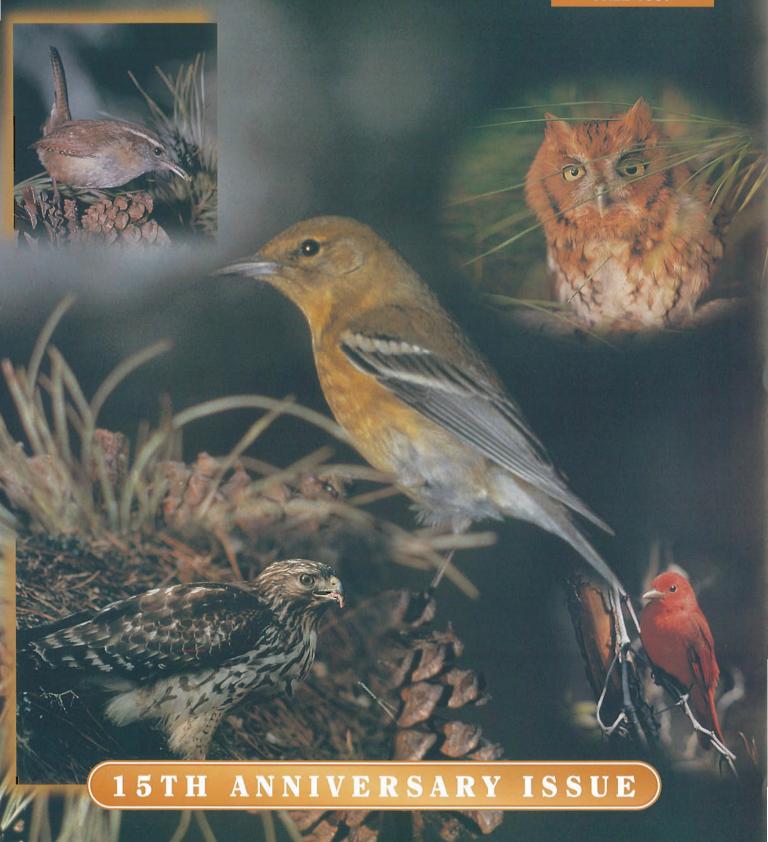
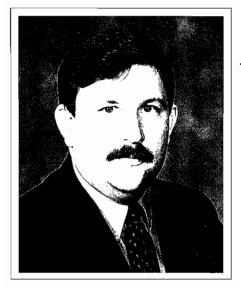
Alabama's TREASURED Forests

FALL 1997



STATE FORESTER'S MESSAGE

by TIMOTHY C. BOYCE, State Forester



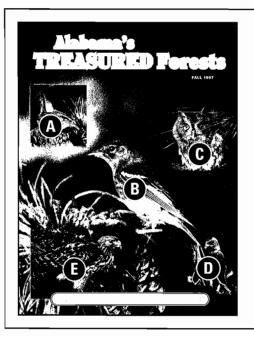
labama's TREASURED Forests magazine has hit its first milestone of 15 years. Our magazine has been one of the most productive and enjoyable activities I have been privileged to be associated with and has brought much credit to the Commission and its many participants over the years.

A lot has happened in the past 15 years, as you can read on page 7 of this issue. However, what is important is what will happen in the **next** 15 years, or, should I say, what we **make** happen.

Our future will hold many challenges. We will also have many opportunities. Our future rests with the tenacity and perseverance of our private landowner, spurred by the incentives of private enterprise and family values, with government being a catalyst and helping hand, not a deterrent or a road block. Our success will depend upon all of us working together, forging partnerships with open discussion and dialog with all parties.

Recently, the TREASURE Forest Association employed James Malone as its executive director. James' leadership and enthusiasm will play a major role in expanding the involvement of forest landowners in forestry throughout the state. I hope you will consider helping James champion the cause of private forest landowners by joining the Association. Your involvement is needed now if we are to tell the true story of the contribution nonindustrial private forest landowners make to our great state.

In closing, I would like to take this opportunity to bid Bob Joslin a fond farewell as he assumes his new duties as Deputy Chief of National Forest System, U.S.D.A.-Forest Service, Washington, D.C. Bob's service as regional forester for the Southern Region has meant a lot to the South and to me personally. He will be missed. Good luck Bob!



COVER: No matter where you live in Alabama, you can find enjoyment watching birds. Nearly 400 species of birds have been documented within our state's boundaries. Read more about them on pages 20-21.

Photo credits: Harriett Wright, Ann Miller, John Findlay, and John Imhoff.

- A Carolina Wren
- 3 Pine Warbler
- C Screech Owl
- D Summer Tanager
- E Broad-winged Hawk

Sincerely,

Timothy C. Boyce

State Forester

Alabama's TREASURED Forests

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

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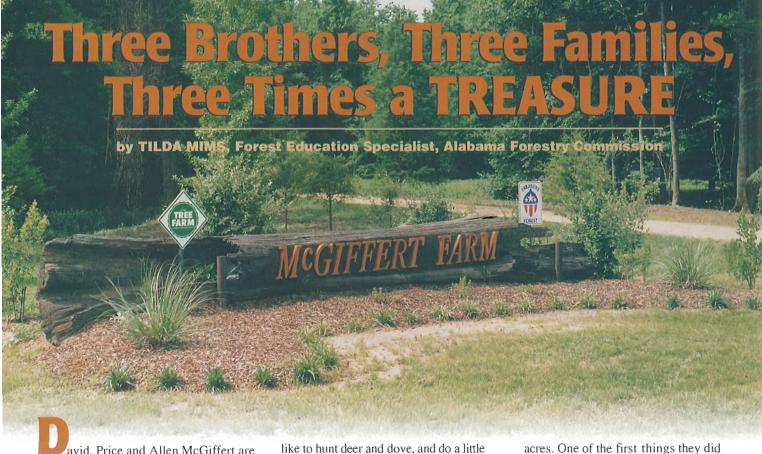
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avid, Price and Allen McGiffert are working together as brothers and friends to create a TREASURE Forest as diverse as its owners. Though they share mutual objectives for their forestland, each one contributes unique skills and talents toward achieving those goals.

Multiple-use management of the 1,398-acre McGiffert Farm in Tuscaloosa County is clearly reflected in the multiple interests of the three brothers. The hard work and vision they devote to this property received statewide recognition when they were named the 1997 Helene Mosley Memorial TREASURE Forest Award winners for the Northwest Region.

Although the McGifferts' primary objective is wildlife enhancement and timber production is secondary, the two could be easily reversed. They manage the wildlife habitat and timber with equal intensity toward a single vision of productive, healthy forestland that offers recreation, scenic beauty and future economic return.

Hunting is a popular sport for the three brothers, but the specific objectives are a little different for each of them. David and Allen enjoy turkey hunting as their primary interest, while Price's main objective is quail hunting. They all

like to hunt deer and dove, and do a little duck hunting each year. They have combined these interests into a successful management plan that both complements and enhances timber and wildlife.

"We started out planting and managing the area for wildlife from the beginning," says David. "The fields that didn't have much cover we planted in pines to create habitats and we started planting supplemental foods in every place we could."

Deer Management

They bought their first parcel of 110 acres in 1980 and have since made eight additional purchases for a total of 1,398

want to get them higher than that."

For the last five to six years they've planted Oceola and ladino clovers for year-round high protein foods and have seen a lot of usage by the deer in

round high protein foods and have seen a lot of usage by the deer in those areas. Green fields of crimson clover and wheat, scattered sawtooth oaks, chufas, and orchards of autumn olive, crabapple and persimmon are attractive to many game and non-game species. They also plant between 500 and 1,000 bicolor lespedeza each year.

after reaching the 500-acre mark was to

enroll the property in the Alabama Deer

Program since March of 1988 and are

"We've been in the Deer Management

very happy with the results," David said.

"We are managing for deer quality rather

than quantity. We use doe tags, harvest-

ing about 35 does per year. Last year we

points. We are beginning to see and har-

vest many deer in the 110-120 category

on the Boone and Crockett Scale but

harvested 10 bucks that were eight

Management Program.



▲ Tuscaloosa County Forester Hank McKinley and David McGiffert walk through a pine plantation that is prescribe burned on a 2- to 3year rotation.

Quail Management

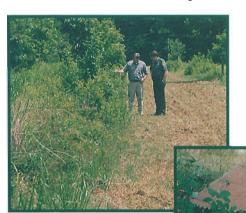
In addition to the deer plantings, partridge peas, soybean patches, and almost four miles of quail strips featuring sorghum and Egyptian wheat have been provided for food and cover. They also furnish quail feeders for a source of food and water.

For several years now, Price has put out pen-raised quail about two months before the season starts. After a week or so they remove the release boxes, giving the birds six weeks or more before the season starts to become adapted to the environment. "We are starting to see some residual quail from earlier seasons," Price noted. "We've heard a lot of quail whistling this year and have seen them pairing up, so we hope we are going to get some regeneration."

Turkey Management

The turkey population has increased substantially under their ownership. "The turkey population had just started coming back to this area when we first began acquiring the property. We hunted in this part of the county in the 1960s and 1970s and never saw a turkey," David says. Good mast crops, favorable nesting habitat and 17 chufa fields now allows them to harvest somewhere between five and eight mature turkeys each year.

About 7,000 acres are bordered between Tuscaloosa and the Black Warrior River around this property. To further their management plan, they contacted adjoining landowners and have annual meetings with most of them. "Almost all of them are trying to manage the same way we do," according to David. "We have a good group around us and we are working well together. As landowners of 1,400 acres we can't really do too much with producing quality deer, so we've got to work together. We have other landowners working with



David McGiffert and wildlife biologist Jeff Makemson check on wildlife food plantings.

Quail feeders provide a reliable food and water source.



▲ The McGifferts dammed up a slough and added drainage structures to create this 15-acre lake.

us to increase the quality of deer and that has worked out well."

Timber Management

The 300 acres of pines on the property are relatively young, from one to 12 years old. Some hardwoods on the property are older and they are starting to manage them as well. Cherrybark, Nuttall and other oaks were planted in three 10-acre clearcuts around the property.

One hardwood cutting on the original tract removed poor quality trees. Another cut near the horse stables created pastures by harvesting the trees and using the profits from the sale to hire heavy equipment to reshape the land.

Utility Easements

Many utility easements cross this property: Alabama Power Company has a transmission line, the city of Tuscaloosa has its outfall sewage line from the treatment plant to the river, and Hunt Refining Company has a pipeline to carry its finished products to another pipeline below Moundville. The McGifferts try to use all of the rights-of-way as best they can to their advantage. They plant clover fields and green fields that can be bush-hogged and kept under control.

One of the worst problems they inherited when they bought this property was the blocking of drainages during utility construction. "We've corrected a lot of that,

some with the assistance of the utility company," Allen says.
"Alabama Power Company has helped us greatly in several locations with their crews.
They would come in and clean up areas

where they were having problems with danger trees. After removing the trees, they would clean up the areas and put the drainage courses back in correctly."

The McGifferts are quick to praise the professional advice provided by local agencies and forest industries. The Tuscaloosa office of the Forestry Commission created their management plan and continues to offer assistance in cost-share availability, prescribe burning and other practices. Consultants from Mississippi State University and Auburn University have provided guidance in both wildlife and timber.

They credit Johnny Foster of Gulf State Paper Corporation with much of their early achievements. David recalls that much of the original planning on the property was done by Foster. "He has been a tremendous asset to us since we first bought the property in the 1980s," he said.

"Also, in our area we have been blessed with some really good wildlife biologists to work with. Jeff Makemson, a biologist with the Department of Conservation and Natural Resources, has been an excellent resource to us in our wildlife program."

McGiffert Farm is a beautiful place filled with the timber, recreation and aesthetic charm that gives TREASURE Forest its name. David, Price and Allen along with their parents, wives and children have pooled their time, talents and resources into making the farm more than just a tract of forestland. It is a family place, one that draws them together at a time when most families are struggling to stay in touch with each other.

The McGiffert family has earthly treasures far exceeding the boundaries of their forestland. They have the intangible gifts of brotherly love and strength of family. These are true riches that have allowed them to achieve more than simple finances would allow.



by TILDA MIMS, Forest Education Specialist, Alabama Forestry Commission

ike many Alabama children, David, Price and Allen McGiffert grew up hunting and fishing with their father. They hunted in hunting clubs, participated in scouting and played sports—almost anything in the out-

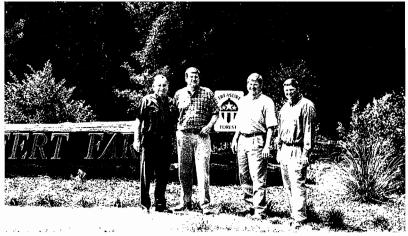
doors was their delight.

As they grew older, they began looking for a piece of land to buy. They wanted to manage and hunt on land that belonged to them, to devote time and resources to improve their own land, not leased land. "We wanted to do our own work on our own land," they said. Now, all day Saturday, Sunday afternoons, and holidays you will find them working at the farm. They laughingly say those are normal work times "unless you have a pass."

Their father David comes along to help and their mother Betty usually fixes lunch for them. Their children and wives are in and out as school and extracurricular activities allow. Since the farm is only five miles from town, it is close enough to permit a quick visit.

The regular five-day work week finds the brothers involved in established family-owned businesses in Tuscaloosa. All three McGiffert brothers are graduate civil engineers from the University of Alabama. David and Allen work for McGiffert and Associates, a civil engineering firm in Tuscaloosa founded by their father. Price has his own construction company.

Their education and experience have been an asset in the development of the roads, drainage structures and other improvements on their property. "We know that our engineering background has helped us tremendously in managing our land," David acknowledged. "We have improved drainage throughout the property, built bridges and put in a lot of



L-R: David G. McGiffert, W. David McGiffert, Price McGiffert, and Allen McGiffert.

drainage structures. We try to apply our engineering background every day."

Road construction and maintenance are a challenge for all landowners but particularly those in low-lying areas. The McGifferts have an excellent road system due to careful design in bottomland areas. They found that in their riverbottom land, it only takes 6-8 inches of crown on the road to make it all-weather.

Allen designed the McGiffert Farm sign at the entrance of the property. It is made of a cypress log that kept floating up in the lake. A representative planting of the species found on the property was created by pruning large trees back and transplanting them.

Price built the comfortable cedar camp house that contains mementos of occasions that welcomed family and friends. There are even small wall hangings presented to them when a contingent of Japanese farmers visited Alabama to tour agricultural sites. The house was designed on stilts using record floods in 1961 and 1979 to project an elevation

> that should protect from future floods. It features a large screened porch that overlooks part of the 15-acre lake.

When asked where they see the farm in 20 years, the family joke is that they will be sitting around watching their sons-in-law cut their timber. With four daughters the answer may be more fact than humor, but the children show every indication of loving the farm as much as their fathers.

From horses to 4-wheelers, from hunting to

butterfly collecting, the children enjoy all the property has to offer. David and Ann McGiffert have one daughter, Megan, who is the fifth generation of the family to attend the University of Alabama; she began her freshman year this fall. Allen and Kay have two daughters, Katherine and Sara Frances; and Price and his wife Elizabeth have daughter Kendall and two sons, Garrett and John Price.

For all its bounty, McGiffert Farm is only beginning. Years ago their young parents taught them to love and respect nature. Today those sons dedicate their time and resources to improving "their little corner of the world" and passing that commitment on to their children. Future generations, building upon this solid foundation, will foster the tradition of a TREASURE Forest dedicated to productivity, conservation and family.

Forestry Making Significant Strides

Alabama's TREASURED Forests Celebrates 15 Years

by STEVE NIX, Forest Resource Analyst, Alabama Development Office

labama's TREASURED Forests magazine is 15 years old. CON-GRATULATIONS! I'm looking forward to another 15 years of great forestry information.

Fifteen years of forestry brings a lot of change—some of it good, some of it not so good. I want to reflect, just briefly, on a few changes that have significantly affected forestry in Alabama. Recently I asked a group of industrial, procurement, and government foresters to indulge me and name some of the major changes they saw as significant in Alabama forestry. I asked that they be candid and to the point. They were, and gave me a list of top 10 changes in forestry over the last 15 years. You may have others that we missed.

Here is what the group thought was significant—their top list of changes.

1. Resource Changes

The decade of the Eighties axed the idea that there was an endless supply of timber in Alabama. The 1990 Alabama Survey suggested that we were cutting more pine than we were growing. Foresters had not seen this in previous surveys and never really questioned the statewide availability of wood.

These foresters admitted experiencing a tightening of pine availability, but no panic yet. Adequate supplies of wood can be found, but quality wood comes at a premium. Technology is allowing smaller wood to compensate for size. Timber sellers are also better informed and are willing to hold wood longer for a better price.

Another interesting resource change surfacing over the last decade is the increase in hardwood volumes and hardwood acreage as compared with the pine resource. At least in the short run our coniferous forests are becoming deciduous forests.

2. The Use of Hardwood

Through the early 1980s foresters routinely advised landowners (sometime against the better judgement of both) to make an "improvement" and remove all

hardwood competition. This forest practice was supported by federal cost-share programs and was done by state and federal foresters as well as consultants and industry foresters.

Dozers, chemicals, and axes were all used to eliminate upland hardwood if a pine could be grown. The forestry community now realizes this may not have been wise.

There is a silvicultural need to control hardwood stems, **but not in every case.** Foresters have slowly but effectively begun to incorporate upland hardwood management when possible. Most foresters have traditionally had little training in upland hardwood management. This is changing.

3. The Chemical Improvement

The consensus is that chemical control methods are vastly improved since 1982. Applications that used to be hit and miss because of site, soil, and species differences have now developed into very specific, effective application rates. Many more kinds of chemicals have been developed to replace several heavy hitting but potentially harmful chemicals.

New chemicals have reduced the cost of site preparation and have proven to be effective and safe. Less invasive site preparation, which preserves site quality, has occurred primarily from better chemical application and improvements in harvesting techniques.

4. Forestry Mechanization

You hardly recognize harvesting systems now as compared to ones used in the early 1980s. The bobtailed truck has been replaced by more cost-effective and less site disturbing methods. We are now harvesting in less dense stands, using smaller diameter trees, and hauling and skidding longer distances than ever before because of improved mechanization.

Mechanized cutting is competing with the chain saw on a growing list of site conditions. These harvesters, which fell, delimb, crosscut, and pile logs are far more productive than traditional methods.

A forester/logger indicated that harvesting equipment functionality and longevity has tremendously increased. "They just plain last longer, process more wood, and do it faster than ever before."

5. The Personal Computer

The Macintosh was introduced during the 1984 Super Bowl. The Personal Computer was not long in following, and the computer age exploded. The computer is now a full business partner and forestry is all the better for it. Almost every forester has a computer on his desk, either at work or at home.

Alan Greenspan recently said that the economy is "humming," primarily because of the Personal Computer. Not only because

(Continued on page 30)

COMPARISONS

Here are some comparisons between the fall of 1982, when the first issue of *Alabama's TREASURED Forests* appeared, and the fall of 1997.

1982	1997	
Governor: Fob James	Governor: Fob James	
State Forester: C.W. "Bill" Moody	State Forester: Timothy C. Boyce	
Assistant State Forester: Charles A. Pigg	Assistant State Forester: Richard H. Cumbie	
Number of TREASURE Forests: 140 Number of TREASURE Forests: 1,122		
Acres enrolled in TREASURE Forest program: 270,000	Acres enrolled in TREASURE Forest program: 1.6 million	
First mailing of Alabama's TREASURED Forests: 800	Current mailing of Alabama's TREASURED Forests. 10,20	

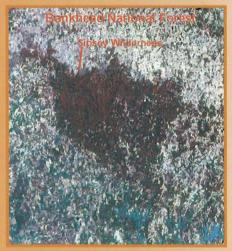
SOIL EROSION

Our "Hidden" Legacy

by DR. DOUG RICKMAN, Professional Geologist #488 and DR. JEFFREY C. LUVALL, RF #1655, JLC/DLR Consulting, Huntsville, Alabama

oday the Bankhead National Forest in north Alabama is carpeted in trees. So much so that many think of the area as nearly pristine wilderness, full of virgin trees left from before the arrival of European settlers. Under the trees clear, mountain streams run over rocky beds in deep, well-defined channels. In truth there are few trees more than 200 years old. The streams have lost their original nature and are now rapidly cutting deeper, barren channels which drain and dry the surrounding lands. Most of the land has at one time been either cleared for farming, selectively logged, or used for livestock forage. As a result, most of the original, rich organic topsoil was lost. Much of this use occurred before even the grandfathers of today were born. It is now a hidden history, forgotten and unrecorded. Yet this history continues to impact the fertility of the land, the character of the streams and how these can be best managed. As TREASURE Forest owners, it is important to recognize the legacy of erosion features which originated so long ago and the consequences of this erosion on your forest management practices.

The importance of land usage over a hundred years ago was recognized during one of our recent projects in the Bankhead National Forest. We were examining the impact that upland pine plantations may have on the water budget as apposed to natural hardwood forests. We were interested in this question since many of the unique ecosystems in the Bankhead are contained within deep canyons having vertical, rock sides and are dependent on the upland areas for the amount and timing of their water supply. A change in the forest cover in the uplands might have significance well beyond the immediate site. However, it became more and more apparent that effects of past historical dis-



Landsat5 false infrared color satellite image of the Bankhead National Forest during July 1993. Notice how different the forested land looks as compared with the surrounding agricultural/pasture areas.

turbances of the Bankhead forest are a dominate impact.

History and Land Use

The area of the Bankhead Forest was occupied by European settlers between 1840 and 1860. The Agricultural Census of 1860 shows the eastern half of Winston County had 161 farms. The farms were small family farms. The average farm was 215 acres, and on average had two horses, three milk cows, one ox, six other cattle, four sheep and 18 swine. They had 32 acres "improved" and 183 unimproved acres. In the previous year they had won from the ground 237 bushels of "Indian" corn, 43 bushels of sweet potatoes, 10 bushels of Irish potatoes, 15 bushels of peas and beans, 1,400 pounds of baled cotton, 27 pounds of tobacco and a bushel of oats. It is interesting to note that the family's average 32 acres in a mountainous area was more productive than the average for the entire state. While the population density was low by modern standards, there were 123 acres per person; the impact on the land was large.

Each open hearth required 20-40 cords of wood per year for fuel. The land cleared for agriculture remained productive for only a few years. Livestock foraging, especially hogs in the forest, was everywhere and greatly increased erosion from forestland. As one plot of land was depleted, it was necessary to clear additional acres. If one could see the cleared land through time, it probably would have looked like scattered holes in the forest, which with time became larger, eventually consuming all ground that could even remotely be farmed. We have even gone into areas that are relatively small, difficult to access and very steep (minimum slope of 35 percent). Even here the land had been cleared.

The result of such use is clearly visible in the soil today. Gullies are common. We have found them up to 12 feet deep, which is impressive in an area which has little soil depth. In the heavy forest cover of today, these are most easily seen in the winter.



Private ownership forested land used for hogs on the edge of the Bankhead National Forest. This photo demonstrates the impact this practice can have on modernday forests.

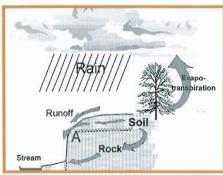


Figure 1
Water budget. The major pathway for water removal is evapotranspiration by trees. Water evaporated by trees can account for 50-60% or more of the total rainfall depending on forest type.

Cores or test pits often show a thin veneer of a redeveloping organic horizon directly on "B" horizon or even "C" horizon soils, horizons that are usually covered with a sizeable layer of topsoil and organic matter.

As one would expect, the destruction of the soil also destroyed the economic viability of the farms. When we visited the cemeteries in the forest we found an interesting pattern in the tombstones. Through the earlier part of the century there were many stones made of marble and commercially carved. These had to be transported over land by wagon, which is expensive. By the 1920s and 1930s such markers were no longer used. Instead, we find graves with locally made cast markers. The orthography is wrong; the spelling is incorrect. These people could no longer afford even a common tombstone for their dead.

It was this land that the federal government started buying in 1918 and eventually turned into the Bankhead National Forest. Bare areas were planted in pine. Livestock grazing was restricted. In time, these and other management techniques stabilized the soil. The gullies now have trees growing in their bottoms and are difficult to recognize unless one knows to look. Clearly, where the forest cover is rebuilt and remains, the land heals. But the situation in the streams is different. Today, more than 50 years after the forest cover was reestablished, the streams are aggressively evolving. The most obvious change is the active deepening of channels. Throughout the northern portion of the Bankhead, streams of all sizes are rapidly digging deeper. This can be proved by such things as large roots that bridge over streams, inbank terraces, "pipes" where small streams

join larger streams by going underground and tunneling through the bank of the larger stream, and waterfalls developed on flood plain clay beds. A typical stream is now in a well-defined channel with banks several feet deep. The shorn ends of tree roots commonly stick out on both sides of the channel. While it is normal for streams to cut and remove material, the rate necessary to develop the features seen in the Bankhead Forest is far beyond natural rates. In one place we estimate rates that are probably 100 to 1,000 times greater than even very fast, natural erosion such as the Grand Canyon in Arizona.

The effects of such changes are not completely understood. Clearly, flood plains that were formally wet or moist much of the year are now much drier. In fact, in the Bankhead there is a drainage ditch, reportedly dug by hand in the 1850s, that is now high and dry. There will also be a drying out of the land on the slopes. This will happen because water in the soils will move down hill, through the formerly saturated food plains and out through the open channel. This means there will tend to be less water available for plants.



A typical present-day stream showing the effects of rapid stream down cutting. Notice how the beech tree has been undercut and its roots exposed.

The ecology of the streams has also probably changed. We don't know for certain, but we believe that many of the streams in the Bankhead used to flow on silts and sands, with significant aquatic vegetation. Now the streams are commonly gravel and cobble-bottomed and even native rock. The stream flows have also probably changed, becoming much more "flashy." With such changes, there would be a change in the aquatic animals, from insects to fish.

Why do the streams continue to cut into their beds even though the forest



Erosion gully along Thompson Creek trail, Sipsey Wilderness, within the Bankhead National Forest. This gully is approximately 12 ft. deep and is a typical erosion feature found throughout the Bankhead National Forest.

cover has been re-established for so long? We think the explanation is simple and may be very important to the long-term management of the Bankhead Forest. To understand you must understand the forest's water budget.

The Role of Soil in Stream Flow

In the water budget of the forest (see Figure 1), rainwater, which may be thought of as income, will be "spent" in various ways. It may flow over the surface of the ground, eventually going into stream channels. It may enter the soil and flow down slope through the soil. It may descend through the soil and into the underlying rock. It may also be "saved," staying in the soil until the trees spend the water by lifting it to their leaves and allow it to evaporate. This is technically referred to as "evapotranspiration." There are actually other paths for the water to enter and leave a site, but these are the ones we need to consider now.

Just as with a person's budget, what will happen to the water (income) of a particular rainfall will depend on what has previously happened, how big each of the various budget requirements are, and the capacity of each part to hold or move the water. For example, if it has been dry the water will soak into the soil and not move downhill; if it has rained enough to saturate the soil, there will be more runoff. If trees are removed from a site, less water will be taken from the soil through the trees by transpiration.

Now we apply these generalizations to the specific case of the Bankhead Forest

(Continued on page 19)

Low-cost Forest Regeneration

by KEN MCNABB, Auburn University School of Forestry and TIM GOTHARD, Alabama Forestry Commission

labama's nonindustrial private forests are owned by a broad spectrum of citizens including farmers, schoolteachers, and construction workers, many of whom have inherited forestlands that were passed down through several generations. These owners have a variety of management objectives and value their forests not only for timber production but also for beauty, wildlife, and recreation. For the most part, they are very conscientious managers, realizing that proper forest stewardship and sustained productivity requires the planned regeneration of harvested areas.

Some forest owners prefer to regenerate using intensive management such as preparing cutover lands with machines or herbicides. Although this type of forest management is very productive, it is usually quite expensive and the primary objective is timber production. There are other methods, however, that can provide landowners with a low-cost forest regeneration alternative. These less intensive methods are often better suited to landowners with objectives other than timber production.

Natural Regeneration Alternatives

Most active forest management in Alabama deals with the growing and harvesting of pines. Fortunately, pines can be managed using natural regeneration techniques that rely on seedfall from trees left on or near the site, or seedlings present in the understory at the time of harvest. Natural regeneration has the advantages of being relatively inexpensive, more aesthetically pleasing, and requiring less labor and heavy equipment. Natural regeneration does not mean, however, letting Mother Nature take its course. Each step in a natural regeneration program should be monitored and managed. Planning is one of the most important factors. To ensure success, natural regeneration must be planned before existing trees are removed.

Loblolly and slash pine can be regenerated using seed tree or shelterwood systems.

In these systems the best trees in a stand are selected before harvest and retained as a seed source. Seed fall must be monitored. and a burn is usually necessary to prepare a seed bed. A shelterwood system is more appropriate to longleaf pine. Not only does a shelterwood system leave more trees on the site to serve as a seed source, but it also requires a two-stage harvest to allow the future seed trees to further grow and develop. Oaks are also good candidates for shelterwood regeneration methods. In each of these systems, competing vegetation frequently needs to be managed to allow the germinating seedlings to grow and become established. The cost of this competition control often determines if stand regeneration will actually be "low-cost."

Clearcutting can also be an effective low-cost regeneration technique for both pine and hardwoods. Seed of loblolly and slash pine can blow into an area from neighboring seed sources from as far away as 200 feet. In addition, if the harvest is timed correctly, seed or seedlings already on the site can sometimes be used to regenerate the next stand of pine. When depending upon "seed-in-place," clearcutting should be done in November through March, which is right after seed fall in the autumn, but before germination in the spring. The harvest for a "seedling-inplace" system, however, is best when done in late summer following a good seed year.

Clearcutting also provides the conditions necessary for the growth and development of many species of hardwoods such as yellow poplar, ash, cottonwood, sycamore, and others that do best in full sunlight. The stand regenerates after harvest from both seed and sprouts. In general, hardwoods are good sprouters, but some species, such as the oaks, sprout less as they get older. In this case other measures are needed to promote the establishment of understory seedlings that will regenerate the site when the canopy is removed.

Another low-cost natural regeneration method is the "selection system," also

called uneven-aged management. This system manages seedlings, saplings, and large trees simultaneously by harvesting individual trees or small groups of trees in the stand as they mature. Managing pine with a selection system is not easy because pines require abundant light for vigorous growth.

Hardwoods are generally more conducive to uneven-aged management, as many species are shade tolerant and can emerge through the small gaps created by individual tree harvests. If a selection system is incorrectly applied, however, it becomes a highgrade, where over a period of time the best trees are removed and less desirable species and individuals take over the stand.

Low-cost Planting

Planting seedlings is another method of regenerating harvested forests. While planting is more expensive than natural regeneration systems, there are distinct advantages to planting: planting can introduce a new genotype; seedlings are already a year old when planted; each tree has an equal amount of growing space; and planting does not require the landowner to leave seed trees that can be lost to wind, insects, or lightning.

Even so, to be a low-cost alternative, site preparation is restricted to burning. A site preparation burn usually improves site access by removing harvest slash and thus facilitate planting. A site preparation burn can also provide a minimal level of weed control and perhaps even provide a small fertilizer boost through the ashes. It needs to be recognized, however, that stand regeneration based solely on a site preparation burn followed by planting pine will usually result in a mixed stand of both hardwoods and pine.

Several low-cost regeneration practices such as prescribed burning, vegetation control, and planting are eligible for several federal and state cost-share programs. The Forestry Incentives Program (FIP), Stewardship Incentives Program (SIP), and the Alabama Agricultural Conservation Devel-

opment Commission Program (AACDCP) may pay from 50 to 65 percent of the cost when approved practices are performed according to technical plans developed by agency resource professionals.

Knowledge, Planning, and Involvement

Many regeneration options are available for landowners to reforest an area after harvest, from using Mother Nature's own seed source to purchasing and planting young seedlings. Forest owners need only match their own management objectives with one of several low-cost regeneration options. But whatever the forest management strategy, there are several crucial elements necessary to remember when weighing the options.

First, good forest stewardship requires knowledge about the many options landowners have regarding forest regeneration. Second, forest regeneration requires planning. Although letting Mother Nature take its course after harvesting may result

Seed Tree and Shelterwood Systems

Seed tree and shelterwood regeneration systems can be used for a variety of hardwood and pine species. The seed tree method is best for loblolly, slash, and shortleaf pines. Seed trees will need to be disease free, mature (30 years or more), 12 to 15 inches in diameter, with a straight trunk and crowns large enough to provide a good seed crop. The landowner should be regenerating with the best genetic stock available. Usually 4 to 12 evenly spaced seed trees per acre are desirable for loblolly and slash pines, while 12 to 20 are used with shortleaf pine. After regeneration is established, usually in 3 to 5 years, the seed trees can be harvested.

The shelterwood system is most appropriate for longleaf pine and some of the oaks. This method uses a two- or three-cut approach to gradually open up the existing stand. If seed production is inadequate, a preparatory cut is used to stimulate seed production. When seed production is adequate, the preparatory cut is not used. The second cut, or "cut to shelterwood," further reduces the number of trees to between 20 and 40 trees per acre. Once seedlings are established, the crop trees are removed.

in another forest, this is generally not considered good forest stewardship. Finally, forest regeneration requires direct involvement by the landowner. Some regenera-

tion options are less expensive than others, but they all require monitoring and periodic evaluation to ensure things are going according to plan.

MEMORIAL

Vobile County TREASURE Forest landowner **Sterling Kemp** passed away May 12, 1997. Mr. Kemp's 222 acres was certified as a Tree Farm in 1978 and as TREASURE Forest #693 in 1988. Mr. Kemp was active in the Adopt-A-School program, where school groups visited his TREASURE Forest to learn first-hand about forest practices. Two of Mr. Kemp's daughters, Claudiette and Marcia, will continue to manage the property as a TREASURE Forest.

Dale County TREASURE Forest landowner **H.C. Jordan** died July 24, 1997. Mr. Jordan owned 708 acres designated as TREASURE Forest #248. He had harvested and replanted a large portion of his property and was one of the first landowners in Dale County to successfully plant longleaf pine. Mr. Jordan also hosted landowner tours and the county FFA forestry judging contest several times. His TREASURE Forest was a district Helene Mosley winner in 1986.

Baldwin County TREASURE Forest landowner **J.R. Crosby** died August 2, 1997. Crosby received many honors for his conservation efforts over the years, among them the National Good Stewardship Award from the National Arbor Day Foundation. His property, TREASURE Forest #96, received the state Helene Mosley Memorial TREASURE Forest Award in 1984. In 1991 he was named Conservationist of the Year by the Alabama Wildlife Federation.



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- ☐ The additional \$50 is a charitable contribution and is tax deductible.
- ☐ Proceeds will be used for educational projects that promote healthy and productive forests, clean water, and abundant wildlife.

Editor's note: This is the second in a five-part series on how federal tax laws affect forest landowners. The first article discussed timber sales. This article will focus on reforestation. Future articles will discuss casualty losses, management expenses, and estate taxes.

The Scenario

Al McCoy owns 120 acres of mixed forestland in northeast Coosa County near the town of Goodwater. He inherited 80 acres from his father in 1980, and purchased an adjoining 40-acre tract in 1987. Daddy's tract had been in the family for years and was forested when he died; Al just let it grow until this year. The new tract was an open field that Al planted to pines in 1988.

Al retired last year after a career as a lawyer. He is living off his savings of about \$500,000 and his and his wife Jenny's Social Security, but no pension. He paid off the mortgage and owns his house. Last year Al sold the timber on the 80 acres he inherited from his father and found how capital gains treatment of timber sales was a benefit to all landowners.

Reforestation

In June, Al's consultant forester, Steve, called him to say that the logger had already finished the harvest. Al's land was well drained, so the logger was able to work through the winter and finished much faster than expected. So it was now time to think about putting trees back on the land.

Later that week, Al met Steve at the property and went over his options. The

Year in the Life of a Taxpayer Part 2 by LOU HYMAN, Resources Planning, Alabama Forestry Commission

logger had done a pretty clean job, so Steve suggested that the site could be sprayed with a herbicide, prescribed burned and then hand planted with loblolly pines.

Al's wife had asked about planting hardwoods instead of pines, but Steve explained that hardwoods regenerate themselves naturally by sprouting and do not need to be planted. Hardwoods would be a good option on some lands, he explained. However, based on the soil type of this tract, the best species to regenerate would be pine,

Why Reforest?

At the local Hardees, some of Al's friends asked him why he was bothering to replant. "When Daddy cut the trees 50 years ago, they grew back, so why spend money now doing what nature could do on its own?"

Al and his consultant forester discussed the alternatives. By planting trees, Al gains control over the type of forest that grows back. He can make the new stand mostly pine, and by varying the spacing he can improve this final product. Investing now will ensure Al the maximum income from his lands through the future.

Another benefit is the reduction in the time it takes for a stand to become established. In

many cases, cutover land that is not actively reforested goes through a brushy phase, which delays the timber stand development for several years. Planned regeneration helps nature through this period and enables the landowner to grow trees in 30 years that might take nature 50 years to grow.

One problem in forest management is the long time it takes for trees to mature. "Why plant trees; you'll be dead by the time they're grown?" Al considered that issue, but also realized that part of his goal was to build up his property for his family, so that his children and grandchildren can benefit from what he does. Leaving them cutover land just didn't seem right when he could leave them a healthy growing forest instead.

which requires open sunlight to grow, which in turn means that the cull trees and slash must be reduced.

Al was concerned about the toxic impact of herbicides. "I don't want any dioxin on my land," he said. Steve quickly showed him that today's herbicides are species specific with very low toxicity to animals or water. He also said that they would use a licensed vendor who would be careful and do the job right.

Steve worked up a cost estimate that showed costs of \$90 per acre for the herbicide application, plus \$10 per acre for the prescribed burning, \$5 per acre for supervision, then \$40 per acre for the tree planting crews, plus the cost of seedlings. There are several sources of pine seedlings, Steve explained, but he always had good luck with trees bought from the Alabama Forestry Commission nursery. The trees would be planted using a 6 foot by 10 foot spacing grid, so Al would need about 726 trees per acre at a cost of \$40 per thousand seedlings. Adding it all up, the total cost of the regeneration project would be roughly \$175 per acre, or \$14,000 for the entire 80-acre tract.

Al agreed and Steve lined up several vendors to do the work. The spraying was done in August, followed by a prescribed burn in November. The tree planters moved in right after Christmas

Building the Basis

What if Al's vendors had done all the work in one year, or if Al had paid for them in one year instead of waiting until the jobs were finished? In either case, all of the costs would be included in one year for tax purposes. In this example, the total cost was \$14,000, which is above the \$10,000 annual limit.

The first \$10,000 would be used for the reforestation tax credit and amortization deduction, producing a tax credit of \$1,000 and an amortization deduction of \$678.50 the first year and \$1,357 the next six years (\$10,000 x 95 percent divided by 7).

The remaining \$4,000 would go into the timber account and form the basis of the trees. This basis would be recovered when the trees are harvested.

There is a tradeoff in these calculations. Amortization reduced the basis of the asset. By amortizing the reforestation cost, a landowner gets his basis back sooner, but ends up with no basis to reduce the capital gain when the trees are sold.

Tax Impacts of Cost-share Grants

If Al had used a cost-share grant, it would change how his taxes were calculated. Under IRS rules, a taxpayer can choose to count or exclude part of the cost-share money received as taxable income. The decision has several impacts and many "if's."

If Al had received a FIP grant and chose to count the cost-share grant as income, it would raise his adjusted gross income, which may impact his other itemized deductions (especially medical and miscellaneous deductions which have a "floor" based on the adjusted gross income). However, counting the grant as income would enable Al to take the full tax credit and amortization deduction.

In this case, Al has no itemized deductions, so his taxable income would increase by \$4,000 (the portion of the cost-share grant applied to his site preparation) and his taxes would go up initially by \$600. Al would get the full tax credit of \$840 and a tax reduction of \$85.50 from the amortization deduction. So he would have a net tax savings of \$325.50.

Al may choose to exclude the cost-share grant if he had income from the tract during the last three years. He did have a timber sale the year before last that generated

\$3,000 per acre, so the grant would qualify for an exclusion. Excluding the income would have no impact on adjusted gross income or on his itemized deductions. However, Al can not claim the full tax credit and amortization, but only that portion that he actually paid for.

So in this case, the calculations would be based on \$4,400 (\$8,400 cost for the year, less the \$4,000 cost-share). The tax credit would be only \$440 and the amortization deduction for the first year would be \$298, with a tax reduction of only \$44,70, for a net tax benefit of \$484,70 for the first year.

Note though that the amortization deduction continues for seven years, and in later years the smaller amortization will reduce taxes less. Counting the cost-share generates a deduction of \$1,140 for years two through seven, while excluding the cost-share grant will generate a deduction of only \$597 per year. The total tax savings over the full period would be \$1,351.50 if the cost-share grant is counted, versus \$1,022 if the cost-share is excluded.

Another note: people who receive costshare grants must report the grant as income on their tax forms and then, if they chose, claim an exclusion. Be sure to include a note with the tax form explaining what the exclusion entails and how it was determined. Using an exclusion sometimes sets up a landowner for an audit, so be careful.

and finished in early February. Al paid each bill as it came due, using his profits from last year's timber sale.

April 15—Tax Day

Al brought all of his paper work to his cousin Vinnie, a CPA, to get his tax forms done. Like many CPAs, Vinnie was not really up on timber tax rules. So he initially set up Al's books with a simple timber capital account, using the cost of the reforestation as the basis of the new stand, with Al recovering the cost when the timber is sold in 15 to 30 years.

When Steve called that evening to visit, Steve reminded Al to ask for the Reforestation Tax Credit and Amortization Deduction. Vinnie had not heard about these breaks, so he called Steve and asked for an explanation. According to the Internal Revenue Code Sections 194 and 48, any landowner can take a 10 percent tax credit for a reforestation investment, and, in addition, amortize (write off) 95 percent of the cost over the next seven years. The benefit is limited to \$10,000 total investment per year.

Vinnie recalculated Al's taxes. Al had spent \$14,000 on the total job, which is over the \$10,000 limit. But he paid part last year (\$8,400 for the site preparation and prescribed burning) and part this year

(\$5,600 for the tree planting and seedlings). So Al could claim a partial tax credit for last year and claim the other part later when he does this year's taxes.

Based on these figures, Vinnie calculated Al's tax credit to be \$840 (10 percent of \$8,400). This credit directly reduced the amount of taxes normally owed by Al from \$4,504 (based on his other income) to only \$3,664 in taxes owed.

Vinnie then calculated Al's reforestation amortization deduction. He started by multiplying that year's investment by 95 percent to get the amortization amount (95 percent of \$8,400 is \$7,980). That amount is divided by seven to get the normal amortization deduction of \$1,140. However, the first year of the deduction is reduced by half, using what the IRS calls the "half-year convention," with the other half of the first year deduction coming back in the eighth year. So Al's deduction for the first year was \$570.

This is considered an "above the line" deduction, meaning that the reforestation amortization is considered as an adjustment to gross income. It is reported on the bottom of the front page of Form 1040 by writing in "reforestation" and the amount of the deduction. The deduction is not put on Schedule A, "Itemized Deductions," and so it is available to all taxpayers who

Using Cost-share Grants

In the story, Al McCoy paid all the expenses of replanting his forest with his own money, using the profits from an earlier timber sale. Some landowners do not have resources available to replant. There are government grants available to help landowners who want to reforest their lands. These grants split the costs with the landowner, but have limitations and restrictions.

The most famous of these cost-share grants is the Forestry Incentives Program (FIP). FIP will reimburse a landowner for site preparation and tree planting costs at the rate of 50 percent of actual costs up to pre-set dollar limits per acre. These limits are set each year and are based on the average costs for the activity. Another cost-share program available for reforestation is the Stewardship Incentives Program (SIP). SIP will reimburse a landowner using a 60 percent rate, also with pre-set dollar limits per acre. Both programs require a forest management plan on the property and limit total grants to less than \$10,000 per landowner per year.

There is also a state cost-share program, the Alabama Agricultural Conservation Development Commission Program (AACDCP), which also has a reforestation component. AACDCP will reimburse 60 percent of reforestation costs, up to \$3,500 per landowner per year.

One problem with these programs is, during a period of reducing government, there are not enough cost-share dollars to meet all the demand. In many counties there is a two-year or more waiting list for cost-share grants.

For information about reforestation cost-share grants, contact your county Alabama Forestry Commission office.

invest in forestry. This deduction saved Al \$85.50 in taxes (15 percent of \$570).

The other part of his reforestation investment would receive the same treatment next year. In addition, the amortization begun this year would continue and be added to next year's deduction.

Al was amazed. By reforesting his land he had a good investment started, and also a tremendous tax benefit. He received an \$840 tax credit this year, another \$560 tax credit next year and an amortization deduction for the next eight years. Boy, he thought, the people who said there was a TREASURE in the forest sure knew what they were talking about.

He felt really good about forest management, until he received a letter from the Alabama Forestry Commission telling him about a Southern pine beetle spot on his 40-acre tract . . . but that is the next story.

To Be Continued

TREASURE Forest—The Parts of the Whole

by JAMES MALONE, TREASURE Forest Landowner and Executive Director, Alabama TREASURE Forest Association and TIM L. GOTHARD, Forest Management Chief, Alabama Forestry Commission

here are so many components that make up "TREASURE Forest" that many people find it confusing. There's the Alabama Forestry Planning Committee, County Forestry Planning Committees, the TREASURE Forest Program, certified TREASURE Forest, and the Alabama TREASURE Forest Association. These are all parts of the whole that make up TREASURE Forest.

The Beginning

The name, idea, and concept of the TREASURE Forest Program originated within the Alabama Forestry Commission in the early 1970s under the leadership of former State Forester C.W. "Bill" Moody. The TREASURE Forest concept was born out of the realization that our forests yield multiple values such as tim-

ber, wildlife habitat, scenic beauty, clean water, recreational opportunities, and a quality environment. It was further recognized that although landowners manage their forestlands with different levels of emphasis on these values, these same values can be enhanced and protected through active forest management that carefully considers each benefit.

To achieve and promote this visionary concept, it was readily apparent that a collaborative effort between state and federal natural resource agencies and conservation groups in Alabama was needed. In 1974, the Alabama Forestry Planning Committee (AFPC) was formed to accomplish this task. The AFPC adopted the multiple-use forest management concept, agreed to work to promote its voluntary implementation on Alabama's forestlands, and launched the program we now know

as TREASURE Forest. The member agencies of the AFPC are listed on page 3 of this magazine. The AFPC has three subcommittees: County Outreach, Forest Resources, and TREASURE Forest.

County Forestry Planning Committees

To advance the TREASURE Forest Program at the local level, the AFPC membership worked with their local field representatives to form forestry planning committees at the county level, thus the name County Forestry Planning Committee (CFPC). CFPCs are made up of local representatives from the member agencies and groups of the AFPC, forest industry, landowners, and other interested parties. They work together to promote the TREASURE Forest Program through both education and recognition.

CFPCs are one of the outlets for providing technical information to forest landowners. Materials and projects developed by the Forest Resources Subcommittee of the AFPC are provided to CFPCs to assist in promoting the TREASURE Forest Program. CFPCs are the backbone of the certified TREASURE Forest award program. CFPCs identify, nominate, and work to arrange inspections of TREA-SURE Forest award candidate properties and owners. The strongest nomination before the TREASURE Forest Subcommittee is one that comes directly from a CFPC. An awards program for outstanding CFPCs is sponsored by the AFPC's County Outreach Subcommittee.

The TREASURE Forest Program and the Certified TREASURE Forest Award

The TREASURE Forest Program seeks to promote voluntary, multiple-use forest management on all forestlands in Alabama. This is accomplished through two primary avenues, education and recognition.

Education is provided through technical information and on-the-ground assistance from member agencies and groups of the

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.

Yes, I would like to join the Alabama TREASURE Fore	est Association
Date:	
Name:	
Address:	
City:	County:
State: Zip:	Telephone: ()
Check each category and fill in the blanks as appropriate: Associate Member Enclosed is \$15 annual membership fee	
☐ Growing Member☐ Enclosed is \$20 annual membership fee	

at (334) 679-6087

AFPC. The Forest Resources Subcommittee works to provide technical information on managing forests under the TREASURE Forest concept and initiates special projects to stimulate TREASURE Forest management in resource or geographic areas where it is lacking. Education is also provided through this magazine, which is published by the Alabama Forestry Commission.

Recognition of landowners who follow the TREASURE Forest concept when managing their lands is perhaps the most important and well-known part of the TREASURE Forest Program. This is accomplished through the certified TREASURE Forest award. This award is earned by landowners who are committed to the TREASURE Forest concept and who physically show this commitment through the management activities that take place on their land. Landowners who earn the award are nominated by someone familiar with the TREASURE Forest Program, have their land inspected by a registered forester and a wildlife biologist to ensure that it is being managed consistent with TREASURE Forest principles, and

have their nomination approved by the AFPC's TREASURE Forest Subcommittee. This committee is composed of technical representatives from AFPC member agencies and groups and other certified TREASURE Forest owners. Each nomination is reviewed and voted on by the committee before the certified TREASURE Forest award is given. The first certified TREASURE Forest award was presented in 1975. Today there are more than 1,100 certified TREASURE Forests totaling over 1.6 million acres.

Alabama TREASURE Forest Association

The Alabama TREASURE Forest Association (ATFA) is exactly what the name implies—an association. It is not the same as the TREASURE Forest Program and is not intended to be made up solely of people who are TREASURE Forest landowners. ATFA membership is open to people in three categories: (1) certified TREASURE Forest owners (Full Members); (2) forest

(Continued on page 31)

Six Steps to the Certified TREASURE Forest Award

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:

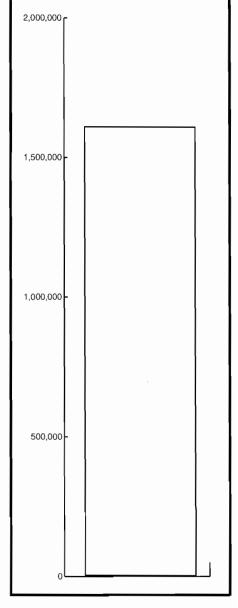
- 4) The property must be nominated by someone associated with one of the member agencies or groups of the Alabama Forestry Planning Committee. You may contact them and suggest a nomination if you feel your property or that of someone you know qualifies for the award.
- The property must be inspected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

If you would like to be considered for the certified TREASURE Forest award, or know of someone else who may qualify, contact your local office of the Alabama Forestry Commission or other member agency/group of the Alabama Forestry Planning Committee. They will be happy to assist you with any step in the process.



UPDATE

The TREASURE Forest Program has set a goal of having 2 million acres in the program by the year 2000. The chart below shows the number of acres currently enrolled in the program.



NATIONAL

by BILL IMBERGAMO, Executive Director, National Association of State Foresters



he tax cut bill signed by the president in August included

some good news for forest landowners, including a cut in the top capital gains tax rate, as well as additional relief for estate taxes paid by family farms and businesses. At this point it looks like some issues relating to material participation are dealt with as well, although the Treasury Department will still have some leeway in determining how to define material participation for forest landowners faced with estate taxes.

The tax cuts are really the only binding portion of the package the president signed into law at the gala ceremony. The deal was the result of literally months (or years, depending on when you start counting) of negotiations. The cuts in welfare rolls effected by last year's welfare reform bill freed up enough money that the tax cuts became relatively easy to achieve. Cuts in spending will be more difficult, but due to strong economic forecasts may be less steep than previously thought.

The tax provisions of the budget deal cut the top capital gains tax rate from 28 to 20 percent, with 18 percent for investments held longer than five years. These rates will go into effect by the year 2001. There was no change made to the rules governing the expensing of reforestation costs, which must be treated as capital investments instead of annual expenses under current rules. No increase was made in the reforestation tax credit.

In the estate tax arena, the bill increases the exemption to \$1 million by the year 2007, with an immediate jump to

\$1.3 million for family farms and businesses. In 2007, family farms and businesses will enjoy a \$2.3 million exemption under estate taxes. Review of the bill indicates that most family forest landowners will qualify for the treatment under the bill.

The bill also provides a 40 percent exclusion from estate taxes for the value of land under a qualified, donated conservation easement within 25 miles of a metropolitan statistical area. This is a very modest step toward encouraging the use of these easements, which have proven popular with forest landowners, including timber companies, in New England.

Forestry Programs Fare Well

The House and Senate should be well along in completing action on the Agriculture and Interior spending bills by the time you see this magazine. At this point, it looks like the Forest Stewardship Program will be funded strongly at about \$24 million, and the Stewardship Incentives Program will be funded higher than last year. The Forestry Incentives Program will continue to be funded at about \$6 million annually. There are still a number of opportunities to enroll trees in the Conservation Reserve Program.

In a very positive development, the Renewable Resources Extension Program, which funds extension and outreach programs for landowners, loggers, and others involved with forestry and wildlife, was restored to a continuing level in spite of an attempt by the administration to zero the program out.

Landowners Take the Spotlight

Tree Farmers and other landowners took to Washington like a bear to the woods in late July, and made a strong impression on those they met. The group of 13 landowners was coordinated by the National Council on Private Forests, a consortium that includes the Tree Farm System, the National Woodland Owners Association, the National Association of State Foresters, and the Forest Landowners Association. The group included landowners from Mississippi, Georgia, and Virginia, as well as New York, Washington, Wisconsin, Ohio, and Missouri

The landowners met with officials in the Department of Agriculture, and made personal visits to the offices of the House delegations. The group also starred in a roundtable hosted by Senate Agriculture Committee Chairman and Tree Farmer Richard Lugar (R-IN). The landowners told a panel of Lugar, two other senators and about 20 senate staff members about the challenges of forest ownership, including regulatory issues, landowner rights, estate taxes, and the need to reach out to other landowners who are not actively managing their lands.

In another interesting development, the House Agriculture Committee played host to a series of hearings focusing on forest health. In an attempt to get a broader view than simply the National Forests, Chairman Bob Smith (R-OR) has done a good job bringing in forest landowners from across the country, including the Southeast and New England. The hearings are expected to lead to draft legislation, perhaps to be introduced this fall.

ALABAMA



hile awaiting the return of legislators for the first Special Session to be called by Governor James, our capable editor, Kim

Gilliland, stopped by to inform us that we would be celebrating our 15th anniversary of *Alabama's TREASURED Forests* magazine.

That was all this writer needed to send the wheels spinning back to the year 1982, the year in which George Wallace was elected to succeed Fob James for an unprecedented fourth term as Alabama's governor.

Our purpose was to research the books for legislation passed during this 15-year period that directly affected Alabama's forestry program, and there was quite a lot.

Timber Theft Condemnation

One of the more significant forestry acts passed during this span became known as the Timber Theft Equipment Condemnation Act. It gave the authority for any law enforcement officer in the state of Alabama to arrest any person wherein timber or lumber items are stolen, and it further empowered law enforcement officers to seize any vehicle or equipment used in the theft of such forest products.

The law states that when any judgment of condemnation or forfeiture is made, the judge shall order and direct that such vehicle and equipment be forfeited or awarded to the state forester to be sold or used by his agency in the enforcement of the law.

Record Keeping

Another act passed during this period amended the record keeping system for manufactured or semi-manufactured forest products. The new law stated that any person, firm or corporation contracting to buy or otherwise acquire such forest products shall keep a written record of every such purchase.

The record shall contain the name of the person or persons from whom the product was acquired, the county from which the product was severed, the amount of the transaction, and the date of delivery. Such information would be obtained from the person or persons from whom the product was acquired. The original Act of 1939 had specified that the range, section and township be recorded for each acquisition.

Prescribed Burning Act

More recently, through the efforts of the Forestry Commission and the Forestry Association, the Legislature was successful in passing the Alabama Prescribed Burning Act.

The act declares that the application of prescribed burning is a landowner property right and a land management tool that benefits the safety of the public, the environment, the natural resources and the economy of Alabama.

It states that prescribed burning conducted in compliance with this act shall be considered in the best interest of the public if it meets the following requirements:

- It is accomplished only when at least one verified prescribed burn manager is supervising the burn.
- A written prescription is prepared and witnessed, or notarized, prior to the prescribed burn.
- A burning permit is obtained from the Alabama Forestry Commission.
- It is conducted pursuant to state law and rules applicable to prescribed burning.

The law authorizes the Forestry Commission to charge and collect fees and other payments from persons applying for certification or training as a prescribed burn manager.

The Forestry Tag

Certainly, one of the most prominent legislative proposals to come in recent years (1995) was the act that created the distinctive forestry tag. Proceeds from the sale of these tags are placed in a trust

to further forestry education in Alabama, and it has been well received by the public. In fact, it has been declared one of the most attractive vehicle tags ever designed for Alabama motorists.

There were many other legislative acts over the past 15 years that had direct bearing on forestry including forest fire assessments, TREASURE Forest certification, law enforcement officers of the Forestry Commission being allowed to retain their badge and pistol upon retirement, amendments to the severance tax law, plus a number of local fire protection acts with application to various counties. And, of course, the annual budget appropriations for the Forestry Commission.

Such research by this writer invoked many memories of days and nights of lobbying for the passage of forestry legislation.

The General Fund

It had been hoped that this column would include the results of the Forestry Commission's general fund appropriations for fiscal 1997-1998, but press time prevailed as lawmakers were still attempting to hammer out a document that would please the governor and still meet the needs of each agency.

The problem that caused the governor to veto the budget in Regular Session flared up again with appropriations that he said had virtually nothing to do with the essential functions of state government

As legislators sailed through the tenth day of the special session with a budget that carried the stamp of a conference committee, the governor took one look and called it "a piece of trash."

The Senate rejected it 22-8 and it went back to the drawing board on the next to final day of the session.

In our winter column we will attempt to cover provisions of the \$970 million budget—if it's passed by then.

HIDDEN



TREASURES

Creating a TREASURE Forest—the "Wright" Way

by TILDA MIMS, Forest Education Specialist, Alabama Forestry Commission

ance and Kristy Wright of Hamilton are not only the newest TREA-SURE Forest landowners in Marion

County, they have achieved this goal in near-record time, according to Tony Avery, Marion County supervisor. "The Wrights are doing an outstanding job of managing their forestland. One factor that makes these accomplishments especially noteworthy is that they have only owned the property since April of 1995," he said. Wildlife enhancement is the primary objective on Wrights' 130-acre tract, which includes a 25-acre lake.

In the last 12 months the family has initiated a variety of practices to attract and maintain a healthy wildlife population. Six food plots have been limed, fertilized and planted in chufa and other foods. Mast producers like white oak, persimmon and honeysuckle have been fertilized to increase forage production, while herbicide release in the pine areas have removed brush and created an opening for wildlife habitat.

Wood duck and bluebird boxes can also be found on the property near timed feeders. Hardwoods are being maintained along some portions of U.S. Highway 78,



L-R: Kristy, Hunter and Lance Wright

streamside management zones and the lake area for wildlife and aesthetic benefit.

The Wrights have also initiated a management program to develop both trophy

bass and trophy white-tailed deer. Timed feeders for both fish and deer have been established to provide year-round food supplements. Deer harvesting is restrict-

> ed to a limited number while the population age increases and the buck-doe ratio becomes more balanced.

The 25-acre lake is being managed according to the recommendations of a pond management consultant. By harvesting only 10- to 14-inch bass of a defined limit, the number of trophy bass will increase through the controlled population. Construction is underway on the dam of the lake to refurbish and incorporate riprap into its design. Japanese millet has been sown on the mud flats for ducks.

Although timber may be a secondary objective on the Wright TREASURE Forest, it is certainly not overlooked. The Wrights have nearly 25 acres in a pine planta-

tion that is approximately 18 years old. This plantation was released in 1996 with Arsenal and prescribe burned in 1997. This practice will create a more open canopy, enhancing the food value for both deer and turkey. Firelanes have been constructed and sown with grasses to protect SMZs and other aesthetic areas.

Although Lance and Kristy are new to forest ownership, they have accomplished an award-winning program in a short time period. Lance gives much of the credit to the professional advice provided by the Forestry Commission. "If it wasn't for the Forestry Commission, I wouldn't know as much as I do about forestry. They have gone above and beyond the call of duty in helping us," he said.

Pride of ownership, dedication to conservation, family values and professional advice create a TREASURE Forest—the "Wright" way.

Logging Railroads of Alabama

Logging railroad enthusiasts and geared steam locomotive fans will be interested in a new book by noted rail historian Thomas Lawson, Jr. *Logging Railroads of Alabama* is a 296-page hardback book containing 240 photographs. It covers over 300 different named Alabama logging railroads and contains comprehensive engine rosters. The book took four years to write after 40 years of research through numerous sources, including courthouse documents.

The book is available through Cabbage Stack Publishing, P.O. Box 19912, Birmingham, AL 35219. The price is \$59.95, which includes postage and handling to all U.S. shipping points. Alabama residents must add 4% state sales tax.

Continued from page 9

and how the loss of soil due to erosion has affected the system. First, the erosion both decreased the total volume of soil available to store water and removed the organic rich top layers, which have a disproportionatly greater ability to absorb and hold water. In budget terms, the bank is smaller. The remaining soils are commonly very sandy. As anyone who has mixed mortar or concrete knows, putting water on top of a sand pile will soon push water out the bottom of the pile. The water does not run down the surface of the sand, it flows through the sand. When the water reaches a place it can not flow through, it emerges. The addition of water on the top of the pile pushes water out the bottom of the pile almost instantly. In the Bankhead water can easily move through the soil; it is very sandy in most places. But water can not move into the bedrock. Except where limestone occurs in the very northern parts of the forest, the soils rest on sandstones and shales. These particular rocks allow water to enter very slowly or not at all. Thus, in the Bankhead, rain falling up slope will tend to push water in the soils down slope out and quickly into the streams.

The effects are several. First, it is probable that the total amount of water reaching the valleys has increased. There is less soil up slope to store that which trees can then transpire over time. What we do not know is how large or important this effect is. Second, it has changed the distribution of energy going into the stream channel. Any material that moves has what physicists call kinetic energy. Kinetic energy increases with the amount of mass (in this case water) and with the square of the velocity; therefore a small increase in velocity can be much more important than a small increase in mass! It is the kinetic energy of water that gives water the ability to erode and move sediments. The more energy, the greater the erosive power. When the topsoil was lost, more water could reach the stream channels more quickly. The result in the Bankhead is erosion of the stream channel. This erosion is seen as deepening of the channels.

Unfortunately, the situation may be self-accelerating. Normally streams flow in valleys filled with sediments. Of the water that flows down slope into the valley, much of it migrates down the valley perco-

lating through the sediments, not by going into the open channel. As the streams deepen their channels due to the increased volume and rate at which water reaches the valley, the percentage of total flow that is carried by the open channel increases. This means the stream channel has even more water to carry, which of course means it will tend to erode even more. As the channels deepen, an ever greater percentage of the total flow goes into the channels.

Implications

It is fairly clear the ecology of the streams and the stream sides has changed. Just how much and in what ways we are not able to say, though we suspect the existing streams' ecosystems are much different than the streams of 200 years ago. But of central concern to the readers of *Alabama's TREASURED Forests* is the implication for the growing of trees.

One can certainly argue that the trees are growing and appear healthy, so it must not be a significant concern. Yes, they grow, but are they growing as fast or as well as they could grow? And will they continue to grow in the future? Can they withstand drought, insect and disease as they might? Few could argue that poor soil makes for better trees and few would contend that dry soil is healthy.

The TREASURE Forest owner is aware that with the reduction in soil depth, and especially with the loss of topsoil, comes a reduction in the ability of the soil to store water. In most years this may not be a real concern. Since we talk about rotation lengths of tens of years, though, it is likely that during this period there will be periods of drought. It is during these times when the absence of a wealthy reserve of soil water will be missed the most. During such times the significant reduction in available soil water could have a large impact on the growth and health of the tree. But the impact is not restricted to drought. With the deepening stream channels and the resulting drainage of the soils, bottom lands and the toes of slopes will be drier than they otherwise would be.

So this requires a careful examination of the site we plan to reforest and the correct selection of tree species that can utilize the current site conditions. The reduction in soil depth and the associated moisture stress may induce other stress-related diseases to become more frequent. Therefore, this makes the trees on

these sites more susceptible to disease and other problems.

Our current forest management practices along with streamside management zones are very effective in preventing soil transport into streams. However, the effects of increasing water yield and greater peak flows after forest cutting on streams is not as well studied. The effects would largely be dependent on the site's slope, aspect, underlying geology and soil depth and type. Also important is how quickly and what type of forest is regenerated on the site. In addition to SMZs, there are two important considerations in helping to reduce the impact of forest management practices on streams. First, re-establish forest cover as quickly as possible after harvest, and second, maintain and build soil organic matter. The quick establishment of forest cover reduces the amount of water passing through the soil to the stream. Increasing soil organic matter will increase the amount of soil water storage and slow the passage of water through the soil.

Acknowledgments

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DISCOVERING

Alabama's Birds

by GREGORY J. HARBER, Past President, Birmingham Audubon Society

labama the Beautiful. This is the message that greets visitors to our state as they cross the state line. The sign could also read "Alabama—a State with Diversity!" Anyone visiting Alabama will find a diversity of land-scapes and habitats—from the beaches and warm waters of the Gulf of Mexico to the cool mountain air of the Lookout Mountain Plateau in the northeast corner of the state. Our state is also richly blessed with an abundance of plant and animal life. Birds make up one of the more colorful and visible elements of Alabama's fauna.

Currently, nearly 63 million Americans watch and/or feed birds, pumping millions of dollars into the nation's economy in the process. Maybe you are one of these people who find enjoyment or relaxation in observing our feathered friends. Or perhaps you have been interested in learning more about birds but don't know where to start. You're in luck! Alabama is the perfect place to begin watching birds. Nearly 400 species of birds have been documented within our state's boundaries and territorial waters and over 170 birds have been known to breed here. Each region of our state has something to offer the bird watcher, regardless of the season of the year.

Dauphin Island is one of the premier birding locations in the nation. Each spring thousands of Neotropical migrants pass through on their way to breeding grounds further north. Migrant birds, such as the flame-red summer and scarlet tanagers and numerous species of colorful warblers, gather on the Yucatan peninsula of Mexico waiting for the favorable winds and weather conditions that will carry them 600 miles nonstop across the Gulf of Mexico. If the conditions are right, the "Yucatan Express" takes flight and heads out over the open waters! The fastest fliers, species such as the Eastern kingbird, will make landfall early the next afternoon. The smaller birds trickle in even later. Birds encountering bad weather in-flight struggle to make it to shore. Many don't make it, but when they dowatch out! The "fallout" can be an incredible sight to see indeed! The grounds around the Shell Mounds Park near the USDA lab, Fort Gaines and Fort Morgan can be literally covered with exhausted birds. Colorful indigo and painted buntings, orchard and northern (Baltimore) orioles, warblers and thrushes of all varieties are everywhere for the birder to behold. Each step around that next bush or tree can bring a new, breathtaking image into the field of your binoculars! Many satisfying hours can be spent wandering the grounds of any of Dauphin Island's hot spots. The fall migration brings many of these same birds back through on the way to their wintering grounds in Central and South America. A stalled front at the coast can create a real backlog of birds waiting for just the right moment to depart.

Summer hurricanes can also bring many pelagic, or open-water, species to shore. A Wilson's storm-petrel was found on the Dauphin Island causeway after Hurricane Danny came ashore near Gulf Shores this past summer. Large, black magnificent frigatebirds are occasionally seen gracefully soaring as they cruise the beaches looking for any easy meal to rob from a gull or tern.

Winter's cold blast of air brings many species of waterfowl-by the thousandsto places like Wheeler and Lake Eufaula National Wildlife Refuges. Large rafts of ducks can be seen floating on the open waters, apparently oblivious to the cold, biting winds that always seem to blow the hardest when the birding is best! Species such as the snow goose, northern shoveler, gadwall, canvasback, ring-necked duck and common loon are regular visitors to the state. The lucky observer might turn up an oldsquaw duck, pacific loon or tundra swan when least expected. Several species of gulls also descend on the larger waterways of the state and are frequently seen loitering on wooden pilings near marinas or dams.

Herring and ringbilled gulls

are common, and great-black backed or Bonaparte's gull are occasionally seen.

Lake Guntersville State Park is THE place to see bald eagles in the wintertime in Alabama. Each winter more than 100 of these magnificent birds visit the Tennessee Valley area, escaping the bitter cold of their northern breeding grounds. The park offers Eagle Weekend packages each weekend in January, catering especially to those who have come searching for our national bird. There are numerous field trips and seminars along with a Saturday night banquet and speaker. There is also a small, resident population of bald eagles in the state. A pair has nested for the past three years near the small community of Heiberger in Perry County, catching their fish dinners in the nearby Cahaba River. Resident eagles are more common along the Gulf Coast, however.

Alabama's varied landscapes and habitats are where our breeding birds make their homes and raise their young. No niche or habitat type is left out. Birds can be found nesting in swampy wetlands, open agricultural areas, overgrown fields, second growth forests and mature stands of pines and hardwoods. Some species, such as mockingbirds and Carolina wrens, are very comfortable nesting near human habitation, while others, like the red-cockaded woodpecker of our mature Southern pine forests, have very specific habitat requirements and nest only in very old pines. The oozing resin and sap that surrounds the nest cavities make the tree very conspicuous. Foraging for food is confined to areas of open understory.

A visitor to our southern swamps, like those found in the Mobile basin area, would likely encounter the bright yellow prothonotary warbler as it flits about the trees singing its "SWEET-SWEET-SWEET-SWEET" song. Northern parula warblers

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can be heard singing their ascending "Zeeeeeeeee-up" song overhead in the canopy while the common yellowthroat is more likely to be found near the ground. White-eyed, and especially red-eyed, vireos are common in many eastern forests. The uncommon Swainson's warbler is more often heard than seen, as it prefers woody, brushy areas along still bodies of water. Red-shouldered hawks and barred owls are birds of prey that are frequently found near wooded swampy areas as well. Those birders keeping an eye out for what's soaring over these wooded swamps will be rewarded with views of Mississippi kites as they "hawk" dragonflies out of the air and consume them on the wing. The swallow-tailed kite, with its striking white and black underwing pattern, can also be seen gracefully riding the warm thermal air currents.

The mature pine forest, in addition to being home to the endangered red-cockaded woodpecker, is also a good location to look for the elusive Bachman's sparrow. The odds of seeing one are increased dramatically during the early summer breeding season, however, when the males are more likely to be singing their "Heeeeere, kitty, kitty, kitty" song from an exposed perch. The sewing machine-like song of the pine warbler also fills the air. Pileated woodpeckers, Alabama's largest woodpecker, can be heard singing their loud "WICKA-WICKA-WICKA" song in mature forests throughout the state.

Moving further north to the Black Belt region of the state, a birder would have a better chance of seeing some of our birds found in more agricultural settings. Nearly everyone is familiar with the song of the bobwhite. Dickcissels, dressed in their yellow and black bibs, can be heard calling their name from overgrown fields. Eastern meadowlarks are more frequently encountered, however. Eastern bluebirds, with the color of the sky worn on their backs, are commonly seen near many fields and homesteads. Late summer brings the post-breeding dispersal of the wood stork, a bird that is equally at home stalking prey in a pond or a field. This is a tall, white bird with long legs and a bare head covered with dark skin. It has a face that truly only a mother could love!

During the winter months, these same fields will also be home to American kestrels and northern harriers, both birds of prey. The small kestrel will often be seen sitting on a perch from which it can survey its hunting ground, then flying out to hover over and finally pounce on its prey. Harriers, on the other hand, are much larger, brownish birds that tend to soar low over open fields. The whitish spot at the base of their tail is a distinguishing field mark that can be seen from great distances. The peregrine falcon, and its smaller relative, the merlin, are also occasionally seen, especially during migration.

Northern Alabama's mature hardwood forests, such as that found in the Bankhead and Talladega National Forests, are home to birds more commonly found further north. With perseverance and a good bit of luck, the brightly colored Cerulean and Black-throated green warblers can be glimpsed as they work the treetops, looking for small insects among the leaves. The scarlet tanager, with its bright red body and jet black wings, will also light up the forest as well. Listen for its "chick-burr" call in the morning. Early second growth forests are good locations to look for yellowbreasted chats as well as the dainty Prairie warbler. The chat is our largest warbler and can be readily identified by its yellow breast and black face mask. This bird is usually heard before it is seen, however. Its loud, raucous "Heh-heh-heh" and various squeaks and whistles are most definitely not musical! The prairie warbler is a small bird whose buzzy, high pitched song will test the limits of your hearing as the song ascends up and off the scale!

The forested ridge lines throughout northeast Alabama are excellent locations to look for migrating hawks in the fall, especially where a rocky outcropping has heated the surrounding air, causing the air to rise. These rising thermals of air provide the necessary lift for raptors, such as the broad-winged hawk, to soar for hours on end as they float from one thermal to the next down the ridge line. On a good day in the fall the number of broad-winged hawks soaring within each "kettle" can number well into the hundreds. Cooper's hawks and sharp-shinned hawks are birds of prey with short, rounded wings and long, rudder-like tails. These adaptations allow the birds to chase and capture smaller birds on the wing as they dart through Alabama's forests. The element of surprise increases their chances of catching a meal, but don't be surprised if one shows up at your feeder for some easy pickings too!

Numerous species of birds are active at night too, so don't limit your birding experiences to daylight hours only. Owls, of course, are more active at night and tend to prefer wooded areas. Barred owls are frequently heard calling, "Who cooks for you, who cooks for you all!" Less common are the screech owl and the great homed owl. Chuck-will's-widows and whip-poor-wills can be heard calling their names from forests and field edges just before sunrise. Chuck-will's-widows are more common and tend to be found at lower elevations throughout the state, while whip-poor-wills are restricted to the northern portion of the state. Common nighthawks and chimney swifts are also more active at dawn and dusk.

As with any new hobby, it is easiest to learn about birds and bird watching from someone who has more experience. There are several organizations in the state that welcome beginners who are eager to learn more. The Alabama Ornithological Society is perhaps the ideal starting point. The spring and fall meetings are held at the Dauphin Island Sea Lab and are timed to coincide with the height of migration. Numerous field trips introduce you to all the local hot spots and the banquet seminar usually features an expert ornithologist. Winter meetings are held in various locations throughout the state, again featuring the regions' winter bird populations. A subgroup of the AOS, the Coastal Birding Association, would be of more interest to those living south of Montgomery. The National Audubon Society is also well represented in the state, with chapters located in Mobile, Birmingham, Tuscaloosa, Cullman, Huntsville/Decatur and Florence. Each chapter offers frequent field trips that are open to the general public. Another birding resource in Alabama is the Rare Bird Alert. This telephone hotline lists the rare bird sightings reported throughout the state and is updated as necessary. The RBA number is (205) 987-2730 and there are also additional names and phone numbers listed for the above mentioned organizations.

Chances are, that as you finish reading this article, there is a golden birding opportunity at a location near you, just waiting to be experienced. The fall migration is underway. Grab your binoculars and a field guide and experience for yourself the joy of discovering Alabama's birds!

Negotiating Utility Easements

by TILDA MIMS, Forest Education Specialist, Alabama Forestry Commission

labama's healthy economic environment is evidenced by new industries, flourishing urban areas and record housing starts. As big cities become bigger, many families are choosing to live in rural areas, creating significant growth in those areas, too. These developments have resulted in a skyrocketing demand for reliable public utilities. Sewer, water, gas and electric power lines crisscross the state in an effort to meet the needs of the public.

For the forest landowner this expanding network may mean it is simply a matter of time before a utility company comes knocking on the door seeking an easement.

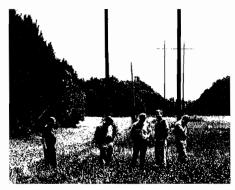
An easement allows the utility company a limited right to use your property for a specific purpose. For example, an oil refinery may want to run a pipeline underneath your property or an electric company may need to erect transmission lines above your property. The company does not gain ownership of the land but rather the right to use a portion of the land, and the landowner may not interfere with the utility.

Regardless of the type of utility, the company will require access to the property for initial construction and future maintenance. The landowner receives compensation for the loss of property and often retains some rights to its use. In a typical situation, trees may not be planted in easements, but food plots, row crops and ground cover to enhance wildlife in the area is allowed.

Most landowners recognize the rights of utility companies to secure land when it is deemed necessary to the public good. If the utility companies have selected their routes, most will have the power of condemnation or the right of imminent domain and are likely to exercise them if necessary.

However, those rights don't mean the landowner has no room for negotiation nor does it imply the company won't be accommodating. "I've worked on both sides of this issue as an engineer and as a landowner," said David McGiffert, a TREASURE Forest landowner and civil engineer. "Usually they are coming to you because you have the best site or the best route, which

makes it cost effective for them to negotiate with you. Work with the utility companies to see where they can best fit into your overall management plan," he advises. "Utility companies may provide benefits to you other than cash payment."



An Alabama Power Company easement on McGiffert Farm in Tuscaloosa has been planted in clovers to enhance wildlife.

Negotiating Conditions of Easement

The best advice for negotiating with utility companies comes from experienced landowners, and that advice is the following: *Maximize the benefit to you and minimize the damage*.

When negotiating, consider possible ways for the easement to enhance your management objectives:

- If several utilities are to be located on your property, try to keep them together. Placing them in a cultivated field causes less damage.
- If you need an opening for hunting or for wildlife food plots, ask for assistance in creating that area as the easement is located.
- Consider access to your property; who will be on your property and how often?
- Easements may often be planted in wildlife foods and other cover. Determine who will be responsible for mowing and other maintenance.
- Require restoration of drainage or improvement of drainage around the easement.

Ensuring sufficient natural drainage to remove ponding water and to control ero-

sion is necessary for any landowner. "Generally speaking, we get improvements in our drainage when negotiating with utility companies. With the type and amount of equipment they use to install utility lines, making small improvements to your drainage while they are already there is usually a minimal expense for them." McGiffert said.

Financial Compensation

Forested land is an investment and compensation for that loss requires careful consideration. Utility companies have limits on what they can pay and what is considered just compensation. According to Madelene Hollingsworth, assistant city attorney for the city of Tuscaloosa, just compensation is usually based on the "before value" of the property (before the project) minus the value of the land after the project is completed.

"The initial offer of compensation to the landowner will probably be determined by an appraiser or an in-house land manager for the utility. If the landowner agrees to that offer, the conditions of the easement will be worked out between those two parties," she said. If, however, the landowner doesn't agree to the offer, he or she can go through condemnation proceedings in which the probate judge will appoint three people to determine the just compensation.

Hollingsworth suggests the landowner make sure all the bases are covered by asking several important questions. Does the utility actually have the power to condemn? Is the project necessary? Will it serve the public good? Is this the best route that will cause the least damage to the landowner's property?

Loss of Investment

For the forest landowner, compensation for loss of investment is a crucial issue. If the utility easement removes several acres of 20-year-old pines, does the utility pay the landowner for those trees or for the 35-year-old pines he was

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TIMBER THEFT:

Can It Happen to You?

by KENNETH ELMORE, Law Enforcement Specialist, Alabama Forestry Commission, Northwest Region

puzzled look followed by these questions: Timber theft? How can that happen without the landowner's knowledge? You mean people really steal trees! Wouldn't that be very obvious? These are typical reactions

when I mention timber theft to the average landowner.

Most people think all timber theft occurs when someone enters another's land, cuts timber, hauls it and sells it as their own. Absentee landowners and landowners unfamiliar with their holdings or property lines are often the victims of this crime.

However, most timber theft occurs through diversion, deception and fraudulent business practices. This typically happens when an illadvised or uninformed landowner sells timber. It happens more often with verbal agreements but does happen with written contracts as well.

Alabama has the third largest commercial forest in the nation. The timber industry is big business and a timber sale can be very complicated. The average landowner has only two or three timber sales in a lifetime and may be at a disadvantage when dealing with timber buyers.

Where do you start? What type timber do you have? What products are there and what are they worth? What markets are available? What is the best way to sell timber so you receive fair market value?

Protecting Your Investment

You've invested 20, maybe 30 years growing timber and suddenly realize you don't know how best to sell it and get a fair price. You must rely on advice of timber buyers and procurement foresters

L-R: Doug Dailey, Dr. James Sherwood, Hank McKinley and Ernie Spiller. Dr. James Sherwood seeks reputable, professional advice whenever he negotiates a timber sale. Here he confers with Doug Dailey of Doug Dailey Logging Inc., Tuscaloosa County Forester Hank McKinley, and consultant forester Ernie Spiller of Southern Forestry Services. Dr. Sherwood is a TREASURE Forest landowner in Tuscaloosa County.

who make their living in the timber business. Most are honest, hard-working people, but unfortunately, some will take full advantage of your trust and lack of knowledge if given the opportunity. How can you best protect yourself?

Recognize your timber's value—
Think of your standing timber as a bank account. Anyone taking money from your account through outright theft or theft through deception or fraudulent business practices is stealing money. A timber sale contract is a business deal. Keep it business. The old adage "trust but verify" applies.

Hire a reputable professional consultant forester—Most landowners don't have the time or inclination to educate themselves about the complexities of a timber sale. A reputable consultant forester will look out for your interests when deal-

ing with timber buyers, procurement foresters and producers. They charge for their work but earn it by getting top dollar for your timber and giving you some peace of mind.

The consultant forester will handle competitive contract bidding between buyers. He or she will handle contract specifics such as price, volumes, sale area, dates, streamside management zones, best management practices, products and markets for each product, stream crossings, cleanup, penalties for contract violations, and many other contract items in your best interests.

Check references—A good consultant forester is proud of his profession and work, and will not mind giving names of previous clients. Were they satisfied with his work? Were there problems with the sale? Were there contract violations? How were they resolved?

Negotiating conditions of the sale—Whether you hire a consultant forester or not, you will make the final decision on how your timber is sold. Should you sell it lump sum or pay-as-cut? Which is best for you? Both have advantages and dis-

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THREATENED & ENDANGERED

SPECIES

Trumpets in the Woods

by CARLEN M. EMANUEL, Stewardship Ecologist, Alabama Natural Heritage Program

he green pitcher plant, Sarracenia oreophila, is an herbaceous, carnivorous plant that grows in seepage bogs and occasionally on sand bars of creeks and rivers. It was listed as a federally endangered species under the Endangered Species Act of 1973 on September 21, 1979.

The distinctive pitcher leaves appear in the spring and are green to yellow-green with maroon veins and purple blotches occurring on the upper portion of the pitcher and the pitcher hood. The pitcher is wider at the top than the bottom, 8 to 30 inches long, and resembles an upsidedown trumpet. The yellow flowers occur singly on a scape and bloom from mid April to mid May. The pitchers begin withering in late summer, displaying beautiful fall colors in various shades of red. A distinguishing feature of the plant is the numerous flat, curved green phyllodia (a flattened leaf) that occur at the base of the plant and persist throughout the winter.

Green pitcher plants in Alabama grow in nutrient-poor, acidic soils and abundant sunlight is necessary for flowering. In low light conditions the pitchers are tall and skinny and no flowering occurs. Some plants in poor sites produce only phyllodia. The rhizomes are long lived and can exist in poor sites for decades. Pitcher plant seedlings require bare mineral soil and high levels of light and moisture for germination. Seedling recruitment and establishment is very poor.

Fire suppression, alteration of hydrological processes, and land alteration and development have had the greatest impacts on green pitcher plants. Seepage bogs, and by association, pitcher plants, are fire-dependent communities. Lack of fire allows shrub and tree encroachment of seepage areas, thus shading pitcher plants and increasing competition. Litter buildup eliminates germination areas and

changes soil nutrient levels. Shrubs and trees also lower soil moisture through increased uptake. Development of land for silvicultural, agricultural, and residential purposes has destroyed or severely altered many green pitcher plant habitats.



Landscape fires (large acreage fires) no longer occur because of fire suppression priorities dictated by smoke sensitive areas and habitat fragmentation (agriculture, residential, industrial). Seepage bogs are sometimes dug out to create ponds, thereby eliminating habitat, and fertilizers and herbicides from agricultural practices leach into water sources, altering water chemistry and nutrients.

Forest management and green pitcher plants are compatible. Selection, seed tree, shelterwood cuttings, and long-term rotations provide favorable canopy conditions and sunlight. Prescribed burning reduces the shrub layer and increases the herbaceous layer, which in turn increases floristic diversity, thus providing insects for the pitchers and bumblebees that pollinate the pitcher plants. Prescribed burn-

ing can also expose the mineral soil necessary for germination. Careful use of logging equipment is necessary not to crush or uproot the plants.

This beautiful plant is one of Alabama's natural treasures. There are 36 reported sites for green pitcher plants and the majority of them (34) occur in northeastern Alabama. Harper (1918) reported Sarracenia flava var oreophila occurred "on the Cumberland Plateau in Marshall, Jackson, and DeKalb counties . . . in moist sandy places near streams." Most sites are privately owned. The Nature Conservancy, the National Park Service, and Alabama State Parks own sites also. If you have trumpets in your woods, treasure your gift of Alabama's natural heritage and notify the Alabama Natural Heritage Program at (334) 834-4519, extension 26.

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Flowering Dogwood

by NEIL LETSON, Urban Forestry Program Specialist, Alabama Forestry Commission

n his way to Mobile from along the Tallapoosa and Alabama Rivers, the great 18th century naturalist William Bartram encountered what he described as a "remarkable grove of Dog wood trees (Cornus florida), which continued nine or ten miles unalterable." According to Bartram, "these trees were about twelve feet high, spreading horizontally, their limbs meeting and interlocking with each other, formed one vast, shady, cool grove, so dense and humid as to exclude the sun-beams, and prevent the intrusion of almost every other vegetable, affording us a most desirable shelter from the fervid sun-beams at noon-day." This fascinating description is all that remains of that early Alabama forest stand, but the admiration for the tree species remains as high today as when Bartram first saw them.

The scientific name for the flowering dogwood tells us a lot about its special qualities. The generic name cornus comes from the word for horn, referring to the hardness of the wood. At one time, the tree provided a valuable

raw material for small articles such as spindles, shuttles, hubs, golf club heads, and handles. Its close-textured, smooth wood meant that it suffered little wearing effect upon use. Today, new technology and plastics have significantly reduced the flowering dogwood's commercial appeal. It is now limited to specialty uses and as a wood for handicrafters.

The species name *florida* means flowering or full of flowers. A trademark image in most people's mind is of this understory tree covered with snow-like flowers in late April and early May.

Actually, the true flowers are inconspicuous, yellowish-green, and are clustered in the center of what is usually mistaken for the blossom. The four, notched, large white bracts surrounding the flowers are actually forms of leaves. This technicali-

occurring species in areas of intended recreational use such as home sites, lakes, trails, vistas, horseback riding, etc.

Another important landowner use of the flowering dogwood is for wildlife enhancement. Its seed, fruit, flowers, twigs, bark, and leaves are all used as food for a number of wildlife species. The fruit has a high fat and calcium content that makes it a quality soft mast for birds, quail, turkey, squirrels and other mammals. Management for the flowering dogwood should be part of an overall plan to improve protective cover, nesting habitat, and water. Landowners should encourage equal dispersion of the species. Older pine stands may need seedlings randomly planted throughout.

If flowering dogwood is desired, a general understanding of its cultural needs will help guarantee successful management.

> The tree grows best on moist, rich soil with adequate organic vival is low on poorly drained clay soils. It can grow in sun or part shade, though trees in the southern part shade.

material. Seedling surpart of its range prefer As with any tree, landowners need to

ty, though, doesn't diminish the tree's springtime performance.

For the forest landowner, the flowering dogwood is usually managed for its aesthetic value. Not only does the tree provide spectacular springtime color, but it also produces an attractive red to reddishpurple fall foliage. In fact, it is one of the most consistent trees for fall color. Another aesthetic attribute is the glossy red fruit that ripens between September and October, sometimes persisting beyond December. Management activities should take advantage of naturally

be aware of natural and introduced pests problems. A number of insects affect the species and can be managed through a plant health care program. Perhaps the most serious problem is the disease dogwood anthracnose. It can kill the tree two to three years after infection. In Alabama, trees on sites above 800 feet elevation are most prone to infection. For additional information see Dogwood Anthracnose: Prevention and Control by Jim Hyland and Nolan Hess in the Fall 1993 issue of Alabama TREASURED Forests.

Negotiating Utility Easements

Continued from page 22

managing for? What of the revenue lost from future harvests on that site? Who retains the mineral rights to the property?

Condemnation of forestland for utility or other right-of-way easements generally involves the taking of any timber growing on the right-of-way and the right to grow future timber crops but not legal title. In the case of power lines or pipelines, the landowner may be allowed to grow crops on the right-of-way. The production of timber is generally not allowed because the tops and roots would

interfere. Any loss of future timber income should be included in the negotiations of the condemnation award.

Tax Consequences

Consulting a tax attorney or an accountant to determine what tax consequences will result from the easement would be wise. The way in which you include a taxable gain or deductible loss from a condemnation in computing your income depends on the property involved, when you acquired it, how long you held it, and whether or not part of your gain is due to depreciation. A knowledgeable profes-

sional will be helpful in understanding this part of the process.

You might not welcome a utility easement onto your property, but a harmonious relationship is possible if both sides work together. Informed, thoughtful negotiations should enable landowners to achieve their specific management objectives while allowing the utility to provide needed services to its customers.

Reference

"Forest Owner's Guide to the Federal Income Tax," Agriculture Handbook No. 708, issued October 1995.

Timber Theft: Can it Happen to You?

Continued from page 23

advantages.

Since competitive bidding usually ensures fair market value, a "lump sum" sale is often in the landowner's best interest. It's important to get as many bids as possible. With a good timber sale contract to protect your property and other interests, any theft problems become the buyer's.

The "pay-as-cut" option may result in a better price for the landowner if the loggers merchandise the different products and take advantage of spot markets. Loggers do not have their money tied up and they don't have to worry about the possibility of an undercut. However, "pay-ascut" is also the method where law enforcement receives the most complaints from landowners unhappy with the final compensation, believing they did not get paid for everything.

If you select the pay-as-cut method, exercise extreme caution. The potential for abuse is high. Some examples include but are not limited to the following:

- Poor utilization—The tract is highgraded (taking the best and leaving less desirable species), losing money paid to you and making it difficult to get another contractor to come in and finish the job. It can also make reforestation more expensive.
- Poor merchandising—You're paid for pulpwood when sawtimber was removed.
- 3. Diverted wood—Unless you're there every day, how do you know what left your property and where it was taken? Wood is a commodity; once it leaves

- your land it looks the same as any other load of wood. Establish a paper trail so every load of wood leaving your property is accounted for.
- 4. Co-mingling of wood—If the producer or buyer is cutting more than one tract of timber, he can pay you for a load of lower grade wood that came from another tract and pocket the difference. You are especially at risk if the producer or buyer owns the other tract of timber. Be especially wary if the producer moves off your tract and onto another tract before finishing yours. Multiple trucking firms or producer trucking crews hauling from your tract and other tracts are yet another danger sign.

Regardless of the method of selling timber, other red flags that should alert the landowner to possible problems include the following:

- Loggers operating where they shouldn't be.
- Truckers hauling when they shouldn't be.
- Loggers or trucking contractors delivering to unauthorized markets.
- Multiple trucking contractors on a site.
- Loggers segregating products on the landing not mentioned in the contract.
- Logs hidden in the woods.
- · Logs mixed with pulpwood.
- Boundary trees cut or boundary lines moved.
- Harvesting in streamside management zones in violation of a contract.
- · Logger working an adjacent timber tract.
- Trucking contractor hauling from adjacent tracts.
- Logs that left the site but were not delivered promptly.

• Complaints or tips from landowners, neighbors, other loggers, foresters, consultants, etc.

Take Preventive Measures

There is no foolproof plan to prevent timber theft. Prevention starts with knowing where your property is, having clearly defined property lines, limiting access to the property, having good neighbors and being a good neighbor. If you are an absentee landowner, having good neighbors, friends or someone to check your property and report any suspicious activity is a must.

Hiring reputable, honest people when entering into a timber sale contract will eliminate most potential problems. Insist on a written contract using clear language, completed and signed by all parties. These practices are important safeguards for the private landowner and the commercial landowner, as well.

Joe Jones, Natural Resources Security Manager for Gulf States Paper Corporation's 400,000 acres, agrees. "The harvesting and marketing of timber products can be very complex, and if you don't know the timber business, you better know the people with whom you are dealing. Good background checks and the bidding process are two of the key elements to protect the landowner."

Entering into a timber sale without a written contract to protect your interests is asking for trouble. A good timber sale contract that outlines prices, volumes, products, markets, sales area, cleanup, penalties for contract violations and has good wood flow accountability measures will reduce temptation, thus eliminating most potential theft opportunities.

Fertilizing Native Oaks to Increase Acorn Production

A Common Sense Approach to Choosing Which Ones to Fertilize

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

ertilizing native plants to increase their value for wildlife is a valuable management tool used by many landowners and professional wildlife and forest management practitioners. The two most common targets are honeysuckle and oak trees, the desired outcome being to increase food availability for wildlife. When fertilizing honeysuckle patches, the approach is relatively straightforward: find the honeysuckle patch, apply appropriate fertilizer rates at the appropriate time, and honeysuckle growth will follow and quickly be consumed if deer are in the area.

Fertilizing oaks is often approached in the same manner but the outcome may be different: find the oaks, apply appropriate fertilizer rates at the appropriate time, but acorn production may or may not increase or occur. The specific end result often leads to conclusions about fertilizing oaks that may or may not have any basis in fact. On one hand, a person who fertilizes oaks and sees a healthy acorn crop may swear that fertilization is the key to bumper crops. For that year or that tree they may be exactly right; but then again, it may have occurred even if they had not fertilized the tree. On the other hand, a person who fertilizes oaks and sees few or no acorns may swear that fertilization does not affect acorn production. For that year or that tree they may also be exactly right; but then again, it may have been a bad year for acorns even if they had not fertilized the tree. Bear with me. The purpose of this article is not to confuse the issue. On the contrary, this article seeks to help identify ways to maximize the chance that fertilizing oaks will yield the desired results.

How Can Fertilization Help?

The benefits of fertilization are pretty common knowledge. Fertilization can provide nutrients necessary for plant growth and improve overall health. We see fertilizers used in the agriculture and ornamental industry to maximize yields. Depending on the industry, the desired yield may come from different plant parts. In the ornamental industry, the desired yield is often healthy plants that produce abundant flowers- marigolds, Impatiens, etc. In the food side of the agriculture industry the desired yield is often the fruit produced-tomatoes, apples, beans, etc. With oaks, our desired outcome is much like the agronomic producer—increased fruit production. Getting the benefits that the ornamental producer desires (increased flower production) also plays an important role in offering us a better chance of achieving our desired end product-acorns. Fertilization can help in both areas and does this primarily by increasing plant health and vigor.

Maximizing the Chance for Success

As much as we would like to think that fertilization is "the answer" to increasing acorn production, it is arguably the least important factor in many situations. There are several factors that affect acorn production. Some of these are not controllable; others may be influenced to bring them to a point where fertilization can help.

Age is one factor. Our native oaks (water, willow, white, swamp chestnut, etc.) do not typically produce acorn crops of any magnitude until they are at least 25 years or older. There are occasional exceptions, but across the board this is usually a minimum age for significant acorn production. You cannot change this characteristic, and fertilizing young native oaks will not stimulate them to produce acorns before their constitution allows. What it can do, under the right circumstances, is help the tree develop into a vigorous, dominant oak capable of producing significant acorn crops when it matures to

acorn-producing age. When identifying candidates to fertilize, make sure they are of age to offer acorn production.

Crown position and condition are other factors that affect acorn production. Dominant and codominant trees are those whose crowns help make up the upper level of a forest canopy. Trees in this position receive abundant sunlight relative to lower trees, have broad crowns, and are usually vigorous specimens. These three factors directly affect acorn production in trees capable of producing acorn crops. The crowns of lower level trees, often called intermediates or suppressed trees, are beneath the larger trees. Therefore, these trees receive little sunlight, are often narrow, and usually less vigorous-factors that do not bode well for significant acorn production. White oaks are often targeted for fertilization because deer seem to favor these acorns over those of red oak. If the tree of interest is below the canopy of larger trees, fertilization would not be a productive venture. However, it would be a beneficial move if you removed some of the surrounding trees so that the tree could capture more sunlight, expand its crown, and position itself to be a better acorn producer. Once this is achieved, fertilization might help increase acorn production. Favor dominant trees with large crowns for fertilization.

Some oaks just don't produce significant acorn crops. On one 200-acre tract that I frequent there is a hillside full of white oaks that I pay particular attention to during the fall. Some years acorns are completely absent throughout the stand, and during other years they are fairly abundant. This is normal, as most oaks produce bumper crops about 1 in 5 years on average. However, the individual tree that I have always thought should be the

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Keeping Alabama Forever Wild

by PAT BYINGTON, Director, Alabama Environmental Council and JENNIFER GREER, Freelance Writer

n January, when the cold winds blow through the Appalachian remnants in north Alabama, bald eagles come to perch and fish in a naturally forested peninsula along Lake Guntersville in Marshall County. Watching them, you get the impression these splendid birds are **forever wild**.

In April, when spring comes to the Alabama woods, white-tailed deer, turkey and other game come to feed in field-like open areas and mixed pine-hardwood forests near the Alabama River in Lowndes County. The sleek deer and plump turkeys, too, are forever wild.

In June, when the sun lulls alligators to sleep in the Grand Bay Savannah in Mobile County, and the sandhill cranes watch over their young, both predator and prey are **forever wild**.

These animals, these plants, and these places won their chance to remain wild in 1992. That was when the Forever Wild bill passed the Alabama Legislature and began to change the face of Alabama's landscape.

The bill was approved by 84 percent of the popular vote, the largest mandate ever won by any conservation measure in the nation, according to Kathy Stiles Cooley, executive director of The Nature Conservancy of Alabama. "With Forever Wild, Alabamians collectively said something very important: 'Save our natural heritage. It's part of who we are and we want it to be part of who our children and grandchildren are,' "explains Cooley, who helped lead the effort to build support for Forever Wild.

What Is Forever Wild?

Simply put, Forever Wild sets up a process by which Alabamians can donate or sell their lands to the public so the natural or rural land use is permanently preserved for everyone's benefit. Funds for the acquisitions come from one of the state's other natural resources — interest

off the proceeds from the sale of oil and gas leases in the Gulf of Mexico.

An in-depth screening procedure ensures that only the most unique and valuable lands (from a conservation and recreation standpoint) are acquired. Managed by the State Lands Division of the Alabama Department of Conservation and Natural Resources, Forever Wild properties include wildlife management areas, nature preserves, recreational tracts and state park additions; many have multiple uses.

Why Is Forever Wild Necessary?

Alabamians love the outdoors. They always have. They always will. Blessed with five different physiographic regions—the Highland Rim, Cumberland



The Riggins Tract is located near the Alabama River and includes excellent wild game habitat.

Plateau, Valley and Ridge, Piedmont Upland and the Coastal Plain—the state enjoys one of the most diverse and scenic landscapes in the United States. Mountains, plateaus, canyons, rivers, creeks, hardwood uplands and bottomlands, pine flatwoods, cypress swamps, wetlands, coastline, inlets, bays, savannahs, and prairies—Alabama has it all. Or, had it all.

What many people don't realize is that our state's population has doubled since the days of our grandparents. There are now 4.1 million Alabamians, the majority of whom live in rapidly growing cities. Meanwhile, we still have less than 5 percent of Alabama's land in public hands for permanent recreational and conservation use. As a result:

- Hikers so crowd the Bankhead National Forest during the summer that certain trails suffer from over-use.
- Hunters have a hard time finding a place where the game outnumbers them, unless they are willing to drive for miles and belong to private hunting clubs.
- State park lodges fill to capacity and must be rented a year in advance; campgrounds, too, are often full in the summer.
- Urban sprawl continues to eat up Alabama farms and forestland, as birders observe a mysterious decline in migratory songbirds.

Wildlife competes for green space, too. Alabama now ranks among the top five states in the nation for its number of threatened and endangered species. If current population and economic growth patterns continue, keeping parts of Alabama Forever Wild—amidst all this civilization—may be one of the biggest challenges we face in the first half of the next century.

Alabama's Private Stewardship Legacy

Fortunately, there are many pieces of "natural Alabama" left. They exist, primarily, because of the good stewardship of private landowners like Robert G. Wehle. For many years, Wehle, a New York businessman and transplanted Alabamian, owned a 1,546-acre tract as a winter retreat in Bul-

Since 1992, Forever Wild has been changing the face of Alabama's public lands, putting rare bird refuges, pristine wetlands and prime hunting areas into permanent protection.

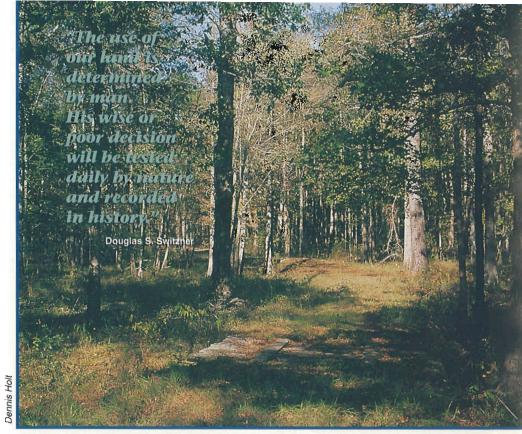
lock County, southeast of Montgomery, according to Jim Griggs, State Lands Director. "When he bought the tract 25 years ago, it was old, worn-out cotton land. He allowed the timber to regrow naturally, and built wetlands and ponds to attract a variety of wildlife (birds, otters and even alligators.) He tried to reintroduce quail, which were once there. He did everything he could to restore the land to a sanctuary for wildlife. Mr. Wehle is a conservationist in the truest sense of the word."

Recently purchased by Forever Wild, the entire Wehle Tract is now one, large nature preserve and outdoor classroom. "Mr. Wehle donated \$1 million of the \$2 million appraised value . . . he wanted to see the property preserved. He didn't want it to ever be subdivided," says Griggs.

Griggs adds that there are many more Alabama landowners, with both small and large holdings, who think like Wehle. "We see it all the time in our work. Sometimes, we see a small landowner who has a food plot to attract deer and turkey, plus bluebird boxes. It's not because he wants to hunt; he just wants to attract the species. We also see large owners who are creating private nature preserves. I think Alabamians love the land as much today as the early settlers did."

To date, Forever Wild has made six land acquisitions totaling 5,809 acres in all different regions of the state. They include the following:

- The Monsanto Tract in Marshall County—This 209-acre tract near Lake Guntersville was a gift of the Monsanto Company through an intermediary, The Nature Conservancy, in 1994. The land is being managed as an extension of Guntersville State Park and to provide a nesting habitat for the growing population of bald eagles.
- The Wehle Tract in Bullock County— Purchased in 1994, this 1,517-acre tract will be used for public recreation and a nature preserve. Adjacent to the tract is the Robert G. Wehle Nature Center, which will open this fall. (Wehle made generous donations that reduced the cost of the tract, financed the nature center, and provided an annual gift to help maintain the property.) A portion of the Wehle Tract may ultimately be included in the adjacent Barbour County Wildlife Management Area.
- The Coon Creek Tract in Tallapoosa County—This 320 acres sits quietly



Twenty-five years ago the Wehle Tract was worn-out cotton land. Through the good stewardship of Mr. Wehle, it is now a sanctuary for wildlife.

along the banks of Yates Lake and was purchased in 1995 for \$325,000. (Joe H. Johnson and the heirs of J.M. "Mac" Smith, from whom the tract was purchased, donated \$25,000 of the tract's appraised value.) This rolling, forested land is being managed for public outdoor education, a nature preserve and environmental education. It also provides public access to Yates Lake.

• The Grand Bay Savannah Tract in Mobile County—This is the largest tract purchased yet—2,733 acres—for less than \$643,000 in 1996. Low-lying marsh land, it fronts the Mississippi Sound and is traversed by several streams. Managed as a nature preserve, this fragile coastal area is home to the sandhill crane and many other indige-

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How Does Forever Wild Work?

Nominating land—Anyone can nominate land to be considered for the program. Once a piece of land is nominated, the Department of Conservation staff must investigate whether the owners of the land are interested in selling. If they are not interested in selling, the process stops right there. The law requires Forever Wild to purchase lands only from willing sellers.

Scoring—If the land has been nominated and has a willing seller, it can be "scored" by Department of Conservation biologists. The land is scored in four separate categories—wildlife management, nature preserve, recreational area and state park. The Forever Wild Board then uses the scores to set priorities on which lands to buy.

Appraising and negotiating—With good data, the board can then decide to direct the State Lands Divi-

sion to obtain appraisals and negotiate a price for me land. By law, the board cannot spend more than 125 percent of the appraised value of the land. This ensures the best deal for the public's investment.

Purchasing and Stewardship—If all these steps occur, and other factors such as size of the property, costs, and access, just to name a few, are considered favorable, then Forever Wild can purchase the land. To ensure good stewardship of the lands in the future, 15 percent of the amount of the selling price must be put into a stewardship fund.

For more information about Forever Wild or to place a nomination, write the State Lands Division Department of Conservation and Natural Resources. 64 North Union St., Montgomery, AL 36130.

Forestry Making Significant Strides

Continued from page 7

of the computer industry's economic benefit, but because of the PC's influence on all technology—forestry included.

He further indicated that since information technology arrived in large scale in the 1980s, it is finally producing better business performance in the 1990s.

The foresters I interviewed reinforced this Greenspan summary. One paper company forester stated, "We work smarter in forestry because of computer technology. It has become a time-saving device and it primarily helps in making management decisions."

6. A Forester's Ability to Communicate

"Lousy" was one comment I received from the forestry group. "Foresters—by their very nature—like to avoid confrontation and work in the mentally comfortable and non-confrontational outdoors." This has taken its toll on presenting an adequate forestry picture to the public.

Defending forestry and our perception of how the forest resource should be managed may be a forester's shortcoming. Foresters sometimes make poor public relations people. This hasn't improved much over the last 15 years.

Environmentalists, who are a lot less knowledgeable of the forest but much more adept at communication, have taken the day. It was agreed that the forestry community has not been as vocal as needed and that foresters should be visible in the mainstream media.

7. Domestic Harvest and Export Wood Increases

On average, timber prices have doubled since *Alabama's TREASURED*Forests came to print. Hardwood pulpwood prices have more than tripled. Consumption of wood fiber, both domestically and on the world market, is at an all-time high and is not expected to abate.

The Port of Mobile has become a major point of shipping for the export of all wood products—both solid wood and pulp and paper—from the United States. The late 1980s spawned a dramatic rise in chip exports. Solid wood exports have always been strong.

Severance tax indicates that harvested Alabama wood volumes increase about 3 percent every year. Hardwood removals have fueled this increased as the price of hardwood pulpwood and sawtimber go up. Total cubic foot volume removed in 1982 was approximately 800 million. In 1996, 1.1 billion cubic feet of wood were cut.

8. Improved BMP Compliance

Best Management Practices have been a point of discussion for several decades. BMPs are guidelines for water quality. The 1990s have generated a positive response from industry to the problem of water quality and BMP compliance. Industry now insists that loggers who supply logs observe state guidelines and carefully work in streamside management zones.

The Alabama forest now has better water quality and less site disturbance because of industry-supported BMP regulations. Georgia Pacific states that they "annually conduct self audits . . . provide support to nonindustrial private landowners to ensure BMP compliance . . . and will not knowingly buy wood directly from landowners violating state BMPs." Most Alabama forest product companies have similar self-imposed regulations to assist the BMP process.

9. Certified Loggers

Logging improvements could not have taken place without an equal improvement in the quality of the logger. In addition to making money from the harvest, the new logger has to be a good businessperson, safety manager, operations planner, and be knowledgeable of current forestry practices.

A cooperative effort between the Auburn School of Forestry and Alabama Extension has given the Professional Logging Manager Course to hundreds of loggers in the state. This course covers silvics, logging management, harvesting systems, safety and much more. This continuing education to the logger has improved the forest condition, and Alabama is home to the best trained loggers in the nation.

10. Tree Planting

The U.S. Forest Service states that Alabama has planted nearly 4 million acres, 18 percent of Alabama's commercial forest, since 1982. This is no small feat. Alabama led the nation by growing 231 million seedlings in 1996. Alabama is third in the nation in total acres planted in 1996.

Nearly 1 million acres of trees were planted during the peak CRP years of 1987 and 1988. Alabama is a tree-growing state and a significant portion of the forest is young. We have a maturing forest that will continue to expand in both volume and value.

Conclusion

What will the next 15 years bring? No doubt there will continue to be significant developments in technology that forestry professionals will need to keep abreast of. We can hope, too, that Alabama's TREASURED Forests will still be around to inform and encourage landowners to manage their property in a way that benefits them and society.

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TREASURE Forest

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landowners who are not certified (Growing Members); and (3) other persons, companies, corporations, or organizations that do not own forestland but want to support and promote the concept of TREASURE Forest management on all lands in Alabama (Associate Members). The ATFA is made up of people who actually practice TREASURE Forest management, those who encourage others to practice it, and those who believe that managing Alabama's forestlands according to the TREASURE Forest concept is good for both present and future generations.

The leadership of the ATFA, composed of certified TREASURE Forest owners,

has dedicated itself to the TREASURE
Forest Program and to focusing the efforts
of the association on becoming the vehicle
by which people are reached with the
TREASURE Forest concept. The ATFA
firmly believes that the key to success in
expanding the use of TREASURE Forest
management and increased involvement in
the program is activity and personal contact
with people. To accomplish this goal, the
ATFA is seeking to organize ATFA county
chapters in each of Alabama's 67 counties.

The Whole

The TREASURE Forest Program began under the tenure of former State Forester Bill Moody and has been championed by the collaborative efforts of each member agency and group of the AFPC. Current

State Forester Timothy C. Boyce, as well as other representatives of the AFPC, continue to place high importance on the program. Through the continued collaborative efforts of the AFPC membership, CFPCs, and the ATFA, the TREASURE Forest Program will continue to benefit more and more of Alabama's forestland and further increase the number and acres of certified TREASURE Forests. As State Forester Boyce stated at the 1996 Landowner and TREASURE Forest Conference, "We must rededicate ourselves to the TREA-SURE Forest Program. We must be willing to actively encourage others to adopt the multiple-use forest management concept embodied by TREASURE Forest. We must carry this concept to all of Alabama and beyond."

Fertilizing Native Oaks

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best acorn producer due to its broad, spreading crown, location on the lower portion of the slope, and sufficient age and size, is actually the poorest producer in the stand. In years where other trees have a few acorns, it has none. In years when others have bumper crops, it has few, and again, sometimes none at all. It doesn't figure—but it does provide a good lesson. When choosing particular oaks to fertilize, in addition to their condition make sure they produce acorns to some degree. The only way to do this is through observation over time.

Speculations on Acorn Crop Failures

Even though you take care to determine the best possible candidates for fertilization, sometimes acorn crops fail. Most often this gets attributed to rainfall deficiencies. This can be a cause but is usually "the cause" only in significant cases of dry weather during the period when acorns are filling out. Often the acorns will be present but may fail to fill out completely. Acorn weevils can also cause a similar effect. Weevil-infected acorns are the first acorns to drop during the year. Other weather factors can also affect acorn production. Oaks flower fairly early in the spring and hard freezes can damage buds and flowers that eventually give rise to acorns. This may

cause entire crop failures and acoms will be completely absent. Wet weather during the peak pollination periods can negatively affect pollination success. This may result in fewer acoms produced, though not a complete crop failure. Often good acoms are present but quantities are low. At other times, crop failures may be due simply to the cyclic nature of acom production.

Fertilizing native oaks can provide increased acorn yields when conditions are right for acorns to be produced. When identifying candidates for fertilization, maximize your chances for increased acorn production by targeting trees that are 25 years or older, are dominant or open-grown trees with well-developed crowns, and have a history of acorn production.

Keeping Alabama Forever Wild

Continued from page 29

nous animal species. During the spring and fall bird migrations, the Grand Bay Savannah is a busy place indeed.

• The Riggins Tract in Lowndes
County—This tract includes 624 acres
that are managed, along with other federal and state land acquisitions in the
area, by the Game and Fish Division to
form a new wildlife management area
for public hunting. Acquired for
\$727,000 in 1996, the Riggins Tract is
located near the Alabama River and
includes excellent wild game habitat.

The Fort Toulouse Tract in Elmore

County—The latest acquisition, this 240-acre tract was purchased this year. It is both archaeologically and historically significant for its proximity to Fort Toulouse, which sits on a bluff at the intersection of the Coosa and Tallapoosa Rivers (where they form the Alabama).

In addition, the Forever Wild Board has authorized the purchase of the Indian Mountain Tract, which is actually four individual properties in Cherokee County. This 541-acre purchase will be an important one as it will link Alabama's Pinhoti Trail with the Appalachian Trail by connecting Cheaha State Park (on the

south) to Springer Mountain, Ga.

As Forever Wild acquires new properties, like Indian Mountain, it will unite Alabama with a natural world that is much larger than the state's boundaries and much older than its written past. They say our decisions, wise or poor, about how to use the land are "tested daily by nature and recorded by history."

Forever Wild should pass both the test of nature and the test of time.

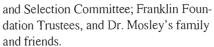
Editor's Note: Pat Byington is also a member of the Forever Wild Board of Trustees. Jennifer Greer is a Harpersvillebased freelance journalist who writes about forestry, nature and gardening.

W. Kelly Mosley Environmental Awards Program Celebrates 25th Anniversary

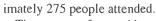
by JANE BALLARD

he W. Kelly Mosley Environmental Awards program, considered one of the most prestigious in Alabama, recently celebrated its 25th anniversary. To

commemorate the celebration, Dr. W. Kelly Mosley and all past winners of the Mosley Environmental Achievement Awards were honored with a luncheon and awards ceremony. Other guests included former winners of the Helene Mosley Memorial TREA-SURE Forest Awards; the Outstanding County Forestry Planning Committees; past and present members of the Mosley Steering

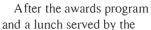


The event was held in July at the Solon Dixon Forestry Education Center in Andalusia, Alabama, and was sponsored jointly by the Franklin Foundation of Atlanta, Georgia, and Dr. Mosley. Several weeks before the program, press releases were mailed to all state newspapers inviting anyone interested in the preservation and management of our renewable natural resources to attend free of charge as Dr. Mosley's guest. Approx-



The program featured keynote speeches by Dr. Paul Parks, Provost and Vice President of Academic Affairs at Auburn

University, and Dr. Emmett Thompson, Dean of the Auburn University School of Forestry. Dr. Parks also presented Mosley Achievement Awards to Mrs. Martha Dixon and Mrs. Thelma Dixon in recognition of the Dixon family contributions to forestry education at Auburn University and the state of Alabama.



Dixon Center staff, Center Director Rhett Johnson conducted tours of the Dixon Center.

The W. Kelly Mosley Environmental Awards program was established at Auburn University in 1972 as the W. Kelly Mosley Environmental Forums to help boost conservation in the state of Alabama. The Forums were funded by the Franklin Foundation, chaired by Auburn University engineering alumnus (class of 1924) and retired Southern Bell Vice President Dr. W. Kelly Mosley.

The goal of the awards program is to

recognize publicly and support achievements or proposed endeavors that will result in the wiser use of renewable natural resources. Presently the program sponsors achievement awards for individuals and groups, funds grant proposals, honors outstanding TREASURE Forests and recognizes outstanding county forestry planning committees.

Dr. W. Kelly Mosley is a nationally recognized leader in environmental education, having received the prestigious Gulf Oil Conservation Award in 1984 for outstanding contributions to the preservation of renewable natural resources. This award is presented to only 10 conservationists in the U.S. annually.

Still vigorous and active, Dr. Mosley is proud of his accomplishments. It is through his untiring energy and endless efforts with the Franklin Foundation and the W. Kelly Mosley Environmental Awards Steering and Selection Committee, that this program will continue to succeed and maintain the reputation it has developed during this first 25 years.

Information regarding the Mosley Environmental Awards program may be obtained by writing to Dr. H. Lee Stribling, Department of Zoology and Wildlife Science, 331 Funchess Hall, Auburn University, Alabama 36849-5414; (334) 844-9247.



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