (except for the yellow-shafted flicker): 1) yellow-bellied sapsucker; 2) red-headed woodpecker (juvenile is brown); 3) red-bellied woodpecker; 4) pileated woodpecker; 5) ivory-billed woodpecker (extinct); 6) downy woodpecker; 7) hairy woodpecker; 8) red-cockaded woodpecker.

Artificial Cavities Boost Red-cockaded Woodpecker Population

by TILDA MIMS, Forest Education Specialist, Alabama Forestry Commission

The red-cockaded woodpecker population in Alabama is making a significant comeback due to a habitat enhancement program of the U.S. Forest Service that includes the use of artificial nest cavities in forests where there aren't enough old-growth trees. The federally endangered red-cockaded woodpecker (RCW) is the only woodpecker that constructs its nesting cavities exclusively in living Southern pines.

To make its task a little easier, the bird chooses old trees (60 plus years) infected with a fungus called heartrot. Heartrot is a disease that causes decay in the inner wood. This deterioration makes it easier for RCWs to excavate cavities in trees. A cavity takes from several months to several years for the birds to complete and competition for these cavities is keen. RCWs will abandon their cavities if brushy vegetation reaches 15 feet or higher near the tree. They prefer open, park-like areas with a clear flight path. Research on the RCW has shown that the challenge of locating suitable cavity trees may easily be the single most important component of their territories. The use of artificial nesting cavities has proven successful in increasing the RCW population by helping replace lost habitat.

received the greatest damage, leaving many areas with no trees old enough to excavate. More than 300 cavities have been excavated on the Francis Marion National Forest using the artificial cavity technique, and within a few short years, more than 60 percent of the inserts were being used for nesting or roosting.

The practice of inserting artificial nesting cavities in mature pines has played a major role closer to home by increasing the RCW population in Alabama's Oakmulgee Ranger District to its ranking as the fifth largest in the world. The district consists of 160,000 acres in Bibb, Chilton, Hale, Perry and Tuscaloosa counties. Jim Mawk, district wildlife biologist for Oakmulgee, says that the program began in the early 1990s with less than five inserts. Today there are more than 100 artificial cavities, and all of them are in use.



Artificial cavities for red-cockaded woodpeckers are being successfully used on the Oakmulgee National Forest.

To better understand how this idea works, it helps to know a little about this unique woodpecker. According to Mawk, RCWs live in family groups consisting of one breeding pair and up to six males referred to as "helpers." Helpers are male offspring from previous years that remain with their parents to assist with excavating duties and to care for nestlings. Female offspring leave the group after their first winter to find a new group to breed with.

Each individual RCW has a cavity in which it roosts. The group's cavity trees are located in "clusters." Inserts are used to add cavities to existing clusters, but they

are not being used to create new clusters at this time.

Construction of Cavity Inserts

Inserts used in the Oakmulgee District are constructed of Western cedar because it cracks, warps and swells less than the other woods tried. Although a harder wood would be ideal to minimize cavity enlargement by other species, this problem is overcome by placing a metal cavity restrictor over the insert.

The cedar is cut into 10-inch lengths, 4 inches wide by 6 inches thick. A vertical 3-inch hole is drilled from the top of the wood block to within 2 inches of the bottom. The entrance hole is 1 3/4 inches wide. As in naturally constructed holes, it is angled 8 degrees upward from horizontal to prevent rain from entering the chamber. A lid is added to the box and exterior wood putty is applied to the entire outside of the box to prevent sap from draining into the cavity.

Selection of Tree and Cavity Placement on Tree

The diameter of the tree at the height of the cavity must be at least 15 inches. RCW cavities may be used for as long as 20 years so, whenever possible, a healthy tree with a large crown is selected. Cavities are always inserted about two feet above the top of a ladder section. The Forest Service's Swedish climbing ladders come in 10-foot sections, so they always insert the cavity at a height of about 12 or 22 feet. They are located below the first live branch and within the range of natural cavities in the area.

A chainsaw is used to cut a rectangular hole into the tree. Then the top, bottom and sides of the hole are coated with the same wood putty as the insert.

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Squirrel excluder devices restrict flying squirrels from using both natural and artificial RCW cavities.

Introduction of Artificial Nesting Cavities

Just after the technique was initially developed, artificial nest cavities were quickly perfected on the Francis Marion National Forest, where a majority of existing cavity trees had been destroyed by Hurricane Hugo. Once home of the largest RCW population in the world, the 1989 hurricane destroyed 87 percent of the cavity trees on the coast of southern South Carolina. Mature pine stands

Artificial Cavities Boost Red-cockaded Woodpecker Population

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are used to tighten the fit and to fill small gaps.

Although the RCW is the only species that excavates cavities in live pines, there are approximately 19 other species that will take up residence in these cavities. Major competitors include other types of woodpeckers, bluebirds and flying squirrels. A metal restrictor plate is added to protect from these trespassers. The front of the insert is painted brown to help it blend into the tree. Vertical streaking seems to work best.

Heaving coatings of cream-colored paint in streaks is added to simulate flowing sap. Resin wells are a conspicuous feature of natural cavity trees and may help the RCWs locate the cavity insert. Resin wells are cut into the trees to get the sap to start flowing. After the

cavity is complete, Mawk and his assistants inspect the inside with a dental mirror and small drop light to make sure the insert didn't crack during construction.

Maintenance and Monitoring

Squirrels are a constant problem, requiring frequent removal of their nesting material from both inserts and natural cavities. Squirrel excluder devices are metal bands used to restrict flying squirrels from using the cavity while allowing the RCW in. The slick metal surface also deters rat snakes and other predators of new chicks.

Cavities are monitored throughout the year to observe the birds and record their activities. Birds are banded and a log is kept of each bird by gender and location. In 1993, 26 birds, both adults and chicks, were banded in the District. In

1998, a total of about 234 birds had been banded.

The Oakmulgee District has been designated a "donor population," which means it may donate birds to an existing RCW population in another national forest. Accurate records make it easier to locate the appropriate bird in the forest for this purpose.

In the Oakmulgee District and in other areas, the RCWs have adapted easily to the inserts, working the area around the entrance hole, pecking the bark and cambium, as if it was a natural cavity. The red-cockaded woodpecker is making a significant comeback due to habitat enhancement programs, offering an excellent illustration of the success that can occur when state, federal and private entities work together.



Artificial nesting cavities are made from Western cedar.

Woodpeckers of Alabama

Continued from page 19

Alabama Forestry Commission is working with the Alabama Department of Conservation and the U.S. Fish and Wildlife Service to implement a statewide conservation plan for this bird.

Ivory-billed Woodpecker

This magnificent bird was our largest and always the rarest. Dependent on virgin hardwood bottomlands and cypress swamps, it disappeared as the big timber was logged out. Illegal shooting was also a factor toward the end, as museums and collectors scrambled for the last of the last. Larvae of large wood-boring beetles were the principal food. Arthur Howell, in his 1928 **Birds of Alabama**, wrote of what may have been the last ivorybill documented in the state: "C.W. Howe, a trapper who has spent many years in the wilder parts of Alabama, tells me that he killed one of these birds about 1907 in the Conecuh swamps north of Troy, the only one he ever saw in the State." The species survived in Cuba into the late 1980s or possibly early 1990s, but all indications are it is now extinct.

Conclusion

Have you ever been awakened at dawn by a woodpecker jackhammering the side

of your house? Rather than proclaiming their territories like songbirds, woodpeckers peck or tap rapidly on objects to make a loud noise that is recognized by other woodpeckers. This is called "drumming" and differs from pecking for food or nest holes because it does not often make a hole—it just makes a loud racket. Drumming usually starts in late winter and continues into spring. Sometimes woodpeckers choose gutters, siding, or other metal surfaces as drumming spots because they can get a louder sound from them. This might be great for the woodpecker, but few people will tolerate this for more than a few consecutive mornings. The best way to combat the behavior is to put something

over the drumming spot, like a piece of foam rubber, which dulls the sound. If the spot no longer makes a loud noise when hammered, the bird will soon move on in search of another, better location.

Woodpeckers are truly an enjoyable component of Alabama's natural (and cultural) heritage, and they are dependent on us for the perpetuation of their habitat. In return, they reward us by controlling forest pests and by adding to the color and sound of our woodlands.

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Oakleaf Hydrangea

by SHIRLEY FIFIELD, Vice President, Alabama Wildflower Society

The most casual visitor to the state of Alabama will immediately notice the beauty and diversity of the plants which grace the highways and byways of our state. This must have been true in 1791 when naturalist William Bartram entered the area in his now classic quest to note and describe the natural history of the region.

Certainly one of the most striking among the many plants that he encountered was the oakleaf hydrangea (*Hydrangea quercifolia*, Bart.). From Bartram's discovery and description to the present day, this versatile plant is rediscovered annually in the wide variety of locations where it grows naturally: highlands, lowlands, stream bottoms and rocky hills. Well-known naturalist Dr. R.M. Harper stated that there are probably more oakleaf hydrangea in the state of Alabama than in the rest of the world put together!

Oakleaf hydrangea is found throughout Alabama. Because of the striking beauty of its profuse blooms, it has found its

way into the hearts of gardeners from the coast to the Tennessee Valley. The plant grows to a height of 8 feet. Its creamy white blooms appear in late spring, mature and continue to grace the plant with greenish pink panicles throughout the summer. In late summer they dry to a rich brown, which contrasts with the green oak-shaped leaves. In fall, the foliage turns a wine red and with the coming of winter, leaves fall, revealing a shaggy light brown bark on branches tipped with buds that anticipate the next spring's spectacular bloom.

Today, gardeners, wildflower enthusiasts, botanists and just everyday people are mounting an effort to designate the oakleaf hydrangea as the official Alabama wildflower. Alabama's state flower, the camellia (*Camellia japonica*), maintains its rightful place as one of the most versatile and beautiful plants to grace the gardens and parks of our state, but it is not native to Alabama. Nothing can detract from its beauty or its variety in color and form, but Ginny Lusk, president of the Alabama Wildflower Society, says, "We really should honor the oakleaf hydrangea, a native plant, by naming it the Alabama state wildflower. It is truly a distinguished part of the plant heritage of our state."

If you would like to join the effort to make the oakleaf hydrangea Alabama's state wildflower, contact your legislators and ask for their support in this cause.



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