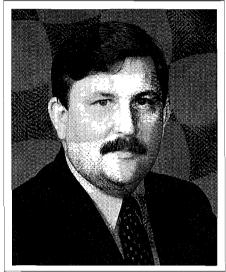


## STATE FORESTER'S MESSAGE

by TIMOTHY C. BOYCE, State Forester



It's been a long, hot summer. The extended drought that many of us experienced caused problems across the South. The most publicized was the rash of devastating forest fires in Florida. Alabama received barely enough rain to keep us out of a crisis, so we were able to help our neighbors. I am very proud of the firefighters from Alabama who gave their all to fight the Florida wild-fires.

Alabama has been very lucky. We have not had a "bad" fire season in several years. However, in conversations with many experts, we see weather patterns developing for this fall and next spring that could result in potentially higher than normal forest fire problems in Alabama.

As a landowner, you can take several fire prevention measures on your property this fall that could prevent or lessen problems later. A well-planned system of roads and firebreaks can help minimize fire losses. First, they allow better access throughout your property, enabling firefighters to reach the site of a fire quickly. They also break up the property, containing any fire and saving special sites from damage.

Prescribed burning, the careful use of fire under controlled conditions, reduces the fuel load in the forest, which in turn reduces the intensity of any later wildfire. Areas burned on a regular cycle of every three years or so will be much less susceptible to wildfires and sustain much less damage from any fire that does occur. You can read more about prescribed burning on pages 11-12 of this issue.

These fire prevention techniques give benefits far beyond just abatement of fire damage. Roads and firebreaks increase access for more and better recreation on the land. Prescribed burning has a host of benefits, including improved aesthetics, enhanced wildlife habitats, an increase in the number of wildflowers, and easier forest regeneration. If you would like to discuss starting a prescribed burning program on your forestland, contact your local office of the Alabama Forestry Commission. Their addresses and phone numbers are on page 10 of this issue.

Your forest is a TREASURE. Take time now to improve the protection of that resource.

Sincerely,

Timothy C. Boyce

2 CBayer

State Forester

#### Alabama's TREASURED Forests

#### Commissioners

David Long, Chairman

Gary Fortenberry, Vice Chairman

Clifford J. Drouet

Charlie Hamilton

Jimmy Samford

Stinson Slawson

James D. Spears

#### State Forester

Timothy C. Boyce

#### **Assistant State Forester**

Richard H. Cumbie

#### **Alabama Forestry Planning Committee**

- School of Agricultural and Environmental Sciences, Alabama A&M University
- Alabama Cooperative Extension System
- Alabama Department of Conservation and Natural Resources
- Alabama Department of Education, Vocational Division, Agribusiness Education
- · Alabama Farmers Federation
- · Alabama Forest Resources Center
- · Alabama Forestry Association
- · Alabama Forestry Commission
- · Alabama Soil and Water Conservation Committee
- · Alabama TREASURE Forest Association
- · Alabama Wildlife Federation
- Association of Consulting Foresters, Inc., Alabama Chapter
- Alabama Agricultural Experiment Station, Auburn University
- College of Agriculture, Auburn University
- · School of Forestry, Auburn University
- · Tennessee Valley Authority
- College of Agriculture, Environmental and Natural Sciences, Tuskegee University
- USDA—Farm Service Agency
- USDA-Rural Development
- USDA—Forest Service, National Forests in Alabama
- USDA—Forest Service, Southern Region, State and Private Forestry
- 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.

#### **Editorial Board**

Kim Gilliland	Alabama Forestry Commission
Tim Gothard	Alabama Forestry Commission
James Malone	Alabama TREASURE Forest Association
Tilda Mims	Alabama Forestry Commission
Editor	Kim Gilliland

### CONTENTS

Volume XVII. No. 4

**FALL 1998** 

- 4 A Remarkable Family Tradition by Tilda Mims
- 7 Alabama Agricultural Experiment Station by Katie Smith
- 8 Services of the Alabama Forestry Commission by Tim L. Gothard
- 1() Directory of Alabama Forestry Commission County Offices
- 11 Prepare Now for Prescribed Burning by Tim L. Gothard
- 14 Start Your Own Natural Resources Library by Kim Gilliland
- 19 Selling Timber with Sealed Bids by Mark Key
- 22 Understanding Timber Sale Variables by Billy Rye
- 24 Insects of Pine Forests by Mark A. Rumph
- 26 Pass It On by Joel Glover
- 28 Commonly Asked Questions about Releasing Pen-raised Quail

#### DEPARTMENTS

- 2 State Forester's Message by Timothy C. Boyce
- 6 Editor's Understory by Tilda Mims
- 13 Trees of Alabama: Pecan by Neil Letson
- 16 Landowner's Legislative Alert by Jay Jensen and Frank Sego
- 18 **Hidden TREASURES:** Hall of Famer Sees Revolutionary Changes in Forestry by Tilda Mims

**COVER:** The first 75 TREASURE Forest recipients were awarded a sign bearing the acronym TREASUR. The new sign bearing the acorn symbol and the word TREASURE has been used ever since. These signs belong to the Pine Lake-Tom Richey TREASURE Forest in Fayette County. The property was designated TREASURE Forest #15 in 1976. Read more about this family treasure on pages 4-6. Photo by Tilda Mims.

Alabama's TREASURED Forests (ISSN 0894-9654) is published quarterly by the Alabama Forestry Commission, 513 Madison Avenue, Montgomery, AL 36130. Telephone (334) 240-9355. Bulk rate postage paid at Montgomery, Alabama. POSTMASTER: Send address changes to: Alabama's TREASURED Forests, P.O. Box 302550, Montgomery, Alabama 36130-2550.

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

# A Remarkable Family Tradition

by TILDA MIMS, Forest Education Specialist, Northwest Region, Alabama Forestry Commission

Linda and Tom Richey stroll along the bank of the lake built by Tom's grandfather.

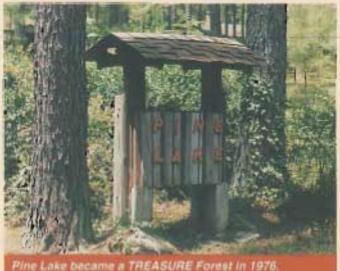
hen family heirlooms are considered, one's first thoughts may turn to delicate antique furniture and precious family photographs. Among forest landowners, however, the family legacy is likely to include acres of forestland carefully managed to produce timber, beauty and recreation.

Whether the family heritage is a treasured cameo broach or a TREASURE Forest, the concern remains the same: Will it be valued by future generations?

E.B. Richey of Fayette County
has the satisfaction of knowing
his 240-acre TREASURE Forest, Pine
Lake, has passed into able hands. In the
summer of 1991, its ownership was transferred to his son, Tom, and his daughters
Judy and Peggy.

The TREASURE Forest was renamed and recertified in Tom's name because he makes the forest management decisions. In 1998, the Pine Lake-Tom Richey TREA-SURE Forest was named the winner of the Northwest Region Helene Mosley Memorial TREASURE Forest Award.

Pine Lake is more than scenic forestland; it is home to both E.B. Richey and his son, Tom, and Tom's wife, Linda. Their homes are almost side by side, facing a 1.5-acre



lake built by Richey's father-in-law. His wife's father believed the recreational lake would serve as a "centralizing element" for the family, something to entice his 12 children and their families back to visit the family homestead.

The lake and surrounding forest worked its magic early on the Richey family, drawing them from their home in Birmingham for frequent weekend trips. In the early 1960s E.B. Richey and his wife, Mae Opal, bought the tract from her family and built the lake house. In 1967 Richey retired as an architect, and he and his wife moved to Fayette County.

E. B. Richey has devoted his retirement

years to forest management.

Over the last 35 years he has cleared, thinned and planted the tract with the goal of 100 percent growth. In 1976 Richey became Fayette County's first TREASURE Forest landowner and the 15th one in Alabama.

Since that time the senior Richey's dedication to his forestland has received several prestigious awards. In 1981 he and his wife were featured on the cover of Alabama Forests magazine in recognition as an outstanding Tree Farmer. In 1983 he received Weyerhaeuser

Company's Mississippi/Alabama Region Tree Farm Family Plantation Award, and in 1991 he was named Conservationist of the Year for Fayette County by the Alabama Wildlife Federation.

"Forest management keeps me active,"
E.B. Richey said. "I work five to six hours
a day outright. I have an old-fashioned
feeling that work does you more good
than pills. I firmly believe I wouldn't have
lived into my late 80s without it."

Tom Richey quickly found pleasure in forest management and enjoyed working with his father on weekends and holidays until be, too, escaped the busy life of the city. In 1985 Tom and Linda moved their family from Bay Minette to a home nestled amid the serenity of Pine Lake.

"It's peaceful here. I've lived in Birmingham and Huntsville, and they're just
too crowded," Tom said. "Here I can
hunt and fish, and I garden for our family
and the deer," be jokes. Continuing his
father's efforts is serious business, however. "I want to maintain Pop's goals of
achieving maximum growth of our timber and maintaining ample wildlife habitat," he said. "I hope to deal with some
new things as well. We have planted 53
loading areas in wildlife food plots,
established firebreaks in all new roads
and are trying out herbicides."

#### Forest Management

The forest management objective for Pine Lake is economically productive timber management that provides an ample wildlife habitat for both game and non-game species. Although the predominantly managed species is loblolly, care has been given to retain and protect a variety of species for both wildlife and aesthetic purposes.

E.B. Richey and, now Tom, keep scrupulously complete records of all activities on the farm dating to before its. TREASURE Forest certification. Their records illustrate a strategically progressive forest management plan.

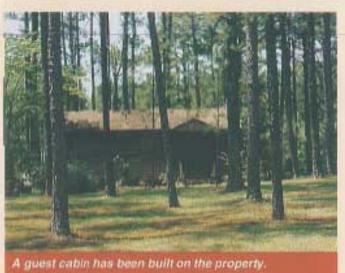
During the first five years in the TREASURE Forest program, the Richey family had 165 acres clearcut and 70 acres thinned with, according to the reinspection team, no detriment to water quality or soil erosion. Throughout the years a test area of Virginia pines for shaping into Christmas trees has been established and abandoned gas wells have been reclaimed and replanted in loblolly pine. Today the 18- to 20- year-old pine plantation is ready to be thinned.

#### Wildlife Habitat Management

Although they have planted many wildlife foods, the Richeys strive for abundant natural wildlife foods by retaining hardwood drains and creating edge and browse effects during site prep and planting operations. The wildlife population has increased dramatically in the last 20 years. Wild turkey, otters, squirrels and birds are plentiful. The whitetail deer population, once scarce at Pine Lake, is now almost to the pest stage, according to Tom.



George Lowery of the Alabama Forestry Commission and Tom Richey walk through an area known as "Grandma's Park." Mse Opal Richey cleared much of the area by herself. The vegetation beyond the park will be bushhogged after the ground nesting birds are gone.



The lake is maintained for family recreation but also creates a plentiful water supply. It has been stocked with bass, bream and catfish. Three groups of catalpa trees have also been added for bait.

More than a mile of ATV/hiking/nature trails have been added to serve as linear wildlife openings for deer and groundnesting birds.

#### **Educational Uses**

The Richey family enjoys sharing the bounty of this forestland with the community. They welcome family, friends, agency personnel, fellow landowners and church groups to tour the property and use it as a meeting place.

In recent years they have hosted churchwide picnics, a Christian youth concert, Easter egg hunts and a daylong forestry toar for forestry planning committees of Fayette and Lamar counties. The project not only resulted in four new TREA-SURE Forests, it

received first runner-up for the TREA-SURE Forest Special Project Award from the Alabama Forestry Planning Committee at the annual conference.

Pine Lake is more than a retreat, a residence or an economic investment. It is a family tradition, beginning with one man's desire to keep his family together throughout the years. It continues today as another man's dream of making the world a better place for having been a part of it. Tom Richey sustains his father's legacy by setting the pace for multiple-use forest management into the year 2000 and well beyond.



by TILDA MIMS, Forest Education Specialist, Northwest Region, Alabama Forestry Commission

B. Richey gives much of the credit for Pine Lake to his late wife, Mae Opal. "My wife was always a far better businessperson than me. She said, 'We want this land to stay in the family.' She fell into the idea of living here on her own; she loved it. She didn't send me out to do the work. She went with me."

Tom Richey's family moved to Pine

Lake in 1985 as an answer to prayer, according to Linda. They had hoped to move within 200 miles of Fayette, only to have Tom hired as a manufacturing engineer in nearby Vernon. Today he works only eight miles away as a manufacturing engineer over the tube mill at Arvin Exhaust.

"I can't express how much these last years have meant to us as a family," Tom says. "My children got to spend many years with my father while they were growing up and we all got to spend a few years with my mom before she died. Now I have the opportunity to spend all

these years with him. It's great."

Tom and Linda readily agree that "Pop" helps them more than the reverse. "I'll cut the logs down and he'll split them during the week and bring me a load of firewood," Tom says.

The senior Richey says that Linda is just as interested in Pine Lake and just as encouraging to Tom as his wife was to him. "We get along together inside and out. Tom and I work the garden and Linda puts it up—that's pretty good teamwork."

Although Tom makes the forest management decisions, his sisters enjoy visiting the property whenever they can. His sister Peggy King and her husband, Terry, live in Talladega. They have three children. Terry King is retiring soon and is looking forward to becoming more involved in Pine Lake, Tom said.

His sister Judy Richley, her husband, Johnny, and their three children live in Tom and Linda's two children, Tommy and Cindy, enjoyed growing up on this TREASURE Forest and come back to visit as often as they can. Tommy is in the Coast Guard and Cindy has a position at a bank in Mobile. Tom says his son loves the land just as he does, and looks forward to working around the place

Leavenworth, Kansas, and come down

from time to time for visits.

whenever he gets to come home.

Handwritten deeds trace ownership of the land through Mae Opal Richey's family and today Pine Lake has passed on to the next generation. E.B. Richey has the satisfaction of knowing that his beloved Pine Lake is in good hands for many future generations. He said it best when he said, "When our generation passes it on, it's a great source of satisfaction to say 'here it is, you take over' and know that it will be taken care of."

Many years ago, Tom's grandfather built a small lake hoping to draw his children home for visits. More than 40 years ago, E.B. and Mae Opal Richey made their home there, working daily to see it reach its full potential as a place of beauty and productivity.

Today Tom and Linda welcome the opportunity to continue a family tradition of stewardship of the land. They look forward to teaching their future grandchildren about the true gift of Pine Lake—a family-owned TREASURE Forest.



Members of the Fayette and Lamar County Forestry Planning Committees were on hand for the Helene Mosley Award Presentation to Tom and Linda Richey (second and third from right).



E.B. Richey

#### ALABAMA AGRICULTURAL EXPERIMENT STATION

## Conducting Vital Research in the Field of Forestry

by KATIE SMITH, Associate Editor, Alabama Agricultural Experiment Station

In 1883, the Alabama Legislature established the Alabama Agricultural Experiment Station (AAES), a research system entrusted with the mission of developing better, more efficient ways to produce food, fiber and other products from Alabama's natural resources. Now, some 115 years later, that system continues to provide information valuable to all Alabama citizens, including the state's forest industry and all users of forest resources.

While forestry is not the exclusive subject of AAES studies, it is a major focus of scientists in numerous fields of study at Auburn University, Alabama A&M University and Tuskegee University, which are all part of the AAES system.

According to Pat Green, assistant director of the AAES at
Auburn University, more than \$1 million is allocated each year by the AAES for forestry research throughout the state. Dick
Brinker, dean of Auburn University's School of Forestry, notes that forestry research has become vital to the state in recent decades as the forest

industry has developed in Alabama.

Brinker explains that Alabama's forest industry began to truly blossom some 40 years ago when the forest products industry started migrating into the Southeast in search of its primary resource—trees.

"Forestry is the largest single industry in the state," said Brinker. "More than \$13.2 billion per year is contributed to the state's economy through the forest products industry. And the basis for that industry is the timber resource that we have in the state."

According to Brinker, 68 percent of the state's land area is timberland. There are



AAES researchers are studying the effects of elevated carbon dioxide on the growth and development of longleaf pines.

214,000 landowners who own 40 acres or more of forestland and 450,000 landowners who own one acre or more. "There's a lot of people who are in forestry to grow timber as a business or to enjoy the wildlife and recreation opportunities or just the aesthetics of forestland. It's not only a big business, it's a big part of the state's environment. It's a bigger part of most Alabamians' lives than most people realize."

To support this industry, the AAES has research sites in six locations throughout the state including units in Autauga, Barbour, Coosa, Fayette, and Lee counties and the Solon Dixon Forestry Education Center near Andalusia. Studies also are

conducted on public and private landholdings throughout the state. In addition, many cooperative studies are underway throughout the Southeast among scientists at Alabama's three institutions and researchers at other universities and organizations in the region.

Research projects are wide-ranging. Basic research is conducted on such issues as tree physiology related to seedling quality, growth and environmental issues. Applied projects address nursery and silvicultural practices related to production and sustainability issues.

Scientists in other fields of study outside of the traditional forestry departments, such as agricultural engineering and rural sociology, also are addressing issues related to economic and environmental well-being in the state.

The AAES often works hand in hand with other agencies located in Alabama, including the U.S. Forest Service, which has two research units located on the Auburn campus. Studies on such

(Continued on page 21)



Seedling and nursery production are focuses of AAES research projects.

## Services of the Alabama Forestry Commission

by TIM L. GOTHARD, R.F., Forest Management Chief, Alabama Forestry Commission

he Alabama Forestry Commission (AFC) provides a variety of services to forest landowners and the general public. Some services are provided on a continuous or as needed basis while others are provided upon request. The purpose of this article is to highlight and briefly describe the services of the AFC and the method by which landowners access them.

#### Forest Management Planning Assistance

The AFC provides many forest management technical services specifically aimed at helping non-industrial private landowners develop their forestland to meet personal goals and objectives while maintaining the multiple values of the forest.

Technical information from AFC personnel provides landowners the opportunity to make educated land management decisions. Technical recommendations give landowners the details necessary to carry out practices they choose to implement. All technical information and recommendations are based on TREASURE Forest principles and seek to promote attainment of TREASURE Forest status.

Tree Planting Plan Development is provided through each local office of the AFC. This service provides landowners with written recommendations for site preparation and tree planting based on their management goals and specific site conditions. This service is available for both open and forested land. AFC personnel also provide this service to landowners who perform tree planting activities under the federal, state, and privately funded cost-share programs in Alabama.

Stand Management Plan Development provides a similar service but targets existing stands where landowners plan to perform silvicultural or wildlife practices such as thinning, prescribed



burning, and release. This service is also provided to landowners involved with cost-share programs in Alabama.

Forest Management Plan Development is where entire properties are evaluated. Based on landowner objectives, constraints, specific site conditions, and sound stewardship principles, TREASURE Forest management plans are prepared. These plans pull together information and treatment recommendations covering multiple stands and objectives into a format that can be used to guide management activities over an extended period, usually 10 years. AFC personnel prepare such plans or collaborate with other people in the forestry community, such as private consultants, industry assistance foresters, and wildlife biologists to find the best approach to facilitate plan development.

Forest Management Demonstrations/ Technical Sessions for Landowners are provided on a variety of topics and practices landowners commonly wish to employ or should consider for implementation on their properties. Demonstrations and technical sessions are provided on both a request basis and without request when new forest management information or techniques of potential interest to landowners become available.

TREASURE Forest Nominations and Inspections are services the AFC offers to landowners with great pride. Nomination

is the first step in the process for landowners to seek the prestigious TREASURE Forest certification. All nominations must be accompanied by a completed 10-page TREASURE Forest Inspection Record before they can be considered for certification. Completion of an inspection record requires an on-site inspection by a forester and wildlife biologist.

Local Consulting Forester, Forestry Vendor and Timber Buyer Listings are services maintained and provided by each county office of the AFC. They offer landowners needing forestry assistance the opportunity to obtain contact information for local sources who can perform activities such as site preparation, tree planting, timber inventory and sales, and a host of other management activities.

The Alabama Forest Inventory is a continuing service provided by the AFC without request, and one in which the AFC has become more intensively involved in recent years. This service evaluates, in great detail, the extent, type, productivity, value, and condition of Alabama's forest through a series of permanent inventory plots located throughout the state. AFC inventory crews have recently been established and perform a significant portion of the actual measurement work. Results from this service provide information to forest industry and a broad array of other interest groups and forest stakeholders for critical planning purposes.

#### Direct Forest Management Assistance

Prescribed Burning and Permanent Firelane Construction services are provided on request for a fee. The number of sites and acres that can be burned within a given year is greatly influenced by weather, demand for the service in given areas, and the number of suitable burning days in a given year.



Prescribed burning is a service conducted by the Alabama Forestry Commission for a fee.

The AFC also operates a nursery that produces quality *tree seedlings* for forest and wildlife management purposes and makes them available for sale and delivery-to-Alabama-landowners-on-an-annual basis. Ordering information is available upon request from local AFC offices or call E.A. Hauss Nursery at 334-368-4854.

### Best Management Practices (BMPs) for Forestry

BMPs are voluntary guidelines to protect water quality during and after forest management operations. The AFC offers *Pre-harvest BMP Planning* assistance to landowners and timber harvesters in an effort to further the use of BMPs and the protection of water quality. AFC personnel provide insight and recommendations regarding the proper placement of roads, skid trails, landings, and streamside management zones, consistent with "Alabama's BMPs for Forestry."

BMP Evaluations during and after timber harvest operations are initiated through several avenues. Some are by invitation from landowners, timber harvesters, and consultants. Others are initiated by concerns from the general public, expressed directly either to the AFC or through the Alabama Department of Environmental-Management, or-by-A-FC discovery during the course of other work-related activities. Regardless of the source through which evaluations are initiated, with landowner permission to view the property, AFC personnel evaluate BMP implementation based on "Alabama's BMPs for Forestry" and document their findings. If BMP discrepancies are noted, recommendations are prepared to remedy the situation and protect water quality.

Random BMP Aerial Monitoring provides an opportunity to continually assess the frequency with which BMPs are employed so that educational efforts can be modified or targeted to specific areas, if needed, to further the goals of protecting water quality. Likewise, positive information obtained through this service can serve witness to the effectiveness of the BMP education effort and the stewardship principles most landowners practice.

#### **Urban Forestry Services**

Tree City USA is a designation that recognizes municipalities that are effectively managing their urban forest. If requested, the AFC will assist with developing the structures, committees, and activities necessary to achieve Tree City USA status. The AFC can also assist municipalities with procuring professionals for permanent urban forestry positions, or permanent urban forestry assistance, including grant sources for conducting urban forestry projects.

Urban Tree Assistance services are provided upon request and include insect and disease diagnosis, prevention, and treatment options. As well, information on proper tree selection can be provided.

#### Forest Health Services

southern Pine Beetle (SPB) Detection is provided to all landowners without request. The SPB is the most significant insect pest of our Southern pines and costs landowners millions of dollars in lost revenue. Aerial detection is conducted on a monthly basis from spring through fall. Utilizing AFC aircraft and personnel, SPB and other pine beetle infestations are detected, mapped, and tracked on virtually a continuous basis.

SPB Infestation Notification is a critical service that can be the difference between minimal and significant losses to landowners. It is provided to landowners without request. Results of SPB aerial detection surveys are transferred to topographic maps, affected landowners are identified, and notification letters and maps are mailed in an effort to stimulate action and avoid further losses.

Forest Health Monitoring is an ongoing service provided for the benefit of the general public, landowners, and the forestry community. This program records long-term health trends and changes in Alabama's forest through permanent plots maintained and monitored

(Continued on page 21)

To obtain forest management assistance, contact the office of the Forestry Commission in the county where your property is located. A listing is found on page 10.

## **Directory of Alabama Forestry Commission County Offices**

**Autauga County** 

2226-I Hwy. 14 West Autaugaville, AL 36003 334-361-0576

**Baldwin County** 

32760 State Hwy. 59 Loxley, AL 36551 334-964-6391

**Barbour County** 

P.O. Box 163 Clayton, AL 36016 334-775-3496

**Bibb County** 

P.O. Box 278 Centreville, AL 35042 205-926-4917

**Blount County** 

415 5th Ave. E., Suite F Oneonta, AL 35121 205-274-2231

**Bullock County** 

P.O. Box 392 Union Springs, AL 36089 334-738-3040

**Butler County** 

105 Firetower Rd. Greenville, AL 36037 334-376-9114

**Calhoun County** 

3985 Hwy. 21 N. Jacksonville, AL 36265 256-435-6245

**Chambers County** 

P.O. Box 501 LaFayette, AL 36862 334-864-9368

**Cherokee County** 

P.O. Box 342 Centre, AL 35960 256-927-3163

**Chilton County** 

221 Co. Rd. 423 Clanton, AL 35045 205-755-3042

**Choctaw County** 

Route 1 Box 2 Butler, AL 36904 205-459-2928

**Clarke County** 

P.O. Box 628 Grove Hill, AL 36451 334-275-3283

**Clay County** 

P.O. Box 453 Lineville, AL 36266 256-396-2441 **Cleburne County** 

7315 Hwy. 78 Heflin, AL 36264 256-463-2876

**Coffee County** 

P.O. Box 413 New Brockton, AL 36351 334-894-6734

**Colbert County** 

201 North Main St. Tuscumbia, AL 35674 256-383-4376

**Conecuh County** 

P.O. Box 206 Evergreen, AL 36401 334-578-3226

**Coosa County** 

Route 2 Box 45-B Rockford, AL 35136 256-377-4638

**Covington County** 

P.O. Box 451 Andalusia, AL 36420 334-222-4041

Crenshaw County

P.O. Box 182 Luverne, AL 36049 334-335-5712

**Cullman County** 

1527 Sportsman's Lake Rd. N.W. Cullman, AL 35055 256-734-0573

**Dale County** 

P.O. Box 61 Ozark, AL 36360 334-774-8112

**Dallas County** 

P.O. Box 631 Selma, AL 36702 334-875-7131

**DeKalb County** 

P.O. Box 680744 Ft. Payne, AL 35968 256-845-1331

**Elmore County** 

P.O. Box 1058 Wetumpka, AL 36092 334-567-5486

**Escambia County** 

P.O. Box 178 Brewton, AL 36427 334-867-7798

**Etowah County** 

1511 Crudrup Rd. Attalla, AL 35954 256-538-2535 **Fayette County** 

103 1st Ave. N.W. Suite 8 Fayette, AL 35555 205-932-6223

Franklin County

P.O. Box 404 Russellville, AL 35653 256-332-2460

**Geneva County** 

P.O. Box 687 Geneva, AL 36340 334-684-2876

**Greene County** 

P.O. Box 556 Eutaw, AL 35462 205-372-3980

**Hale County** 

P.O. Box 417 Moundville, AL 35474 205-371-2202

**Henry County** 

P.O. Box 351 Abbeville, AL 36310 334-585-2403

**Houston County** 

P.O. Box 477 Dothan, AL 36302 334-677-5454

Jackson County

16003 Ala. Hwy. 35 Scottsboro, AL 35768 256-574-3217

**Jefferson County** 

6640 Old Hwy. 31 N. Gardendale, AL 35071 205-631-6982

**Lamar County** 

P.O. Box 426 Vernon, AL 35592 205-695-7530

**Lauderdale County** 

P.O. Box 361 Florence, AL 35630 256-764-4382

**Lawrence County** 

13075 Ala. Hwy. 157, Suite 1 Moulton, AL-35650 256-974-8168

Lee County

651 Lee Rd. 113 Opelika, AL 36801 334-742-0320

**Limestone County** 

P.O. Box 164 Athens, AL 35611 256-232-7940 **Lowndes County** 

P.O. Box 206 Hayneville, AL 36040 334-548-2402

**Macon County** 

210 N. Elm St., Suite 401 Tuskegee AL 36083 334-727-3783

**Madison County** 

819 Cook Ave. Room 203 Huntsville, AL 35801 256-532-1565

Marengo County

P.O. Box 480716 Linden, AL 36748 334-295-5811

**Marion County** 

P.O. Box 561 Hamilton, AL 35570 205-921-3843

**Marshall County** 

P.O. Box 262 Guntersville, AL 35976 256-582-4212

**Mobile County** 

1070 North Schillingers Rd. Mobile, AL 36608 334-639-9629

**Monroe County** 

P.O. Box 538 Monroeville, AL 36460 334-743-2350

**Montgomery County** 

11261 U.S. Hwy 331 Montgomery, AL 36105 334-280-3701

**Morgan County** 

400 Chestnut St. N.W. Hartselle, AL 35640 256-773-2114

**Perry County** 

P.O. Box 482 Marion, AL 36756 334-683-8537

**Pickens County** 

P.O. Box 247 Carrollton, AL 35447 205-367-8232

**Pike County** 

P.O. Box 167 Troy, AL 36081 334-566-3436

**Randolph County** 

P.O. Box D Wedowee, AL 36278 256-357-2178 **Russell County** 

62 Mathis Rd. Seale, AL 36875 334-855-3302

**Shelby County** 

P.O. Box 768 Columbiana, AL 35051 205-669-4133

St. Clair County

18909 U.S. Hwy. 411 Springville, AL 35146 205-629-6421

**Sumter County** 

P.O. Box 104 Livingston, AL 35470 205-652-6500

**Talladega County** 

P.O. Box 561 Talladega, AL 35160 256-362-4848

**Tallapoosa County** 

P.O. Box 4 Dadeville, AL 36853 256-825-4244

**Tuscaloosa County** 

P.O. Box 599 Northport, AL 35476 205-333-1490

**Walker County** 

P.O. Box 1209 Jasper, AL 35501 205-384-6344

**Washington County** 

P.O. Box 267 Chatom, AL 36518 334-847-2972

**Wilcox County** 

P.O. Box 355 Camden, AL 36726 334-682-4421

Winston County

P.O. Box 595 Double Springs, AL 35553 205-489-5014

## Prepare Now for Prescribed Burning

by TIM L. GOTHARD, R.F., Forest Management Chief, Alabama Forestry Commission

inter is prescribed burning season, but now is the time to prepare for it. What stands will you burn? Are your firelanes prepared? Do you have a prescribed burning and smoke management plan so that you know ahead of time the weather conditions necessary to conduct your burn effectively and safely?

#### What Stands Will You Burn?

If you have a forest management plan. you probably already know the answer to this question. If you don't have one, or don't know the answer to this question, evaluate your stands and designate areas to be burned. Doing so now will allow time to complete important tasks necessary to put you in the proper position to capitalize on the few days of good burning weather during the winter.

Whether or not you need to burn depends on many factors. Most important are your specific management objectives. If timber production is an important objective for all or parts of your property. significant competition from undesirable vegetation is one sign that prescribed burning may be beneficial. This is especially true in pine stands devoted to timber production where hardwoods (sweetgum, etc.) are crowding or threatening to overtop pine crowns and competition for light is significant. Stands with low understories, where competition for light is not a problem, may also benefit from burning if the competition is significant. In such cases, it is best to have a registered forester evaluate the stand to see if burning for timber production advantages is prudent. If natural pine regeneration is a future goal, the benefits of maintaining a sparse understory may be another reason to burn even though productivity benefits may be minimal to the existing trees.

If wildlife management is an important objective, there are several situations where burning may be in order. For deer in particular, both the height and palatability of understory vegetation is important. It is most beneficial to provide succulent vegetation within about four to five feet of the ground. Potential sources of browse above this level are out of the primary feeding zone for deer. Further, it presents shading problems for other browse plants that normally grow within easy reach of deer. Prescribed burning will promote succulent resprouting within easy reach for deer.

To provide nesting habitat for turkey, prime understories should provide a mixture of open herbaceous areas and low. scattered clumps of shrubby vegetation. Stands with dense shrubby understories are prime candidates for burning to benefit turkey. Quail benefit from understo-

ries composed of a random patchwork of one- and two-year-old roughs composed of mainly herbaceous vegetation. This makes most any pine stand with an understory more than two to three years old a potential candidate for burning to improve quail habitat.

Regardless of your primary objective, safety against losses to wildfire should be a fundamental consideration for all stands. Stands with excessive fuel accumulations (brush, pine needles, etc.) should also be considered for prescribed burning, even if no significant benefits in timber production or to wildlife are expected. Many pine plantations established on former agricultural land may be relatively free from understory vegetation and hardwood com-

#### **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

Yes, I would like to join the Alabama TREASURE For	rest Association
Date:	
Name <sup>*</sup>	
Address:	
City	
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 (ee 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

petition, but can harbor excessive pine needle buildup. A prescribed burn under the right weather conditions can allow this risk to be diminished.

#### Are Your Firelanes Prepared?

To burn safely and capitalize on suitable burning weather, adequate firelanes need to be in place well ahead of time. Fall is typically the driest time of the year and is ideal for operating heavy equipment in areas too moist during other seasons-- like winter when you plan to burn. This may sound contradictory, but it is true. The majority of burning is conducted during the time of year that is typically wettest. In reality, it is not a contradiction because dry fuels, not necessarily dry ground, is one of the necessary conditions for prescribed burning. Most winter, understory burning targets weather conditions one to three days following rain. Prepare your firelanes now to avoid finding out later that you have dry enough weather to burn but soil conditions too wet to construct firelanes.

#### Do You Have Prescribed Burning and Smoke Management Plans?

Whether you conduct prescribed burning yourself or hire a professional, prescribed burning and smoke management plans are important. The planning process for a prescribed burn must take into account the inherent fuel characteristics. within a stand, the reasons why burning is needed, and the desired outcome to determine the specific weather and fuel conditions necessary to conduct the burn safely and effectively. Preparing to manage the smoke from a prescribed burn is an extremely critical process as well. Each person planning to conduct a prescribed burn must consider the offsite impacts smoke can have and ensure that the burn is conducted in a manner that does not promote off-site safety problems. Smoke screening provides the ability to determine what conditions are necessary to avoid smoke problems. This process along with burn planning based on specific site conditions is the only way to prepare yourself ahead of time so that poor burning days. both from a safety and effectiveness standpoint, are avoided. Likewise, it is the only way to be adequately prepared to capitalize on the right weather and stand conditions when they come along.

### **Burn Permit Toll-free Numbers**

To obtain a burn permit, call the number for the county where the burn will be conducted. These numbers may also be used to report forest fires.

Phone #	Counties	
1-800-942-3107	Colbert, Franklin, Lauderdale, Lawrence, Limestone, Marion & Morgan	
1-800-452-5923	Bibb, Fayette, Lamar, Pickens & Tuscaloosa	
1-800-292-6653	Cullman, Jefferson, Shelby, Walker &Winston	
1-800-572-2017	Blount, Calhoun, Cherakse, DeKalb, Etowah, Jackson, Madison & Marshall	
1-800-492-3711	Chambers, Clay, Cleburne, Coosa, Randolph, St. Clair, Telladega & Taliapoosa	
1-800-392-5679	Bullock, Buller, Crenshaw, Elmore, Lee, Lowndes, Macon, Montgomery & Russell	
1-800-922-7688	Barbour, Coffee, Covington, Dale, Geneva, Henry, Houston & Pike	
1-800-672-3076	Baldwin, Conecuh, Escambia & Monroe	
1-800-672-6912	Choctaw, Clarke, Mobile & Washington	
1-000-242-2504	Autauga, Chiton, Dallas, Greene, Hale, Marengo, Perry, Sumter & Wilcox	

#### Liability and the Alabama Prescribed Burning Act

It is important to consider the potential liability associated with prescribed burning. You may be liable for physical damage that occurs to adjoining property should your fire escape. As well, you may be liable for damage precipitated by smoke from your prescribed burn, specifically, but not limited to, vehicle accidents that result from impaired vision due to smoke on roads.

It is also important to understand the difference between burning by a certified prescribed burn manager and those who are not certified. First, it is entirely legal for anyone to conduct prescribed burning provided that they have a burning permit from the Alabama Forestry Commission. However, burning performed or supervised by a certified prescribed burn manager has a significant advantage. The Alabama Prescribed Burning Act, passed by the Alabama Legislature in 1995, limited liability associated with damage from prescribed burns or their smoke. provided that the burn was done in compliance with the act. To be in compliance, the following must be in order:

 At least one certified prescribed burn manager must supervise the burn.

- A written prescription, including considerations for smoke sensitive areas, must be prepared and witnessed or notarized prior to the burn.
- A burning permit must be obtained from the Alabama Forestry Commission.
- The burn must be conducted according to state laws and rules applicable to prescribed burning.

If you are not a certified prescribed burn manager, you may want to consider the services of someone who is certified, or consider attending training to achieve certification before conducting prescribed burning yourself. Again, you do not have to be certified to perform burning, but the advantage is significant.

#### Summary

Prescribed hurning is indeed an important forest management tool. It is a single practice that provides the opportunity to achieve multiple benefits. Planning ahead provides you or the person who will conduct the burn ample time to prepare a safe and effective game plan. Stack the deck in your favor, get it together now so your winter burning activities are a thing to remember—for all the right reasons instead of reasons you'd just as soon forget.



# Pecan

by NEIL LETSON, R.F., Urban Forestry Program Specialist, Alabama Forestry Commission

f I were a young man," said borticulturist Luther Burbank, "I would go to Texas, knowing as I do the possibilities of the pecan industry, and devote my life in propagating new (pecan) species . . . and doing the same work there in nut culture as I have done in other lines of Horticulture. Your pecan is superior to our walnut and you are standing in your own light-why not develop it?" These words are not only remarkable because they were written in 1908, but because they were heeded by agricultural entrepreneurs and researchers all over the South. As a result, the pecan tree (Carya illinoensis) is arguably America's most economically valuable nut tree and has become a very important commercial crop in Alabama.

The pecan tree is actually not native to Alabama, except for a small pocket in northern Marengo County. Its natural range is along moist bottom lands from Indiana southward along the Mississippi River system then west toward Oklahoma, Texas, and into scattered parts of northern Mexico. Today, pecan trees are planted and cultivated throughout Alabama and in many parts of the United States and world.

As the largest member of the hickory group, pecan trees are stout with spreading crowns when on open sites. Mature trees normally range from 70 to 100 feet in total height. Its compound leaves are 12 to 20 inches long. The nine to 17 odd-numbered leaflets are gracefully narrow and taper like the head of a lance. During April and May, the distinctive pollenbearing catkins appear on the end of last year's twig growth. By late fall and early winter, the nuts ripen and fall to earth



ready for consumption and harvest.

The most popular uses of the pecan tree are nut-production, landscape plantings, and as a wood product. Commercially, pecan wood is used in making furniture, doors, cabinets, and flooring. The wood is close-grained, tough and strong. It is almost two times harder than oak. This characteristic makes it useful where abrasion resistance is needed.

Nut production is an option for forest landowners, but can be very expensive. Optimum production requires good soils, proper site preparation, correct selection of varieties, adequate spacing, proper planting, pruning and training, fertilization, irrigation, pest control, weed control, and harvesting techniques. Commercial producers are keenly aware of the pecan tree's tendency to bear fruit during alternate years, with intervals normally ranging from one to three years. To attain annual nut production, sites must be intensively managed. But even intensive management may not overcome its alternate bearing tendency.

Another important benefit of the pecan tree is wildlife enhancement. Several types of birds, fox, gray squirrels, opossums, raccoons, and other wildlife species favor the nut as a food source. The high fat and oil content help build up food reserves for the

winter. Branches, bark, and leaves provide foraging habitat for birds that eat insects, such as woodpeckers.

Pecan trees can either be strategically planted for wildlife on open sites or remnant pecans managed individually. Where pecan trees already exist in a forest stand, the key is to give enough room for growth and development. More sunlight and space mean more energy can be devoted to nut production, resulting in more mast for your wildlife. Where pecans are crowded, adjacent trees and shrubs should be pruned back or removed to promote lateral growth of the favored tree. Cross-pollination is another consideration for wildland pecan trees. Pecans are wind-pollinated and can cross-pollinate with other pecan trees as far as a quarter of a mile away. Ideally, you should try to manage pecan trees within 300 feet of another variety. And finally, a soil test will show if fertilization is needed to enhance nut production.

Other landowner uses of the pecan tree include recreation, aesthetics, and environmental enhancement. Special efforts should be made to manage trees on sites suited for the pecan tree with plenty of sunlight. Since many of these other management objectives involve on-site people uses, attention should be given to safety. Pecans tend to suffer from wind firm weakness and limb breakage. Trees planted or managed on moist, well-drained, and well-aerated soils will support firmer root systems and stronger branch attachments.

For more information on the pecan tree, see "Pecan Production," Circular ANR-54, available from your local Alabama Cooperative Extension System office.

# Start Your Own Natural Resources Library

by KIM GILLILAND, Editor

f there's one common denominator among forest landowners, it seems to be a continuous search for information about how to manage their land, identify the trees on it and attract more wildlife. Talking with natural resource professionals and attending seminars and tours are good ways to acquire this information. Another way is to read books and magazines on the subject. The Forestry Commission hopes that Alabama's TREASURED Forests is filling a need in this area. There's a wealth of information available on natural resources, and listed in this article are several books and magazines to consider. It is by no means a complete list, but is intended to show you a sampling of what is available. Some of these materials are lowcost or free. Your local library may have some of them on hand.

The ISBN number is listed for all books that have one. This "International Standard Book Number" is a 10-digit identification system that allows booksellers and libraries to identify a book. It will be helpful if you cannot find the publication at your local book store and wish to have them order it for you. Prices are subject to change and may vary widely between different booksellers. If a particular book is known to only be available from one source, ordering information is listed.

#### **Forestry**

1997 Forest Landowner Manual, 31st Edition is published by the Forest Landowners Association. It provides information on every phase of timber operations and has a directory of contacts. Available from the Forest Landowners Association, P.O. Box 95385, Atlanta, GA 30347; 1-800-325-2954. \$25 per copy, plus \$3 postage and handling for each copy. Become a member of the Forest Landowners Association and receive the manual (published

every other year) and the association's *Forest Landowner* magazine as a benefit of membership. The next manual will be published in the spring of 1999.

Forest Owners' Guide to the Federal Income Tax, 1995 Book provides a framework for analysis of timber investments and a chapter on timber tax planning. Discusses federal income tax considerations for timber, explains how to research tax questions, sources of tax assistance, and how to keep forest records. Includes tax forms and a glossary. Order from the Government Printing Office, 1-202-512-1800; stock number 001-000-04621-7; \$12 (paperback).

Managing the Family Farm in the South is a small book that includes chapters on regeneration, harvesting, economics and wildlife. It is a good basic reference for Southern forestland owners. Authors: Hamlin L. Williston, William E. Balmer, and Daniel H. Sims; Publisher: U.S. Forest Service; available free from your local Alabama Forestry Commission office or send a request to Kim Gilliland, P.O. Box 302550, Montgomery, AL 36130-2550.

Terms of the Trade, 3rd ed. is a useful dictionary of forestry terms. Everything from "autoclave" to "mottle" to "zebrawood" is included. Defines words and phrases used in forestry, logging, manufacturing, marketing and construction. Editor: David S. Evans; Publisher: Random Lengths Publications; ISBN 0961404280; \$39.95 (hardback).

Tree Basics covers tree biology in simple, easy to understand text and large photos. Designed for anyone who wants to know the essentials of tree biology. Written by a former chief scientist of the U.S. Forest Service. Author: Alex L. Shigo; Publisher: Shigo & Trees, Associates; ISBN 094356316X; \$8.85 (paperback).

The Woodland Steward is for current and future owners of small, private forestlands. While national in scope

(there is a chapter on maple syrup), the book provides a wealth of good information for Southern forestland owners. Author: James R. Fazio; Publisher: The Woodland Press; ISBN 0961503106; \$14.95 (paperback). Available from Woodland Enterprises, 310 N. Main St., Moscow, ID 83843; 208-882-4767.

#### Tree Identification

There are many books available on tree identification and this list has been narrowed down considerably. Here are just a few to consider:

The Audubon Society Field Guide to North American Trees, Eastern Region is one of the most popular tree identification books. Includes color photos and complete descriptions of trees along with maps showing their ranges. Author: Elbert L. Little; Publisher: Alfred A. Knopf; ISBN 0304507606. \$19 (vinyl covered paperback).

A Field Guide to Eastern Trees: Eastern United States and Canada is a Peterson Field Guide. Uses color illustrations and easy to understand text. Author: George A. Petrides; Publisher: Houghton Mifflin Co.; ISBN 0395467322; \$18 (paperback).

Both the Audubon and Peterson tree identification field guides are but one in a series, which includes books on wildflowers, birds, and butterflies, just to name a few. Many of these will appeal to outdoor enthusiasts and are highly recommended.

100 Forest Trees of Alabama is an economical book with black and white illustrations of leaves, fruits and flowers of common trees found in our state. It is available for \$5 per copy plus .50 per copy shipping from the Agribusiness Field Office, Petrie Annex, Auburn University, AL 36849-5304; 334-844-4401.

Trees of the Central Hardwood Forests of North America: An Identification and Cultivation Guide uses color and black and white photos along with maps. Describes 188 native or naturalized species and 84 trees that are commonly planted in the area. Authors: Donald Joseph Leopold, William C. McComb, and Robert N. Muller; Publisher: Timber Press; ISBN 0881924067; \$49.95 (hardback).

Trees of the Southeastern United States provides color photos of many species, but is a little more technical in nature with the descriptions and keys to different species. For example, the captions of photos use scientific names only. Regular use of a book like this will likely increase the amateur's understanding of biological terms. Authors: Wilbur H. and Marion B. Duncan; Publisher: University of Georgia Press; ISBN 0820314692 (paperback) \$19.95.

#### Wildlife

All about Alabama Birds gives an introduction on attracting birds to your yard and also has a color photo identification guide. Author: Fred J. Alsop III; Publisher: Sweetwater Press; ISBN 1889372706; \$16.95 (paperback).

The Bobwhite Quail: Its Life and Management traces the origin and history of the bird and includes techniques to improve quail habitat. Author: Walter Rosene; Publisher: The Sun Press; \$44.95 (hardback). Available from Ben Meadows Co., 1-800-241-6401.

Ecology and Management of the Wood Duck was developed from nearly a half century of study. Topics covered include migration, brood behavior and survival and predators. Authors: Frank C. Bellrose and Daniel J. Holm; Publisher: Stackpole Books; ISBN 0811706052; \$59.95 (hardback).

Fishes of Alabama and the Mobile Basin is undoubtedly the most comprehensive book on Alabama fishes ever published. At 820 pages, it contains information on more than 300 freshwater and marine fishes found in the state. Authors: Maurice F. Mettee, Patrick E. O'Neil and J. Malcolm Pierson; Publisher: Oxmoor House; ISBN 0848714857; \$50 (hardback). If you are unable to find it at your local bookstore, call the Game and Fish Division's Fisheries Section at 334-242-3471.

White-tailed Deer: Ecology and Management chronicles the history, biology and ecology of the white-tailed

deer in all of its habitats. Editor: Lowell K. Halls; Publisher: Stackpole Books; ISBN 0811704866; \$79.95 (hardback).

The Wild Turkey: Biology and Management is written for naturalists, biologists and hunters alike. Editor: James Dickson; Publisher: Stackpole Books; ISBN 081171859X; \$69.95 (hardback).

Also of note is the new book **Managing Wildlife**. An announcement regarding this 600-page book is on the back cover of this issue.

#### **Magazines and Newsletters**

As with books, there are a number of magazines and newsletters of interest to forest landowners. Here's a sampling that you might find interesting and helpful. Although a couple of these are national publications, many are specifically for Alabama residents or are regional in nature. Most of these publications are received as a benefit of membership in an organization. Because there are different levels of membership available, no prices for these are listed. Please contact the individual organizations for current membership information.

Alabama Forests is a publication of the Alabama Forestry Association. The quarterly magazine is a benefit of membership in the organization and contains information on forest industries, political news relating to forestry and activities of the Forestry Association. Contact AFA at 555 Alabama St., Montgomery, AL 36104; 334-265-8733.

Alabama Wildlife is the quarterly publication of the Alabama Wildlife Federation. It contains articles on wildlife conservation, wildlife management and activities of the Wildlife Federation. Subscriptions are a benefit of membership. Contact the Alabama Wildlife Federation at 46 Commerce St., Montgomery, AL 36104; 334-832-9453.

American Forests is published quarterly by the organization of the same name. It is a benefit of membership but is also available on some newstands. The magazine focuses on current forestry issues and trends as well as urban forestry. The National Register of Big Trees is published every two years in the spring issue. Contact American Forests at P.O. Box 2000, Washington, D.C. 20013; 202-955-4500.

Capital Ideas is the monthly newsletter

of the Alabama Forest Owners' Association. The bulk of the newsletter is a three-month calendar of events. There is also a classified section for forestry services and land for sale or lease. *Capitol Ideas* is a benefit of membership in the association. Contact AFOA at P.O. Box 361434, Birmingham, AL 35236.

Forest Landowner is published six times a year by the Forest Landowners Association. The magazine is a benefit of membership in the organization, which is geared toward landowners in the Southern and Eastern states. Contact the Forest Landowners Association at P.O. Box 95385, Atlanta, GA 30347; 1-800-325-2954.

National Woodlands is the quarterly magazine of the National Woodland Owners Association and is a benefit of membership. If you like to read about national forestry issues and news from other regions, then this publication will be of interest. Taxes, harvesting and landowner profiles are topics also covered. Contact the NWOA at 374 Maple Ave. E., Suite 310, Vienna, VA 22180; 703-255-2700.

Outdoor Alabama is a published five times a year by the Alabama Department of Conservation, including a calendar issue. The magazine focuses heavily on recreation, wildlife and information about Alabama's state parks. Contact Outdoor Alabama at 64 N. Union St., Montgomery, AL 36130; 1-800-262-3151. \$8 for one year, \$14 for two years, and \$20 for three years.

Reforestation News is a free newsletter for timberland owners in the Southeast published twice a year by International Forest Company of Odenville, AL. Articles include information on reforestation and intensive management. Contact IFCO at P.O. Box 490, Odenville, AL 35120, 1-800-633-4506.

Tree Farmer is the official magazine of the 70,000 member American Tree Farm System®. It is published six times a year and contains articles on timber management, taxes and harvesting, just to name a few topics. Since it is a national publication, the management of some species covered in articles may not apply to Southern landowners. If you are not an officially designated Tree Farm and wish to subscribe to Tree Farmer, contact the American Forest Foundation, 1111 19th St. N.W., Suite 780, Washington, D.C. 20036; 202-463-2462. \$15 for 1 year; \$27 for 2 years.

#### NATIONAL

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



ork on the fiscal year 1999 spending bills is progressing nicely, but congres-

sional leaders are warning that there is a chance that a few of the 13 annual appropriations bills may not be complete by the beginning of the fiscal year, forcing Congress to enact a series of continuing resolutions to avoid a government shutdown. It appears that the only two funding bills that deal with forestry related programs—Agricultural Appropriations and Interior Appropriations—will be ready by the start of FY '99.

#### Agriculture

Both houses of Congress have already passed their versions of the Agriculture spending bill, which contains funding for programs such as the Forestry Incentives Program as well as cooperative extension education and forestry research assistance.

Of particular note, the House originally zeroed out funding for FIP, which is the only cost-share program used solely for assisting landowners to cover the cost of planting trees. This has the potential to severely impact Southern states where the program is used extensively and recent figures have shown that timber removal has exceeded growth in recent years. However, there is strong indication that the Senate's numbers for the program will prevail (\$6 million) when the two versions are reconciled during conference.

#### Interior

The Interior spending bill contains the bulk of federally funded forestry programs in the country including funding for State & Private Forestry under the U.S.D.A. Forest Service. Programs under S&PF address such concerns as forest health and forest fire protection as well as providing the majority of forest landowner assistance through such programs as the Forest Stewardship Program, Stewardship Incentives Program and the Economic Action Program (a summary of S&PF programs and what they accomplish appeared in the summer 1998 issue of Alabama's TREASURED Forests).

Unfortunately, this spending bill is also known for numerous environmental riders that tend to make it one of the more 
controversial. Only the House of Representatives has passed the bill, doing so in 
late July. Taking three days to debate 
several floor amendments, the bill passed 
with an overall decrease in funding levels 
for S&PF programs. This decrease is 
mostly attributed to the zeroing out of the 
Stewardship Incentives Program.

Like the Agricultural Appropriations bill, the Senate produced healthier numbers than the House through committee. After the Senate brings the measure to the floor, it is anticipated that their numbers will prevail when the bill goes to conference to be reconciled. Strong increases in Cooperative Fire Protection, SIP and Forest Legacy are expected. It is also worth noting that the president has threatened a veto of this bill if there are too many contentious riders attached.

#### Reauthorization Bills

The Republican leadership is indicating that reauthorization of the Endangered Species Act will not happen this year. Momentum behind serious overhaul has waned in the past few months as lawmakers focus their energies on other higher profile issues such as tobacco and appropriations.

Agricultural research is the only significant piece of forestry related legislation that has made it to the president this year. President Clinton signed the Agricultural Research Extension and Education Reform Act, better known as the Ag Research Bill, on June 23, 1998. Under the reauthorization law, the Forest Inventory and Analysis Program reporting schedule was restructured to provide more timely and accurate information on the current state of our nation's forests. Information gathered under this U.S.D.A. Forest Service program is used by policy makers, land managers, and landowners to make better informed decisions. Beginning next fiscal year, the Secretary of Agriculture will be required to provide, in conjunction with state foresters, annual state forest inventory reports as well as five-year nationwide reports.

#### Final Note

There may still be action on a tax bill this session; however, the House of Representatives has proposed large tax cuts that have been all but ridiculed by the leaders of the Senate Budget and Finance Committees. While several House proposals, including those introduced by Rep. Jennifer Dunn (R-WA) would be beneficial to forest landowners, it seems more likely that a focused tax bill, most likely eliminating the marriage penalty, will be the only action on that front.

It is important for landowners to communicate with their Congressional offices to let them know that tax policy is natural resource policy, and that had tax policies lead to bad natural resource management. Groups like the American Tree Parm System and Forest Landowners Association can help you make those contacts.

#### **ALABAMA**



lection Day: November 3, 1998. Will it be a day to remember or a day to regret? That's the question being heard around

the state more often these days. Reason: Every four years we look to the first Tuesday after the first Monday of November with a great deal of anxiety. Who will be the Governor, Lieutenant Governor, Attorney General, Secretary of State, Treasurer. Auditor and Commissioner of Agriculture and Industries? These are the constitutional officers as set forth in our Constitution of 1901. Places on the Supreme Court, the Court of Civil Appeals and the Public Service Commission are also up for grabs on the fall ballot. Much attention will be given the abovementioned positions of leadership for Alabama but, remember, there are 140 seats to be filled in the House and Senate. Jockeying for these legislative seats intensified throughout the state during the heat of the summer.

#### **House Leaders Retire**

You must remember that three oldtime "Housekeepers" who wielded heavy influence in the lawmaking bodies have opted for retirement, making way for an influx of newcomers. Names of these long-serving veterans of the House won't be seen on the November ballot. One is House Speaker Jimmy Clark, the Baron of Barbour, considered and, rightly so by many, to be the most influential politician ever to sit in the speaker's chair.

Pete Turnham of Auburn was the senior member of the House in years of service when he said farewell at the end of the regular session in April. Turnham was a gifted legislator who carefully analyzed the needs of the state.

Tom Drake of Cullman, the affable man of many talents—star athlete, wrestling champion, attorney at law, etc., made his exit from the ring as unexpected as it was to some. Drake served as Speaker of the House prior to the reign of Jimmy Clark.

#### Changes in the Senate

Meanwhile, the Senate offers a different scenario. Only two members of the 1995-98 Senate fell to their opponents during the spring elections. Longtime Senator Chip Bailey of Dothan dropped a bitter contest to newcomer Harri Anne Smith, vice president of the Slocomb National Bank. Senator Charles Davidson lost his bid for re-election to attorney Curt Lee of Jasper. Lee will face Democrat Jerry Bishop, brother of former Senator Charles Bishop, who is a candidate for Commissioner of Agriculture and Industries.

As has been pointed out, the most significant elections in November will focus on the 140 seats in the Legislature. The Senate has been under Democrat control for more than 100 years. It is more than a passing fancy that the Republicans expect to sneak through and gain a majority for the first time in this century.

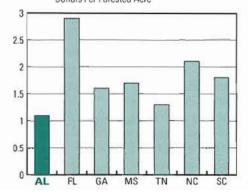
Republican Party chairman Roger McConnell has predicted there will be additions to the 14 Senate seats now held by his party. They need 18 for a majority.

It's a different story in the House where the Republicans hold only 36 of the 105 seats. Picking up additional seats would probably still fall short of the 53 needed for a majority in the lower chamber.

#### Forestry Funding

Now for a change of pace, let's consider funding for state agencies and the course this new Legislature must take to keep the state running. Much has been said and written about education in Alabama. You hear about funds for Medicaid, Corrections and Public Safety—all vital to the heartbeat of this state. But how often do you hear one of the candidates bring up

Figure 1 Comparison of State Funding
Dollars Per Forested Acre



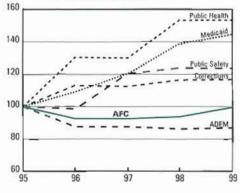
the need for an Alabama Forestry Commission program that ultimately clears the way for forestry to become the state's number one manufacturing industry?

Figure 1 shows a comparison for state funding per forested acre with our South-eastern neighbors. The average level of funding for forestry agencies in the Southeast was \$32 million, or roughly \$1.82 per acre. If the Alabama Forestry Commission budget was increased to the Southeastern average per acre rate, it would be \$40 million, an increase of \$14 million over the FY 1998 budget.

### Funding Comparisons with Other State Agencies

Over the last eight years, the AFC budget has declined and recently leveled off. Other Alabama state agency budgets have also changed, with some declining and others growing. The fastest growing budgets have been the Departments of Public Health, Medicaid, Public Safety and Corrections, while other environmental agencies, such as the Alabama Department of Environmental Management, have faced similar declines as the AFC. Figure 2 shows the rate of change in several state agency budgets including the Forestry Commission.

Figure 2 Rate of Change in State Agency Budgets FY 1994-95 = 100 Percent



#### **AFC Funding Is Vital**

State Forester Timothy C. Boyce and your legislative liaison will be working closely with the newly elected legislators, as well as those returning, to ensure that the Forestry Commission gets the attention it so well deserves. Landowners throughout the state will join in this effort.

## HIDDEN



## TREASURES

### Hall of Famer Sees Revolutionary Changes in Forestry

by TILDA MIMS, Forest Education Specialist, Northwest Region, Alabama Forestry Commission

oday's foresters may have a hard time imagining a world without rubber-tire skidders and lightweight chainsaws, but Roy Gamble of Cullman easily remembers these revolutionary changes and how they altered the direction of forest management forever.

"I've been practicing forestry for over 40 years. In that time I've seen the number of wildfires decline dramatically and have watched new technology alter the pattern of timber business," he said.

One of the most significant changes in forestry happened about 35 years ago when rubber-tire skidders came on the scene. "Skidders were less expensive than bulldozers and cheaper to operate, too. They allowed the logger to go more places and do less damage; they made more land loggable," Gamble recalled. The

next breakthrough was the introduction of the lightweight chainsaw that caused less fatigue and allowed one man to work alone.

Another pivotal change in forest management was the acceptance of prescribed burning to reduce potential wild-fire damage and as a site preparation tool. More than 40 years ago, Mr. Gamble conducted some of the first prescribed burning in Alabama.

"When I graduated from Auburn, I started working for Gulf States Paper Corporation office in Centreville. Back then, there was no such thing as prescribed burning but there were plenty of wildfires. Gulf States had some longleaf on a 30-year rotation. In our district we had nearly 200 acres in longleaf with a bumper crop of seed a few years before it was time to harvest," he notes.

"I had been reading about research in prescribed burning at Conecuh National

Forest and asked my bosses for permission to burn a tract north of Centreville in the Scottsville community. The answer I got was, 'Go ahead, but if something blows up then they didn't know anything about it,' so I did."



Roy and Jane Gamble

That 200-acre burn got rid of years of leaves and limbs in that longleaf plantation. "Three years after the burn we harvested with tractors, leaving behind a few seed trees for insurance in case the burn didn't work. In a short while the area greened up with longleaf seedlings and became a showplace of the benefits of prescribed burning." After that, Gulf States began doing a lot of burning, Roy recalls with a smile.

Roy and Jane Gamble became TREA-SURE Forest landowners in 1987. Their property in Cullman County is managed primarily for timber production with wildlife, recreation and water quality as secondary objectives. Roy grew up on this land, inheriting about 90 of the 120 acres from his parents in 1976. A history of beetle damage on the tract resulted in a 65-acre clearcut which was replanted by hand. Today the property is rich in pines

in which, of course, prescribed burning is used to reduce competition and enhance wildlife habitat.

Roy Gamble has a noteworthy history with forestry in Alabama. After graduating from Auburn's School of Forestry, he

was one of the first 100 foresters registered in Alabama. State Forester Jake Stauffer was #1 and the rest were alphabetical. Roy's registration number is 50. He is also in the Alabama Foresters Hall of Fame. He is especially proud of that honor because he was selected by his peers, primarily through the Society of American Foresters.

After 15 years with Gulf States Paper he and his wife Jane returned home to Cullman to open Dixie Pulpwood in the White City community. He worked as a timber supplier and Jane did the bookkeeping and ran the wood yard.

The Gambles raised five children. David, a forester for Drennen Forestry Services, is married to Mary Lou, the first female forestry graduate from Auburn. Their other children are John, Barbara and twins Steve and Julia. They are also proud grandparents of 10 grand-children.

Now retired, Roy keeps his registration current and does appraisals and timber sales for friends and relatives. He also volunteers with FAWN programs, the Cullman County Forestry Planning Committee, the Society of American Foresters and the Alabama Forestry Association.

Roy and Jane Gamble have made a life-long commitment to forestry in Alabama, as citizens, as parents, as small business owners and as landowners. This commitment is testimony to the beliefs and values that are the foundation of the TREASURE Forest program.

# Selling Timber with Sealed Bids

## THE BASIC ELEMENTS

by MARK KEY, R.F., Assistant District Forester, Gulf States Paper Corporation, Demopolis, Alabama

imber is commonly sold through the sealed bid process, offering the right to bid by invitation. Properly conducted, this is an excellent way to ensure that the current fair market value for your timber is obtained. Consulting foresters or lawyers often handle the sale for a landowner, but increasingly, individual landowners are offering their timber for sale and handling the process themselves. This article is intended to help landowners understand the process, help ensure that all potential buyers are treated fairly, and to point out items that signal the need to use a registered consulting forester to handle the timber sale process. In general terms, there are four steps to the process: determining the details, preparing the invitation, mailing the invitation, and the bid opening.

#### **Determining the Details**

Effective marketing revolves around two basic concepts: 1) understand the product and the customer, and 2) properly present the product. A sealed bid sale is exactly that—marketing. The objective is to market the timber effectively so that maximum value is obtained relative to the conditions under which the timber will be sold. In this part of the process the goal is to fully understand the product. To do so certain information about the timber should be obtained or gathered. Basic requirements include:

- Location of the property and timber: written descriptions (section, township, range) and maps.
- Type of timber to be sold: pine or hardwood pulpwood, sawtimber, veneer, poles.
- How much timber will be sold: acres, volume and number or trees by size and product class.

## Is a Sealed Bid Sale Right for You?

A sealed bid sale may or may not be the best way to sell your timber. depending on your objectives. Although it provides a good way to secure fair market value for your timber, there is limited control over who cuts your timber or the exact time that it is cut. For small sales, salvage operations that require quick action, or situations where a particular logger or type of logging operation is desired, sealed bid sales may be a poor choice. It is a good idea to get advice from a registered forester familiar with your timber, the local markets, and your particular desires, and then determine if a sealed bid sell fits your needs.

- Stipulations placed on the sale of the timber: contractual.
- How much is the timber worth: by product class and as a whole.

At this stage, landowners considering selling timber themselves should evaluate whether or not it would be wise to use the services of a registered consulting forester. Specifically, you should evaluate whether or not you can prepare or have prepared the necessary maps to properly depict where the property and timber are located. Concerning what type of timber will be sold, can you adequately determine the type products offered for sale? Likewise, can you determine how much timber is for sale? Both are crucial to maximizing your marketing efforts. Regarding contract stipulations, can you prepare or have prepared a suitable written contract that will protect your interests and give you recourse if the contract is not followed properly? Also, are you capable of following the harvest process after the contract is finalized to ensure that contract stipulations are followed?

You will note that the last item listed above is "How much is the timber worth?" Many people think that a sealed bid sale eliminates the need for a timber appraisal. Selling timber through the sealed bid process does not eliminate the value or need for a professional appraisal of your timber's value. A bid is only what an individual buyer is willing to pay for your timber at a specific point in time. You do not know what his particular needs are, what inventory of timber he possesses, whether or not he can merchandise your timber, or what value he is placing on each product. A professional appraisal provides the ability to compare a bid offer or offers with a professionally estimated valuation of your timber. Without a professional appraisal, you do not know if a particular bid reflects a reasonable value for the timber under the market conditions at that time. This becomes increasingly difficult to assess when few or single bids are received. It also enables determination of a minimum bid price, below which selling your timber is not prudent. Can you determine these values yourself?

If you answer no to one or more of these questions, it would be wise to contact a registered consulting forester about handling the sale process for you. The price for their services usually more than pays for itself in terms of your time invested and in the final monetary amount received for your timber.

#### Preparing the Invitation

Once the information about the timber sale has been gathered, the next step is to package the information in a format appealing to potential buyers. The invita-

ITEM	CONTENT	
Landowner	Names of all legal owners	
Location	Written legal description of property and sale area, usually in term of section, township, range. More detail as needed to clearly definite location.	
Timber Description	Timber types—pine or hardwood; species specific if beneficial Product class—pulpwood, sawtimber, poles, werener, etc. Amount—satal volume estimates by type and product class. For sales where trees are marked with paint, clearly surfines whether painted trees will or wall not be cut.	
Contract Requirement	Identifies that a written contract must be executed between the suc- censful bidder and the selfer within a specified period after the bid opening. States where and how sample contract can be obtained if not included as an addendum.	
Length of Cutting Contract	Congth of time successful bidder will have to harvest the designated timber; clearly identifies any periods such as busting sesson or wet weather seasons during which harvesting will not be allowed.	
Harvesting Bestrictions	Identifies areas where harvesting must be performed under special criteria such as in Streamside Management Zones (SMZs) according to Alabama's BMFs for Forestry.	
Bidding lest suctions	Identifies the bid opening date, time, location, and all bidding requirements such as lump turn vs. per unit, whether fexed bids will or will not be accepted, and if a bid deposit is required.	
Terms of Sale	identifies whether a performance bond will be required, amount, and other turns as needed.	
Contact Information	Provides a contact name and phone number for questions regarding the sale.	
Addendums	Location and Tract Maps Sample Contract Stock and Stand Table Bid Form	

tion to bid, commonly called a timber sale prospectus, should specifically attract the attention of potential buyers in hopes that they will evaluate your timber and offer a bid later in the process. With that intent, it should present as much of the information desired by potential buyers as possible, in a clear and detailed manner. Invitations to bid often have different formats or appearances but usually present the same basic information. Topics commonly addressed in the invitation are outlined in Table 1. The invitation should at a bare. minimum include the name of all the legal owners, a description of the timber, where it is located, any sale or contract terms, when and how to bid, and a contact name and phone number. Reserve the right to reject any or all bids.

Describing in detail the type and amount of timber for sale can be important to the success of this marketing effort. Ideally, you want as many potential buyers competing for your timber as possible. Detail in the timber description can affect the number of parties that become interested enough to look at the timber and bid. If a potential buyer does not know that the timber for sale includes timber types and products they commonly use, they may not take the time to find out if other pressing matters are at hand. Stating that you are selling pure sawtimber will automatically capture the initial interest of sawtimber users. Similarly, it provides a courtesy to other potential buyers who are not interested in the type of timber offered for sale. A recent timber appraisal and the detail it provides can be used to give potential buyers an estimate of the volume and number of trees by size class (stock and stand

tables). This is not essential, but it helps timber buyers decide if they want to spend the time and effort to appraise the timber. It also indicates that the seller has a good idea of the volume of timber offered, and probably its value as well.

Always provide a contact name and phone number so that potential buyers have someone to call if they have questions. Set a bid opening date from three to four weeks following the date invitations will be mailed. This will give potential buyers time to make a cursory inspection, cruise, work up their bid and mail it back to you. The three- to four-week window can be longer if the sale is a large one or other conditions indicate a longer period is beneficial.

Certain addendums to the invitation are also warranted. A clear and legible tract map is a must to help potential buyers definitively locate your timber. The tract map should show boundary lines, roads, and restricted cutting areas such as streamside management zones. A map showing the general location of the property is beneficial as well, especially if someone is not familiar with your local area. A sample contract with exact terms listed can also be included, especially if there are unusual restrictions regarding harvest operations. If a stock and stand table is developed, include it as an addendum. A bid form with space for the name, address, and phone number of the bidder, as well as the bid amount, should also be included for convenience and ease during the bid opening process. However, signed bids are usually accepted on company letterhead as well. Make special note that return envelopes should be clearly marked "Timber Bid" on the outside so that they are not opened prematurely.

#### Mailing the Invitation

The bid invitation is a marketing tool. Likewise, the seemingly simple process of mailing your bids to potential buyers is also a marketing tool. Bid invitations should be mailed to as many prospective buyers as reasonably possible, particularly those who normally use the type of timber to be sold. Determining how to limit the number of bid invitations is the hard part. In general, all wood-using mills, wood dealers, timber buyers, and woodyards within a 60- to 80-mile radius of where the timber is located are mailed an invitation. If the timber for sale involves high value or rare products, this range should be extended. A registered consulting forester will be able to make these determinations if one handles the sale. If a landowner handles the sale, a good place to obtain information about local timber buyers is through the county office of the Alabama Forestry Commission or from the Alabama Forestry Association.

#### The Bid Opening

The bid opening should be handled in a professional manner to alleviate any doubt among bidders that the sale was conducted fairly. Invite bidders to observe the opening of the bids at the appointed time. Faxed bids are common but it should be advertised in the invitation whether or not faxed bids will be considered. If they are, they should be opened or read first. Relate all bids to everyone that bids on the sale, but to no one else. Arrange for time immediately after all bids are opened to review and compare bids. Always accept the highest bid above your minimum bid, unless there are conditions stipulated with the bid offering that conflict with the terms as outlined in the bid invitation. Remember, all bidders should have equal access to all information about the sale and should bid on the terms you have set. Terms should not be negotiated after the bid opening and all bidders should have

equal opportunity to purchase your timber. Award the timber and sign the contract within 30 days following the bid opening.

#### Summary

Selling your timber through the sealed bid process can be effective, provided that you prepare and use this technique as a marketing tool. Handled properly, it leaves everyone satisfied—the landowner with the market value for his timber, the successful bidder with timber to cut and put in his inventory. Unsuccessful bidders may be disappointed, but if they have been treated fairly, they will bid on your next timber sale.

#### Alabama Agricultural Experiment Station

Continued from page 7

issues as machinery and roads and the impact of forest management practices on the environment are addressed through the Southern Forest Engineering Center, which is a collaborative effort between the U.S. Forest Service and faculty in agricultural engineering.

Brinker expects the forest industry to continue to be strong in Alabama. He notes that the forest products industry is continuing to invest in Alabama. "In the past 10 years, the forest products industry has invested \$900 million of capital investments per year, which is equivalent to a new Mercedes Benz plant every three months. Most of the investment comes in existing locations to expand production and they are able to do that because the timber resources are here."

"We are proud to support research for forest landowners," said AAES Director Jim Marion. "Those landowners are important to Alabama, and the forests themselves are economically and environmentally important to the state, especially when you consider that trees occupy about two-thirds of the state's land mass."

"Forestry research will continue to be a priority for the AAES," he added. "And I hope that the Experiment Station can receive more funds in the future to support additional forestry research. It definitely is needed, from production through processing of the thousands of

#### Services of the Alabama Forestry Commission

Continued from page 9

by the AFC. Information from this program is crucial to long-term planning necessary to maintain healthy and viable forests in our state.

#### Wildfire Related Services

The AFC has long provided critical wildfire related services. Wildfire Detection and Suppression is a daily service of the AFC. Aircraft routinely patrol the skies to spot threatening wildfires so that a timely response minimizes potential timber and property damage and loss. Suppression equipment and personnel are positioned in each county of the state, are on 24-hour alert, and respond to all notifications of uncontrolled forest fires. To report a forest fire, consult the listing on page 12 and call the toll-free number for the corresponding county.

Volunteer Fire Department Establishment is an activity that the AFC is proud to support and encourage. The AFC has the authority to screen federal excess property that can then be utilized by local volunteer fire departments. This provides direct benefits to local citizens by establishing organized firefighting resources and equipment and helping to provide lower property insurance rates. At the same time it assists with fulfilling the AFC's legislative mandate to protect the forest resources of our state.

#### **Timber Theft Investigation**

The AFC provides investigation services to landowners for potential timber theft cases. AFC investigators evaluate whether cases are civil or criminal in nature and work with landowners to ensure steps are taken accordingly.

#### Forestry Related Educational Services

Educating individuals and the general public about the multiple benefits of sound forest management is integrated into all AFC activities. The AFC also provides forestry related presentations, programs, videos, publications, etc., upon request to school groups, landowners, civic clubs and the like. This is another of the many ways the AFC seeks to fulfill its legislative mandate to protect, promote, and increase the forest resources of this state.

#### Summary

The AFC provides a diverse array of services to the citizens of Alabama. If you have a forestry- related need and are unsure whether the AFC provides assistance of that type, contact your county office and ask them. Their addresses and telephone numbers are listed on page 10. If it is a service the Forestry Commission does not provide, we can direct you to the appropriate source so that your forest management needs and objectives are met.

# Understanding Timber Sale Variables A practical approach for marketing your timber

by BILLY RYE, Forest Management Specialists, Inc.

btaining a fair price for harvesting timber is an important objective for most landowners in the South. Increased prices received by landowners for standing timber not only provide additional income, they also increase the opportunity for the landowner to reinvest some of the income in the form of reforestation and other forest management activities. Therefore, it is the intent of this article to provide basic information on some of the variables that affect how much you receive for your standing timber. By understanding these variables, you have a much greater chance of obtaining an acceptable price.

To help understand these variables, it is important that we first define two terms often used to describe the value of timber: "stumpage value" and "gate value." Stumpage value is the value that purchasers are willing to pay for your **standing** timber. The gate value is what is paid for the timber once it has been harvested and transported to a processing mill or wood yard. Unless you harvest and transport the timber yourself, you will be most concerned with the stumpage value.

Many global, regional, and local forces can affect the price that landowners receive for their standing timber. To keep things simple, we will only discuss local factors that normally fall into one of three categories: local market factors, property factors, and method of payment.

#### **Local Market Factors**

Competition—One variable that can have a significant impact on how much stumpage you receive is the number of timber purchasers in your area. In fact, I would rank this variable second only to the quality and quantity of your timber. Believe it or not, timber purchasers are sometimes willing to pay more for wood that is farther away from the mill. Why? The answer is competition! As a rule, the more timber purchasers there are in an area, the more they are willing to pay. This is why it is important to allow as

many competitors as possible to make an offer on your timber. Unfortunately, you have very little control over the number of firms purchasing in your area and landowners in some counties of the state will probably always receive more than landowners in other counties.

Inventory of competing purchasers— The stumpage prices paid by timber purchasers vary by season and are closely tied to the wood inventory at area mills. Forest product mills have to keep running even when it is wet or otherwise difficult to remove timber from the forest. Therefore, they are often willing to pay more for timber that may be harvested during wet months or for tracts where the landowner allows 18-24 months to harvest. However, some forest products actually have higher prices during the summer. To complicate matters further, the prices paid for some forest products fluctuate wildly during the year while some have much more stable prices. The key here is to understand the inventory of timber purchasers in your area so that you can market your timber when the demand is high and the supply is low.

Distance from market—While this is not as big of a factor as competition, the amount that purchasers have to pay to transport timber from the stump to the mill has some negative effect on the amount that they are willing to pay for standing timber. This cost is often passed along to the landowner in the form of lower stumpage prices.

#### **Property Factors**

Quantity/quality of existing timber— Obviously, the more and better quality the standing timber on your property, the more you will likely receive for stumpage. Pine sawtimber is worth more than hardwood pulpwood; therefore, the more pine sawtimber present on your tract, the more that it will be worth. This is why it is important to know about soils and future market conditions so that you can manage your forestland for maximum returns. **Size of tract**—It's simple: larger tracts bring more money! This is primarily due to the fact that the logging crews will have to move less often, which saves them money. Reduced logging costs *may* be passed along to the landowner in the form of higher stumpage prices. This is more common sense than revelation, but nevertheless, some landowners think they can receive top dollar for two-acre selective harvests.

Topography—It generally costs more for loggers to operate in steep or excessively wet terrain. This increase in operating cost is usually passed along to the landowner in the form of lower stumpage prices. There is not much that you can do to change the topography of your land; however, if the harvest area is excessively wet, an extended length of time for the purchaser to harvest the timber is recommended.

Access—Does your tract have access to a public road or will the loggers have to cross another landowner's property to remove some or all of your timber? This factor is often overlooked, but is very important. On good tracts that have no access to public roads, the timber purchaser is often willing to secure permission to cross another landowner's property. However, if you have a tract that will not be easy to market (small size, poor quality timber, etc.), you may have to agree to obtain an easement from your neighbor just to receive a fair price for your timber. Easements are complicated and you should not assume that your neighbor is required to grant you access, even if it is the only access to your property. If you agree to secure an easement for your timber purchaser, seek professional assistance!

#### **Method of Payment**

In addition to the local market and property factors, how you are paid for your standing timber can affect how much you receive. While there are many methods of payment for standing timber, the three most commonly used methods include lump sum, pay-as-cut, and pay-on-shares. Any of these methods may be used to sell timber by negotiating with individual buyers or through a formal bid process. Regardless of which method is used, put the agreements between you and the purchaser in a written contract.

Lump Sum—Lump sum sales usually consist of sampling the existing timber, soliciting bids from prospective buyers, setting a date for opening bids, and acceptance of the winning bid by the landowner. After a winning bid is accepted by the landowner, he or she is paid up front and in full by the timber purchaser. The usual method of payment is by check within 21 days of the bid acceptance. This will allow the timber purchaser time to research the title on the property to ensure that it is free from any encumbrances and to prepare a timber deed whereby ownership of the timber will be conveyed to them.

The benefits of this type of sale for a forest landowner include full payment up front, knowledge of exactly how much will be received, and knowledge of exactly what the commission for the consultant will be. It is simple to administer, and on larger tracts it often yields a higher price for the landowner. Of all the methods of payment, this is often the most preferred. However, in areas where there is little competition or on tracts with poor quantity/quality wood, you may find it difficult to obtain an acceptable price using this method.

Pav-as-cut—In cases where there is an insufficient amount of timber volume, where loggers may be limited by terrain, or where there is limited competition between buyers, a "pay as cut" method of sale may be necessary. This type of sale is more difficult to administer, but it may be the only method of obtaining acceptable prices for timber sold in certain locations or on smaller tracts. If this method is used, it is recommended that the timber be sampled by a competent professional with your best interest in mind, a reputable buyer be selected, prices to be paid per unit be agreed upon, logging operations be closely monitored, and the scale tickets of the loads removed be furnished to the landowner or his/her consultant. Checks are generally mailed to either the landowner or his or her consultant by the purchaser on a weekly



Many variables can affect a timber sale. Understanding these factors and obtaining professional assistance when selling your timber will help you successfully market this valuable commodity.

basis as the timber is harvested.

Pay-as-cut contracts often yield higher net prices for a landowner because the purchaser assumes less risk. The purchaser has no money (unless a performance bond is required) tied up in the tract and pays the landowner only after the timber has been cut. In addition, on lump-sum sales, the purchaser often makes a bid based on a sample or "cruise" of the property. The risk of overestimating the timber volumes will often be compensated for by lowering the amount that a company will bid for a lump-sum sale. There is no such risk in a pay-as-cut contract, as the landowner is paid based on the actual amount of timber removed, not an estimate of the amount present.

Pay-on-Shares—This method of payment was widely used in times past. It consists of an agreement, usually verbal, between the landowner and the timber purchaser on what percentage of the gate value each will receive. Under this method, the landowner usually receives 50 percent of the gate value, often called "selling on the halves." Of all the methods of payment, this is the least desirable. Our company receives several pricing reports that list the average amount paid for stumpage and the average amount paid at the gate for delivered timber. In all of these reports, the average amount paid for stumpage is between 60-70 percent of the gate value! What that means in real terms is that those selling on the halves will lose an average of 10-20 percent of the gate value. That can mean a loss of \$10,000-20,000 for a landowner whose timber is worth \$100,000 at the gate! The only place where the pay-on-the-shares method may be justified is on timber harvests that are very small or where timber income is not a primary objective.

#### **Get Professional Help**

Let's face it, regardless of how many articles we read or how many seminars we attend, most of us will only sell timber once or twice in our lives. However, we are selling to someone who buys timber every day and are at a distinct disadvantage in understanding the current value of our timber. Most timber purchasers are honest, hard-working people; however, we recommend that you obtain professional help to represent you during the selling process. The Alabama Forestry Commission is a good place to start. While they cannot estimate volumes or appraise your timber, they can provide useful information on making your timber sale a success. They also have lists of forestry consultants, who for a fee, can see that you receive the most for your timber, protect you and your property with a written contract, inspect logging operations, and provide overall peace of mind. Using professional help and understanding the many variables that affect the stumpage price of timber will help you successfully market this valuable commodity.

# **Insects of Pine Forests**

by MARK A. RUMPH, Integrated Pest Management Alabama Program Assistant and Graduate Student in the School of Forestry, Auburn University

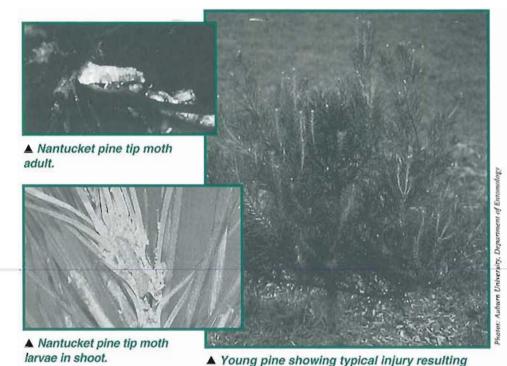
nsects are a natural part of the life cycle of a forest. Some insects are beneficial to the health of the forest while others are pests. In some cases, insect pests can cause serious economic damage. More often than not, however, a healthy forest can manage the problem without human intervention. It is necessary to remember that in the scheme of the entire forest ecosystem, a few infested trees is rarely cause for concern, but being able to identify a possible serious outbreak is always helpful. After reading this article you should be able to help your forester by alerting him or her to possible problems so that actions, if necessary, cambe taken to correct them.

This article will examine a few of the major insects that affect pine forests in Alabama. The Southern pine beetle remains at the top of the list for causing losses in pine stands. However, this pest will not be discussed since a great deal of information is already available and the Alabama Forestry Commission conducts aerial surveys to identify potential outbreaks across the state. The article will focus on five other economically important insect pests encountered:

- Those commonly seen at eye level— Ips Engraver Beetle and Black Turpentine Beetle
- Those attacking newly planted and young trees—Pales/Pitch Eating
   Weevil and Nantucket Pine Tip Moth
- A group of defoliators—the Pine Sawfly species.

#### Those Commonly Seen at Eye Level

Ips Engraver Beetles—Ips engraver beetles, like other bark beetles, commonly attack injured pines and are attracted by the resin produced by damaged trees. All species of pines are susceptible to attack, and those weakened by drought or other stresses are most commonly infested. Logging sites are particularly attrac-



from pine tip moth attack.

tive to beetles since there is an abundance of fresh debris.

Initial signs of attack include reddishbrown boring dust found in bark crevices or small reddish-brown pitch tubes (resin flowing out of the tree) on bark surfaces. lps beetles bore into the trees and construct Y- or H-shaped tunnels called "galleries" under the bark of infested trees. This is where the females lay their eggs and the larvae develop. Foliage in the crown of ips infested pines will eventually turn yellow and then red as beetle larvae mature into adults. In addition to the immediate damage caused by beetle boring, ips beetles transmit a fungus to the tree when they attack. This fungus stops up the vascular system of the tree causing it to decline more quickly.

Ips engraver beetle adults are dark redbrown to almost black and 1/8 to 1/5 inch long. Under magnification, these beetles can be identified by a characteristic rearend with four to six spines on each side. The life cycle of an ips engraver beetle, from egg laying to maturity, lasts around a month in the summer and several months during the winter.

Natural enemies such as birds and parasites, as well as the weather, will often control these insects before they occur at damaging levels. Preventing damage to healthy trees around harvesting operations is a first line of defense against beetle outbreaks. When infestations do occur, remove the affected trees and destroy the debris. Chemicals are available for control, but are rarely used in forest conditions.

Black Turpentine Beetle—The black turpentine beetle can be found throughout Alabama. It attacks all pines native to the state, but loblolly and slash pines are the most frequently infested. Black turpentine beetles commonly invade pine trees weakened or damaged by fire, timber harvesting and weather conditions.

Turpentine beetles invade stumps and the lower trunk of recently damaged

pines. The resin produced by the injured trees attracts the beetles. White or reddish-brown pitch tubes about the size of a half-dollar can be found in bark crevices on the lower part of the tree. These pitch tubes can be a signal of a beetle infestation. Secondary infestations from other bank beetles, such as the ips engraver beetle, commonly accompany turpentine beetle damage.

Adult black turpentine beetles are dark brown to black and about 3/8 inch in length, slightly larger than the ips engraver beetle. They can often be found dead, caught in dried pitch. This can aid in identification. Like the ips engraver beetle, adult turpentine beetles bore into the tree and build galleries. Generally, their galleries do not follow the same Yor H-shaped pattern characteristic of the ips beetles. Adult females lay their eggs in the galleries and the new beetles emerge within several months.

A variety of natural enemies as well as healthy trees usually keep black turpentine beetle populations under control, and intervention is rarely warranted. Turpentine beetle infestations may also be reduced or prevented by keeping damage to healthy trees to a minimum around logging operations, or by quickly removing trees damaged by natural causes such as fire or lightning. Chemical controls are available to prevent and save infested trees, but a forester should be consulted before any action is taken.

#### Those Attacking Newly Planted **Pines**

Pales and Pitch-Eating Weevils— Pales and pitch-eating weevils are the most serious insect pests of newly planted pines in the state. All pine species in Alabama are at risk for attack. Weevil damage can be particularly devastating, resulting in the death of the seedling, especially in plantings over recently harvested areas.

Adult weevils feed on the bark of seedlings and twigs, leaving patches on the stem. These visible patches may be a sign that weevils are infesting a planting. Extensive feeding may strip the bark around the base of the stem causing nutrients and water to be cut off, resulting in wilting or death. Feeding on the stem below the soil line and on the roots is also common.

Mature weevils are black to reddish brown and about 1/2 inch long. Adult



inner bark.

weevils are attracted by pine resin and inhabit fresh pine stumps. Eggs are laid in the roots of these stumps and hatch in about a week to 10 days. Depending on the weather, weevils may reach adulthood in several weeks or months. Up to two generations are produced in a year.

Control of these insects is relatively simple. Delay replanting for one season in areas cut after July. Also, limiting the size of clearcuts to reduce the numbers of weevils attracted to a given area can be helpful. Chemical treatments are available, but not commonly used in a forest type situation.

Nantucket Pine Tip Moth—Nantucket pine tip moths attack the buds and shoots of most pine species in Alabama with the exception of longleaf and Eastern white pines. The economic loss from this pest results from slower growth and by deforming the stems of growing trees. This can be particularly devastating in plantations such as seedlings or Christmas trees.

Tip moth larvae damage young pines by boring into and feeding on the inner tissues of buds and shoots. Most injury occurs during the first few years of tree growth and decreases as the trees mature. Signs of attack are readily visible. Infested shoots produce resin that builds up

▲ Black turpentine beetle pitch tubes on trunk of pine. Pitch tubes are resin masses that form on the outer bark at points of beetle entrance and are the primary indicators of beetle attack.

around the attacking larvae and those tips eventually die.

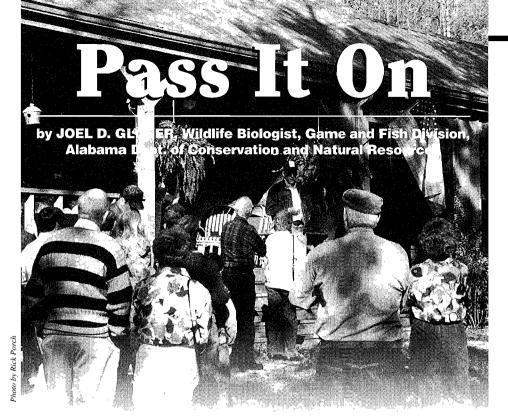
Adult moths emerge in late winter or early spring, usually around February in central Alabama. The adults appear to be covered with gray scales, while their wings are covered with patches of brick red and copper-colored scales. Depending on the climate, two to five generations may be produced throughout the year.

The best defense against tip moth infestations is to plant a variety that is resistant, such as longleaf. Chemical control is not usually recommended in forest situations. Research into management of this pest is ongoing at Auburn University and the University of Georgia.

(Continued on page 31)



Redheaded pine sawfly larvae.



s a reader of this magazine, you may either own a TREASURE Forest, be working toward TREASURE certification, or simply be interested in the outdoors. In any case, you are someone who is interested in the proper management of our natural resources. Therefore, you are the very person whose assistance I need: take your knowledge of proper resource management and share it. Alabama needs you to "pass it on." Allow me to explain.

As a wildlife biologist, I've had the opportunity to work with hundreds of TREASURE Forest landowners. During this association, I have found the majority of landowners to be more than willing to share their TREASURE with others when asked. Over time, I have witnessed how effective this type of mentoring can be. As an employee of the state, people are sometimes skeptical when I say I am here to help them. Many times I give advice to landowners and watch them implement it only after seeing a friend or neighbor doing it. This is only human nature; however, it is a trait we, as TREASURE Forest landowners and people interested in proper management, should capitalize on. It is our opportunity to "pass it on."

An old tale comes to mind about the newlywed wife and her preparation of a roast for supper. The husband soon noticed that each time she prepared a roast she first cut 2-3 inches from the end of it before placing it in the pan. The husband finally mustered his courage and asked about the ritual. The wife explained that her mother had always cut some off the end of the roast. When he again asked why, the wife phoned her mother and asked. Her mother replied that her pan was often too short to hold the entire roast. The point is, people will often do what they see others do. People will also do what works. You did not, or will not as the case may be, achieve TREASURE Forest status by having a property that is poorly managed. You have something worth sharing.

The bottom line of the TREASURE Forest program is the promotion of the proper management of Alabama's natural resources. The first step and most essential part of this program is the education of landowners and future landowners. Currently many educational programs are doing a relatively good job of teaching our children. Unfortunately, few children are currently making land management decisions! Therefore, it is imperative that we reach not only children, but adults as well.

#### **Educating Children**

Educating our children about proper management of our natural resources is probably more important now than it has ever been, since many of our youth are so Coosa County TREASURE Forest landowner Raymond Shaw of Rockford welcomes landowners attending a tour of his property.

far removed from nature. Not too long ago, many more people lived in rural areas and therefore had ties to the land. They understood that they relied heavily on the natural resources that the land provided. They possessed a land ethic. Today, however, the majority of people, even landowners, are removed from the land and do not consider their use of natural resources. In many rural areas today, the lack of job opportunities basically forces graduates to move to more urbanized areas. These people may very well spend their entire career and raise their family in an urban area. With each generation the land ethic seems to dwindle as people become farther removed from nature.

This became very evident to me during a local adopt-a-school program. Adopt-aschool provides fifth grade students an opportunity to visit a well-managed property and learn about proper resource management. During the wildlife segment of the program, I normally ask the students to name one material thing that does not originate in some way from a natural resource. When I asked this year's class, the first response I received was "gas." I then asked the student, "Well, where does gas come from?" The student quickly fired back, "A gas station." That's not funny, that's sad! I can only imagine what those kids were thinking while I was talking about birds that live in cavities—they probably went home and brushed their teeth!

So many high-tech activities are available to our youth that, unfortunately, a walk in the woods doesn't fit into their busy schedules. That is all the more reason for us to share nature's bounty and the importance of proper stewardship with them. Nature is a great classroom when put to use.

Quite possibly the audience you can influence the most are some you know best: your children and grandchildren. I have often been delighted to hear how landowners have incorporated activities and projects on their property to encourage the involvement of their children and grandchildren. The construction of hunting/observation stands, creation of walk-

ing and ATV trails, recreational lakes, butterfly gardens, etc. are all ways to involve youth in outdoor activities. Once again, don't overlook older children—those who will, one hopes, inherit and continue the proper management of the family property. It is sad but true that several TREA-SURE Forests are decertified each year due to a change of ownership to someone who doesn't embrace the multiple-use management concept. Even sadder is the fact that these are often children who inherit the property and quickly cut the trees and/or sell the land.

In addition to telling your children and grandchildren about proper management, show them and others what you're talking about. If possible, make your property available to others. This can be done in many ways. You can reach youth by hosting 4-H club events, adopt-a-school programs, Boy and Girl Scout outings and many other avenues.

#### **Educating Adults**

I don't have that much exposure to children, you may be thinking. Well, you're still not off the hook. Educating children is important, but they are definitely not the only ones who need to be trained in proper resource management. We must also reach the current landowners. For every acre enrolled in the TREASURE Forest program, there are roughly 15 acres that aren't. That doesn't necessarily mean that all other land is being managed poorly, but a drive down the highway will often show that many areas aren't being properly managed. As important as educating children is, it's just as important that we educate the landowners who are currently managing property.

This can be accomplished in many ways. For TREASURE Forest landowners, hosting a landowner tour is a great way to educate others. I realize that not everyone wants a lot of people on their property. However, keep in mind that you have something worth sharing and the more people you can influence to manage properly the greater the results for everyone. Of course, you don't have to share your TREASURE with everyone, but surely you do share it with someone. A church group, garden club or just friends over for dinner are all possible TREASURE Forests just waiting to happen. Share your knowledge. A knowledgeable person isn't necessarily

the one who has all the answers, but the one who knows where to find the answers. You can provide that. If someone did a good job thinning your timber, pass that name on. If a consultant was able to get you the best price for your timber, introduce him to your neighbor who has timber to sell. Share your not so successful stories, too. Allow the neighbors you mentor to learn from your mistakes. Simply pointing someone in the right direction can prevent them from making a mistake it could take many years to correct.

If you aren't currently a TREASURE Forest landowner, you should become familiar with the natural resource professionals in your area. You can do this by asking the people who live in the house with the TREASURE Forest sign in the yard or you can contact your local Alabama Forestry Commission county office or your local Game and Fish district office. I would suggest you contact your Alabama Forestry Commission county manager and find out if there are any upcoming tours or educational opportunities in your area. In addition, you may also want to contact the Alabama TREASURE Forest Association and consider becoming a member.

This magazine itself can help you reach others. When you finish reading it, pass it on to someone else or carry it to your barber shop or hair salon and leave it. You may take it to the local senior center or library. The attractive cover of the magazine is sure to catch someone's eye and possibly lure them into the bountiful information inside.

#### **Summary**

While writing this article I couldn't help but notice how it is very much akin to a sermon. When I got to thinking on that, I decided that it was a fitting way to tell this story. It is written that we have been given dominion over these resources and we will give an account of the job we've done. Therefore, passing on the word is even more important than I thought! Do your best to "pass it on."

Telephone numbers of county Alabama Forestry Commission offices are on page 10 of this issue. Call 334-242-3469 to request the name and number of your local wildlife biologist. The Alabama TREASURE Forest Association can be reached at P.O. Box 145, Chunchula, AL 36521; 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:

- 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.
- Possess or acquire a written multipleuse 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.
- 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.
- The property must be inspected by a registered forester and wildlife biologist.
   Your local Alabama Forestry Commission office will arrange the inspection.
- 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.

# Commonly Asked Questions about Releasing Pen-raised Quail

An Interview with Ted DeVos

Editor's Note: Ted DeVos is a wildlife biologist and forester with the Trust Department of Regions Bank in Montgomery, Alabama. Ted has both practical and research experience with wild and pen-raised quait in Alabama and Georgia. He also conducted research on quait ecology at Tall Timbers Research Station near Tallahassee. Florida.

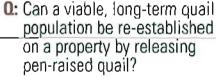
Q: When wild quail numbers are low or absent on a particular property, should landowners and managers turn to penraised quail release programs to fill the void?

A: The best way to answer that question is to begin with a question. Why are quail absent or numbers low in the first place? More often than not, the answer is lack of one or more of the critical habitat components quail require in order to persist. More specifically, it is usually an overabundance of deer/turkey habitat (shady woodlands), and therefore a lack of suitable nesting and brood rearing habitat. Research has shown that wild quail have the ability to expand their populations provided that they have suitable habitat into which they can expand. In the absence of suitable habitat, long-term increases in wild quail will not happen.

Understanding this, it is a faulty premise to believe that releasing pen-



raised quail into unsuitable habitat will result in increased quail numbers, especially when you consider that wild birds, pre-conditioned to a harsh environment to begin with, are unsuccessful at increasing their own numbers. Once landowners know that their property provides the fundamental habitat components that quail require, they may then consider the place that pen-raised quail releases have in their management strategy. Even pen-raised quail must have some of the basic habitat components—protective cover in particular—if release programs are to be successful for any length of time.



A: The answer to this question is complex, but fundamentally the answer is no. Releasing pen-raised quail is not a long-term, magic cure for low quail numbers. Survival rates for pen-raised quail are often extremely low. If reintroduction of a native quail population is the target, relocation of wild quail into good quail habitat is a better option.

Q: What type of survival rates are common with pen-raised quail released into the wild and how does this compare with wild quail survival rates?

A: The most significant difference between survival of pen-raised quail and wild quail is early survival. Around 50 percent of the pen-raised quail in a typical fall release (September-October) will die in the first two months. This rate is at least double the mortality rate found in wild populations during the same time period. After that initial two-month period, the mortality rate of pen-raised birds

Good release structure has thick cover both overhead and to the sides, protecting birds while they are feeding on the site.



Having food, water, and thick cover at release sites, and allowing birds to gently walk out on their own, are important steps to a successful release.

will remain slightly higher than the natural mortality rate of wild quaif. By spring, only 20 percent or so of the initial fall release will remain, compared to wild populations of which around 40 percent of the fall population will survive until spring. Similar differences have been found through studies on managed plantations where less than I percent of penraised birds released in the fall are taken through hunting the second fall after release. For wild birds over the same time period however, around 4 percent are harvested in the second fall.

O: Do pen-raised and wild birds existing after release integrate or persist as segregated coveys?

A: Both. Some pen-raised and wild coveys will maintain covey integrity and exist without mixing. Other coveys will contain birds from both groups. Wild coveys that do integrate with pen-raised birds usually accept only a few release birds.

O: Do pen-raised quail that survive into the spring nest and successfully rear broods?

A: Absolutely. Studies have shown that nearly all released birds surviving into the spring will nest and attempt to raise young. All reproductive characteristics (clutch size,

hatchability, nest success, etc.) are nearly identical to wild birds. Around one-half of both wild and pen-raised quail existing in the summer will produce a brood.

#### Q: Will releasing pen-raised quail make wild quail more susceptible to disease outbreaks?

A: There has been some concern based primarily on the problems that have been noted with releasing pen-raised turkeys. However, there is no evidence to suggest that this is a problem with pen-raised quail. Most of the diseases pen-raised quail can potentially carry already exist within wild quail populations. It is also important to note that most disease outbreaks are usually a function of population density rather than the simple introduction of pen-raised individuals.

#### Q: Will the release of pen-raised quail adversely affect the diversity within the wild quail gene pool?

A: No. At present, there is no detectable genetic difference between wild quail and pen-raised birds. This is due primarily to the fact that extremely limited genetic selection has been undertaken with pen-raised quail. Further, there is a wide genetic base, or to use a forestry term, a wide selection of seed sources, being used within the pen-raised quail breeding market. As a result, a high degree of genetic diversity continues to persist within the pen-raised bird population.

#### Q: Are there circumstances or situations where releasing pen-raised quail offers some promise?

A: Without a doubt there are situations where the release of pen-raised quail can be used to meet landowner objectives. The desire for hunting opportunities is by far the most common, well-known, and documented situation where pen-raised birds are successfully utilized. This can be done using a variety of timing methods to ensure that the desired number or relative density of birds is available for hunting. Where hunting opportunity is more important than the character or wildness of the birds, releases can be performed as late as the day of the hunt.



Good quail habitat is also a requirement for released birds, especially protective cover such as plum and waxmyrtle thickets, briars, and broomsedge.

When wild characteristics are important, releases can be timed far enough in advance of hunting to allow pen-raised birds to develop some wildness while keeping the release close enough to desired hunting dates so that the dramatic mortality losses that occur in the first two months after release are minimized.

Another situation is where a landowner wants to increase wild numbers by improving habitat on their land and allowing wild birds to expand into that habitat, but they also desire hunting opportunities in the interim. Pen-raised birds provide the opportunity to hunt, identify whether the first birds taken from a covey rise are wild or pen-raised (by banding all released birds), then pursue or back off the covey as appropriate to ensure that wild coveys are left alone to expand on the property. Once desired numbers of wild birds are established, pen-raised releases can be discontinued or used on an as needed basis.

### Chronology of a Pen-raised Quail Release Program

Month/date	Event	
May	Monthly protective cover for release sites.	
	Plant food sources (Egyptian wheat, grain sorghum, pertridge pea, bicolor, etc.) in class proximity to release sites.	
	Order birds.	
Oct. I	Fing refeare sites.	
Det. 13	Clear situs within the refease area, clean circular spots three feet in diameter down to been dirt; place weter and scatter grain sorghum/cracked corn mix.	
Oct. 14	Pick up birds and secure in barn overnight.	
Det. 15 - Murring	Release birds at prodetermined sites; cut hole in box and prop open with stick; move away and allow birds to welk out on their own.	
Oct. 15 - Attempon	Remove boxes from release sites to avoid predetors keying in on the site; avoid flushing the birds or moving them off the refesse area.	
Next three weeks	Hufund at release sites every fee days.	
After three weeks	Broadcast small grains into food plots or other areas you expect to find quail during frunting season.	
	For hunting, stop feeding just before hunting season; flush birds with a lab or bird dog	

purpy to "train" the bads. Do not use broke bird dogs as they may stop pointing and chase.

Pen-raised birds can offer some benefit in situations that do not involve hunting. Landowners may simply desire to have a covey or two resident on their property. If wild birds are absent and surrounding properties do not provide adequate quail habitat to supply a source of wild birds to fill suitable habitat on a landowner's property, releasing pen-raised birds may be the only feasible way to start the process. With time, persistence, and commitment to supplying all the needed habitat components, pen-raised birds could provide the answer.

## **Q:** How do you determine how many pen-raised quail to release?

A: Most well-managed quail plantations release from one to two birds per acre of suitable habitat depending on the intensity in which they plan to harvest the birds or frequency with which they desire to find coveys. Assuming a 20 percent harvest, one bird per acre release rates will yield a harvest of 20 birds per 100 acres and anywhere from two to four covey finds per hour. A two birds per acre release rate is usually the upper limit of a good release operation and can yield a harvest of 30 to 40 birds per 100 acres and from three to five covey finds per hour.

For those not concerned with hunting but would like a covey or two for viewing or other purposes, a one bird per acre rate over consecutive years would be advisable until quail numbers reach the desired level and remain consistent.

## **Q:** What time of year should birds be released?

A: Other than day-of-the-hunt releases, timing should be from September through November. This time period usually coincides with the least amount of pressure from predators and the maximum amount of wild quail mixing. Hawks in particular begin to migrate into our area around the first part of November.

# **Q:** What type of habitat conditions should be identified for release sites?

A: Pen-raised birds must be released into adequate protective cover. Ideal sites include areas such as plum thickets, wide hedgerows, waxmyrtle thickets, cutover roughs, etc., where overhead and horizontal



Proper feeding cover near release sites is an important component of a successful release operation.

protective cover exists near good feeding locations. Pen-raised birds will hold close to the release site for several days and it is imperative to provide food at the release site at all times during the first three weeks. If adequate protective cover is not available, predators will take them promptly.

# **Q:** What qualities should be considered when preparing to purchase pen-raised quail?

A: Basically you want to acquire disease free-birds from a reputable supplier that is oriented towards producing quality pre-season release birds. The best way to acquire this information is to talk with other landowners and managers about the breeders from which they have obtained birds. They can give you information as to whether they have had disease problems, what type of flight qualities the birds have demonstrated, etc.

# **Q:** What type of costs are associated with purchasing pen-raised quail?

A: Birds cost around \$2.50-\$3.00 each.

## **Q:** Where do you obtain pen-raised quail?

A: A variety of independent operations can supply birds. Again, contacting landowners and managers who have purchased birds is a good place to start. You can also contact the North American Game Breeders Association for suppliers they are aware of in your local area.

#### Sources for Purchasing Pen-Raised Quail

Alabama Game Farm 13536 County Road 45 Tuskegee, AL 36083 334-485-3393

Dixon Quail Farm P.O. Box 164 Hatchechubbee, AL 36858 334-667-7362

Triple M Quail Farms Route 1 Box 272 Midway, AL 36053 334-529-3802

Harold and Sons Quail Farm P.O. Box 215 Hayneville, AL 36040 334-548-2262

Cox's Covey 374 County Road 40 Shorter, AL 36075 334-727-4884

H&S Quail Farm 3303 Gambles Store Road Tallassee, AL 36078 334-283-6340

Moore's Game Bird Farm Route 2 Box 180 Browns, AL 36759 334-683-8039

Sand Mountain Quail Farm P.O. Box 246 Crossville, AL 35962 205-561-3471

#### For additional listings contact:

North American Game Bird Association 1214 Brooks Avenue Raleigh, NC 27607 919-515-5403

#### Insects of Pine Forests

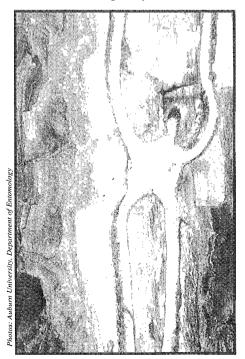
Continued from page 25

#### **Defoliators**

Pine Sawfly—Pine sawfly will be used to generally describe three species that produce similar damage in Southern pine forests – blackheaded pine sawfly, redheaded pine sawfly, and loblolly pine sawfly. The sawfly is one of the most important defoliators of all varieties of pines in the South, with loblolly, longleaf, and shortleaf being preferred. Heavy defoliation can lead to growth loss, reduced tree vigor and in some instances, tree mortality.

In general, sawfly larvae feed on the older needles of the tree. Visible damage includes twigs with damaged and browning needles. These twigs are referred to as "flags." Each species of sawfly has a different life cycle, and several generations can be found in a year.

Loblolly pine sawfly larvae are dull green with black stripes along each side. They are about one inch long and have brown heads. Blackheaded pine sawfly larvae are also about one inch long and olive green with black stripes. Consistent with their name they have a black head, but they also have a conspicuous row of black spots on each side. A bright red head distinguishes the redheaded pine sawfly from other species. The body is about one inch long and yellow, either



▲ Typical ips engraver adult tunnels in inner bark.

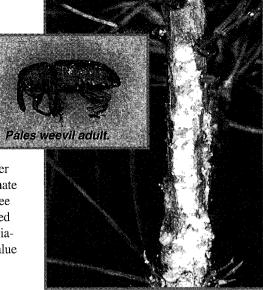
pale or bright. Four to six conspicuous rows of black spots are found on the body.

Outbreaks of the pine sawfly occur periodically and usually subside quickly or within one to two years, depending on the species.

Natural enemies are usually helpful in preventing or ending outbreaks. Other natural factors such as disease and climate also help control populations. In all three cases, chemical insecticides may be used after several years of consecutive defoliation in the same stand, or when high value trees are threatened.

#### Help Keep Your Forest Healthy

Many private landowners rely heavily on a forester to ensure that their forest remains healthy. But, more than likely the forester has many clients, and probably does not have the opportunity to constantly inspect the woodlands for health problems that may arise, especially sudden insect or disease outbreaks. By knowing the signs and symptoms of these pests, you should be on the lookout for them when you are on your property. If you suspect that one of these insects is infesting your trees, be sure to alert your forester so that the problem can be controlled before



▲ Typical "patch" feeding of pales weevil adult on a pine twig.

economic loss is incurred. Your forester knows about these pests and how to handle them, as well as whether or not any action is warranted at all.

Information for this article was obtained from Forest Insect Disease Leaflets produced by the Southern Region Forest Health Protection Division of the USDA-Forest Service. Photos are courtesy of Lacy Hyche, Department of Entomology, Auburn University.

#### ATTENTION READERS

For Alabama's TREASURED Forests to receive the lowest possible mailing rates, we must have your complete address. If you've moved or if your address recently changed from a rural route to a street address, please complete and mail the form on this page. You may also contact us with address changes, comments or suggestions by e-mail. Send to: tfmag@forestry.state.al.us

# Is Your Mailing Label Correct? Are you receiving Alabama's TREASURED Forests at the correct address? If not, please complete the following form and return to:

Alabama's TREASURED Forests Magazine, P.O. Box 302550, Montgomery, Alabama 36130-2550						
New Address						
Name:		<u> </u>				
Address:						
City:						
Old Address as it appears on mailing label						
Name:						
Address:						
City:						

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

600-page hardback filled with color photos filled with dilustrations

### Coming Soon from the Alabama Wildlife Federation

## MANAGING MILDLIFE

"Attractive enough to grace a coffee table and utilitarian enough to take to the field . . ."

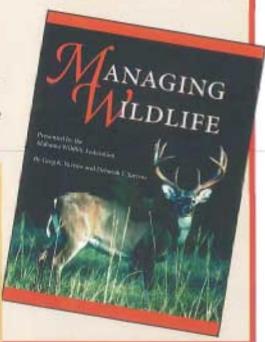
> - Excerpt from "Preface and Acknowledgments" by Rhett Johnson

"It appears to be a universal characteristic of us outdoor types to believe we came here with an innate sense regarding sporting pursuits and wildlife management. While we are perfectly willing to consult dentists for a toothache or doctors for medical advice, and are generally reluctant to practice law without a license, this willingness to defer to experts does not extend to matters concerning game and fish. As a general rule, any person who has shot one squirrel or caught one bream on a pole and line, feels fully capable of managing fish and game of all species on an ecosystem scale. He doesn't hesitate to disagree with professional wildlife biologists, to override the opinions of trained foresters or other natural resource managers, and, in general, to prove again, for the umpteenth time, the truth of the adage that 'entrenched beliefs are never altered by exposure to facts.'

This excellent, comprehensive manual makes no claim to omnipotence but it does reflect the opinions of some of the best minds in the Southeast, in a variety of disciplines, and sets forth in plain language practices which the private landowner or land manager can implement to improve the status of fish, game, and forests on his land...

It might not be a bad idea to read on and see for yourself. Even you may learn a thing or two!"

- Excerpt from "Foreword" by Tom Kelly



Available at Books • A • Million and other fine book stores beginning in mid-November

Managing Wildlife will also be available through the Alabama Wildlife Federation, 334-832-9453

Financial support for Managing Wildlife was provided by the Curtis and Edith Munson Foundation, National Fish and Wildlife Foundation, Alabama Forestry Commission, International Paper, Alabama Forest Resources Center, and Books•A•Million.



Alabama's TREASURED Forests

513 Madison Avenue P.O. Box 302550 Montgomery, Alabama 36130-2550

CHANGE SERVICE REQUESTED

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