

Alabama's **TREASURED** Forests



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STATE FORESTER'S MESSAGE

by C.W. MOODY



The first legislative session under Governor Hunt's administration proved beneficial to forestry on the whole. Certainly we didn't get all we asked for, but we did secure passage of some significant legislation—timber theft and expansion of the emergency fire fund to include insects and disease.

Our litter bill failed to pass along with many other bills. I am encouraged, though, by the fact that these bills did not fail because of major opposition, but rather because of conflicts within the chambers themselves. This makes me optimistic as we look toward next year, and I hope that you will continue to urge your legislators to support us.

Forestry certainly is receiving favorable attention from the governor's office. As we draw closer to completing the final stages of Alabama's Fourth Forest Study, we can appreciate even more the appointment by Governor Hunt of the Task Force on Agriculture and Forestry. Already, this committee has recognized areas needing attention, and recommendations are being formulated which should benefit the forestry community.

I also want to remind you to order your seedlings for this year's planting now! We anticipate the demand in Alabama will exceed the supply with all of the applications being accepted for CRP and ARCP this year.

Another point worth mentioning concerns the conservation provisions in the 1985 Farm Bill. **Any landowner with agricultural lands subject to erosion (row crops, pastures, etc.) must have a conservation plan by 1990 to continue qualifying for any federal assistance funds. This includes Forestry Incentives Program (FIP) and Agricultural Conservation Program (ACP) funds. A forest management plan will not serve as a conservation plan. Also, if you cut a forest stand and convert to pasture, you will have to secure a conservation plan to qualify for federal assistance funds. You may contact the ASCS or SCS offices in your county for more information.**

I enjoyed visiting with many of you at the Fourth Alabama Landowner and TREASURE Forest Conference. As usual, this was an excellent meeting and everyone who had a part can be justifiably proud.

C. W. Moody
State Forester

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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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Cover Photo: Alabama has a prolific deer population. Photo by Ray Sandretto.

Alabama's TREASURED Forests

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With about five percent of an original 5000 acre plot, Larry Trotter has proven

IT'S WHAT YOU DO WITH WHAT YOU'VE GOT

by COLEEN VANSANT, Information and Education Coordinator, Birmingham

ONE OF LARRY TROTTER'S FAVORITE PHILOSOPHY'S IN LIFE comes from one of Walt Disney Productions most famous movies. In one of the segments of "Song of the South" the cartoon characters sing and dance to the words "It's not what you've got, it's what you do with what you've got." By incorporating this into his management practices, Larry Trotter's own magical spell has been cast over his forestland.

"TREASURE Forest is something you have to work at all the time," Trotter explained, "to make it look the way you want it to look." The hard work is evident when you look at the beautiful 280-acres of land Trotter manages under the TREASURE program.

The Trotter property became a TREASURE early in 1979. His certificate sports the number 40 which indicates he was among the first landowners in Alabama to adopt the TREASURE doctrine. Because of the outstanding management efforts on his land, he was nominated for and received the state's highest TREASURE Forest award in 1979, the Helene Mosley Memorial TREASURE Forest Award.

An Inherited Ethic

Although the paperwork testifies Trotter's forest has been a TREASURE for eight years, his land speaks of and displays a much longer reign.

Trotter is a third-generation landowner of a portion of a 5,000-acre Pike and Crenshaw County farm originally purchased by his grandfather. When the old gentleman died the land was divided into nine parcels, each tract going to one of his nine children. Years later, when Trotter's father passed away, the land was divided again, but this time between his four brothers and sisters.

You might say the younger Trotter inherited his love for the land and his



Trotter sets an "example" for TREASURE program.

understanding of the importance of good stewardship from his father and grandfather. When his grandfather purchased the property in the 20's and 30's the planting and production of pine trees was not a part of his future. Most families were large, and land had to be managed to fill the families' needs. This included the production of row crops, food for the family's consumption and sale, along with acreage reserved for whatever livestock the family required. Timber was the sideline after food was put on the table.

When Trotter's father inherited the

tract, he carried on the tradition of good stewardship and caring for his land. When he died, the country was going through an "enormous change," Trotter noted. He explained the area was going through the change from the typical agricultural producing farmland to forestry because of the Soil Bank Program.

Professional Advice Paid Off

Properly managing his timber became a priority to Trotter around 1970. "You could say I more or less grew into it," he said. Because of his lack of knowledge in managing timber, he acquired the services of a nearby private industry forester. Student and pupil began the job of marking timber to be thinned. "I stayed with this forester and asked him every question I could think of," said Trotter. "We spent four or five days marking timber."

With his new knowledge of timber management, the next time the tract required marking and thinning Trotter performed the job himself "just the way the forester said to do it. I left the very best behind, but what happened was that I realized I needed a management plan."

Not wanting to depend heavily on a private company, the landowner turned to Wayne Craft with the Forestry Commission in Pike County. As a result he was introduced to the district's management forester, Howard Schlegel, who introduced him to what Trotter remembers as "a new management plan." That plan was TREASURE Forest.

According to Trotter's nomination form for TREASURE, he's managing his land for timber and wildlife, but when you ask him, the reply you get will be "well I manage for everything."

As with many TREASURE landowners, timber is an objective. Across Trotter's 280 acres (all but 80 acres is located in

Crenshaw County—two 40-acre tracts are in Pike County) towering pines are closely monitored and managed along with several acres of bottomland hardwood.

The pines are picture perfect, an example of top notch forest management, although Trotter will argue with you that the place is a mess. A prescribed burn is planned for this winter along with another thinning.

On his Pike County property, one of the finest tools for releasing his longleaf pine has been a hatchet and a sprayer filled with **TORDON RTU**, a practice he has followed for the past three or four years. Where hardwoods are undesired, Trotter makes a notch in the base of the tree trunk with the hatchet. An application of **TORDON** in the wound will soon eliminate the hardwood and allow sunlight to reach nearby pines along with more nutrients.

In his bottomland, the crowns of acres of swamp chestnut, birch, cypress, and oak meet together to shade the damp, spongy forest floor. This tract Trotter leaves pretty much in its natural state, although he anticipates thinning in some areas to remove trees damaged by beavers.

In following his management plan, Trotter uses fire as one of his management tools. "Fire is one of the best things for the woods I know," he said, "as long as you control it."

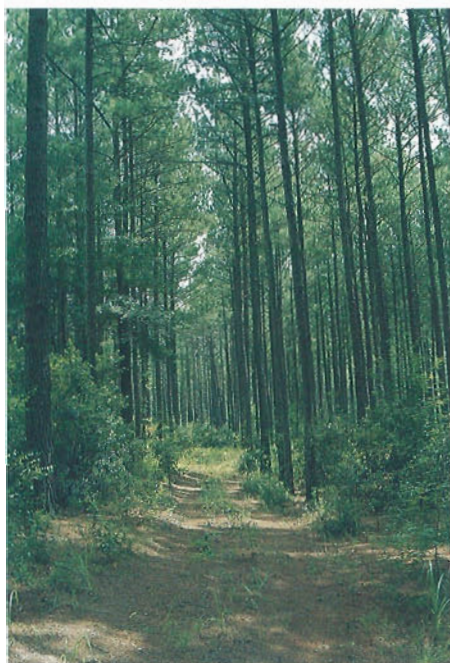
Good Forest Management Meant Better Wildlife

Hunting with family and friends is probably where Trotter receives the most enjoyment from his land and is one of the main reasons why he manages his land so carefully. Last hunting season he and neighbors harvested 11 deer from his tract along with a healthy number of wild turkeys.



Beetle infestation turned into wildlife foodplot.

Clover and vetch is planted in roadways to attract deer and turkey along with a salt lick where deer congregate. Crab apple trees and chinquapin have been left for deer forage and in many areas snag trees



Proper thinning has left only quality pine timber.

are left behind for wildlife. Trotter used a Southern pine beetle infestation to his advantage by salvaging the timber, spraying the dead tree tops with Lindane, conducting a prescribed burn and turning the area into a game plot.

Appreciation for Natural Beauty

In keeping with his management plan, the landowner says he never forgets the most important thing—keeping his land "as natural as I can. My job is just to help Mother Nature a little." Time to spend on his property is sometimes very hard to find since he lives in Montgomery to be near his job with the Department of Pardons and Parole. The husband and father of two daughters manages to find time on weekends, holidays, and vacations to work on improving his land. "You have to do a little bit at a time," he said and added that eventually "you'll be able to tell a difference."

Trotter said, laughing at himself, that one of his problems is that "I hate to cut a tree." He notes he's learned that taking your time in thinning or eliminating undesirable trees is very important. To him doing a little at a time and being sure is the key.

"You can always go back and take out a tree if you need to," he says. "It's like painting a picture, you can just paint it out."

An Example for Family and Friends

TREASURE has become important to Trotter, not only in providing a multiple-



Bottomland hardwoods yield abundant wildlife for hunting season.

use management plan and objectives to follow, but it has become one of the principles he lives by and an example which he strives to set for the people of Shady Grove Community in Pike County.

His brother has become a TREASURE Forest landowner, and according to him "a cousin or two" and several neighbors are close to achieving TREASURE status.

In addition he is using his experience in TREASURE to assist other landowners all across the state. Trotter serves on the State Forester's TREASURE Forest Landowner Advisory Board and was instrumental in the development of the Alabama Forestry Commission's recently published *TREASURE Forest Prospectus*, because he felt something was needed in hand to show landowners when they were approached with the TREASURE program.

"What I try to do with my friends and my neighbors," Trotter said, "is set an example and be an example—not tell them *how* to do something but do it right myself on my place and then when they see it, they can decide for themselves whether it's what they want to do."

Aside from the philosophy spurred from Disney, Trotter has another very similar one: "It's not always what you know, but what you do with what you know."

"You can have all the information in the world sitting up in your head about forestry—how to improve things, how to make things better," he instructed, "but, unless you let somebody know it and help teach them, it's not going to do any good." ♣

EDITOR'S UNDERSTORY

by COLEEN VANSANT

IN MANY WAYS they've become almost extinct. Rarely do you meet people anymore that live in a small town, or that is from one and will admit it proudly. Most of these folks left small communities right after high school and made their exodus to the cities—never taking a backward glance.

To know Larry Trotter, though, to understand the man and everything he stands for, you have to be introduced to the community of Shady Grove in northwest Pike County.

Larry Trotter's roots grow deep in the little community. When he rides through the settlement pointing out places and things, you can't help but notice the pride in his voice and the broad smile on his face

as he waves from his jeep and greets its residents.

Everyone knows Larry Trotter. He and his four brothers and sisters were brought up in Shady Grove. His father ran a sawmill for years in the once bustling community. His grandfather before him was manager of the local general store and cotton gin, and his great-grandfather walked just a few miles north of Shady Grove to Dublin to enlist in the Confederate Army.

Yes. Shady Grove is as much a part of Larry Trotter as Larry Trotter is of Shady Grove. It's where all the values he holds so dear were taught and instilled—the values that he now applies today to his land and his family.

In Shady Grove, neighbors aren't just neighbors, they're family—the type folks that love you, look out for you, and generally care. They're not just around when things get tough, but they are the kind of neighbors who stop in to check on you and to visit. As we passed through Shady Grove, Larry Trotter noted that one of the elderly ladies in the community would be mad at him because he was in town and had not stopped in to see her.

Larry Trotter is still so much a part of Shady Grove that he kept his membership at the Shady Grove United Methodist Church because "they don't have but 30 members and they need all of the help they can get."

And when he walks into the century old M.E. Young Grocery, Mr. Austis Young greets him with a big smile and laughter, and they begin talking about local people and the weather, while the neighborhood children walk by the store's shaggy dog lying in front of the open double doors to peer into the glass front candy case.

You can't help but laugh when Trotter points to the lifesize, cardboard figure of George "Goober" Lindsey in the back of the room and explains that the neighborhood kids love to come into the store and "have their picture taken with Goober."

For Larry Trotter and the millions of others who came from all the Shady Groves in the world, it's a place that never leaves you, the place you always return to, the place that never lets you down—the one place in the world that can see you at your worst and love you anyway.

"Shady Grove. It's like a little jewel in the country," Larry Trotter says smiling. ♣



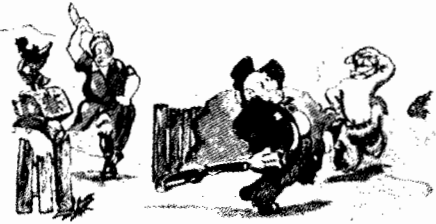
Trotter (left) and Mr. Austis Young enjoy a moment in front of Shady Grove's century old store.

THE 10 COMMANDMENTS OF GUN SAFETY



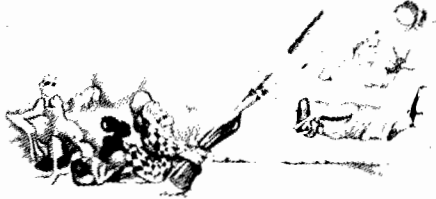
1 Treat every gun with respect due a loaded gun.

Hunting safety is a must! These cartoons are a lighthearted look at the serious side of gun handling. Whenever firearm accidents occur, at least one of the 10 Commandments of Gun Safety has been violated.



6 Never point a gun at anything you do not want to shoot.

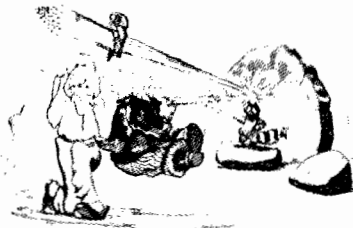
2 Watch that muzzle!



7 Never climb a fence or tree or jump a ditch with a loaded gun.

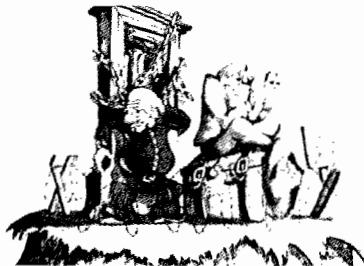


3 Be sure barrel and action are clear of obstructions.



8 Never shoot a bullet at a flat, hard surface or water.

4 Be sure of your target before you pull the trigger.



9 Store guns and ammunition separately.



5 Unload guns when not in use.

For a safer and more rewarding hunting experience, enroll in a Hunter Safety Education Course today. Contact:
 Hunter Safety Coordinator
 Alabama Dept. of Conservation
 Game & Fish Annex
 913 S. Perry St.
 Montgomery, AL 36104
 (205) 261-3623



10 Avoid alcoholic beverages before or during shooting.

(Cartoon drawings courtesy Florida Game and Freshwater Fish Commission)



WILDLIFE FOODS

by DAVID A. HOGE, Wildlife Specialist, Alabama Forestry Commission

MANY ARTICLES in previous issues of this magazine have discussed integrating timber and wildlife management techniques to benefit both resources while achieving TREASURE Forest status. Frequent references have been made to silvicultural treatments, such as prescribed burning and thinning, and to cultural activities such as creating food plots. When properly conducted, these practices have a positive impact on wildlife populations by manipulating the available habitat. Habitat, or the amount of food, water, and cover present, determines the kind, the number, and the condition of wildlife that a given area can support. This article will discuss one of the elements of habitat—food—and the types of food preferred by selected wildlife species.

A key point is that foods eaten readily in one area may not be taken in another area due to differences in soil types, nutrition, succulence, animal numbers, and plant composition. Those foods readily consumed

by and available for wildlife are frequently referred to as preferred foods. Also, another important factor to consider is the seasonal nature of many of the food sources.

White-tailed Deer

At one time or another, deer may eat practically any vegetative species. Considered a browsing animal, deer will also consume grasses, weeds, mushrooms, acorns, nuts and fruits. The quality and abundance of summer-fall foods largely determine the physical and reproductive condition of deer. Deer must store sufficient body fat during this time to survive the food deficient winter months. Preferred spring and summer foods include grasses, legumes, weeds, fruits, various agricultural crops, and tender growth of shrubs, trees, and vines.

Evergreen browse and mast are very important winter foods. White oak acorns are preferred, but black oak acorns are

readily taken. The nutritional value of both mast groups is similar; availability is more important than preference. Beechnuts, pecans, other hard mast species, dogwood, greenbriar, blueberry, sassafras, and Japanese honeysuckle are also important winter foods.

A deer requires 6-8 pounds green weight of food each day for 100 pounds of body weight. With respect to land management practices, deer prefer fertilized over non-fertilized areas and burned over non-burned areas—an instinctive selection based on nutrient value of the forage.

Gray Squirrel

Squirrel reproduction and survival fluctuates with changing yields of heavily seeded mast, particularly acorns. A variety of hardwood tree species is essential to a balanced habitat, but the stocking of oaks, hickories, beech and walnut determines carrying capacity. Squirrels seem to prefer

hickory nuts, beechnuts, white oak acorns, and black oak acorns in that order. However, this is related more to availability than to preference. A squirrel consumes approximately its own weight, at least one pound of mast per week. Other important foods include fruit and berries, floral parts, buds, bark, roots, mushrooms, and animal matter. This is essentially true of the months May through July when heavy mast is not available.

Cottontail Rabbit

A cottontail rabbit is almost 100 percent vegetarian, consuming a large variety of forest, pasture, and other agricultural plants such as alfalfa, red clovers, Kentucky blue grass, soybeans, Korean lespedeza, dogwood, white oak, and sassafras. Choice spring and summer foods are green shoots, fruits, grasses, branch tips, buds, and bark of various species. Choice fall and winter foods are leaves and stems of succulent forbs, grasses, legumes, and shrubs; and the bark and leaves of young trees and shrubs. Sumac is an important late winter food because of the high fat content in the bark.

Mourning Doves

Doves are almost 100 percent seed eaters. Nearly all of their food comes from either agricultural crops or from grasses and weeds associated with open land. Choice foods are seeds of barnyard grass, bristle grass, browntop millet, Japanese millet, corn, wheat, grain sorghum, wild peas, croton, pokeberry and sunflower. Doves also eat seeds of barley, oats, rye, soybeans, Korean lespedeza, cowpeas, and Egyptian wheat. Doves do not generally feed in areas containing heavy, densely matted vegetation. Bare ground is preferred since the birds like to see the seed easily and avoid becoming wet in damp vegetation.

Bobwhite Quail

The bobwhite quail's diet consists of a variety of food items, mostly seeds, fruits, and insects. Choice natural foods are acorns, annual lespedezas, blackberry, butterfly peas, common ragweed, dewberry, Florida beggarweed, milkpeas, partridge peas, tick clover, and panic grasses. Quail prefer the seed of such agricultural foods as brown top millet, corn, cowpeas, grain sorghum, Japanese millet, lespedezas, and wheat. Insects are an important food item in that bobwhite chicks depend almost entirely on them

during the first few weeks of their life. The high protein content of insects is essential for the rapid growth of the chicks. After six to eight weeks, the diet gradually shifts to that of the parents. While the presence of food is important, more critical is its proximity to suitable cover, otherwise the food is of little value to the bobwhite.

Wood Duck

The wood duck is a dabbler, obtaining most of its food by tipping up and dabbling in shallow water. It also obtains food by foraging on the ground in woody swamps. The diet of adult wood ducks consists of about 90 percent plant matter and 10 percent animal matter. In years of good mast production, acorns are the most important food in Alabama during the winter season. The wood duck is especially fond of acorns from these oaks: water, willow, nuthall, cherrybark, and shumard.

Wood ducks search for small acorns on the forest floor and even in trees before acorns drop, but prefer acorns that fall into shallow water (15 inches or less).

Where acorns are absent, wood ducks depend on beechnuts, cypress cone scales and gall, and the fruits of many trees, shrubs and vines, such as elm, wild grape, swamp privet, and buttonbush. Seeds of sedges, grasses, wild rice, smartweeds, pondweeds, and water lilies are especially preferred.

Duckweeds are the most important food in beaver ponds. Agricultural foods consumed by wood ducks include browntop, pearl, foxtail and Japanese millet; grain sorghum, corn and soybeans. Animal foods are mostly spiders, flying and aquatic insects, and small crustaceans. Until they are about four weeks old, young wood ducks feed mostly on these invertebrate animals as their protein requirement is higher than adults.

TABLE I

Deer-Browse Plants in Alabama

Common Name	Scientific Name	Rating
Rattan Vine	<i>Berchemia scandens</i>	High
Fringetree	<i>Chionanthus virginicus</i>	High
Swamp Cyrilla	<i>Cyrilla racemiflora</i>	High
Strawberry Bush	<i>Euonymus americanus</i>	High
Yellow Jessamine	<i>Gelsemium sempervirens</i>	High
Hollies	<i>Ilex spp.</i>	High
Virginia Sweetspire	<i>Itea virginia</i>	High
Japanese Honeysuckle	<i>Lonicera japonica</i>	High
Buffalo-Nut	<i>Pyrolaria pubera</i>	High
Blackberry, Raspberry, Dewberry	<i>Rubus spp.</i>	High
Greenbrier	<i>Smilax spp.</i>	High
Red Maple	<i>Acer rubrum</i>	Moderate
American Beautyberry	<i>Callicarpa americana</i>	Moderate
Trumpet Creeper	<i>Campsis radicans</i>	Moderate
Sweet Pepperbush	<i>Clethra alnifolia</i>	Moderate
Flowering Dogwood	<i>Cornus florida</i>	Moderate
Smooth Hydrangea	<i>Hydrangea arborescens</i>	Moderate
Eastern Redcedar	<i>Juniperus virginiana</i>	Moderate
Yellow Poplar	<i>Liriodendron tulipifera</i>	Moderate
Sweet Bay	<i>Magnolia virginiana</i>	Moderate
Blackgum	<i>Nyssa sylvatica</i>	Moderate
Redbay	<i>Persea borbonia</i>	Moderate
Elderberry	<i>Sambucus canadensis</i>	Moderate
Sassafras	<i>Sassafras albidum</i>	Moderate
Sweetleaf	<i>Symplocos tinctoria</i>	Moderate
Wild Grapes	<i>Vitis spp.</i>	Moderate
Box Elder	<i>Acer negundo</i>	Low
Buttonbush	<i>Cephalanthus occidentalis</i>	Low
Sweet Gum	<i>Liquidambar styraciflua</i>	Low
Wax Myrtle	<i>Myrica cerifera</i>	Low
Sourwood	<i>Oxydendrum arboreum</i>	Low
Black Cherry	<i>Prunus serotina</i>	Low
Rhododendron	<i>Rhododendron maximum</i>	Low
Blueberry, Huckleberry	<i>Vaccinium spp.</i>	Low

TABLE II

Green Crop Planting Recommendations for Deer

CROP	SEEDING RATE PER ACRE
Clover, Reseeding Crimson	20-30 pounds broadcast
Clover, White	2-4 pounds broadcast
Wheat	90-120 pounds drilled or broadcast
Ryegrass, Winter	40 pounds broadcast
Vetch, Reseeding	20-25 pounds broadcast
Mixture:	
Clover, Reseeding Crimson	15 pounds broadcast
Clover, White	2 pounds broadcast
Ryegrass	10-15 pounds broadcast
Wheat	60-90 pounds broadcast
Vetch, Reseeding	15-20 pounds broadcast

TABLE III

Some Common Wild Plants That Provide Food for Quail

Annual Lespedezas	1	Huckleberry	2
Ash	2	Japanese Honeysuckle	2
Barnyard Grass	2	Johnson Grass	2
Black Cherry	1	Milkpea	1
Blackberry	1	Mulberry	1
Blackgum	2	Oaks	1
Bristle Grasses	2	Panic Grasses	1
Bull Paspalum	2	Partridge Pea	1
Butterfly Pea	1	Perennial Lespedezas	2
Common Ragweed	1	Pines	1
Cranesbill	2	Privet	2
Crotons	1	Smooth Sumac	2
Dewberry	1	Sweet Gum	1
Dogwood	2	Tick Clover (beggarlice)	1
Florida Beggarweed	1	Vetches	1
Grapes	2	Wax Myrtle	2

1-Choice—attractive and nutritious

2-Fair—useful when choice foods are not available

TABLE IV

Foods Most Commonly Found in Wild Turkey Crops Taken by Hunters in West Virginia

PLANTS	ANIMALS
Mushrooms	Spiders
Club mosses	Snails
Ferns	Millipedes
Grasses	Grasshoppers and katydids,
Sedges	Walking stick and locusts
Yellow adder's tongue	Wild indigo
Greenbrier	Clover
Hornbeam	Black locust
Beech	Beggar's tick
Oak	Holly
Pipe-vine	Maple
Spring beauty	Grape
Umbrella tree	Black gum
Witch-hazel	Dogwood
Hawthorns	Ash
Blackberry	Snakeroot
Cherry	Dandelion
	Crickets
	Stink bugs
	Moths
	Butterflies
	Beetles
	Flies
	Wasps and hornets
	Salamanders

Wild Turkey

Wild turkey foods are about 75 percent vegetative materials such as tender green leaves, seeds, berries, nuts, acorns, plant buds, and other items. The remainder is animal matter, mostly insects, but with lizards, crayfish, spiders, and other small animals. Fall and winter foods are most important because during these seasons until spring budding, food for turkeys is in lowest supply. Choice foods for late fall, winter and spring are acorns, beechnuts, chufa, corn, flowering dogwood, berries, wild grapes, pine seed and agricultural crops that provide green winter forage such as small grains and winter clovers. Preferred foods of summer and early fall are blackberries, bahai grass, mulberries, browntop millet, cowpeas, corn, peanuts, grain sorghum, soybeans, wheat, and the seeds of many grasses and weeds. Young turkeys depend almost entirely on insects and grass seeds for food during their first few months. Insects furnish protein that is needed for rapid growth of the poults.

Conclusion

By comparing the food habits of a number of wildlife species, both the differences and similarities of food preferences can be shown. Depending upon forest management objectives, natural or cultivated foods can be enhanced for the benefit of single or multiple wildlife species. Silvicultural practices can be planned to encourage preferred natural foods. Cultivated food plots, while incurring additional expenditure of time and money, are worthwhile in that they enhance selected wildlife species and improve human visibility of wildlife.

A consideration worth mentioning at this point is that overpopulation of one species may interfere with cultural activities designed to enhance populations of another species. Another point to consider is that silvicultural and cultural practices designed for the benefit of game species, frequently benefit non-game wildlife species, also. And finally, all practices which manipulate wildlife habitat must be species and site specific.

Contact with the local forester and wildlife biologist is highly recommended. For additional information, please feel free to contact the author, your local Alabama Forestry Commission, or your local Alabama Game and Fish Division office.

The author wishes to thank the Alabama Department of Conservation and Natural Resources, the Soil Conservation Service, and the U.S. Forest Service for information used in the preparation of this article. ♀

*A new lespedeza that's good for quail
and usually shunned by deer*

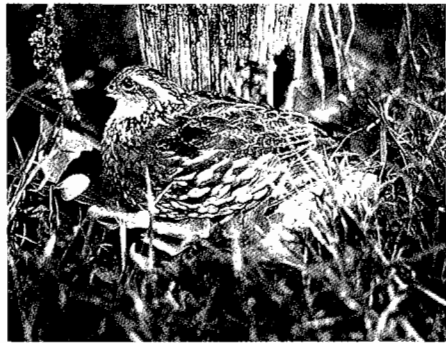
AMQUAIL

by ROBERT WATERS, Biologist, U.S.D.A. Soil Conservation Service

“DO YOU KNOW of a perennial that produces high quality winter food for quail and that deer usually won't eat? For many years, I've used bicolor, but deer won't let me grow bicolor now. They have overrun our area, and they completely devour the bicolor. We need a perennial so it won't have to be replanted every year.”

I've heard that statement and similar ones hundreds of times during the past 20 years, especially from landowners, quail hunters, and managers of quail preserves in parts of the state where the deer population is high.

Heretofore, there was no perennial that would fill their need—none that would produce high quality winter food for quail yet be browsed little by deer. But today there is! It's Amquail, a new variety of shrub lespedeza. This new lespedeza is truly a bright spot on the quail management horizon. In fact, it's the only bright spot in habitat management for quail in Alabama in several decades.



Starting in the winter of 1987-88, seedlings of the new lespedeza will be available from the Alabama Crop Improvement Association, South Donahue Drive, Auburn University, Alabama 36849. The association can be reached by dialing (205) 821-7400 or 826-4952.

The official name of the new lespedeza is “Amquail” thunberg lespedeza (*Lespedeza thunbergii* (DC) Nakai), PI-490362. It's commonly called Amquail. The “Am” in its name comes from the fact that the new variety was developed by the Soil Conservation Service at its Plant Materials Center near Americus, Georgia. The

“quail” comes from the fact that the new lespedeza produces an abundance of high quality winter food for quail. Hence the name “Amquail.”

Until about the mid-sixties, *Lespedeza bicolor*, or bicolor as it's commonly called, could be planted in Alabama on nearly any suitable site without fear of destruction by deer. Before then, the deer population in most of the state was not a threat to bicolor.

However, that's not true today. The Alabama Game and Fish Division estimates that we now have about 1,300,000 deer in the state. By anybody's standard, that's a lot of deer. In order for these deer to survive, they require food nearly every day; and to them, it doesn't matter that bicolor was planted for quail and not for deer. So, they go ahead and help themselves to the small, well-distributed, and often highly fertilized bicolor plots until all the plants are destroyed. Dense populations of deer are less likely to prevent Amquail from producing enough seed to feed quail.

To quail hunters, landowners, and managers of quail plantations in the state, a dreadful thing is that our deer population on many areas will, in all likelihood, continue to increase for several more decades, thereby further compounding the deer-bicolor problem and making Amquail even more desirable as a producer of high quality winter food for quail.

Why do deer literally eat up bicolor and do little browsing on Amquail? Nobody seems to know. Maybe it's because Amquail contains more tannic acid or some substance that's distasteful to deer.

Amquail is a perennial legume—a shrub that usually grows six to eight feet high. It resembles bicolor. In fact, from a distance, it's difficult to distinguish Amquail from bicolor, especially in winter.

Individual plants may contain up to six, eight, or more stems. These stems rise from a crown-like stump near the ground. Young stems are purplish. For the most part, the flowers are rose-purple, but a few are white. The plants with white flowers seem to have the same desirable seed production characteristics and resistance to

deer browse as do plants with purple blooms. Peak of blooming occurs from the middle of August to early September.

Most of the seed are black, but a few are reddish brown. The seed ripen in October and November. Some fall to the ground soon after they ripen. Others remain on the plant and are shed gradually during fall and winter.

It's from late December to March 1, though, that the seed are most valuable to quail. At that time, some coveys feed almost exclusively on the seed of Amquail when they are available. That makes hunting easier and more enjoyable, of course. All the hunter needs to do, then, is take his dogs from one plot of Amquail to another. By doing that, he can find nearly every covey on a tract of land, especially in late December and in January and February.

Size of Plots

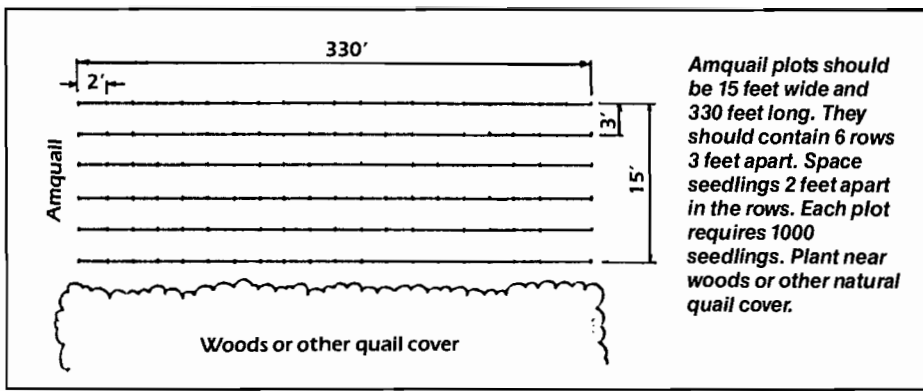
Amquail seedlings should be planted in plots 15 to 20 feet wide and 300 to 400 feet long. A convenient size is 15 feet wide and 330 feet long, especially if you are planting 1000 seedlings per plot. Hereafter when we refer to a plot, we are thinking of one with those dimensions—15 feet by 330 feet. One thousand seedlings are required to plant a plot. Therefore, if you are going to plant 12 plots, you will need 12,000 seedlings and so forth.

Width of Plots

From the standpoint of producing quail food, the width and shape of Amquail plots usually make little difference. But from a quail-shooting standpoint, width is very important. Shooting and bird dog work are difficult in plots more than 20 feet wide. Here's why—a dog on point in a plot wider than 20 feet may be difficult to find unless you walk into the plot. And if you walk into the plot, it's almost impossible to swing your gun while standing in the Amquail. Remember that it usually grows 6 to 8 feet



Amquail seed, a choice winter food of quail.



high. On the other hand, if plots are no wider than 20 feet, you can usually see a dog on point in the Amquail; and you can usually flush the birds without walking into the plot. Therefore, if you are going to harvest your quail by sport hunting—and there's no biological reason for not doing so—your plots should be no wider than 20 feet. The ideal width, however, is 15 feet, especially if you are planting 1,000 seedlings per plot.

Number of Rows and Spacing of Seedlings

Plots should contain 6 rows spaced 3 feet apart. Seedlings should be placed 2 feet apart in the rows. As stated earlier, 1,000 seedlings are required to plant a plot (15 feet by 330 feet).

The reason for six rows spaced three feet apart and for placing the seedlings two feet apart in the rows is that such an arrangement gives good ground coverage over the entire plot. Good ground coverage is important because it provides enough Amquail plants for ample seed production and it forms an umbrella covering over the ground.

The "umbrella" shades grasses and weeds from under the inside four rows and affords overhead cover for quail. The two outside rows usually have grasses and weeds growing under them at all ages. However, if grasses and weeds grow under the inside four rows after the first two or three years, the plot is not providing the most benefit to quail. It's producing seed, of course, but the seed fall into the grasses and weeds where they are of little value because quail won't scratch through the dense vegetation to find them.

Where To Plant

Amquail produces more seed when planted on fertile sites, but it grows well on infertile soils, also, especially if it's limed and fertilized properly.

Plant near woods, thickets, or other natural quail cover. Plant where there's a

shortage of winter food for quail or where you want to concentrate quail for ease of hunting. In most instances, Amquail plots can be located where they will not interfere with other activities. Good locations are field and woodland borders, idle fields, utility rights-of-way, openings in forestland, along ditch banks and hedgerows, and on land in set-aside government programs such as the Conservation Reserve Program.

An ideal location, if the soil is suited, is the edge of crop fields, especially the sloping edges near woods and other natural quail cover. If it's properly limed and fertilized, Amquail grows well in the partly shaded areas around many crop fields.

In addition to Amquail, some landowners will want to plant a 15-foot strip of sericea between the Amquail and crop field, making a total width of 30 feet and a length of 330 feet for the entire planting.

Sericea is a perennial legume that usually grows two to three feet high. It produces an abundance of seed; but quail usually don't eat them, especially if other foods are available. Sericea produces excellent roosting and nesting cover for quail. It should be planted between March 1 and August 15. Obtain instructions for planting sericea from the Soil Conservation Service, your County Extension office, or some other reliable source.

Besides providing permanent food and



Field border planted in Amquail and sericea. Amquail is near the woods and sericea between the Amquail and crops. Ideal for quail on cropland.

cover for quail, field borders planted in Amquail and sericea help control erosion, provide turn rows and travel lanes for farm machinery, and improve the appearance of crop fields.

If possible, locate plots several hundred feet from thriving stands of kudzu and Japanese honeysuckle. After a few years, these vines can overtop an Amquail plot and ruin its value to quail. Avoid planting on lime soils of the black belt, on deep fine sands, on heavily shaded areas, and on areas grazed by livestock. One plot of Amquail for every 12 acres usually supports high quail populations.

When to Plant

Best dates for planting Amquail seedlings are December 1 to March 1. Acceptable dates are November 15 to March 15.

Freshly dug seedlings give better results. Therefore, have your soil prepared and plant seedlings immediately after receiving them from the Alabama Crop Improvement Association. Otherwise, store them in a barn, basement, or other cool, dry place until they can be planted. Avoid "heeling in" which may cause a break in dormancy and result in poor survival.

Soil Preparation

Apply lime and fertilizer according to soil test recommendations. Apply both at the time of soil preparation. If a soil test is not made, obtain instructions for applying lime and fertilizer from the Soil Conservation Service, your County Extension office, or some other reliable source.

How to Plant

The three common methods of planting Amquail seedlings are furrow, dibble, and mechanical tree planter. All give satisfactory results when seedlings are planted properly and when grasses and weeds are controlled during the first growing season, especially on land that's been in crop production.

Complete instructions for planting Amquail seedlings and for maintaining plots will be included with your seedlings when you receive them from the Alabama Crop Improvement Association.

More Information

Information on the price and shipment of seedlings and on maintaining Amquail plots is available from the Crop Improvement Association at the address already given.



Popular recreation in Alabama

by HENRY A. MILLER, State Conservation Engineer, U.S.D.A. SCS, Auburn
and H. D. KELLY, Biologist, U.S.D.A. SCS, Auburn

OVER FOUR THOUSAND SMALL PONDS have been built in Alabama since 1975. Many of these ponds were built for recreational use.

The demand for recreational use of ponded water has increased tremendously in recent years. Fish production and the recreational use of ponds provide many pleasant hours of fishing, boating, swimming, and attractive settings for picnics and play. The following consideration should be used if you are building a pond for any use.

Selecting the Pond Site

Soils in the pond area should be suitable to hold the desired depth of water. The soil *must* contain a layer of material that is impervious and thick enough to prevent excessive seepage loss. Clay, silty clays, and sandy clays are usually excellent to satisfactory soils. Coarse textured sands, sandy-gravels, and coarse gravel mixtures

are highly impervious land and therefore, are usually not suitable. However, if an impervious layer of soil that is twelve inches thick or better exists at a reasonable depth, then a cut-off can make the site suitable. Also, the absence of an impervious layer over part of the pond area, away from the dam site possibly can be treated by use of a compacted clay blanket to make it suitable to hold water.

The foundation under a dam must insure suitable support for the structure and provide necessary resistance to the passage of impounded water. Several deep soil borings should be made along the centerline of the proposed dam, from abutment to abutment, to evaluate site suitability. This investigation should be performed by a person experienced in soils and pond building such as a soil scientist, a professional engineer, or geologist.

During the investigation three other decisions need to be made. First, is there

ample suitable building material for building the dam near the site? Material selected must have enough strength for the dam to remain stable and be tight enough when properly compacted to prevent excessive seepage or harmful percolation of water through the dam. In some areas of the state soil material can be taken from the pool area on ridges that extend into the pool, from the surrounding landscape, and from the emergency spillway area. It is usually not desirable to take material closer than 300 feet of the dam in the pool area except in the black belt area of Alabama. Before you take material from the pool area, have the site evaluated by a professional soil scientist, soil conservationist, engineer, or geologist.

Second, is there a suitable site for a vegetated early emergency spillway where the soils and topography will allow peak flows from large storms to safely discharge well downstream of the dam? The soils

must be resistant to the erosive velocity of the water flow or the flow must be spread out over a wide area. No matter how well a dam is built, it can be destroyed during the first severe storm if the emergency spillway capacity is inadequate. The function of the principal and emergency spillways is to pass excess storm runoff around the dam so water does not rise high enough to damage the dam by overtopping.

Third, what type of trickle tube or principal spillway is needed to protect the vegetated emergency spillway against spring flow, low storm flows, and prolonged storm flows? A riser pipe set at normal pool level connected to a pipe placed under the dam provides this protection, allows you to drain the pond, and prevents the entrance of trash fish into the pond area. The crest of the riser should be designed to take the desired flow from a one to ten year 24-hour design storm (a severe storm that would occur on an average once within a one to ten year period). In no case should it be less than 12 inches below the top elevation of the level control section of the earth emergency spillway. A cool water release or trash rack should be placed over the riser pipe to reduce trash inflow, and lessen the likelihood of beavers plugging the pipe.

Planning and Designing a Pond

A safe earth fill dam can be built on most foundations if you thoroughly investigate the foundation, make needed adjustments, have sufficient quantity of good material, and adapt the design and construction to the site conditions.

The design should be prepared by a professional experienced in pond building.

All Soil Conservation Service field offices, some contractors, and some professional engineering firms are qualified to perform this service. If the pond is used for recreation, the minimum top width of the dam should be 12 feet. If the dam is used for a one lane road, the top width should be at least 16 feet.

For stability, the side slopes should not be less than two-and-a-half feet horizontal to one foot vertical on each side. Many soils such as silty clay and clay soils in the black belt area should be three to one or flatter for stability and ease of maintenance. The finished slopes should be smooth and uniform for vegetation establishment, operations and maintenance, and visual quality.

Excavated emergency spillways should be placed on the abutments in undisturbed soil. As a minimum, the spillway should be designed to pass the runoff from a 25-year, 24-hour storm (one that would occur on an average once within a 25 year period).

Freeboard is added height to the emergency spillway flow depth which determines the top of the dam. This is a safety factor to prevent overtopping by wave action or unusual rainfall events.

Installing an anti-seep collar around the drain pipe is a good investment. This collar should extend out into the fill a minimum of 24 inches in all directions perpendicular to the pipe. One anti-seep collar is adequate if the dam is less than 14 feet high.

During the design and construction of a pond is the time to plan on deepening the waterline to a depth of two to four feet; install a pier, dock, fishing dike, or island; clean and smooth the pond bottom; or add a beach. The cost will be much less than at

a later date and will add to the enjoyment of the pond.

Establishing Vegetation

All completed dams, emergency spillways, borrow areas and other disturbed areas will need to be protected from erosion. This will improve operations and maintenance. As soon after construction as possible, establish a good cover of sod forming perennial grasses and legumes. Preparing a seedbed can best be done by plowing or disking and incorporating fertilizer, lime, and a perennial grass and legume mixture.

During construction it is a good idea to salvage surface soils and spread them back over fill and spillway areas and also over cut slopes to enhance plant establishment and growth. Mulch the seeded area with a thin layer, about one-and-a-half tons per acre, using hay or cereal grain straw. Some owners prefer to sod or sprig adapted plants like bermuda grass or centipede grass.

Operating and Managing the Pond

A pond, no matter how well planned, designed, and built must be adequately operated if its intended purposes are to be realized for its expected life of 40+ years. The lack of good maintenance has caused severe damage or failure of many dams and spillways. Dams should be inspected annually and after severe storms or long, dry periods. Repair all damaged areas and replace materials as soon as possible to reduce costly repairs or total replacement. Once a recreational pond is completed and filled with water, it should be stocked properly with largemouth bass, bluegill, and redear sunfish.

The fish will likely be secured from the fisheries section of the Game and Fish Division, Alabama Conservation Department. A fisheries biologist will check the pond for size and the presence of trash fish. If trash fish are present, the biologist will make the necessary recommendations to be followed to remove them before stocking. Pond management techniques which increase the likelihood of a successful fish population and good fishing will be discussed with the owner. This will include the use and advantages of a good fertilization program.

Assistance in planning, design, preparing plans and specifications for pond construction, and management is available from any local Soil Conservation District, soil conservation specialist, or private consultant. Assistance with management problems also may be obtained from the State Fishery biologists.



Preserve the wild life.

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Forest Service and your State Forester



LONGLEAF PINE

A UNIQUE PINE PRODUCT!

by GARY FAULKER, Chief, Utilization and Marketing Section

EARLY SETTLERS ENCOUNTERED a virgin longleaf pine (*Pinus palustris*) forest from southeastern Virginia to eastern Texas. Some have estimated the original total acreage to be 50 to 60 million acres. Now that this land is settled and developed, only 5 million acres of longleaf pine remain.

What factors contributed to such a drastic change? Conversion to other uses and species, unfavorable cutting practices, and failure to provide proper regeneration conditions are the principal culprits. But recent research and an array of successful experiences are giving hope that some of the lost ground can be regained for this valuable Southern pine species.

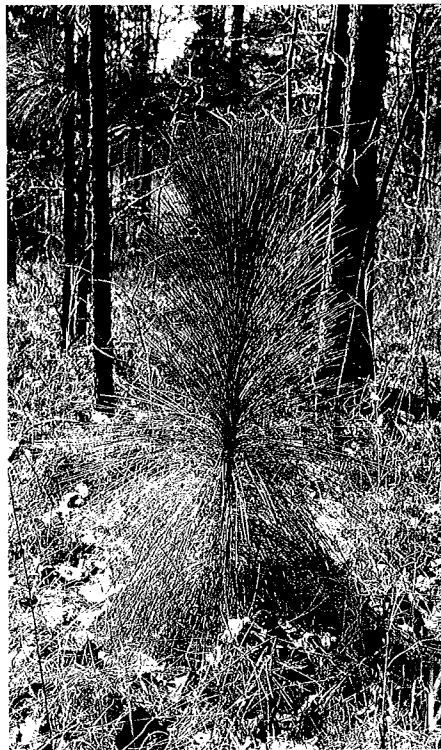
In Alabama longleaf pine forest stands are distributed south from Cherokee County; along the full length on the east side of the state; from Walker County, south to Hale, Dallas, Elmore and Autauga Counties; on the west side of Alabama from Sumter and Choctaw Counties eastward, and south to the Gulf and the Florida line.

Based on figures from the 1982 U.S. Forest Service inventory, Alabama has 1,236.4 million cubic feet of longleaf pine. Itemized, this figure represents the total of 1,208.7 million cubic feet of growing stock, 22.9 million cubic feet of rough timber, and 4.9 million cubic feet of rotten timber. The total figure of 1,236.4 million cubic feet of longleaf pine represents approximately 4.9 percent of all live timber volume in Alabama, excluding noncommercial species. Of pine species, longleaf represents 10 percent of all live timber volume.

portion and medium to strongly acid. Drainage often ranges from good to excessive.

Poorly drained sites are seldom occupied by longleaf because of seed intolerance to flooding and the absence of fire needed to control competing hardwood vegetation. Longleaf grows best in pure even-aged stands.

Longleaf timber owners should consider managing for and marketing poles and piling. Historically, pole stumpage is about 30 to 40



percent above the price of sawlog stumpage. Longleaf is the preferred species of Southern pine for poles and piling. Even-aged, well-stocked stands grow the most linear feet of poles because there are more trees per acre. Also, trees in dense stands have less taper.

Longleaf should not be grown exclusively for pulpwood products. Because of the slower early growth, its greatest economic returns come from larger products grown on longer rotations, such as sawtimber, poles, piling, and veneer logs. Rotation lengths of around 60 years will produce high quality products on average sites of 70 to 80 feet site index.

Because longleaf pine readily expresses dominance, precommercial thinning is rarely needed to prevent stagnation. Use this treatment only if dominant saplings exceed 1500 per acre and early sawlog production is an objective. Residual densities after precommercial thinning probably should be 500 to 700 trees per acre at about the age of 10 years. Commercial thinnings should be influenced by product and management objectives and

almost always should be from below to favor crop trees. If poles are the objective, thinnings should be lighter than usual and emphasis placed on leaving the best pole candidates and less on spacing. If naval stores and large sawtimber are desired, then thinnings should be heavier to encourage the development of a fuller crown and larger stem diameter.

Wildlife and range management can easily coexist with longleaf wood production objectives. A schedule for burning on a three-year cycle will retard hardwood brush growth and favor legumes and other herbaceous plants that offer an ideal habitat for bobwhite quail. Other favorite game species such as white-tailed deer and wild turkey also benefit by the burning and thinning practices needed for good stand management.

Because of the heavy grass cover normally occurring over much of the longleaf range, cattle grazing is a frequent combination use of the forest. Only during the stand regeneration and early seedling-sapling stages is grazing incompatible with timber management objectives. Cattle should be excluded from longleaf stands in these stages.

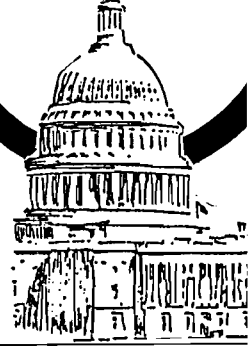
The gum naval stores industry uses longleaf oleoresin to distill into a variety of products. This use has dropped dramatically in the last 20 years, even though research has developed methods that are considerably less destructive to the tree boles, which are subsequently used for other products. ♠

References

- Dennington, Roger W. and Robert M. Farrar. *Longleaf Pine Management, Forestry Report R8-FR3*, USDA Forest Service, Southern Region, 1983.
- Forest Statistics for Alabama Counties in 1982, Resource Bulletin SO-97*, USDA Forest Service, Southern Forest Experiment Station, New Orleans, Louisiana, 1985.
- York, Harlan H. *100 Forest Trees of Alabama*, Alabama Forestry Commission.

LANDO

LEGISLATIVE
ALERT



by MELINDA COHEN, Legislative Liaison, National Association of State Foresters

Congress will have many unfinished items on the agenda when they return from their extended August recess—namely appropriations bills. The House has completed its fiscal year 1988 Appropriations Bill, which contains funding for State and Private Forestry programs. Many people were watching this closely as many programs could be severely affected.

Funds for Forestry

State and Private Forestry (SPF) programs were restored to 1987 levels, with an increase for pest suppression on federal lands. The House Appropriations Committee failed to include the NASF marketing initiative in its 1988 Appropriations Bill despite widespread support by forestry, industry, and conservation groups and a letter to Interior Subcommittee Chairman Yates (signed by 41 congressional representatives). Fortunately, there is still a chance that this important marketing program could be included in the Senate appropriations bill. The Senate has not even begun to consider appropriations bills at the subcommittee level and will probably begin the process shortly after the August recess. Senators Nunn (GA) and Durenberger (MN) sponsored a letter to Senate Subcommittee Chairman Robert Bird (WV) with 29 signatures, supporting '87 funding for SPF with an additional \$5 million for marketing. Both Senators from Alabama (Heflin and Shelby) signed the letter. Once the Senate has completed its bill, the House and Senate will conference the bill to determine what levels to include in the final bill.

The Tennessee Valley Authority (TVA) recently held a luncheon in Washington for congressional staff to discuss TVA's

Wood Export Development Pilot project. Jean Allen of TVA made a presentation on this successful project which increased exports of wood products in the 44 county pilot areas of northern Alabama and eastern Mississippi.

The Soil Conservation Service received a boost in funding to implement the 1985 Farm Bill in 1987 through a supplemental congressional appropriation. There was serious concern about carrying out the program without additional funding, and this funding will provide a temporary solution. The Conservation Districts have proposed a contract with SCS to do the work. This work would entail mostly farm conservation plans. This avoids the problem of hiring additional SCS employees and gives the district the funding to hire experts at the local level.

Conservation Reserve Program

A more permanent funding base is going to be necessary to continue implementing the conservation provisions of the 1985 Farm Bill. Senator Nunn (GA) introduced a bill in July to increase the acreage allowed in the conservation reserve from 45 million acres to 65 million acres and to continue funding for CRP through the Commodity Credit Corporation (CCC). Without CCC funding, the CRP will probably not be able to sign up additional acreage in FY 88. In addition, the bill, *S. 1531*, calls for expansion of the reserve, improving incentives for implementing farming practices which will not adversely affect groundwater quality and supply.

Tree planting got another boost—a recent interoffice memo, between department heads of Agricultural Stabilization and Conservation Service (ASCS), the

Extension Service, the Forest Service, and SCS emphasized the need to increase the number of tree plantings under the Conservation Reserve Program. The memo specifically directs agency personnel, "... should emphasize tree planting under the CRP in contacts with landowners and make the appropriate referrals to State forestry agencies for the development of tree planting plans." NASF will be watching closely to see that this new directive is upheld.

While the success of the Conservation Reserve Program along with conservation easements has brought some relief to farmers on marginal cropland, there is still a growing problem within the Farm Credit System (FCS). This financing system, consisting of over 37 banks, is the largest single farm lender in the United States. The system's losses for 1986 are expected to approach \$3 billion. Farmers' debt problems are compounded by the fact that FCS loans have interest rates 1 to 2 percentage points higher than other lending institutions. Farmers unable to secure loans from private banks and other traditional lending sources must turn to FCS banks for funds—at the higher rate. This seems ludicrous in light of heavy debt loads and foreclosures.

An opportunity exists which would aid the farm lending system and ensure conservation practices—passing legislation to attach the requirements similar to the lending conditions attached to the Farmers's Home Administration through the 1985 Farm Bill. Assistance provided to the Farm Credit System would only be available if the FCS' lending activities were to be contingent upon approved conservation plans, such as tree planting to prevent erosion.

Other opportunities for conservation

WINNERS

measures exist on inventory lands. The current FCS inventory of lands acquired by default or voluntary sale is estimated at 2.2 million acres. One option is for the federal government to purchase inventory lands instead of a straight bail-out loan. In turn, these inventories would then be resold to farmers or conveyed to appropriate state and government agencies. Ideally, these lands should be resold to beginning, small, or family operators who agree to farm land according to locally approved conservation practices.

The government could also purchase easement rights to highly erodible/fragile lands in the FCS inventory and turn them over to the FmFA to use conservation easements on the property. Another option would allow highly erodible lands in inventory to be enrolled in the Conservation Reserve Program.

Members of Congress are currently drafting bills to aid the Farm Credit System, and considering combinations of the above solutions. Past policies of the FCS encouraged the expansion of agriculture, to the point where lands unsuitable for sustainable production, including some forestland, were turned into cropland, and surpluses of farm

commodities have put the U.S. farmer in a dangerous debt position.

Tax Update

Congress is looking for revenue enhancements or tax increases, and is considering changes that may affect forest landowners. Specifically, they are looking at the Inheritance Tax and possible reductions in the Reforestation Tax Credit. No major changes have been slated in this year's bill.

EPA Makes Regulatory Changes

The Environmental Protection Agency (EPA) finally issued new ambient air quality standards after nine years of comments and review. The new standards, referred to as PM10 (particulate matter of 10 micrometers), are in effect as of June 3, the date of release.

The 1977 amendments to the Clean Air Act require EPA to revise ambient air quality standards every five years. PM10 was chosen as the new standard because EPA's medical evidence showed that particles of this size contributed most directly to adverse human health effects.

Particulate matter air pollutants are largely dust, dirt, soot, *smoke*, and liquid droplets directly emitted into the air by sources such as factories, power plants, cars, construction activity, *fires*, and natural windblown dust.

Some counties and states will be required to submit new State Implementation Plans (SIPS). This may mean new state regulations regarding prescribed burning and other forest management practices.

EPA is also making plans to enforce the Endangered Species Act. They had to scrap their original plan of using the forestry and mosquito larvicide clusters for voluntary labeling practices this Spring. They have, however, begun to distribute range maps to the states for comment and review. The EPA range maps are for currently occupied range, and not historical range. Forest landowners will soon have to consult the U.S. Fish and Wildlife Service before using certain pesticides in an endangered species' range. This action is EPA's response to a recent court case pressing them to comply with the Endangered Species Act. ♣

by FRANK SEGO, Legislative Liaison, Alabama Forestry Commission

STATE



IT WAS AUGUST 3, 1987. The hour was early—very early. The warm mid-summer sun was rising over Alabama's State House. Already, sleepy-eyed legislators, lobbyists and clerks were gathering for the 30th and final day of the 1987 Regular Session.

One veteran Capitol observer, sipping from a day-old cup of coffee, drawled, "I've been around here nearly 30 years and I ain't never

seen one to beat this." It didn't take an expert in Alabama politics to know he was referring to the unusual flow of events that had transpired over the first 29 days of legislative action.

He had a point, especially when you consider that this session got off to such a flying start, as reported in our last "Legislative Alert," with both budgets literally leaping

out of the House Ways and Means Committee in record time.

This scenario was followed by the passage of a number of the governor's tort reform bills. These were virtually the same bills that had wallowed to death in the 1986 session. Other legislation seemed destined to get through in an unprecedented length of time, thus avoiding the log jam that often occurs

on the final legislative day. Insiders were starting to marvel at the effectiveness of this legislature.

Filibusters Slow the Pace

But, alas, along comes proposed legislation to allow local school boards to call for tax referendums and to set financial and academic standards for schools. It passed the House by a single vote after fierce opposition from a number of organized groups. It set off sparks in the Senate that kindled lengthy debates and filibusters, and almost "busted" up the harmony between House and Senate leaders. Fact is, the Senate continued its talkathon past midnight on more than one occasion, causing two legislative days to be burned in the process.

The Senate had earlier gone through a week-long filibuster on increasing the speed limit, mandating the use of seat belts and limiting lawsuits against architects and engineers.

Court Blocks Budgets

A new development rocked the legislators on June 23 when the Alabama Supreme Court unanimously thwarted plans to combine appropriations for non-State agencies in the General Fund and Education budgets. This sent members of the money committees back to the trenches in an effort to resolve the appropriations dilemma, but time was running out.

Conference committees worked feverishly through a 16-day recess to have the documents ready for passage on August 3. Even then, it took some fast footwork to get the General Fund gavelled through as the minute hand churned toward the shadow of midnight.

Forestry Bills Pass

In the midst of this, it appeared that forestry legislation would be forced to wait for another session, as would scores of other bills affecting the people of Alabama. On the final day, however, a breakthrough resulted in four forestry-backed bills being placed on the special order calendar. By midnight the following Senate legislation had passed the House and the bills went to the Governor's office:

S-203 by Senator Ann Bedsole—*Timber Theft Condemnation Act of 1987.* It establishes procedures for seizing, confiscating, and condemning vehicles and equipment used in connection with violation of the state's felony theft laws

wherein timber or lumber is stolen. The bill had been sought vigorously by the Forestry Commission and was in the Governor's package for 1987. (Act No. 87-711)

S-264 by Senator Perry Hand—*Insect and Disease Amendment.* The bill amends the current Emergency Forest Fire Fund law, adding "insect and disease" to the language where there is automatically appropriated \$180,000 at the beginning of each fiscal year. The Emergency Fund would not exceed the accumulated total of \$1 million. Monies in the fund would be expended from time to time as deemed necessary by the State Forester, with approval by the Governor. (Act No. 87-821)

S-254 by Senator Foy Covington—Amends the Code making expense provisions optional where State employees attend training sessions provided by contract with the employing agency, and where expenses for meals and per diem are paid by the contract. The Forestry Commission took the lead in pushing for passage of this bill which was favored by a number of other State agencies. (Act No. 87-823)

Another measure to pass during the recent session was *House Joint Resolution 120* by **Representative Jimmy Warren** to fund the Legislative Forestry Study Committee for another year. The Study Committee was created by a 1979 Act of the Legislature to study all facets of forestry in Alabama.

AFC Gets Level Funding

It may also be noted that the Forestry Commission was able to retain level funding in the General Fund budget for Fiscal Year 1987-88. This, at least, prevented the AFC from having to cut back on two-man fire crews in many counties. As **State Forester Bill Moody** explained to the budget committee, "It is downright criminal to send one man out on a fire in this state."

The passage of the budgets and a flurry of last minute legislation brought an end to the 1987 Regular Session and thus averted the possibility of a special session. The 1988 Session will begin in February.

Oh, by the way, as the session ended with weary legislators and lobbyists filing out of the State House, I stumbled into our veteran Capitol Hill observer. As he sipped on a steaming fresh cup of coffee, he winked and mumbled "I told you I'd never seen one like this in my 30 years. Believe I'll retire and buy some good forestland." ♣

FOR

AS A LANDOWNER approaches the decision for harvest, it is a critical time to evaluate the types of products which have grown in his timberlands. The product value of the harvest will be related to local market demands and the economics of supply for those wood products grown. As markets, consumer purchasing power and preference, industrial technology, utilization of the resource, and timber supplies are changing, dynamics for the demand of forest products from timberland owners are occurring. What are the products in demand from Alabama's timberlands? There are a variety of products grown in landowner timberlands which are desired by local buyers as specified by local market conditions. The following discussion will attempt to categorize the types of products in demand and available from Alabama forests, but is not intended to discourage any creative thought for other uses by timberland owners.

Pulpwood

Alabama is blessed with a supply and demand for pulpwood, and in this state, pulpwood is bread and butter. The demand for pine pulpwood has been a staple for landowners for generations and will continue to be so although significant increases in hardwood utilization is occurring in Alabama's pulp and paper industry (38 percent increase in the utilization of hardwood from 1982 to 1985). The state has 14 pulp and paper mills which procure from all counties in Alabama. These mills must be fed fiber. Therefore future pulpwood fiber demands will be consistent for pine and particularly hardwood (FIGURE 1).

Roundwood pulpwood nationally supplies approximately 60 percent of the wood fiber utilized as raw material for the pulp and paper industry. The remaining 40

BEST PRODUCTS You can't see 'em or the trees!

by GARY M. FAULKNER, Chief, Utilization and Marketing

percent of the raw material is furnished by wood fiber by-products such as slabs, edgings, and sawdust. Of the 60 percent roundwood used, two-thirds is softwood and one-third is hardwood. More hardwoods are likely to be used as new pulping technologies are developed and adopted (McKeever, David B., 1987).

In Alabama, the latest utilization figures (1985) show 55 percent of pulpwood roundwood is softwood, and 45 percent is hardwood. This is significant as, in 1982, softwood pulpwood was 66 percent and hardwood was 34 percent (both percentages based on Alabama Forestry Commission's Forest Industry census for those calendar years). This is a verification of the increased demand trend for hardwood pulpwood. Therefore, timberland owners should be aware of the changing market opportunities for their pulpwood trees.

Sawtimber

Alabama traditionally has been known to have a very active sawmill industry. At the turn of the century, there were literally thousands of various size sawmills (mostly small) located throughout Alabama. However, in recent years, sawmill strategies have changed. These changes are due in part to economics in operation (cost of production), sawtimber availability, consumer preferences and wood substitutions, and international trade pressures, to name a few.

Timberland owners' sawtimber trees should be highly valued as high quality, sawtimber size trees are consistently in demand (FIGURE 2). Through time, as the smaller trees grow into sawtimber size and quality, the dollar value grows at an increasing rate per tree. A sawtimber owner should market these sawlogs as competitively as possible; although, not

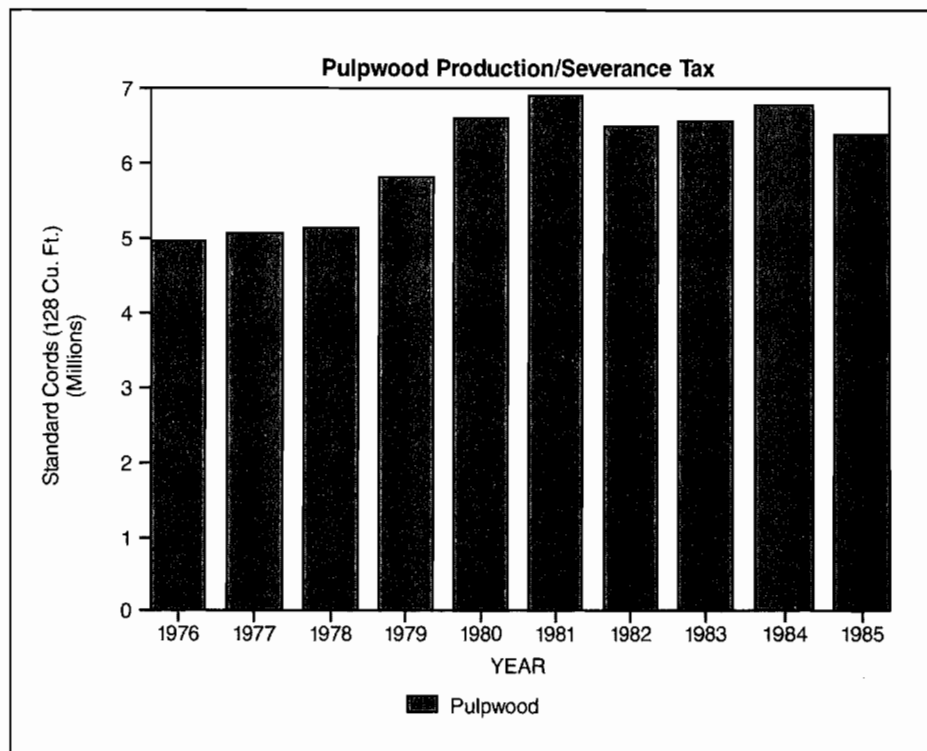
all conditions are subject to the timberland owner's control.

It is noteworthy to profile Alabama's sawmill industry at this point. The latest complete industrial survey (Anonymous, 1982) showed that there were 138 active sawmill operations, 58 idle operations, and 6 new sawmills. The total number of active sawmills had decreased by 85 since 1971 (Bertelson, 1972). Sawmills with an annual production in excess of 3,000 MBF increased from 74 mills in 1962 to 135 in 1971, and decreased to 122 in 1982. Of the total number of active sawmill operations canvassed in 1982, 134 (56 percent) were principally softwood and 104 (44 percent) were hardwood. Average annual sawmill

production has increased steadily over the last three decades. Hardwood sawmills averaged 3.5 million board feet and softwood sawmills 10.7 million board feet in 1982. Sawmills utilized approximately 1.80 billion board feet of roundwood in 1982 (equivalent to 150,000 new houses). This compares to approximately 1.52 billion board feet of sawlogs processed in 1971 (Bertelson 1972). Of the total roundwood harvested in 1982, softwood sawmill operations processed 1.43 billion board feet (80 percent) and hardwood sawmills 0.37 billion board feet (20 percent).

To be competitive, and therefore provide timberland owners with markets for their

FIGURE 1



sawtimber trees, sawmills in Alabama have utilized various computer technology to yield greater lumber production from each sawlog or "grow wood in the mill." Also, new high technology equipment has been installed at various mills to assist efficiency and productivity, all of which help to reduce costs and increase profits over the life of the operation. Many of these production measures are due in part from market (consumer preference) and resource pressures.

In terms of market variables, sawtimber demands are dependent upon the number of building starts, prime interest rates or, in other words, construction and the economy in general. The lumber sawn from timberland owners' sawlogs are utilized for a great number of value added products and projects. If there are changes in demand, such as lower priced foreign lumber, substitution of other materials for wood, inflated cost of new homes, or environmental regulations on preservative treated lumber, the end result may be reduced market demand for the timberland owners' sawtimber.

The U.S. Forest Service recent timber inventory (1982) gives supply observations regarding sawtimber availability. Total sawtimber volumes have increased by 12 percent in Alabama; softwoods by 5 percent (44,500 MMBF) and hardwoods by 27 percent (27,100 MMBF). However, opportunities for sawtimber availability for sawmills are not uniform throughout all regions in Alabama. Softwood sawtimber volume has decreased in Southwest and Southeast Alabama while increases have occurred in West Central and North Alabama. Hardwood sawtimber volume has decreased in extreme Southwest Alabama and significantly increased in West Central, North Central, and North Alabama (Rudis, Rossen, and Kelly, 1984).

Poles and Pilings

Growing poles and pilings in the South can be a profitable business. Southern pine is preferred over other species for utility pole use because of supply, economical harvest, year-round harvesting, strength, weight ratio, form, and ease of treatment. Longleaf pine is the preferred species for utility poles, but loblolly, shortleaf and slash are acceptable. If the timberland grower wants to obtain maximum returns per acre, *he should manage for a multiple product mix*, including poles. Small poles are the bread and butter of the pole industry (35-50 feet). It has been stated that, on good sites, 5 utility poles per acre is an acceptable cut; 8-10 a good cut. Coastal areas of the South, including Alabama,

offer the greatest opportunity for profitable pole production. More treating plants are located toward the coast in Alabama than further inland (Williston, Sc̄repetis, 1975).

The post, pole, and piling industry in Alabama reported 20 active operations in 1982—a decrease of 3 plants since 1971 (Bertelson 1972). The industry utilized 13.8 million cubic feet of wood in 1982 compared with 16.0 million cubic feet in 1971 (Bertelson). Based on severance tax data, the pole and piling industry has been a variable market for timberland owners. (FIGURE 3).

The pole and piling market for landowners has a direct link to the preservative treating industry. The southern yellow pine pole and piling has tremendous marketing applications throughout the nation and internationally. Timberland owners should be conscious of these market parameters.

Wood for Energy

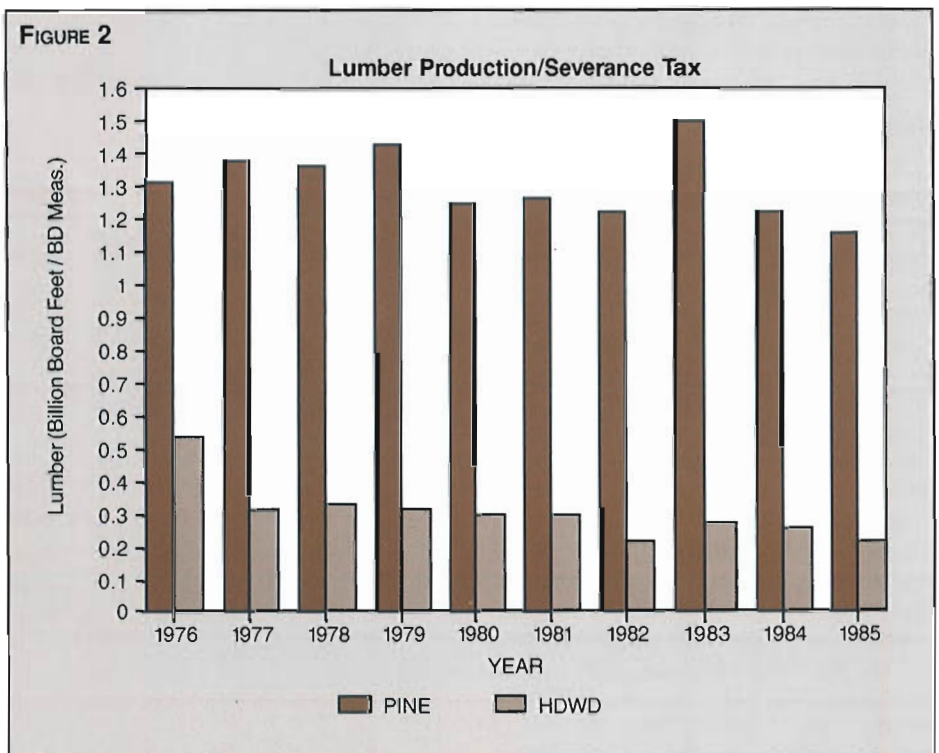
One of the most exciting developments in forestry across the nation in recent years is the use of wood industry residues, logging residues and standing trees to produce energy. Wood for energy helped to alleviate the nation's energy crisis during the last decade. Today, in Alabama approximately three percent of the energy consumed is produced by burning wood.

Wood offers many advantages as a fuel in Alabama. It is relatively inexpensive compared to oil and natural gas and is available in every county of Alabama. Wood energy provides jobs and income to the local communities. For

example, for every 50,000 tons of whole-tree chips produced from our forests, 14 jobs are created.

Not surprisingly, forest product industries in Alabama were quick to realize the tremendous savings by burning their own wood waste as fuel. The pulp and paper industries in Alabama have long been a leader in utilizing their process waste and whole-tree chips. Aside from forest industries, others have taken advantage of wood energy in recent years. In fact there are more than 110 firms in Alabama utilizing wood energy systems such as Russell Corporation in Alexander City, University of Montevallo in Montevallo, Henry Brick of Selma, and Bullock State Prison in Union Springs, to name a few. Best of all, wood for energy is a *renewable* resource and encourages better utilization of Alabama's forestlands.

But where does the wood come from to produce this energy? The wood fuel used by the industrial sector is produced from two sources, industrial wood residues such as sawdust, wood shavings and bark, and the forest biomass itself, which has the greatest supply potential. Regarding industrial wood residues, there are 350 forest product operations in Alabama that produce approximately 10 million tons of sawdust, wood shavings and bark annually. The other source of wood fuel, the forest biomass, produces approximately 22 million tons of potential energy wood annually in Alabama's forests. Forest waste such as logging debris, diseased, dead or dying trees and non-commercial trees are now



being procured by a network of fuelwood whole-tree chipping operations in Alabama. This new "energy wood" product is produced as a consistent sized wood chip, thereby making it easier to handle and burn. Approximately 1 million tons of whole-tree chips are produced and burned annually in Alabama to produce energy.

The removal of small diameter, cull or otherwise undesirable trees provides demonstrable economic benefits. The wood energy industry makes possible long-term and regular removal of such undesirable trees, which results in improved growing conditions for those trees in the residual stand. The use of wood for energy also provides markets for forest residues from logging, stand regeneration and site preparation operations.

Veneer/Peeler Logs

If a timberland owner is fortunate to have a supply of large, high quality veneer logs, he could demand, depending again on local mill availability and market conditions, a higher product value for those trees. Similar with sawtimber, quality veneer logs (straight, minimum defect, fine grain, etc.) can cause a higher dollar return on a per tree basis. A much smaller manufacturing market is available for these timberland owners.

In 1982, there were 28 active veneer mill operations in the state. One softwood veneer operation was idle (Anonymous, 1983). Of the total veneer operations, 19 were principally hardwood and 9 were softwood. In 1971 Alabama had 32 active

veneer plants of which 26 were hardwood and 6 were softwood (Bertelson 1972). The total quantity of veneer logs processed was approximately 509 million board feet—88 percent softwood and 12 percent hardwood. This was almost twice the production of veneer mills in 1971 (Bertelson 1972). We can see that Alabama's veneer operations are becoming more productive, with fewer operations, utilizing a much greater amount of softwood than hardwood.

The resource or supply perspective would be a similar exercise as sawtimber (regarding availability of larger, quality trees). One particular note would be an increase in stumpage value over sawtimber. For those stands of high grade veneer trees, greater stumpage prices can be paid. But of course, quality requirements or specifications for these trees are high. As Alabama has an active veneer/plywood industry, both in hardwood and softwood, the demand for these veneer/plylog trees is good relative to the location of those mills desiring these forest products.

Other Forest Products

Several major forest products have been briefly addressed regarding timberland owners' forests. However, it is important to mention other products grown in these timberlands which can provide unique revenues. A few of these include stumpwood, kindling (fat lighter), firewood, rare species, and pine straw among many. Stumpwood, those stumps left after harvest, are utilized for chemical extracts and have increased in procurement in recent

years. Kindling, commonly known as fat lighter, is being cut and sold on a retail and wholesale basis for mail order markets from the Brewton area for distribution all across the U.S. Rare tree species, such as paulownia wood and quality black walnut trees have been known to bring extremely high stumpage values on a per tree basis. And pine straw, particularly the longer longleaf variety, has market value potential (baled) for nursery and urban consumers. Creative thought and market aggressiveness can yield many opportunities for timberland owners for return on harvest decisions.

Summary

In closing, timberland owners should be cognizant of the types of products grown in their forest. Also, every owner should be knowledgeable of local markets and manufacturing operations in their procurement area particularly in lieu of the demands of each product type relative to its end use. It is important to understand that most forests contain a product mix of many forest products which compose a complete sale. Investigate alternatives regarding your timber sale. As an investor seeks the highest return on his investments, the timberland owner holds no less the same responsibility.

REFERENCES

- Anonymous. 1983 *Directory of Alabama's Primary and Associated Secondary Forest Industries*, State of Alabama, Alabama Forestry Commission, Utilization and Marketing Section, 1983, Montgomery, AL, p. 157.
- Bertelson, Daniel F. *Alabama Forest Industries Resource Bulletin 50-36*, Department of Agriculture Forest Service, Southern Forest Experiment Station, New Orleans, LA, p. 29.
- McKeever, David B. *The United States Woodpulp Industry*, Resource Bulletin FPL-RB-18, U.S. Department of Agriculture, Forest Service, Forest Products Laboratory, Madison, WI, 1987, p. 29.
- Rudis, V. A., J. F. Rosson, Jr., and J. F. Kelley. *Forest Resources of Alabama*, Resource Bulletin 50-98, U. S. Department of Agriculture, Forest Service, Southern Forest Experiment Station, New Orleans, LA, 1984, p. 55.
- Williston, Hamlin L., and George Srepetis. *Managing for Poles and Piling*, U. S. Department of Agriculture, Forest Service, State and Private, Southeastern area, Atlanta, GA, 1975, p. 24. ♠

FIGURE 3



ACTIVITIES

DISTRICT

1

Two forest landowners were featured in the new TREASURE Forest video filmed by **Anita Benton, Donnie Anderson and Neil Letson**. Jackson County landowners **Steve Tondera and Floyd Clemons** along with their TREASURE Forests were highlighted for their outstanding examples of resource management. In addition to scenic views of northeast Alabama hardwoods and mountainland, interviews were conducted with each landowner by **State Forester Bill Moody**.

Herbicide demonstration plots have been installed on the property of TF owner **Harold Herring** in Madison County and **Frank Bankston** in Cherokee County. Recently planted pines on both properties were treated for herbaceous weed control using two different chemicals. Additionally, the Bankston property has a series of pine release plots showcasing Dow's thinline application method and **GARLON** foliar spray. **Chris Northport**, Dow's summer intern, recently conducted a field demonstration of the foliar application technique for twenty landowners, agency representatives, vendors and industry personnel.

DeKalb County's **Gary Sanders** has been quite busy working with the City of **Ft. Payne** in becoming a Tree City. He organized a presentation by **Neil Letson** to the City Council and the presidents of three garden clubs. By laying the groundwork and having a good relation with the city officials, it appears that Ft. Payne will become one of the newest tree cities in District 1 this year.

Chuck Weber, Huntsville's City Arborist and former AFC employee, recently spoke to the **Mountain Lake Chapter of the Society of American Foresters**. He reviewed the similarities of urban and rural forestry and encouraged greater participation in the two different realms of forestry. Additionally, the chapter voted to solicit contributions from all local SAF members and send a minimum of \$50 to the Chinese Forestry Institute. The money will be used to purchase tree seed for planting on the 2.4 million acres of woodland that was devastated by a forest fire earlier this year.

Alabama A and M University's **Dr. Tommy Coleman** attended a recent **North Alabama Reforestation Committee (Jackson County)** meeting to discuss the joint project involving satellite photography and its potential impact for identifying specific woodland sites. His discussion also touched on the use of satellite images for soil survey information, industrial development and general forestry usage. Alabama A and M intends to become a leader in the state's movement toward utilization of high tech capabilities to assist in the management of natural resources.

DISTRICT

2

Cullman Ranger Jimmy Moody presented a program to third grade students of **West Elementary School** on fire prevention and tree identification on May 1. Approximately 50 children and four teachers were present.

On May 6, **I and E Coordinator Coleen Vansant** presented a program on Tree City USA to the **St. Clair County Forestry Planning Committee**.

District Management Forester Tom

Kimbrell and St. Clair County Supervisor Gary Hamilton attended the **Soil and Water Conservation Committee Awards Supper** at the Pell City Civic Center on May 8.

Blount Forester John Rice and **Ranger Steve Bowden** presented the slide/tape program **Alabama Birds** twice during the month of May. John presented the first to the **Sycamore Club** on May 14, followed by a presentation by Steve May 12 to the K-3 grades and special education class of **Locust Fork School**.

On May 19, **Blount County Supervisor John Rice** attended the third annual **Tree Commission Conference** in Montgomery.

Cullman County Forest Ranger Jimmy Moody was honored June 10 in Montgomery when he was presented an **Honorary State Farmer's Degree** by the **State Future Farmers of America**. Jimmy received the award for his help and assistance with the FFA program.

Blount County AFC and the **Blount County Forestry Planning Committee** sponsored events June 20 to promote the area's volunteer fire departments and forestry. The annual **Blount County Volunteer Firemen's Competition and Field Day** was held with winners including the following: **Oneonta**—first; **West Blount**—second; **Dallas-Selville**—third; and **Locust Fork**—fourth. Judges included AFC personnel **Gladys Dailey, Dennis Underwood, and Steve Bowden**, along with **W.C. Foust** of the Blount County Emergency Operations Center. An estimated 200 people participated in the competition.

Also on June 20, **County Supervisor John Rice** conducted the **Planning Committee's forestry field day** which included a tour and demonstration of planting, chemical control and a log cabin manufacturer. Approximately 25 people attended the tour.

Winston County Supervisor David Frost and **Ranger Danny Dodd** participated in the two day **Winston County Free State Festival** during the month of July. The rangers manned a wood products and utilization exhibit during the event. The festival was held in **Double Springs** as part of an anniversary celebration of Winston County's secession from the state on July 4, 1861.

DISTRICT

3

State Forester C.W. Moody was one of a number of officials who presented testimony at a public hearing of the **Forests, Family Farms, and Energy Subcommittee** of the **U. S. House Agriculture Committee** held at the **University of Alabama** in Tuscaloosa on May 29. Former AFC Commissioner and present State Representative **Allen Layson** and AFC Commissioner **John Goodson** also gave testimony. **U. S. Representative Claude Harris** and other members of the committee toured **Judge George Wright's TREASURE Forest**, Millwood, that afternoon. Millwood is located on the Black Warrior River in **Hale County**. During the afternoon program at Millwood, **Mr. Moody** presented the TREASURE Forest award to **Jon Warner**, President of **Gulf States Paper Corporation**. **State Forester C. W. Moody** and **State Conservationist Ernest Todd** presented the **W. Kelly Mosley Environmental Award** to Alabama Forestry Commissioner **John Goodson** on July 8. Very few people promote

forestry at the intensity **Mr. Goodson** does. Our congratulations go out to him.

Commissioner Goodson also chairs the **Tombigbee R.C. D. Council** which met recently to discuss the need for a wood handling port facility in the **Tennessee-Tombigbee or Black Warrior** area.

Hale County Forester J. King and **Ranger Jim Junkin** recently presented the **TREASURE Forest Award** to **Alvin Smith** of **Newburn** and **Lenson Montz** of **Greensboro**.

Our congratulations go out to the newest members of the **TREASURE Forest** family, **Elmer Straight** of **Fayette County**, **Derthia Taube** of **Fayette County** and **Rex Sprull** of **Tuscaloosa County**.

District Forester Wayne Strawbridge has announced the completion of a new cold storage facility for seedlings. The new facility is located at the **District Office** in **Northport**.

Close to 300 students at the **Pickens Academy** in **Pickens County** visited with **Smokey Bear** at their **Spring Festival**. **Smokey** also visited with 200 students at **Eutaw Elementary** in **Greene County**.

Over 200 people attended the **Pickens County Rural Community Fire Protection** competitions in April.

Pickens County Forester John Sutton, **Ranger Gary Sides**, and **Fire Specialist Pat Waldrop** were the guest speakers at the **Aliceville Forestry Field Day** in **Pickens County** where over 120 students and 20 industry representatives attended.

Alabama Forestry Commission rangers helped with the **FFA Forestry Judging** contests in **Lamar, Fayette, Tuscaloosa, Hale, and Pickens Counties**.

The **Tuscaloosa Forestry Planning Committee** recently held forest landowner lectures on forest taxes and hardwood management. Alabama Forestry Commission **Hardwood Specialist Tom Cambre** was one of the guest speakers.

Management Specialist Pat Waldrop and **Gulf States Chief Forester Philip Sassnet** spoke to the **Tuscaloosa Kiwanis Club** in June on forestry as an investment.

DISTRICT

4

Clayton Schwind reports that he did programs for the **Hamburg Homemakers Club**—30 present; kindergarten and first grade of **Chambers Academy**—60 present; kindergarten and first grade of **Milltown School**—90 present. He was also a member of an **FFA Forestry judging** team. **Clayton** assisted with three forestry and wildlife programs.

On April 25, the **Clay County Volunteer Firefighter's Association** held their **Annual Competition**. **State Senator Gerald Dial**, **State Representative Richard Laird**, **Probate Judge Charles W. Carpenter**, and **Lineville Mayor Perry Young** attended. **WASZ Radio** broadcast the **Festival** with **Richard Kytan**, **Mike McCormick**, and **Rhonda Humphrey** emceeing from 11:00 A.M. (after the parade) throughout the afternoon. **WJSU-TV (Channel 40)** **Anniston**, carried the highlights of the **Festival**. The **Ashland Progress** and the **Lineville Tribune** covered the events with good articles and photographs. **Southtrust Bank** of **Clay County** recognized the **Volunteer Fire Departments** of **Clay County** as well as each firefighter in a full-page listing in the April 30 edition of the **Lineville Tribune**.

Earl Smith and **W. N. (Smokey) McCollum** participated in the **Cystic Fibrosis Walkathon** at **Ashland City Park**. Approximately 100-150 people participated.

Glenn Berry provided the program for the **Cleburne County Forestry Wildlife Association** in April. Non-game species was the subject and **Glenn** used a blue bird

program to illustrate his talk. He also did a **TREASURE Forest** program for the **Heflin Lions Club**.

Berry conducted a **Forestry** study session for a group of **Boy Scouts**; the setting was **Choccolocco State Forest**. The study program assisted the **Scouts** in attaining their **Forestry Merit Badges**. **Glenn** also participated in **Career Day** along with several other career professionals at **Cleburne County High School** with students from **Ranburne and Heflin** (sophomores, juniors, and seniors).

Micaville Volunteer Fire Department hosted the presentation of the **Cleburne County** grant checks.

In May, **Treasure Forest** landowner **Joel L. Neighbors (FRII)** hosted the **Coosa Area 4-H Forestry Judging Contest** on his property near **Hanover**. **Blake Kelley**, **Management Specialist, District 4**; **Earnest Kenney** of **Kimberly Clark**; **Roger Vines**, **Coosa County Extension Service**; **Melinda Luker**, **Coosa County Extension Service**; and **Doug Watkins, SCS**; assisted in this in this event. First place was won by the **Coosa County Junior Team**. Teams from **Tallapoosa, Coosa, and Chilton** counties participated. Supper was furnished by **Stan Messer** of **Stan's Super Mart**, and was prepared and served by **Paula Neighbors**.

An herbicide demonstration sponsored by the **Coosa County Planning Committee** was established on the property of **J. A. Smith**. The backpack sprayer and the chemicals used were provided by **Monsanto**. **Rangers Joel Neighbors and Buddy Adcox**, **Management Specialist Blake Kelley**, and **Roger Vines**, **Extension Agent** attended this demonstration.

On July 7, the **Coosa County Planning Committee** held a seminar on the new tax laws affecting forest landowners. **Dr. Bill McKee** of **AU Extension Service** was the speaker. **Blake Kelley**, **Joel Neighbors**, and **Buddy Adcox** were among those present.

Blake Kelley attended a **Wood Energy** meeting at the **Coosa County Courthouse** in **Rockford** sponsored by the **Coosa County Soil & Water Conservation District**. Representatives of local industries considering conversion to wood energy were present. Two representatives from the **Office of Economic and Community Affairs** in **Montgomery** and **Jim Gober** of the **Utilization Section (AFC)** presented the program.

A landowner meeting was held in the **Farm Bureau Building** in **Wedowee** on June 30. **Dr. Jim Miller**, **Research Forester** of the **U.S. Forest Service Office** at **AU**, presented a slide program to illustrate his discussion of **kudzu eradication**. He was introduced to the group by **District Forester E. O. Moore**. After the informative presentation, the group moved on to a **kudzu field** south of **Wedowee**. There, **Bill Nixon**, **Randolph County Forester**, used a backpack sprayer and herbicide furnished by **Monsanto** as well as tractor-mounted sprayers to demonstrate proper application of chemicals. **TORDON 101** was used; this has been the most effective of the herbicides used in **Dr. Miller's** research on **kudzu eradication**.

Charles Sikes, **Randolph FRII**, and **Blake Kelley** conducted tree identification and map-reading sessions at the **Randolph County 4-H Fish and Wildlife Camp** which is held annually at the **camphouse** and **lake** property of **ALAGAS** employees of **Randolph County**.

Bill Nixon and **Blake Kelley** were active in the **Randolph County FFA Forestry Judging Contest**. Teams involved were **Woodland, Wadley, Randolph County High, and Randolph County Vocational School**. The first place winner was **Randolph County Vocational School**.

Guy Slayden, **FRII Jim Money**, and **FRII Ben Parrish** conducted a forestry session at **Camp ASCCA**. After the

hands-on approach a question and answer session was enjoyed by campers and AFC personnel.

On July 27 a group of **Cub Scouts** (approximately 30) met with **FRIL Jim Money** and **FRIL Ben Parrish** at the Alexander City airport for a forestry and tractor demonstration. The program was repeated on July 28 for approximately 30 more Cub Scouts at the Alexander City Sportsplex.

Hardwood Specialist Tom Cambre conducted a seminar on upland hardwood in Cullman which was attended by Foresters **Glenn Berry, John Tyson, and Bill Nixon**. Cambre also conducted a seminar on bottomland hardwood in Monroeville which was attended by Forester **Blake Kelley**.

DISTRICT
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On May 2, 1987, **Autauga County Supervisor Harold Cleveland** and **Smokey Bear (Ranger Bob Emmons)** entertained approximately 200 children at Prattville's City-Fest activities.

Autauga County personnel helped conduct forestry merit badge training for interested boy scouts at **Camp Tuckabatchee** in June.

On April 9, **Ranger Freddie Kornegay** and **Smokey Bear (Tulon Goodwin)** entertained 75 students at the **West Blocton Headstart School in Bibb County**.

Alabama Forestry Commissioner John Goodson received the **W. Kelly Mosley Environmental Award** on July 8 at the Northport Civic Center. The award was presented by **State Forester C. W. Moody, State Soil Conservationist Ernest Todd, and District Soil Conservationist Tom Counts**.

Congratulations to **Chilton County forest landowner Cleveland Burdette** for receiving the **TREASURE Forest award**.

Chilton County Ranger Mike Cleckler presented a **Smokey Bear program** at the **Clanton YMCA Day Camp** on July 24.

Dallas County Supervisor Jim Bible and **Smokey Bear (Ranger Danny Jordan)** made an appearance to 100 preschoolers at a **March of Dimes** mini-walkathon held in the **Selma Mall** on May 15.

Smokey Bear appeared at **Byrd School in Selma** on June 22.

Charles Mayton and Norwood Green were recently certified as **TREASURE Forest landowners in Marengo County**, raising the number of **TREASURE's** in that county to 16.

Fire Chiefs from seven rural volunteer fire departments met recently to receive grant checks from **County Supervisor Allen Black, Representative Harrell Blakeney, and Senator Richard Manley**.

Perry County landowners J. F. Suttle (11,634 acres) and Jack Snow (402 acres) have been certified as **TREASURE Forest landowners**.

Brent, Alabama, has a Tree Commission! Good things are coming their way!

Ranger David Stewart recently trained **Marion Scout Troop 322** on campfire safety and wildfire prevention.

On July 10, **Ranger Elliot Ford, Jr.** presented a slide-tape program on hardwoods to 38 students and teachers at **Pine Apple in Wilcox County**.

DISTRICT
6

Dale County personnel wish to congratulate **Bill Deloney** for becoming the most recent **TREASURE Forest landowner** in the **Wiregrass area**.

Ranger Bruce Hancock, Ranger Larry Doster and **Forester Gordon Horsley** have been busy working on **TREASURE Forest plans** for potential **TREASURE Forest landowners** in **Dale County**.

Dale County personnel wish good luck to **Luther Weed** on obtaining **TREASURE Forest status**.

On July 16, the **Dale County Landowner Association** met and discussed whole tree chipping operations with speaker **Pat Jarvis**. The same evening, **Bill Deloney** was awarded his certificate as a **TREASURE Forest landowner** by **Franklin McAlley, District Forester**.

Barbour County personnel wish to congratulate **Buck Taylor** as a **TREASURE Forest landowner** in **Barbour County**.

Henry County Supervisor Kenneth Blalock and **Ranger Tommy Haynes** have been working very hard completing **TREASURE Forest plans** and generating potential **TREASURE** seekers.

Pike County Supervisor Wayne Craft and **Ranger Mike Stinson** are finding the time to work with potential **TREASURE Forest landowners** by creating **TREASURE Forest plans**, prescribe burning and plowing lines.

Coffee County personnel have been busy working with landowners **Fran Collins** and **Bill Schousteron**. They are prescribe burning, plowing lines and doing management plans, all of this toward a goal of **TREASURE Forest**. Also, they have four additional landowners as **TREASURE** seekers. **Wayne Roberts** and **Robert DeVaughan** are actively assisting **Ann Black** to become a nominee in the near future.

Henry County personnel's hard work and dedication will pay off with two **TREASURE Forest** nominations this Fall.

On July 30, the **Geneva County Landowners Association** held a program on **hardwood management** for 75 landowners for possible **TREASURE Forest** properties.

In July, the **Houston County Landowner Association** participated in a field demonstration using a chemical application of **GARLON 3A** and **GARLON 4** for landowners.

Houston County personnel assisted **Auburn Extension agents** in a forestry and wildlife field day for **Houston County 4-Hers**.

Dale County personnel, along with the **Department of Conservation** and **Auburn University Extension Service** had a 4-H field day held on **Hack Jordan's TREASURE Forest**. The 4-Hers were instructed in tree identification, wildlife and other aspects of forestry and wildlife.

DISTRICT
7

District Forester Robert Dismukes and **Covington County Supervisor Albert Hardage** attended a landowners' meeting in **New Brockton** on May 13.

On June 23 and June 24 **Monroe County personnel** hosted a **hardwood short course**.

On July 2 **Monroe County Supervisor Gary Cole, Ranger Ernest Johnson** and **Brewton Forester Gib Burke** escorted the **Helene Mosley Treasure Forest** inspection team on a tour of **Senator Ann Bedsole's** property in west **Monroe County**. **Senator Bedsole** and **Forester Billy Calahan** presented a brief history and a summary of accomplishments made on the property.

Escambia County Supervisor Robert Knowles presented a **Tree City Program** to the **Brewton City Council** on May 12.

The monthly meeting of the **Covington County Fire Fighters' Association** met April 17. The president of **Alabama Association of Volunteer Fire Departments, Wesley Cain**, was the guest speaker. **Forestry Commission personnel** attending this meeting were **Covington County Supervisor Albert Hardage, Chief of Law Enforcement Walter Vest**

and **District 7 Fire Specialist Lesley Willford**.

Dr. Sam Eichold was presented the **Goodyear Conservation Award** at the **annual Soil and Water Conservation District** meeting at the **Brewton Motor Inn** in **Brewton** on May 28.

Escambia County Rangers Richard Royce and **George Bolling** presented a **Smokey Bear program** to 180 students at **Rachael Patterson School** in **Atmore** on May 14.

On June 18, **Covington County Supervisor Albert Hardage, Rangers Dwight Rathel** and **Terry Daughtry** and **Crenshaw County Supervisor Tim Money** spoke on forestry and fire prevention to the **Menewa Cub Scout Day Camp**. There were 36 campers present.

Crenshaw County Supervisor Tim Money has been working with **Chris Northrup of Dow Chemical** setting up a demonstration pine release plot for the **Crenshaw County Forestry Planning Committee**.

On June 12 **Vanity Fair Corporation** held its 50th anniversary with an open house and entertainment. **Monroe County Supervisor Gary Cole, Rangers Ernest Johnson, Steve Lloyd** and **Johnny Kline** escorted dignitaries. **Senator Rick Manley, Representative Jimmy Warren, Congressman Sonny Calahan, Legislative Advisor Joe McCorquodale, and Governor Guy Hunt** were present.

DISTRICT
8

Mobile County Rangers David Rogers and **Charles Rawls** attended a **Mobile County Firemen's Competition** at the **Creola Fire Department**. The event took place April 6 with approximately 40 in attendance.

Fire Specialist Jake Gibbs and **Personnel Officer Harold Taft** had a forestry display at the **Bay Minette Area Chamber of Commerce's "Industry on Parade"** held at **Faulkner State Junior College, Baldwin County High School** students visited.

Clarke County Supervisor Benji Elmore had an "in-field" demonstration in **Chilton** on **TREASURE Forest landowner Bealie Harrison's** property on May 14. The subjects were product utilization and timber marking. **Sam Fish, Extension County Forester, also attended**.

Washington County Ranger Wyatt Hendry worked very hard with boys from the 4-H forestry judging contest.

Mobile County Assistant Supervisor Jerry Dwyer and **Fire Specialist Jake Gibbs** attended the **National Wildfire Investigation Training Program** at **Unicoi State Park** in **Helen, Georgia**, June 1-June 12.

On June 8-9, **Clarke County Supervisor Benji Elmore, Rangers Randy Kinman, Ernest Hunt, Tim Kelly, and Laborer George McIntire** held a fire prevention program along with subjects such as tree identification and poisonous plants at the **Maubila Scout Reservation** near **Grove Hill**. About 100 **Cub Scouts** attended.

All **Mobile County personnel** and **District Forester David Frederick** attended a forestry field day at **TREASURE Forest landowner Ted Vincent's** property near **Citronelle**. A delicious catfish dinner was furnished by **Farm Bureau**. The main focus was use of the shelterwood system for natural regeneration of longleaf pine. Approximately 45 people attended.

DISTRICT
9

The almost 90-page report **Survey of Trees in the Historical Districts of Florence** was recently made public. The report was enthusiastically re-

ceived by the Mayor, City Council and the public. The **Times Daily** newspaper has followed up with several articles and an editorial complimenting the AFC for this work. During a TV interview, the President of the City Council referred to the report and the **Tree City** certification, as "a good tool to be used in attracting new industry to our area."

Howard Swanner, Larry Lee and **Roger Nichols** participated in the **Annual 4-H Club Camp** held in **Guntersville**. These county supervisors serve as instructors in all areas of forestry for approximately 75 club members.

Hammie Stamps, our almost full-time volunteer and the driving force behind our "Wildflower Trail," has been recognized by **Woman's Day** magazine as one of the "Fifty Outstanding Women in the United States". **Woman's Day** will publish their fiftieth anniversary edition in October and will feature these fifty women. Mrs. Stamps was nominated by **Louise Bone** on the basis of her work on the wildflower trail and conservation education projects. **Mr. and Mrs. Stamps** work faithfully as volunteers for the AFC and have recently presented our staff with a set of framed **Smokey Bear** prints.

Steve McEachron and **Louise Bone** participated in the **Brownie Scout Camp** held at the **Earle Trent Center** near **Florence**. **Brownies** studied wildflowers, tree identification and wildlife.

District 9 has selected its "Living Witness" tree—the **Champion Black Walnut** located in **Sheffield**. This tree is already on the list of **Historical Trees of the United States**. **Dr. T. F. Hall** suggested the tree and **Tammy Ellis** will coordinate the presentation program.

Grady Everette of **Colbert County** has received the **Treasure Forest Award**. The **Colbert County Forestry Planning Committee** made the presentation to Mr. Everette and afterward got a firsthand look at what he is doing on his farm.

Lee Miller, a Franklin County landowner who presently resides in **Germany**, became the sixth **Franklin County landowner** to receive the **Treasure Forest Award**.

Tony Avery and Louise Bone received **Meritorious Contribution Awards** for **Educational Creativity**. These awards were presented at the annual meeting in **Mobile**.

District 9 employees were invited to the **L.O. Bishop annual B.B.Q.** at his farm near **Allsboro**. Approximately 1000 people heard **Governor Hunt** and members of the **Legislature** speak. **State Forester C. W. Moody** was among the special guests.

The **District Staff** is cooperating with **Keith Hudson, Wildlife Biologist** with the **Department of Natural Resources**, in promoting the **Alabama Hunter Education Course**. The 16-hour course was taught at the **University of North Alabama** in **August**. A few of the topics covered are **hunter ethics, weapon care, and outdoor first aid**. In many states, this course is required before obtaining a first time hunting license. A bill pending in the **Alabama Legislature** would extend this requirement to **Alabama**.

Rick Banks, Franklin County Supervisor, is spearheading a clean-up effort in **Franklin County**. He has organized a multi-agency group which includes law enforcement officials and interested citizens. Their goal is to clean up the dump sites and promote an on-going anti-litter campaign.

Gerald Steeley attended the mid-managers meeting held in **Decatur** where they selected entries for the **State Rural Development award** which was to be presented in **Montgomery** on **August 19**. **Marion County** was selected as first place entry from **Area I**.

Tuckabatchee Youth Camp was the center of attention for several AFC employees in July as they served as instructors and teacher-guides for the area's young people learning about trees, forests, nature and the outdoors. Each year at this time **District 10** is called upon to provide this service, and it has done so for many years now. It is sometimes as much fun for **Tommy Wilson, Cliff Cobb, Jim Foreman** and the other adults who attend as it is for the kids.

Elmore TF landowner Ed McCullers, the 1987 Mosley Award winner from District 10, was guest of honor at a ceremony and field day at Ft. Toulouse August 21. A film presentation of the McCullers' **TREASURE** was shown to area landowners, TF's and TF-prospects, and agency people who assisted with developing the project. This occasion was organized by the **Elmore County Forestry Planning Committee** which wanted to show that they appreciate and recognize the work that has gone into this forest. It represents the spirit of the **TREASURE** program precisely, and though it may not be the most extensive of the near-million acres of TF's in the state, it is clearly among the best and most cherished.

Wetumpka nears Tree City USA status with the writing of a draft tree ordinance for the town as a function of its municipal tree committee. The approval of the ordinance by the City Council is seen as automatic by District 10 Urban Forestry Coordinator **Sharon Clark**, since the spending and other maintenance requirements for certification have already been met.

A tree planting seminar August 4 at the Extension Service offices in Phenix City had AFC employees **Robert Wiggins, Melvui Phelps** and **Ed Kirkland** as instructors. The course study was aimed at both vendors and clients of CRP, ACP and ARCP projects and was concerned with seedling survival as a factor of correct planting practices. Several seemingly unimportant, but definitely not recommended, tree seedling handling methods were uncovered during the session to the dismay and surprise of some people attending.

Hornsby Brothers' property, north of Eclectic, managed by father-and-son **William and David Hornsby**, is the fifth TF in Elmore County certified by Supervisor **Lynn Justiss** and his crew. This 1100-acre-plus TF is unusually big for this area where the large suburban population makes the average ownership size about one-tenth that large. The recent decision by the Planning Committee to disallow Elmore's claim to Russell Lands' acreage which that corporation's major holdings were is another county, cut down the Elmore TF total by several thousand acres. Justiss however has two more nominees for the September Committee meeting for approval consideration. One of these was turned down in the past because of using herbicides to clear wire-fence rows—a practice determined not to be good wildlife management. ♣

CALENDAR*

October 5-9—Starkville, Mississippi. Management of Existing Hardwood Stands: Course I. Fee: \$175. Call Tom Monaghan, (601)325-3150.

October 10—Jefferson County. Introduction to the **TREASURE** Forest Program, 10:30 a.m., Alabama Forestry Commission office on Highway 78 in Forestdale. Call Bart Williams, 1-800-292-6653 or 798-3227.

October 13-15—Moultrie, Georgia. 9:00 a.m. until 6:00 p.m. Sunbelt Ag Expo including demonstration of portable sawmill. Spence Field six miles south of Moultrie on Highway 33. Free admission. Call Marie Marchant, (912)386-3459.

October 15—Dale County. 7:00 p.m., Forest Landowner Association meeting at County Library. Call Bruce Hancock, 774-8112.

October 17—Jefferson County. Alabama Forest Owners' Association's mushroom identification field trip with UAB mycologist Dr. Dave Jenkins. Co-sponsored by Alabama Conservancy. Time and location for breakfast to be announced later. Call 663-4138.

October 18-21—Minneapolis, Minnesota. Economic and Social Development: A Role for Forests and Forestry Professionals. Annual meeting of Society of American Foresters. Numerous field trips. Registration fee \$145 for members. Non-members have varying fees. Call Richard Zabel, (301)897-8720.

October 28-29—Jackson, Mississippi. Mississippi Forestry Association Annual Meeting. Call Steve Corbitt, (601)354-4936.

*Any member agency of the Alabama Forestry Planning Committee can be contacted for more information about listings in this section. ♣

What may look good standing, may be of little value at the mill.

APPLYING LOG GRADES TO THE WOODLOT

by JIM GOBER, Utilization and Marketing Specialist

T*his is the first of four in a series of articles regarding the systems of hardwood and softwood grading.*

For forest landowners to realize maximum returns from their hardwood timber, they need to have a basic understanding of hardwood log utilization and grades. Classifying and determining the relative value of hardwood logs in standing timber requires a skilled timber cruiser. Grading a log on the woodyard versus a log in a standing tree can be an humbling experience. Both situations require consideration be given to interior rot, shake, or insect damage and their effect on log grades.

Unfortunately, there are few published guides to help timber cruisers. However, estimating internal scaling deduction in standing timber is not an unknown art. Private industrial and consulting foresters are available across Alabama who can assist landowners in determining the relative value and best utilization of their hardwood timber. One way for a private landowner to improve his knowledge of hardwood utilization would be to visit a logging site to observe how hardwood trees are merchandised into various logs.

Hardwood Log Grading . . . Finding Quality

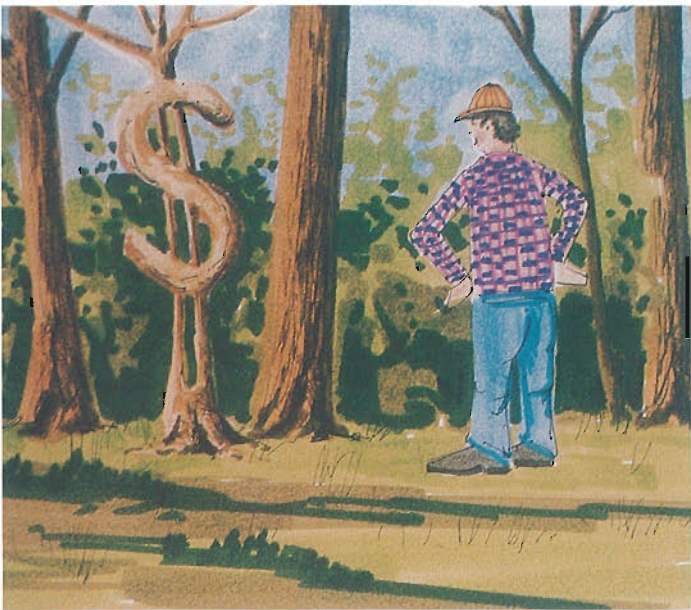
In utilizing hardwood timber for a given

product, no step along the way is more important than the required grading procedures necessary to determine the relative qualities of products obtainable from the hardwood logs. A major objective of log grading is to separate from a mill's log inventory those that are suitable for the manufacture of a given product (veneer, standard lumber, ties, etc.). "The use of log grades puts logging and milling on a predictable dollar and cents basis and results in more profitable operations for all concerned."¹

Poorest Log Concept

The grading system for raw materials has to have a minimum range—a limit below which the material is not acceptable for conversion. Thus, U.S. Forest Service standard grades for hardwood logs specifically describe a *poorest log*. These minimum standards for the *poorest log* guide the mill owner in determining what materials can be utilized to meet the mill's raw material needs.

For example, a standard minimum hardwood log is "any piece of a tree stem eight inches or more in diameter and eight feet or more in length, with sweep not exceeding one-half the diameter of the small end; with not more than two-thirds the gross volume in scalable defect; and

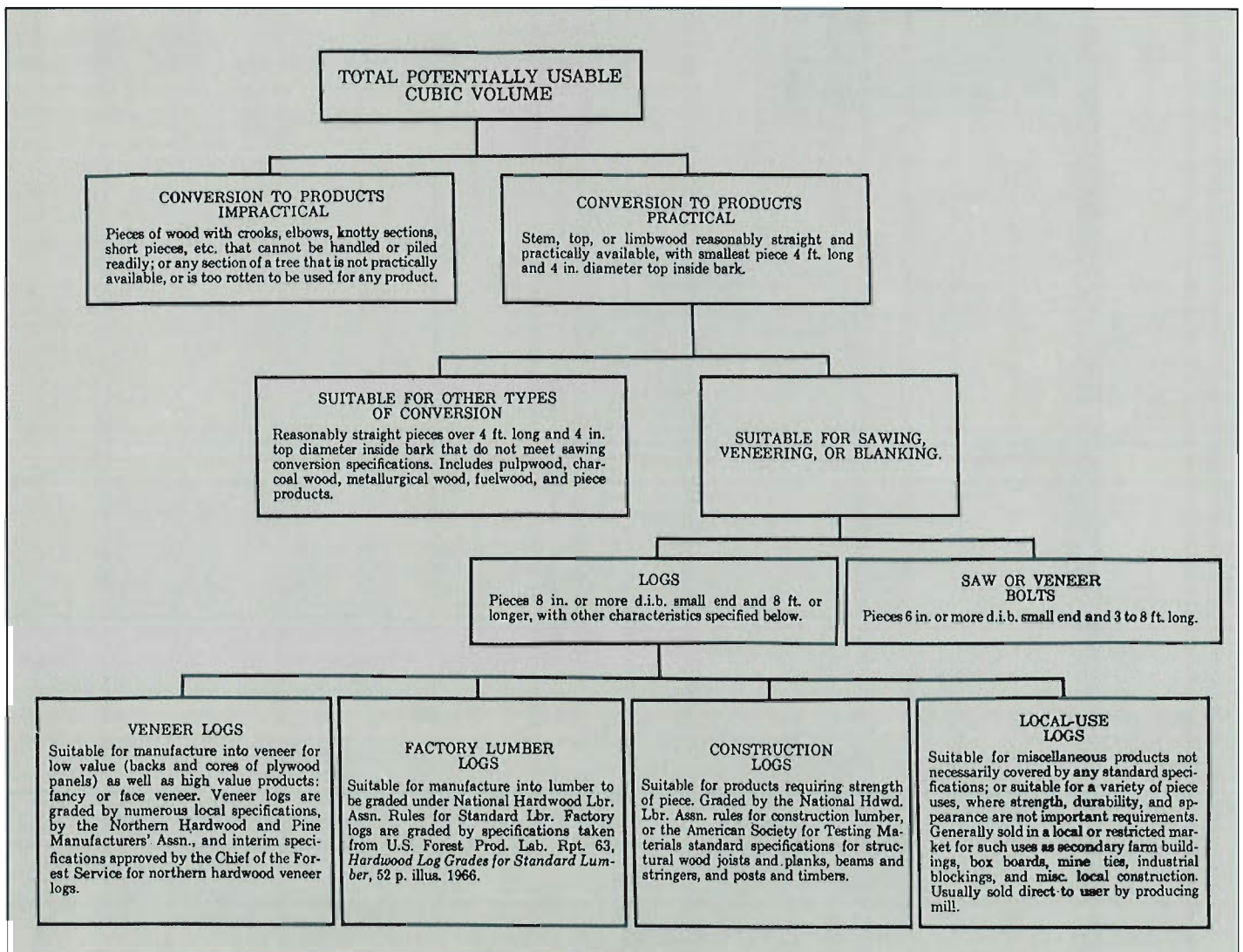


To overlook the value of grading hardwood logs, standing timber, or wood at the mill woodyard may prevent good utilization and thus, maximum returns.



What may look good standing may be of little value at the mill. Here is a good sample of the scaling defect "BUTT ROT."

FIGURE 1.—The possible products obtainable from the total cubic volume in a hardwood tree.



with any number of knots, holes, rotten areas, etc., provided the diameter of none exceeds one-half the diameter of the log at point of occurrence.² A log is distinguished from a bolt by a length specification: bole segments eight feet or more in length are called logs; those under 8 feet are generally called bolts.” The potentially usable material in a hardwood tree is illustrated in **FIGURE 1**.

many factors that influence log quality can be isolated and gauged. For instance, not all hardwood logs that exceed the poorest log specifications are equally suitable for all products. In Alabama, the following four log-use classes are adequate to classify current hardwood utilization practices (refer to **FIGURE 1**):

1. *Veneer Class*—This class includes the high value logs. However, many factory-lumber class logs can be utilized as veneer logs, if they are suitable for turning into different types of veneer.
2. *Factory-Lumber Class*—From this

type of log, boards are produced that later can be remanufactured to remove all defects and obtain the best yields (furniture and other high value products).

3. *Construction Class*—Included in this class are logs adaptive for sawing into ties, timbers and other items to be used for structural purposes. Specifications for this log class are such to ensure strength of individual pieces.

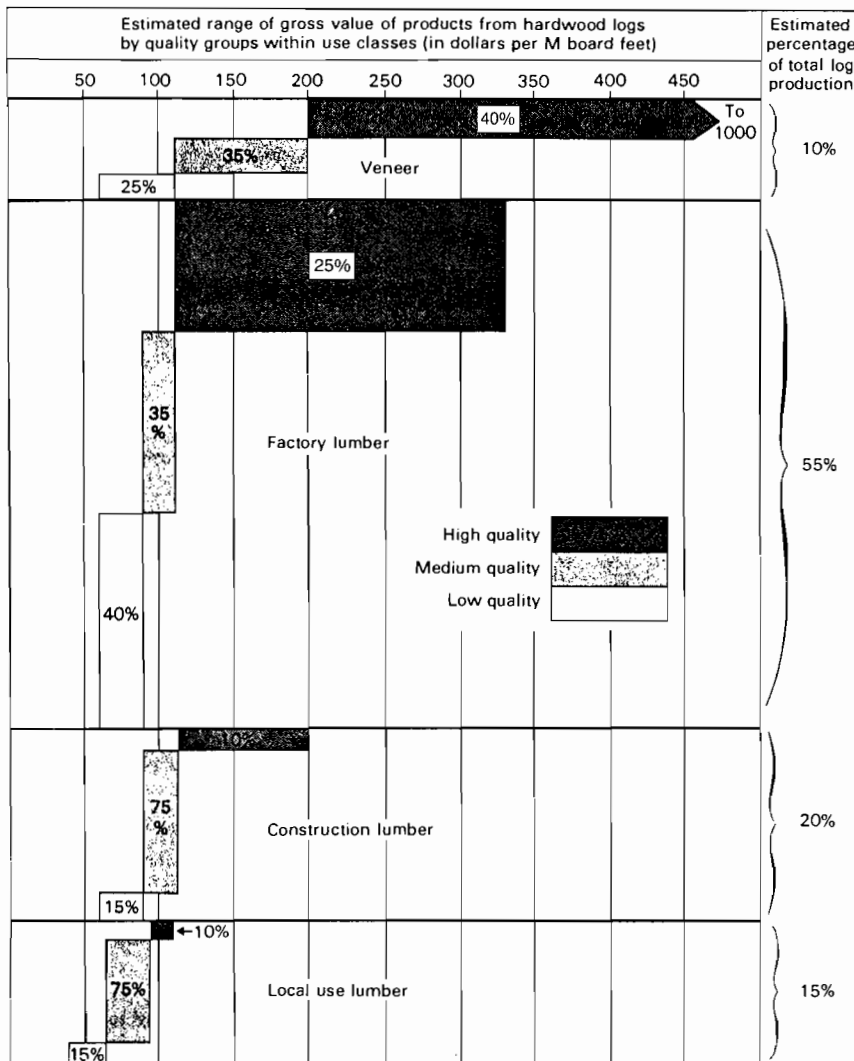
4. *Local Use Class*—Generally, local use logs are those most suitable for products not usually covered by standard specifications. Crating, pallet parts, and mine timbers do not require high strength or fine appearance. The local use class usually has the least value and products are generally sold directly to the user by the producer.

To compare the relative values of each log-use class, refer to **FIGURE 2**. “The comparative values allow the log grader to chose the best possible grading system that reflects the business situation for which grading is to be the control.”²

Hardwood Log Use Classes

Log use, of course, determines how the

FIGURE 2.—Range of product values for major use classes of logs.



Sorting by Grade

Generally, a standard lumber mill’s grader will sort out the factory lumber class logs initially. However, occasionally veneer class logs will be sorted first for shipment to a hardwood veneer and plywood plant. After veneer and factory-lumber class logs have been withdrawn, a residue of lower quality logs is left. Those logs not being sub-grade logs are sorted to the construction and local use classes respectively. Hence, a one way street is created. Many times these log sorts are not only done on the log yard, but also at the logging site.

Summary

As has been depicted, a clear understanding of the log grades will help a landowner recognize timber quality and value. Thus, the opportunity to better utilize one’s timber is enhanced. Please contact your local Alabama Forestry Commission representative for more information and assistance concerning hardwood management and log grades.

Footnotes

¹Pruett, Emerson. **Basic Principles of Hardwood Log Grading**, USDA Forest Service.

²Rust, Everette D. *Hardwood Log Grading*, USDA Forest Service, **General Technical Report NE-1**, 1973.

Note: Height of vertical bar distances represents proportion of log volumes.

Use Class	RANGE OF PRODUCT VALUE PER M*			
	High-Quality Logs	Medium-Quality Logs	Low-Quality Logs	All Logs
Veneer logs	200-1000	115-200	65-115	320
Factory lumber	110- 330	90-110	60- 90	120
Construction lumber	115- 200	90-115	60- 90	105
Local Use lumber	95- 110	65- 95	40- 65	80

* Values for veneer are log values; all others are lumber values.

KINDLIN' KINDLIN' KINDLIN'

by GARY FAULKNER, Chief, Utilization and Marketing Section

This is the third article in the forest products utilization series which highlights a variety of forest related industry in Alabama and informs timberland owners regarding markets for their products in our state.

Have you ever been frustrated by not being able to get the wood in your fireplace started? The answer to your problem can be found in the community of Brewton, Alabama, where entrepreneur Ken Tucker has made a business of marketing an ancient and diminishing resource—kindling from the raw-rare Southern longleaf pine!



Tucker sells wood nationwide.

His enterprise and product are equally unique, and they have combined to supply a national mail order market with an attractively packaged, and sure-fire solution to a hard-to-start fire in the fireplace.

Rich Southern Heritage

One natural resource made the lives of settlers in the deep South much easier—the virgin longleaf pine. Upon coming to the area, our forefathers discovered vast tracts of this magnificent tree which had grown undisturbed for centuries.

The pioneers found many valuable uses for this remarkable tree. They built their homes with it, because it would not rot; and they fenced their livestock with it, since it split easily and lasted indefinitely. They heated, cooked and read by its flame, since a splinter of “lightard”

placed in a jar would burn like a candle. They even hunted and fished at night by the light of long burning “lightard knots.” They cooked down “fat wood” chips to extract a tar substance to use both internally and externally for medicine to treat almost all ailments. The term “tar wood” is used today by chemical companies who still harvest longleaf pine stumps for the manufacture of gunpowder, medicine, and approximately 120 other products.

Timber operations in the old South were both romantic and unique. Able-bodied men would report to camps deep in the mosquito- and snake-infested forest where they worked on timber crews six days at a time, felling huge trees. Using the lumberman’s cumbersome two-man crosscut saw (misery whip), the men would cut the trees waist high to avoid bending over. Many of these massive pines had been tapped for turpentine by being “cat faced” and having cups placed below the faces to collect the rich resin. Since nails were used to hold the cups, lumbermen cut this portion of the tree off and left it in the woods to avoid ruining a sawmill’s saw. These sections of longleaf pine were called “jump butts” and a few can still be found after 100 years.

Timber crews used broad axes to hand hew square sills for export and for building the Southern mansions. One huge tree squared was a full day’s work for one man. They would put their tin syrup buckets filled with corn bread, blackeyed peas and fat back at the end of the tree in the morning. Then they would hew it to the end, stop and eat lunch, then hew it back. By this time it would be dark.

Squared logs were snaked out of swamps and up hollows to the ridge where logging roads, little more than a path, were built on high ground. Teams of oxen, sometimes up to five pair to a team, were needed to pull the coupled logs to streams or log runs where they were branded for identification before being floated to the mill downstream.

Unlike stumps of softer woods which

rotted quickly in the humid Southern climate, the stumps of longleaf pine remained for hundred of years, preserved by their natural chemicals. These stumps and “jump butts” along with fence posts and sills from old houses are the source of the kindlin’ purchased in Ken Tucker’s operation.

The secret to fat wood’s unbelievable ability to start a great fire is its natural saturation of chemicals that make it burn with tremendous intensity and heat to ignite slower burning logs.

Unique Business

In spite of the scarcity of his product, Ken Tucker decided to put remaining fat pine to commercial use. With his location in Brewton, Alabama, in the heart of the old longleaf pine country, Tucker began marketing bundles of lightard pine kindling out of his garage in 1974. He called his product *Old South Country Kindlin’*.

Most of his early sales were to local residents who already knew about and appreciated this very special resource. Although his business grew steadily, his sales remained primarily in the South until 1978 when L. L. Bean of Freeport, Maine, began to sell the kindlin’ in the company’s gift shop and in its catalog under the name “Georgia Fat Pine.”

“Until L. L. Bean discovered us, this





was just a small business,” says Tucker. “I’d sell out of our garage and I drove a pickup truck from Mississippi through Georgia loaded with Country Kindlin’ to sell to gift shops, drug and fireplace stores, and individual customers. It was hard work and only marginally profitable. When L. L. Bean bought our product, it marked the beginning of this as a really booming business.”

In the decade since the beginning of his efforts, Ken’s operation has grown from a \$20 thousand, two-employee shop to a large mail-order production and warehouse complex with thirty full-and-part-time employees. In addition to L. L. Bean, Ken sells to many other mail-order houses such as Johnny Appleseed, John Deere, Tidewater Speciality, Boulder and a soon to be announced medium sized retail chain. Ken sold approximately 1,500,000 pounds of splinters last year (1986).

Besides carrying on a wholesale business with mail order houses who retail the product under various names, Tucker maintains his own retail sales operation to serve individual customers nationwide. From Brewton, he sends his kindlin’ bundles, bags, tote boxes and accessories, as well as thousands of free brochures, to large and small customers all over the United States. He has even sent orders out as far as the Middle East. “There’s a big advantage living and working in a small town,” Ken says. “Everyone—including the mailman—knows me. I get orders and letters requesting information all the time simply

addressed to me, Brewton, Alabama. I’d have to be AT&T to get that kind of service in a city!”

While he advertises in such periodicals as *Yankee* and *ALFA* magazines, much of his business growth is due to favorable word-of-mouth. Ken is incorporating television ads into major markets (with a toll-free number) to bolster his marketing outreach. Crediting his success to several factors, Tucker explains, “We give good service, and we try hard to keep every customer happy. We have a product that is becoming increasingly scarce and nothing, but nothing, works as well for kindling as the old fat pine lightard. So once folks have tried it, it sells itself. It has a pleasant, *woody* smell and it makes an attractive and useful fireplace accessory. Frankly, we have a good product and we’re good to our customers. That means good business.”

Old South Country Kindlin’ sells on a year-round basis. In the spring and summer months, the company ships to its mail-order house wholesale customers. During the fall and winter, the shop is active filling orders from individual customers who buy the kindlin’ for themselves or as gifts for others at Christmas time and in the cold winter months.

Business Barriers

The kindlin’ business is not without its *log jams*. Recently, even this unique industry is being affected by similar business constraints of any private

enterprise. Product liability insurance of clientele and international import pressures (Honduras, in particular) are becoming a lurking storm on the horizon. Foreign imports are a real and ever present danger to Ken’s kindlin’ business. Ken says that imported Central and South American *lighter* misrepresents the kindlin’ trade. “Fatwood is *not* fatwood” remarked Ken, referring to the fact that imported kindlin’, although cheaper, does not have the same rich characteristics as Southern longleaf. Ken has voiced his concerns to Alabama’s Washington elected representatives, principally aimed at the Carribean Basin Initiative which fosters these business pressures. Ken believes in the free enterprise system but states, “Fair is fair but not at the expense of U.S. small business.” His political philosophy is to “wake up and elect free enterprise representatives” to embrace the small business interests in this country.

Pine Straw—Dollars Growing on Trees!

Pine straw, particularly longleaf, is becoming a hot product item in Alabama and the South. Ken is presently developing an increasing trade in pine straw sales. Straw, especially longleaf straw, is a superior replacement for bark nuggets in the landscape and nursery market. Ken states that demand exceeds supply and the only limiting factor for increasing business is straw procurement. Longleaf pine straw is ideally located in the Brewton area in abundant supply. The constraint is to find straw rakers, due in part to the hot and laborious nature of the job. Ken says that economic opportunities for timber landowners for straw, particularly plantation owners of longleaf and slash pine, may be more profitable than the wood fiber itself. Ken believes that in many cases timberland owners and foresters “can’t see the forest for the trees” concerning the economic return of the different tree related products such as pine straw grown in the forest.

Love of the Forest

With a gleam of satisfaction in his eyes, Ken says, “It’s all worth it. I love the outdoors and getting out there in the woods relaxes me. Finding a remote area full of fat pine stumps is like being on a treasure hunt and finding the spot marked X on the map.”

It’s a special product that takes a special man to get and use it. Ken and his Country Kindlin’ go well together.

In timber stand improvement, earn dollars for what you remove

One man's trash is another man's TREASURE!

by STANLEY R. ANDERSON,
Resource Analyst, Alabama Forestry Commission



HAVE YOU BOUGHT any firewood lately? When was the last time you needed any wooden fence posts? Chances are if you checked around on how much these materials cost, you would be astonished. Although these items are considered a minor portion of our forest resource, they can be rather expensive at the consumer level.

Firewood and fence post materials are

readily available on many acres of Alabama's forests which could benefit from a timber stand improvement (TSI). The U.S. Forest Service estimates that an additional 12% net annual tree growth could be added to Alabama's forest resource if TSI were to be carried out on private nonindustrial forestlands. This treatment includes stocking control, precommercial and commercial thinning activities.

What Is Timber Stand Improvement?

TSI is considered to be those management treatments used during the period between regeneration and harvest which increase timber growth. These treatments include such activities as removing undesirable, defective or cull trees in order to change the composition of a stand to more desirable species, increasing growth on residual trees or to releasing desirable seedlings on recently regenerated areas. Other treatments include pruning and fertilization.

The most wide-spread treatment for TSI includes the removal of cull trees or low-grade trees to provide more growing space for desirable trees. This can be accomplished by means of a commercial or non-commercial thinning or by chemically controlling undesirable stems. Commercial thinnings produce marketable products that often cover the cost of thinning. Weedings and non-commercial thinnings usually do not provide marketable products, but must be viewed as an investment in the future by concentrating growth on the most valuable stems. TSI encourages more pest-resistant stands by relieving stress on individual trees, increasing vigor and lowering southern pine beetle hazard.

In addition to increasing timber production, TSI benefits wildlife, recreation and aesthetic opportunities by maintaining relatively open stands.

Comparison of Cost Sharing Programs

Program	Alabama Resource Conservation Program	Forestry Incentives Program	Agricultural Conservation Program	Conservation Reserve Program
Admin. Agency	SCS	ASCS	ASCS	ASCS
Technical Asst.	AFC	AFC	AFC	AFC
1986 Cost Share	60%	65%	60%	50%
Minimum Ownership	20 Ac.	—	—	—
Maximum Ownership	—	1000 Ac.	—	—
Minimum Work Area	1 Ac.	10 Ac.	1 Ac.	3 Ac.
Minimum Erosion Rate	2T	—	2T	3T
Maximum Payment	\$3,500	\$10,000	\$3,500	\$50,000

FORESTRY PRACTICES COVERED:

Tree planting	yes	yes	yes	yes
Site Prep. Mech.	yes	yes	yes	NO
Chemical	yes	yes	yes	NO
Burning	yes	yes	yes	yes
Post-Plant Herb	yes	yes	yes	yes
Pine Release	yes	yes	yes	NO
Pre-comm. Thin.	NO	yes	yes	NO
Pruning	NO	yes	yes	NO
Presc. Burning	yes	NO	NO	NO
Fire lanes	yes	NO	NO	NO
Natural Regen.	yes	yes	yes	NO
Christmas Trees	NO	NO	NO	NO
Fences and Roads	NO	NO	NO	NO

How to Apply

For more information about these programs contact your local County ASCS office, Soil Conservation Service, or the Alabama Forestry Commission. Sign-up dates for each program will vary by county.

Stands Which Benefit from TSI

Recently there has been much talk about pines on pine sites, hardwoods on hardwood sites and mixed stand management. Foresters refer to this as the

species/site relationship and all three situations can benefit from TSI.

On many types of land, mixed pine and hardwood management may be the best economic option for landowners. More research and demonstrations will be available on this in the future. In the meantime, your present stand may have excellent opportunities for mixed stand management and TSI.

Maybe you are not sure about the health of your present stand or the species/site relationship? Perhaps the stand has a history of "high-grading" where the best trees have been cut and the culls and less preferred shade-tolerant species have been left. In such a case TSI might not be economically productive. A professional forester will be able to advise you on what to do.

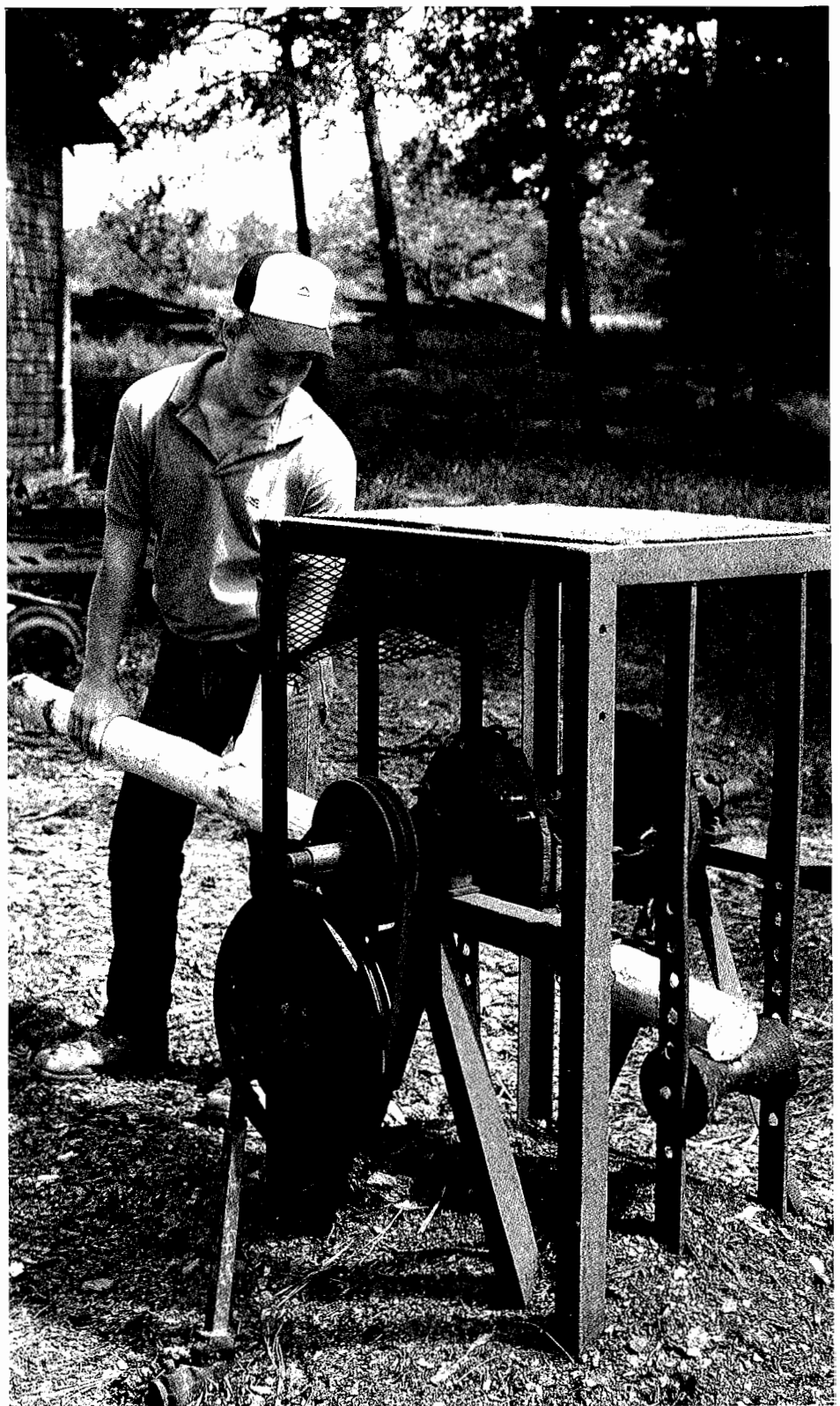
Pulpwood

Some TSI commercial thinnings provide an operable cut for pulpwood. Local markets are readily available for pine and hardwood pulp. In several areas of the state timber buyers have an increased interest in hardwood pulp. This is due to the fact that several large paper companies are spending millions to convert their processes to utilize a higher percentage of hardwood in their mix. Currently, the overall mix in Alabama's paper mills is about 37% hardwoods, and the trend is expected to reach the 50-60% range. The future looks bright for hardwoods, products such as oriented fiber board, wood energy, pulpwood and quality sawtimber. So if you have a good hardwood site or suitable mixed stand, maybe a pulpwood thinning is in order. Lists of timber buyers are available in the county office of the Alabama Forestry Commission.

Fuelwood

Wood for energy was possibly the earliest significant use of the forest resource for man. During the mid-1970's oil embargo, there was much demand for fuelwood. As oil prices dropped, however, so did the demand for wood heating. As heating costs continue to rise and wood becomes a more economical fuel, the demand for wood heat will increase. This market shows promise of being one of the largest consumers of low quality, previously unsalable materials from hardwood and mixed stands.

Wood for fuel creates an opportunity for many landowners to improve their existing stand of trees while at the same time profiting from the sale of firewood. Landowners might also minimize their wood energy costs by supplying their own



Smaller timber removed during timber stand improvement may bring income as poles.

fuel wood. Care should be taken to remove the cull, hollow, crooked, and diseased trees and leave the trees with the highest potential value. Cutting valuable growing stock such as pulpwood or sawtimber will reduce the future value of the stand.

Marketing the fuelwood can be accomplished by several means. Some landowners cut, split, sell and deliver

themselves. In some locales there might be a good market for selling the fuelwood to a firewood broker or firewood processor. This type of market is likely to increase as more and more residences install wood-burning stoves, heaters and fireplaces. Several industries and institutions are utilizing wood energy in Alabama and the number is expected to grow.

Fence Materials and Landscape Timbers

The use of smaller trees for fence rails or posts has been around for centuries. Whether temporary or permanent, fences are easily erected with wooden posts or rails. Treated or untreated wood may be used. The tree species, soil condition and treatment process determines the life of the post.

A landowner might choose to cut, debark and treat his own trees for fence material or sell the trees to a local post mill or timber treatment plant.

Other Markets

Trees removed from a timber stand improvement cutting operation can also be marketed in some areas of the state to various wood handle manufacturers, pallet mills or other specialty product mills.

The 1987 Directory of Alabama's Primary and Associated Secondary Forest Industries is being published now. This directory will list the various fuelwood processors, post and pole treatment plants, pallet mills, handle manufacturers and other forest product processors. Contact any county or district office of the Alabama Forestry Commission for a list of these markets in your area.

Getting the Job Done

Depending on one's interest, health and spare time, the TSI cutting and associated

marketing of what is removed can be done by an individual family or as a group effort with friends or neighbors.

Some landowners prefer to hire a forestry contractor or vendor to do this type work. It is recommended that before any cutting is done, the crop trees be marked in some way to protect them from being cut or damaged. Technical assistance is available from the Forestry Commission or from consulting foresters. Some forest industries and other government agencies have service foresters available in certain areas of the state.

Cost-Sharing for Timber Stand Improvement

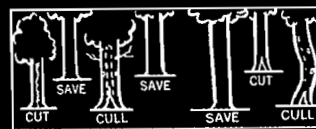
State and federal cost-sharing programs are available to private landowners who wish to carry out timber stand improvement. These programs are designed to help landowners by sharing in payment of the costs of increasing and protecting the productivity of their forestland.

For more information or details of what costs are eligible under any specific program listed in the comparison table, contact the local office of the administrative agency.

Summary

When conducting a timber stand improvement cutting operation, take care to leave the well-spaced, thrifty trees of good form, species and grade. Discourage the premature harvest for pulpwood, fence

Eliminate Cull Trees



- **Insect infested**

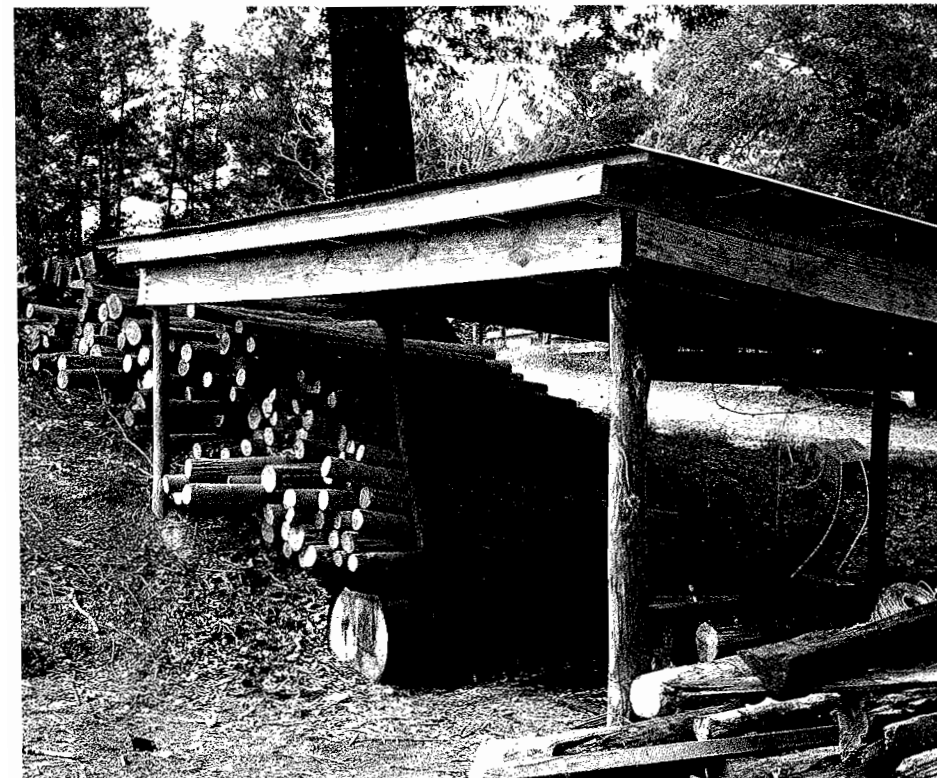
- **Rotten**

- **Poorly shaped**

posts or fuelwood of any trees that have potential value. These trees add value to your investment and proper elimination of cull and undesirable trees will increase returns. Finding markets for the trees removed during a TSI cutting will add intermediate income as well as reduce the costs of having to chemically control undesirable trees. ♣

Suggested Readings and References

- Cambre, Tom. *Hardwoods Improved in Four Easy Steps*, **Alabama's TREASURED Forests**, Winter, 1983, pg. 21.
- Cambre, Tom. *The Hard Facts of Hardwood Management—an Update*, **Alabama's TREASURED Forests**, Summer, 1985, pg. 8-11.
- Jordan, Sandra. *Wood—A Source of Energy*, **Alabama's TREASURED Forests**, Winter, 1983, pg. 14.
- Hinson, Mike and Jim Gober. *Firewood as a Business Venture—A Way to Improve Your Woodlot*, **Alabama's TREASURED Forests**, Fall, 1982, pg. 12-13.
- Hyman, Louis. *Do-It-Yourself Forestry*, **Alabama's TREASURED Forests**, Summer, 1986, pg. 10-11.
- Larson, L. Keville. *Managing Natural Stands*, **Alabama's TREASURED Forests**, Spring, 1986, pg. 22-25.
- Lynch, T. J. *Often Neglected as an Energy Source—Wood*, **Alabama's TREASURED Forests**, Fall, 1984, pg. 27-28.
- Shropshire, Frank. *Utilization of Low-Grade Hardwood*, **Alabama's TREASURED Forests**, Fall, 1985, Pg. 22-23.
- USDA Forest Service. *An Analysis of the Timber Situation in the United States, 1952-2030*, **Forest Resource Report No. 23**, pg. 240-246.



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