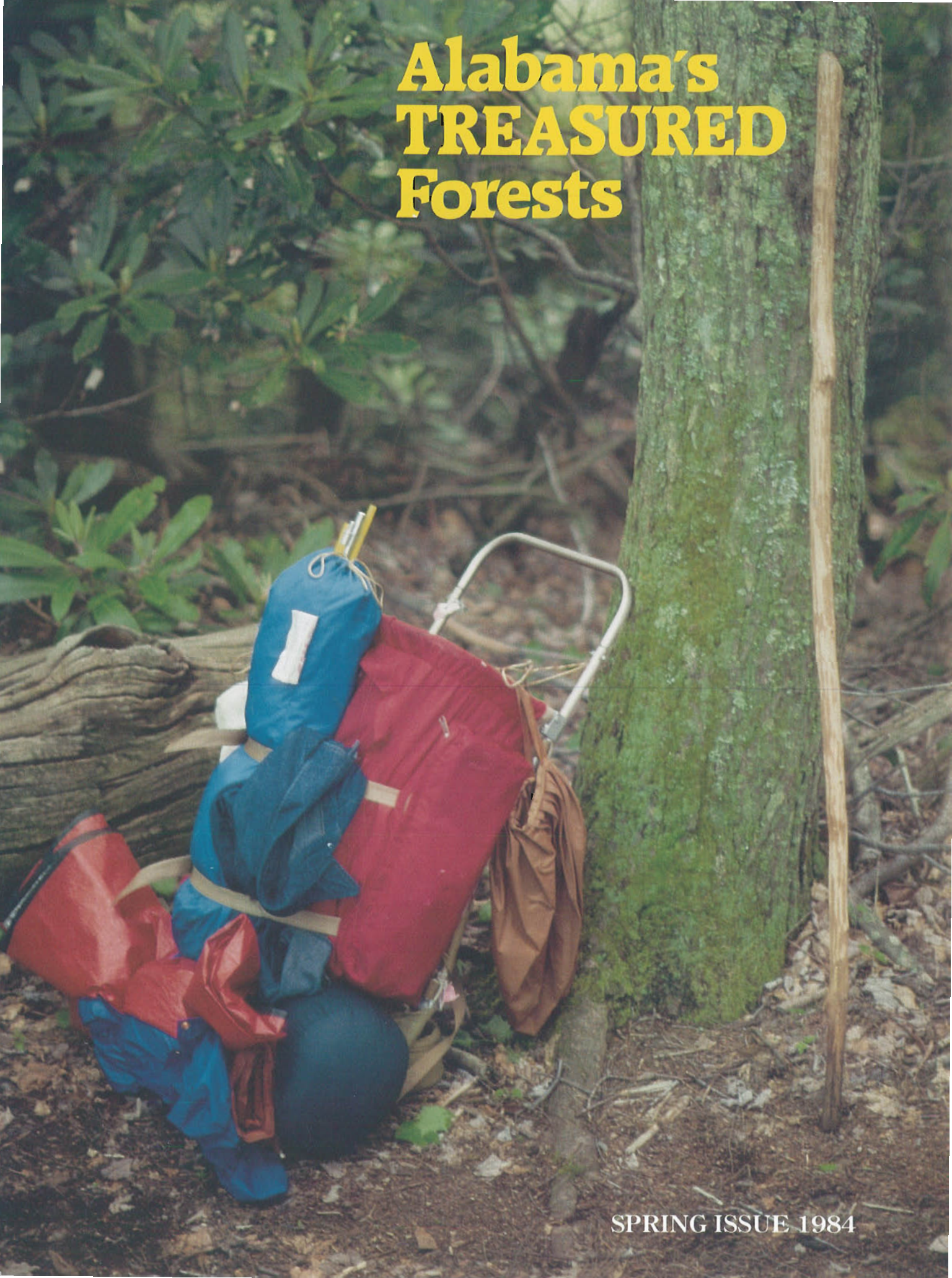


Alabama's TREASURED Forests



SPRING ISSUE 1984

STATE FORESTER'S MESSAGE

by C.W. MOODY



A TREASURE Forest recipient, who was talking about the responsibility of being a landowner, recently commented that "A person must own the land to make it better. You can visit the property of another and enjoy the many resource values, but the only way to improve it is to own it."

The more I think of this statement, the more profound it becomes. It is one of life's simple truths that one is more likely to maintain, manage and improve his *own* possessions, rather than those which belong to someone else.

I believe there is no Alabama forestland owner who will say he is not interested in "improving" his forest. I also believe many of our private forest landowners aren't managing their forest resources to full potential because they are unaware of their true value. Forest resource management requires considerable knowledge involving silvicultural activities which mandate trade-offs between the resources. Therefore, those who do not fully realize the values involved, many times have insufficient information upon which to base management decisions.

Those of us who possess a knowledge of the values and/or desirable management practices must accept the responsibility to spread the good word about forestry to every private landowner in Alabama. This job is incumbent on us whether we are public servants, private resource managers, landowners, professors, or any other citizen with such knowledge because we all are recipients of the benefits of wise forest management.

When Alabama becomes one huge TREASURE Forest we will have improved the quality of life for all Alabamians for generations to come. I believe this is possible and I believe ownership breeds responsibility which greatly impacts on the future well-being of every Alabamian and American.

Please join with me in this crusade to reach every Alabama forest landowner.

Sincerely,

A handwritten signature in cursive script that reads "C.W. Moody". The signature is written in black ink and is positioned above the typed name and title.

C. W. Moody
State Forester

Alabama's TREASURED Forests

Volume III

Spring Issue, 1984

Number 2

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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: Backpacking is inviting to outdoorsmen in the spring! Photo by Charles Siefried; Sayer, Martin & Seifried Advertising in Huntsville.

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SPRING!
It's Time
You
Learned
About
The
Birds
And . . .



WHERE HAVE ALL THE BLUEBIRDS GONE?



by TONY AVERY, Alabama Forestry Commission, Marion County

Fortunately, this is a question most Alabamians have not had to ask themselves. However, in many states east of the Rockies, the eastern bluebird is only a treasured memory. In such states as Massachusetts and New Hampshire where the eastern bluebird was once common, it is now all but gone. In fact, it is estimated by renowned bluebird expert Lawrence Zeleny that the eastern bluebird may have reached a population decline of ninety percent since 1920 over its entire range east of the Rockies, including lower Canada.

One cannot talk about the declining bluebird population without thinking about the fate of the passenger pigeon. Could this happen to the bird that Thoreau said, "Carried the sky on his back?" In 1881, McCormack reported flocks of passenger pigeons in Colbert County numbering in the millions. In 1914, none were left on the face of the earth!

In 1981, the eastern bluebird was placed on the National Audubon Society's Blue List. This list is reserved for North American birds that show non-cyclical population decline or range restriction in either, all, or part of their range. Professor George J. Wallace of Michigan State University stated that the eastern bluebird may now have to be added to an ever growing list of vanishing birds. The reason for the bluebird's decline seems to be fairly well understood with the same declining factors present over its entire range, but more acute in the Northern states than in Alabama. Although Alabama's resident population of bluebirds is further enhanced by the cheerful warble of migrants from the North, we still need to take notice of these declining factors so that the bluebird will always be a part of Alabama's TREASURE Forests.

By far the two most important contributing factors concerning the

decline in bluebird populations occurred in 1851 and 1890. The house sparrow was successfully introduced into the United States in 1851; within a period of fifty years it had completely overrun the continental United States, the lower part of Canada, and Northern Mexico. The house sparrow is basically a cavity nesting bird and much more aggressive than our native bluebird. In competition for cavity nesting sites, it is nearly always our beneficial bluebird that loses the fight. Although their bravery is courageous in defending their nest, the bluebird's corpse, egg, or nestlings are sometimes found under the victorious house sparrow's nest. The house sparrow's favorite method of execution is by pecking the bluebird on top of the head.

In 1890, eighty starlings were released in New York City's Central Park. They, like the house sparrow, have also overrun the country. The larger starlings have no trouble in taking over cavities from bluebirds with an entrance large enough for them to enter. These pesty aliens have run the bluebird out of our urban cities and towns. Because of their large number, they are putting

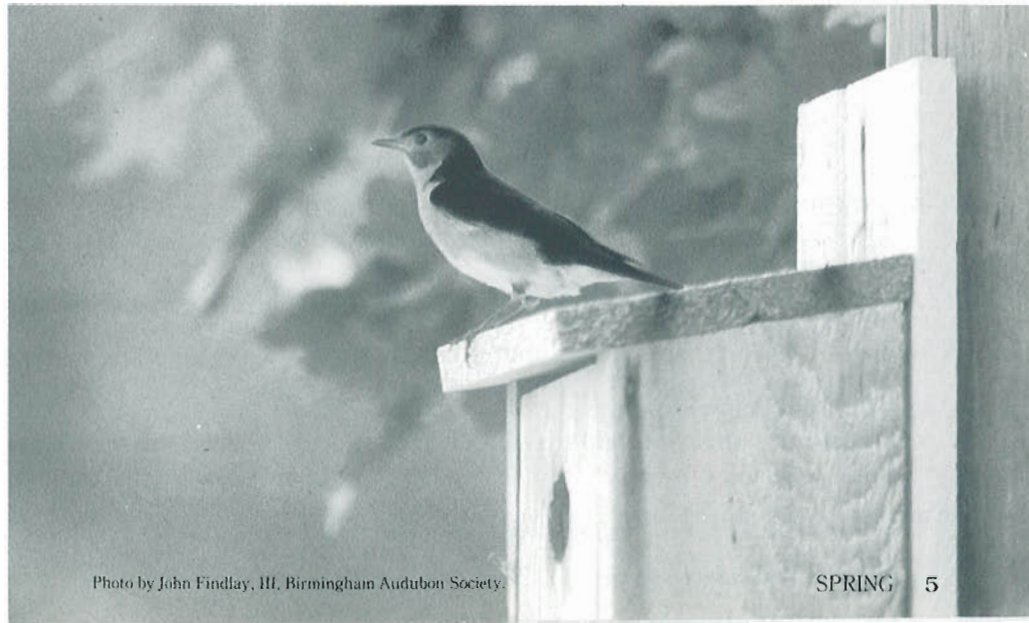
ever increasing pressure on our rural areas as well.

The bluebird also suffers from other detriments common to our feathered friends such as declining winter food supplies, adverse weather conditions, insecticides, and destruction of habitat. Thus, the bluebird is coming under increasing pressure for its survival. What a tragedy it would be to lose such a beneficial bird! Since before the days of Columbus to present time, the soft, sweet warble of the returning bluebird migrating from its Southern winter home has brought renewed hope for the coming spring. No other bird is featured in more songs, poems, and cards. No wonder the bluebird is an often used symbol of love, hope, and happiness.

Man has put a lot of strain on the small thread that holds the bluebird in the complex ecological web of life. The experts have pretty much provided the answers to secure the bluebird in his little niche in our environment. The answer is in nesting boxes — thousands of them!

Henry David Thoreau, noted naturalist, is credited with providing some of the earliest documentation of the use of bluebird nesting boxes. His well kept diary provides the following passage dated September 29, 1842:

"Today the lark sings again down in the meadow, and the robin peeps and the bluebirds, old and young have revisited their boxes, as if they would fain repeat the summer without intervention of winter, if nature would let them."



Because these birds are so beautiful and feeding habits are so completely without fault, it seems these early recorded nesting boxes were placed to entice these gentle birds closer to home and gardens, since they are especially fond of cutworms that are troublesome to crops and gardens in the spring.

From such a humble beginning comes the vocal point of bluebird conservation — the bluebird trail. A bluebird trail consists of a number of bluebird nesting boxes, usually spaced a hundred yards or more apart in suitable locations and arranged so that they can be monitored easily by someone going from box to box by car, bicycle, foot, or three-wheeler.

The concept of the bluebird trail has had an amazing track record since it was invented by Thomas E. Musselman of Quincy, Illinois, in the late 1920's. Of the many trails established since Musselman's trail, by far the longest one is in Canada which with the main route and side legs covers 2,500 miles and has some 7,000 impressive nesting boxes. There are many other trails in various states. John Findlay, III of Birmingham, a member of the Birmingham Audubon Society, has done much to "help bring back the bluebirds" at Oak Mountain State Park with his trail there.* I, too, have a trail consisting of about 20 boxes located in Marion County. During the 1983 nesting season, about fifty birds were fledged from these boxes. This winter I plan to add twenty more boxes to my trail.

With many species of threatened wildlife and birds, there is not much the average citizen can do to help except support favorable legislation and obey the laws and regulations concerning the species involved. This has been pretty much the case with such species as the bald eagle and the whooping crane where highly trained wildlife biologists provided both the technical knowledge and the field work to save these species from the brink of extinction.

The bluebird provides a unique example for amateurs to physically help a species increase its population and reverse its steady decline in numbers. Who are the amateur "bluebirders"? They come from all walks of life. They come from various organizations (the Garden Club,

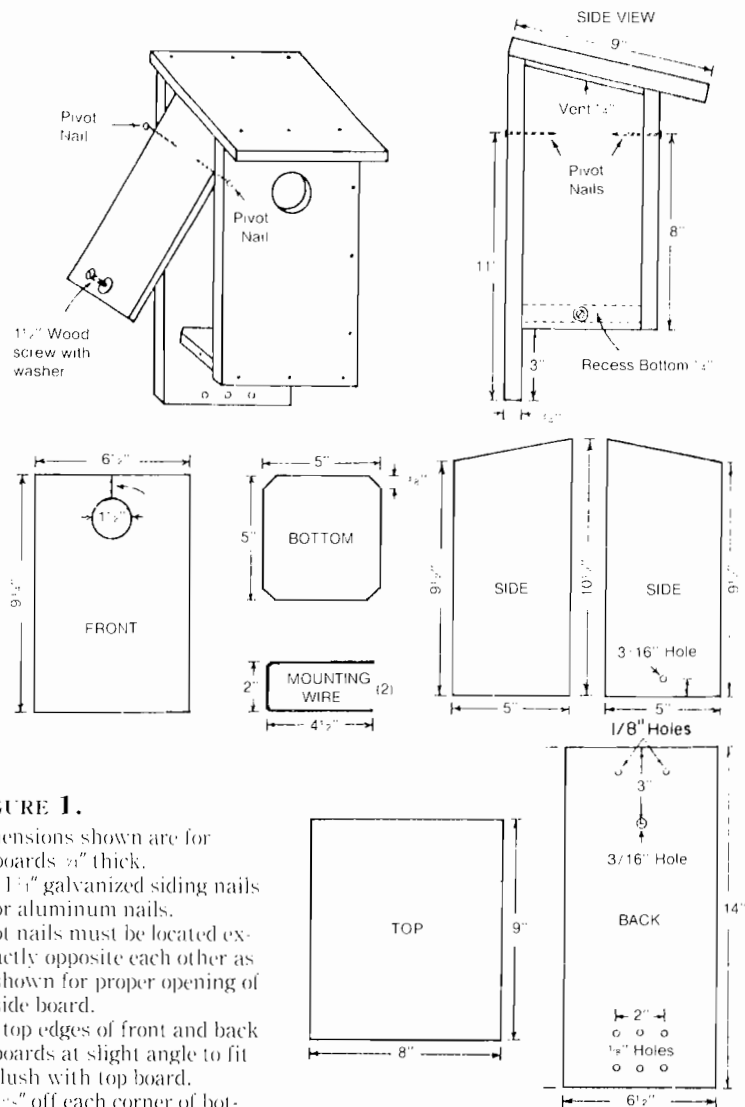


FIGURE 1.

- Dimensions shown are for boards $\frac{3}{8}$ " thick.
- Use 1 1/2" galvanized siding nails or aluminum nails.
- Pivot nails must be located exactly opposite each other as shown for proper opening of side board.
- Cut top edges of front and back boards at slight angle to fit flush with top board.
- Cut $\frac{1}{8}$ " off each corner of bottom board as shown.
- Insert bottom board so that the grain of the wood runs from front to rear of box.

Campfire Girls, Audubon Club, 4H Club, Girl Scouts, and the Boy Scouts) to TREASURE Forest landowner #213, Mr. Thurston Nix in Marion County, who has a small trail on his property.

Much has been done to educate the public concerning the plight of the bluebird. One of the best examples is an article written by Joan Rattner Heilman in **Parade** magazine, a supplement to many Sunday newspapers with a wide circulation over the United States. In her article entitled "The Bluebird Will Return If You Help," she invited readers to write to North American Bluebird Society in Silver Springs, Maryland, for information on bluebird nesting

boxes. The Society, a non-profit organization which is dedicated to bluebird conservation, received an amazing 80,000 requests for information on bluebird nesting boxes.

Bluebird nesting boxes should be simple, well-made structures designed for easy monitoring (**FIGURE 1**). The entrance hole should be exactly one and one-half inches in diameter, since this will make the box starling proof. Most pine or oak lumber will make suitable construction material. If plywood is used, be sure it is of exterior grade since plywood not designed for outside use cannot tolerate weathering. The box in **FIGURE 1** is designed to open from the side to allow for easy monitoring. The blue-

*See Alabama Conservation, May/June, 1981

bird doesn't have any preference over a painted box or an unpainted one, although this will tend to add to the life of the boxes. If you choose to paint your boxes, be sure to use light colors such as tans and grays since they will blend into the natural surroundings. The light colors will also help prevent the box from overheating on hot sunny days. Always allow for good ventilation and drainage, or your boxes may become death traps.

Now that you have a suitable box, you need a suitable location. The bluebird is truly an edge species; it favors open grassy areas, garden spots, and orchard type settings. Golf courses are excellent habitats. The bluebird likes the randomly spaced trees and short cut grass. Unimproved or over-grazed pastures are also possibilities for nesting boxes. The bluebird is not a patronizer of the deep woods and inner cities, and placing boxes in such locations will yield little if any results in

bluebird conservation. Boxes should be erected in February because at this time, the male begins searching for a cavity that will entice his future mate to set up housekeeping. Boxes should be mounted four or five feet from ground level, since this allows for easy monitoring and the height tends to somewhat discourage house sparrows. If the box is mounted on a fence post, be sure the post is solid because partially rotten posts tend to harbor ants that will quickly move into the box once the bluebirds have built their nest. Boxes should not be placed closer than one hundred yards apart since bluebirds are territorial. It is best to monitor your boxes weekly in nesting season if possible. Bluebirds sometimes raise as many as three broods a year and the old nest should be removed each time the fledgings leave the nest. Unwanted occupants such as ants, wasps, and house sparrows should be evicted. The house sparrow is persistent and may have to be evicted

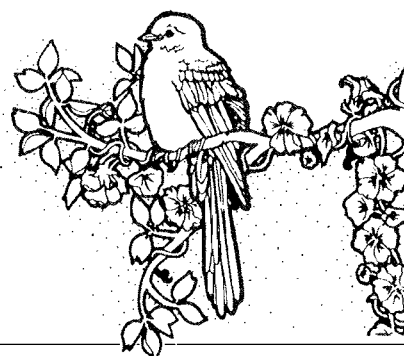
as many as eight times, unless the male is destroyed.

Bluebird boxes and trails have proved successful in increasing population where established. If you are a landowner with a suitable habitat, place some boxes on your property and the bluebird will become a valued part of *your TREASURED Forest*. ♣

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PLANTING SUPPLEMENTAL FOODS FOR WILD TURKEYS



by CHESTER E. BILLIE, JR., Wildlife Specialist, Alabama Forestry Commission, Bay Minette

Planting supplemental food for turkeys is an accepted and often beneficial wildlife management activity. This activity has gained popularity among landowners in the past due to increased turkey populations and increased interest in turkey hunting.

Landowners are often confronted with several questions regarding planting supplemental foods for these birds. These include what plot size should be used, what plant species should be planted, when and how they should be planted, and what fertilizer should be used.

Plot Size

The field planted for wild turkey food should be at least one acre. If

there is a high population of deer on the land, fields should be two or more acres in order to accommodate both species. Some of the largest flocks of turkeys in Alabama have been established and maintained with fairly high deer populations where about five percent of the total woodland area is kept in food patches of winter greens.

Clovers

Button, crimson, red, and white clovers (including Ladino) are excellent turkey foods. Clovers can be planted with grasses, oats, or wheat, but are more easily managed for turkeys when grown alone. Perennial grasses such as bluegrass, fescue, and orchard grass soon crowd out the clovers in turkey fields. Since

deer will feed in the same fields with wild turkey and prefer the clovers, the grasses soon replace these more heavily grazed legumes.

Inoculate clover seed before planting in a field where clover has never been grown. Use the true clover inoculant for crimson, red, and white and the alfalfa; use burclover inoculant for button clover. In fields that have grown clover, inoculation is seldom necessary but phosphate usually is needed for continued vigorous growth.

Seed clovers in the fall by broadcasting. Select the clover best adapted to the soil. Button clover is seeded at 20 pounds of scarified seed per acre, white clover and its varieties at 2 to 4 pounds per acre, crimson clover at 20 pounds per acre and red clover at 10 pounds per acre.



Bahia Grass

Turkeys strip the seeds of bahia grass from the ripe seed heads in July, August, or September. Bahia grass also harbors many insects which are eaten by the young poults in late spring and early summer. One acre of bahia grass is enough for a flock of turkeys, but the grass must be protected from cattle grazing. Sow 20 pounds of seed per acre in the spring. Drill the seed 1/2 to 1 inch deep on a well prepared seedbed. Fertilize with 400 pounds per acre of 8-8-8 fertilizer or by soil test. Lime as needed to establish and maintain a pH of 6.0 to 6.5

Apply 400 to 600 pounds per acre of 0-12-12, 0-14-14, or 2-14-14 fertilizer for clovers, or fertilize by soil test. Lime the soil to establish and maintain a pH of 6.0 to 6.5 for crimson and white clover and 6.5 to 7.5 for button and red clover. Lime again every fourth or fifth year, or when a soil test shows the need.

Button and crimson clovers are annuals, but you can get early volunteer stands each year by harrowing or disking in August. Red clover requires an early fall disking every second or third year to re-establish a full stand against native grasses. White clover is perennial and does not require annual fall disking.

field in August every second or third year. Rye grass sometimes needs reseeding.

Blue Grass, Fescue, and Orchard Grass

All these perennial winter grasses are fair turkey foods. Though the perennials are less palatable than the annual winter grasses, they make good ground cover and are useful on steeply sloping land or along roadways where close grazing by deer and turkeys could cause erosion.

Chufa

Chufa nuts are choice turkey food. Chufa is an annual sedge adapted to sandy loam soil and is grown from tubers (nuts). The tubers may be sown in rows up to 42 inches apart and cultivated, or they can be broadcast. Chufa is easier to cultivate when planted in rows. Plant the tubers in May, June, or July, using 30 to 40 pounds per acre.

Fertilize chufa with about 400 pounds per acre of 8-8-8 or by soil test. Sidedress chufa with additional nitrogen at the first cultivation. If all the tubers are not eaten by turkeys and other wildlife, chufa can be maintained by disking and fertilizing each spring.

Deer, raccoons, and squirrels eat the tubers. Chufa is a hard crop to grow in fields of one acre or less if raccoons are numerous or if turkeys feed regularly in summer. Both of them dig the tubers and may destroy the stand by feeding on them in spring and summer. A field of three to five acres usually withstands turkey grazing. Raccoons that are troublesome can be trapped in accordance with state game regulations.

Oats, Rye, and Wheat

These cool season annuals make suitable winter grazing for wild turkeys. Use the best suited for your particular soil type. In the fall prepare the soil by disking, then broadcast or drill 60 to 90 pounds of seed per acre. Fertilize with 400 pounds of 4-12-12 fertilizer or by soil test. Lime where necessary to maintain a pH of 5.8 to 6.5. Seed clover with grains if you plan to convert the field to clover after the first year.

Rescue Grass and Rye Grass

These annual grasses provide good winter grazing for turkeys. During the fall, prepare the ground well by plowing or disking and harrowing. Broadcast 30 to 40 pounds of rescue grass or 50 pounds of rye grass per acre. Fertilize with 500 pounds per acre of 8-8-8 fertilizer or by soil test. Lime when necessary to keep a pH of 6.0 to 6.5. To maintain rescue grass and rye grass, disk the

Cowpeas, Millets, Peanuts, Grain Sorghums, Annual Lespedezas and Soybeans

All of these are choice turkey foods for summer and fall but at these seasons extra food is seldom needed. Small plantings of cowpeas and soybeans usually are destroyed by deer. Grain sorghum attracts blackbirds, cowbirds, grackles, and sparrows, which eat most of the seed. Also, it mildews badly afield in humid weather. Browntop millet, an annual, is the best of the millets. Its value is to hold a turkey flock and feed it in July, August, or September (before the blackbirds flock heavily). You can use peanuts or browntop millet as a substitute for perennial bahia grass.

A landowner should keep in mind that supplemental planting of game food is just that — supplemental. They are not meant to replace totally natural food items nor are they considered a perpetual remedy for turkey and other wildlife where food is the limiting factor. However, they often do supply temporary relief during years when natural foods are low and they can improve wildlife harvest. ♣

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BICOLOR IS FOR THE BIRDS



by ROBERT E. WATERS, Biologist, Soil Conservation Service, Auburn, Alabama

Editor's Note - The first part of this article appeared in the Winter 1984 issue of this magazine. The first part contained instructions for transplanting bicolor seedlings. It also contained a description of bicolor, a discussion of bicolor's value to quail, and mentioned the plant's limitations. A review of the first part may be helpful.

This, the second part, contains instructions for establishing bicolor plots to ensure their lasting indefinitely. This part also mentions a few reasons for harvesting quail rather heavily by sport hunting every year.

As stated in the first part of this article, bicolor (*Lespedeza bicolor*) can be established by transplanting 1-year old seedlings or by planting scarified seed (seeds whose outer coats have been worn down to improve germination.) Seedlings should be planted between November 15 and March 15. For that reason, instructions for planting seedlings were published in the Winter 1984 issue of this magazine.



Avoid planting on lime soils of the Blackbelt; on deep, thin sands; on wet, poorly drained soils; on heavily shaded areas; on areas grazed by livestock; and on areas with dense populations of deer.

Grazing by either livestock or dense populations of deer destroys bicolor. What is a dense population of deer? Generally, it's a population of one or more deer for every twelve acres of woodland or areas reverting to woodland. Grazing by low to moderate populations of deer, such as those in most of Alabama, has little effect on bicolor.

Like all other plants, bicolor has limitations. Some are mentioned in the paragraphs above. Another limitation of bicolor is that it starts spreading after 10 to 12 years, especially on areas prescribed burned in late winter. On such areas, it frequently becomes a pest after 15 to 20 years. But in most places, bicolor doesn't become a pest. It doesn't spread into cropland nor pasture land, nor does it spread into woodland to any appreciable extent unless

the woods are prescribed burned occasionally.

Plant near woods or other natural quail cover. Plant where there's a shortage of winter food for quail and where it's desirable to concentrate quail for ease of hunting.

In most instances, bicolor 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, along hedgerows, and open areas in woodland. If possible, locate plots several hundred feet from thriving stands of kudzu and Japanese honeysuckle. After a few years, these plants can completely overtop a bicolor plot and reduce its value to quail.

Break and harrow the plots several weeks before planting. That allows rains to settle the soil before planting. The seedbed should be well prepared but firm.

Apply lime and fertilizer according to soil test recommendations. Apply both at the time of soil preparation. If a soil test is not made, apply 450

Planting

The best dates for planting bicolor seed are March 1 to April 15. They may be planted as late as May 15. The following instructions should be helpful.

Plant only scarified seed. You can buy them from larger seed dealers, or your local dealer can order them for you. Plant in plots 15 feet wide and 300 feet long. **Hereafter, when we refer to a plot, we are thinking of one with those dimensions.** Several well distributed plots of that size are better than one larger planting. One plot for every twelve acres usually supports high quail populations.

Bicolor produces more seed when planted on fertile soils. But it grows well on infertile soils, especially if it's limed and fertilized properly.



Bicolor attracts quail coveys.

pounds of lime and 100 pounds of 0-20-20 fertilizer per plot.

Methods of Planting

As stated earlier, the best dates for planting bicolor seed are March 1 to April 15. Avoid planting after May 15. Sufficient soil moisture at planting time and for several weeks thereafter is necessary for success. Therefore, plant soon after the danger of frost in order to take advantage of spring rains.

Seed may be planted in rows, or they may be broadcast. Broadcasting takes less time and usually results in a denser stand. Rows, on the other hand, permit cultivation which is desirable, especially if weeds are a problem. Seed do not need inoculation.

For broadcast planting, freshen the seedbed lightly. Broadcast two pounds of scarified seed evenly over the entire plot. Cover lightly with a cultipacker or other roller just enough to prevent seed from drifting in case of heavy rains. As previously mentioned, broadcast stands cannot be cultivated.

When planting bicolor seed in rows, space the rows three feet apart and plant one pound of seed per plot. Open a shallow furrow, drop 30 seed per foot into the furrow and cover lightly—no more than one-half inch. If covered deeper, the seed will not germinate.

Seed may be planted by hand or by using a single-row, push-type garden planter. Plots should contain six rows. Again, the rows should be 3 feet apart and 330 feet long. Control grasses and weeds between the rows.

Maintaining the Plots

Bicolor is a perennial. Therefore, it puts forth new growth each spring from roots and stems of the previous year. Bicolor can be maintained indefinitely when planted on suitable sites and managed properly. Some

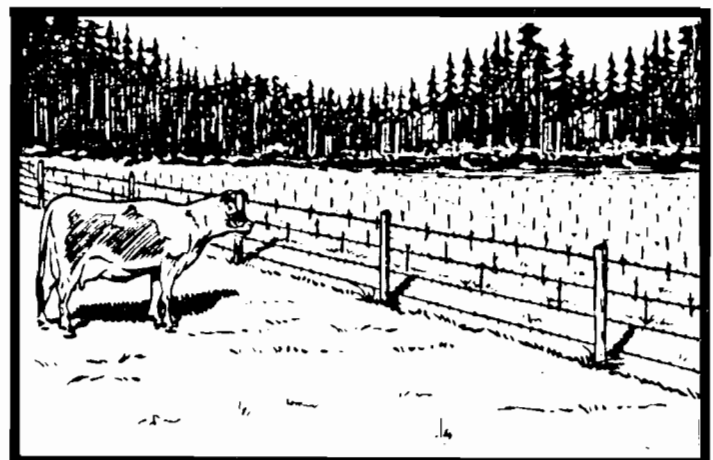
plantings in Alabama are more than 40 years old and are still doing well.

Bicolor must be protected from grazing by livestock and by dense populations of deer. It may make little growth the first year, especially when seed are planted. If it makes little growth the first year, apply lime and fertilizer according to soil test recommendations. It will probably make excellent growth for several years after that.

Clip or mow bicolor near the ground (4 to 10 inches) in late February following its second growing season and apply 100 pounds of 0-20-20 fertilizer per plot. For example, a plot in which *seed* are planted in the spring of 1984 should be clipped near the ground in late February of 1986. A plot in which *seedlings* are planted in the winter of 1983-84 should be clipped in late February of 1985. Clipping causes the stump and roots of each plant to put forth several upright stems, thereby thickening the stand. Clipping also prevents sassafras, persimmon, pine, and other unwanted plants from becoming established in bicolor plots. A tractor-drawn rotary mower of the bush hog type is excellent for clipping bicolor. Clip in late February every 3 to 5 years after the initial clipping, and apply 100 pounds of 0-20-20 fertilizer per plot immediately after each clipping. To reduce the likelihood of serious grazing by dense populations of deer, postpone the application of fertilizer until the beginning of the second growing season after clipping.



Clip bicolor near the ground (4 to 10 in.) in late February after its second growing season and in late February every 3 to 5 years thereafter.



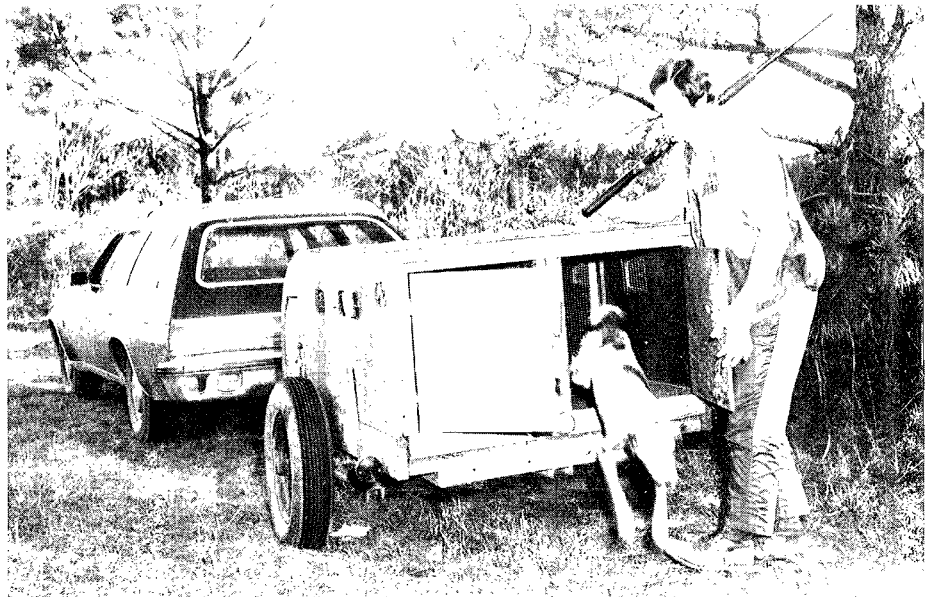
Protect bicolor plots from grazing.



Quail populations vary somewhat from year to year, depending primarily on reproductive success which is largely determined by spring and summer weather. Usually hot, dry springs and summer weather is detrimental. Areas with ideal food and cover may support one bird per acre during winter, the least favorable season.

It's very difficult—in fact, almost impossible—to harvest enough quail by sport hunting to affect the next year's crop. Why's that? Approximately 80 percent (8 of every 10 quail) of a fall population die before the next fall regardless of whether the birds are hunted.

If 50 percent of the quail in a fall population are harvested by sport hunting, 30 percent will die of other causes before the next fall. If 20 percent are harvested by sport hunting, mortality from other causes will be 60 percent. If none are harvested by sport hunting, mortality for the year will still be a whopping 80 percent! So, mortality from all causes—sport hunting and all others—will be 80 percent for the year. That 80 percent annual mortality, is characteristic of quail in Alabama. What it means is this — if one thing doesn't get a majority of your quail from one fall to the next, something else will.



Wise use dictates that you harvest your quail crop by sport hunting every year.

Wise use dictates that you and other sport hunters get them—not bugs, opossums, and buzzards.

Therefore, get your gun and a supply of shells, turn your dogs loose, and go bird hunting at every opportunity during hunting season. Be sure to hunt your bicolor plots, especially after they get old enough to produce seed—that's where your birds will be from Christmas to the end of bird season! Don't worry about harvesting enough quail to reduce your next year's crop. You are

not likely to do that. You and your hunting partners will stop going after depleted coveys long before you harvest enough to reduce the next year's crop!

Remember that 80 percent of your birds die from one fall to the next. Generally, the more you harvest by sport hunting, the fewer die of other causes. When harvested by sport hunters, quail provide food for people and many hours of wholesome recreation.

You can obtain more information on planting and maintaining bicolor plots from the Soil Conservation Service, your County Agent Coordinator, the Alabama Department of Conservation and Natural Resources, the Alabama Forestry Commission, the U. S. Fish and Wildlife Service, and others.



Control grasses and weeds, especially during the first growing season.



Apply 100 lbs. of 0-20-20 fertilizer per plot immediately after clipping the plants.

LANDOWNERS' LEGISLATIVE ALERT



NATIONAL by J. KENNETH MYERS, Legislative Affairs Staff, Forest Service, U.S.D.A.

When the 98th Congress reconvened in January, its attention immediately focused on the Fiscal Year 1985 budget. The Administration's concern with the Federal deficit and the need to reduce domestic spending resulted in reduced budget recommendations for the cooperative Federal/State forestry assistance programs. As presented to Congress on February 1, 1984, the President's budget for these programs calls for a 58 percent reduction in funds. Grants to states for the forest management, utilization, forest fire protection, and forest pest management programs would be discontinued. Funding for cost-sharing with forest landowners under the Forestry Incentives Program (FIP) would be merged with the appropriation for the Agricultural Conservation Program. The budget indicates funding for these two programs at \$70 million with about \$4 million earmarked for FIP. Congress had not responded to the President's budget proposals by mid-February. Congressional committees will conduct hearings on the budget through the spring months before beginning their action to respond to the President's proposals.

The Senate passed and sent to the House the "Highly Erodible Land Conservation Act of 1983" before adjourning in November. This bill would prohibit USDA from paying

certain agriculture incentives to persons who produce agricultural commodities on highly erodible land. The incentives thus prohibited would include price supports, production adjustment payments, crop insurance, loans, and disaster payments. The House is expected to act on this bill in 1984. A bill by Congressman Ed Jones of Tennessee combines this prohibition on tilling highly erodible land with programs allowing farmers to voluntarily set-aside these erosion prone croplands into permanent grass cover or to place the land into a conservation reserve with a USDA payment for long-term (7-15 years) conservation practices carried out.

The Congress also has under consideration several recently-introduced bills that provide for the diversion of cropland prone to erosion into long-term conservation use. S. 2148, introduced by Senator Nunn of Georgia, and a House companion bill, H.R. 4730, introduced by Congressman Hatcher, also of Georgia, would establish a conservation reserve program. These bills are entitled the "Conservation and Forestation Act of 1984." Title II would authorize a USDA program of payments to persons who divert farm acreage from the production of agricultural commodities to the production of pine trees. The payments could be made in cash or in-kind using agricultural

commodities held by USDA. A variation on this approach is in a bill by Senator Jepsen of Iowa. It would establish a pilot program to assist owners of highly erodible cropland to set aside that land and carry out soil and water conservation practices and measures to protect the land. The program would be carried out through contracts between the owner and USDA of five to ten years duration and would require a conservation plan. Action on all of these bills, in the form of hearings and committee debate, is expected before Congress adjourns in October. It has been suggested that Congress will incorporate discussion of these bills into the discussion of the 1984 Farm bill which will get underway this year. The Farm bill is the legislation that reauthorizes, and in some cases restructures, the Federal Government's farm program every four years.

Bills pending before Congress dealing with tax matters and reported on in earlier issues of Alabama's TREASURED FORESTS have not been acted upon. This includes a bill—S. 1719—by Senator Metzenbaum of Ohio that would repeal Section 631 of the Internal Revenue Code which allows forest landowners and forest product companies to treat timber income as a capital gain.

When the 1984 regular session of the Alabama Legislature convened in early February, Governor George Wallace used his 21-page "State of the State" message to propose a revenue package that would generate an estimated \$300 million.

He cited education, highways, prisons, Mental Health and Medicaid among critical areas of need and charged Alabama lawmakers—many of them in their first regular session—to accept the challenge and pass his revenue proposals for the good of all Alabamians.

Measures included in the governor's plan were (1) to raise the maximum income tax rate from five percent to six percent on taxable income exceeding \$8,000; (2) impose a new six mill property tax; (3) adopt a highway revenue package with a two percent gasoline inspection fee; and (4) a .04 percent tax on transactions between wholesalers and retailers. The wholesalers' privilege tax was proposed to head off a predicted \$58 million deficit in the state's general fund. This drew heavy fire from the Alabama Merchants Association and was eventually withdrawn by the administration when it reached the House floor.

Still another bill would require customers of municipal electric systems to ante up the same 2.2 percent utility tax that other utility customers are now paying.

Property Tax Proposal Revised

In later developments, the governor revised his property tax proposal to buffer its effect on farm and timberland owners. He asked that rural landowners with property valued at less than \$500,000 be exempt from the proposed tax increase. His original appeal to the legislature would have exempted all farm and timberland valued at less than \$250,000 from a 6.5 mill existing tax and from the proposed six mill increase.

Under his amended plan, however, all landowners would continue to pay the 6.5 mill tax. Owners whose property is valued at more than \$500,000 would pay both the 6.5 mill and the six mill increase.

A mill is equivalent to \$1 of tax per each \$1,000 of taxable value.

Forest Industry Board Proposed

Other legislation introduced during the early part of the '84 session included a measure to create a State Forestry Industry Advisory Board. This bill was a product of extensive research by the Legislative Forestry Study Committee, chaired by Representative Jimmy Warren of Castleberry.

The intent of the bill, as introduced by Representative Warren in the House and Senator Bobby Denton of Florence in the Senate, was directed toward responsible planning of further forest product industrial development for Alabama.

The Advisory Board's goal would be aimed at wise development and efficient utilization of Alabama's forest resources and industries. The board would consist of 11 members. The governor, lieutenant governor and speaker of the House would each appoint two members—one representing forestland ownership, and the other from forest industry.

Heads of the following agencies would complete the makeup of the board: Alabama Development Office; Department of Forestry at Auburn University; Department of Economic and Community Affairs; Alabama Forestry Commission (the State Forester who would serve as secretary); and the chairman of the Legislative Forestry Study Committee who would chair the Advisory Board.

General responsibilities of the board would be as follows:

-Development of a long-term industrial plan concerning forest products, with an analysis and identification of each;

-Coordination and consolidation of all appropriate agencies concerning the communication of forest product development;

-Support, finance and periodically update Alabama's Primary Wood Using Industrial Survey or Secondary Survey as the board deems appropriate;

-Solicit, improve and protect forest product industries within Alabama for the general welfare of her

citizens and the economy;

-Support, lobby and solicit wood energy development throughout the state;

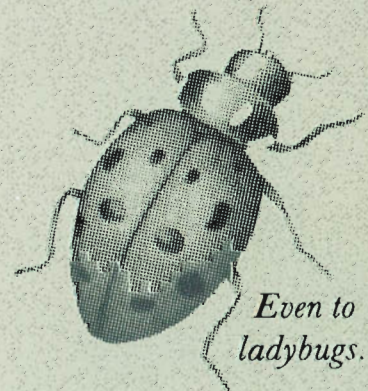
-Coordinate and consolidate wood energy activities through appropriate agencies and provide leadership in wood energy development;

-Integrate into the long-term industry development plan a wood energy marketing philosophy;

-Provide grants in the form of low interest loans, similar to Federal Action Grants (USAG), to alleviate high interest costs as they relate to wood energy conversions at state and private facilities.

It is the intent of the legislation that the Alabama Development Office be funded in the amount of \$100,000 with an equal amount designated to the Department of Economic and Community Affairs to carry out the goals of the board. Monies would be appropriated from the general fund. ♣

The forest
belongs
to every
living
creature.



Even to
ladybugs.



FOREST FESTIVAL SALUTES SMOKEY'S FORTIETH BIRTHDAY

It'll be the biggest birthday celebration Alabama has ever seen! That's right — the 1984 Alabama Forest Festival will salute Smokey Bear's 40th birthday at the annual festivities set for April 21 at Montgomery's Garrett Coliseum from 9:00 a.m. until 5:00 p.m.

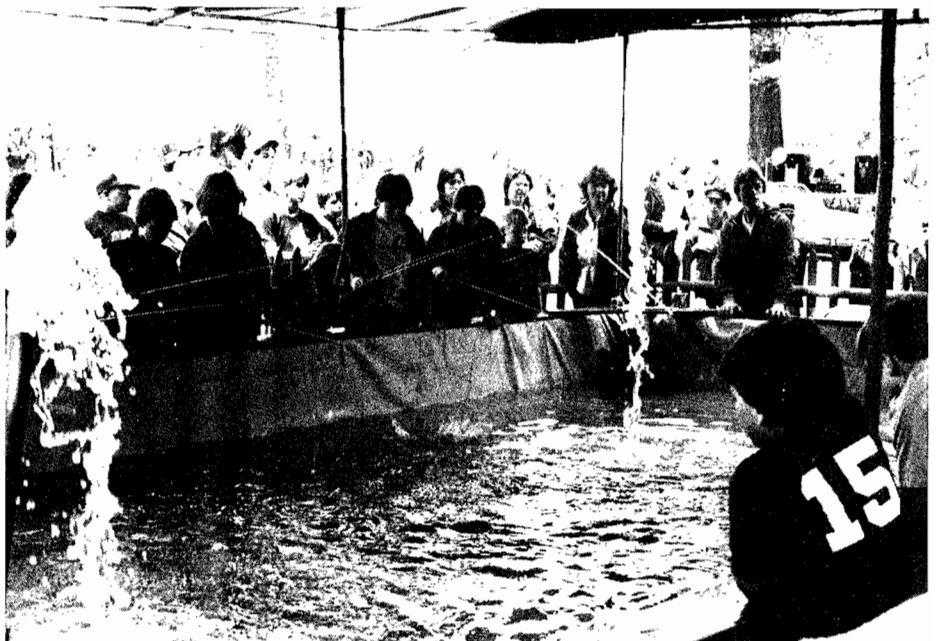
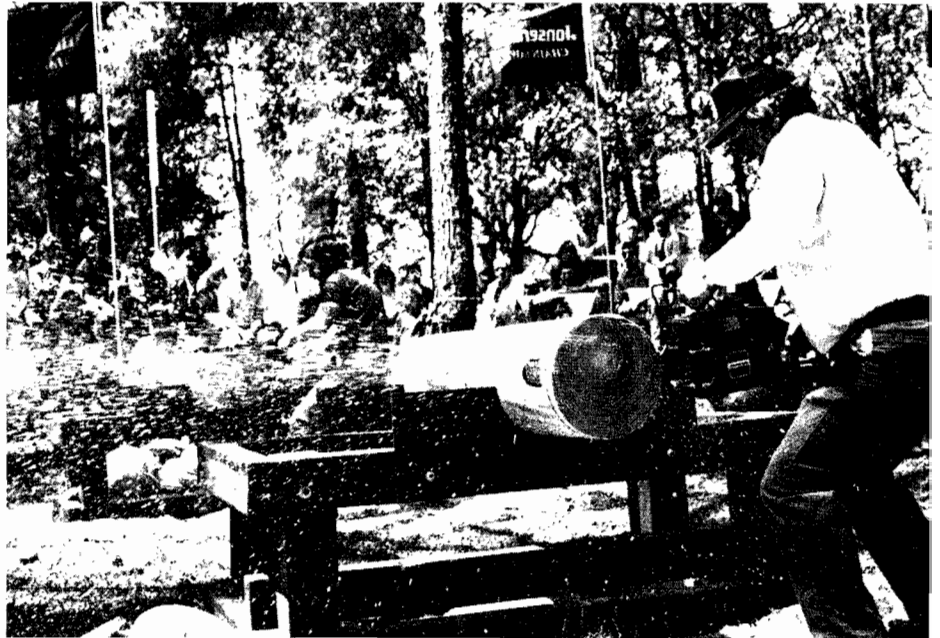
Log rollers, blue grass bands, arts and crafts, chain saw and cross cut competition, and lots of games and prizes for the youngsters are in store. There will even be a trout stream for those who just have a hankerin' to do

some fishin'.

You'll be thrilled by the excitement of the volunteer fire departments' competitions and "Operation Rainmaker's" water drop. Browse through the displays or just enjoy the fun of being there!

At 1:45 p.m., if you're one of the lucky ones, you might even get a piece of Smokey's giant birthday cake!

Where else can you have so much fun for free? NOWHERE! We'll see you there!



GET SET FOR 1984

ALABAMA CHAINSAW AND CROSSCUT SAW CONTESTS

by DON BURDETTE, Information and Education Specialist, Alabama Forestry Commission

Who's the fastest chainsaw operator and the fastest crosscut team in Alabama? Find out on Saturday, April 21 as some serious competitors vie for that distinction during Alabama's Chain Saw and Old Fashioned Crosscut Contests. These events will begin at 9:00 a.m. at Garrett Coliseum in Montgomery, and are sponsored by Tilton Equipment Company of Atlanta, Georgia in cooperation with Jonsered Chain Saws.

Contenders will use identical, standard chain saws provided by Tilton to make the best of their personal skills and experience during the precision cutting, disc stacking and speed cutting events. The hot saw event is a race between modified chain saws which the contestants must provide. A point system will be used to determine the overall standings for the four events. Prizes for the chain saw contest are \$275, \$175, and \$100 for first, second and third places respectively.

The crosscut saw competition encourages the preservation of "old fashioned" timber harvesting practices. Any two-man crosscut saw

may be used to make a single cut through a 12 inch pine log. The fastest time wins. Awards in this event will include a cash prize of \$75 for first place, \$50 for second and \$25 for third with trophy plaques for the top three teams.

Contestants will be required to observe safety precautions outlined in the contest rules and regulations and also must wear protective gear provided by the contest sponsors or otherwise approved by contest officials.

There will be a 20 man limit on

the total number of contestants for the chain saw contest and a 20 team limit for the crosscut sawing contest. There are no entry fees. All persons interested in competing in either of these events should preregister as soon as possible as these slots will be filled on a first come, first serve basis. A registration form and copy of the rules and regulations are available from Don Burdette, Information and Education, Alabama Forestry Commission, 513 Madison Avenue, Montgomery AL 36130. May the best man and team win!



LINDANE RESTRICTION

Lindane is now a **Registered Use Pesticide**. Do not recommend Lindane unless you are a Certified Pesticide Applicator. Lindane as a restricted use pesticide may be applied **only** by certified applicators or persons under their supervision. There are also requirements for the use of protective clothing. This clothing includes a light-weight protective suit or coveralls; water-resistant hat; unlined, waterproof gloves; and unlined light-weight boots. Mixers and loaders must also wear goggles or a face shield, waterproof gloves and a waterproof apron.

Q. What is meant by "thinning from below"?

A. This is a type of thinning which selectively removes from the stand those trees which are less thrifty, suppressed or overtopped by dominant, more desirable trees. The advantage of this type thinning is the accelerated removal of lower class trees which otherwise would be removed naturally. This will then be followed by a stimulated growth of the remaining and more merchantable trees.

Q. How does forestry compare to other traditional forms of investments?

A. Given reasonable active stumpage markets, timber investments can offer rates of return as high as and even higher than other investments available to the average landowner. Some of these investment opportunities include certificates of deposit, all-saver certificates, money markets, and stock markets. This assumes

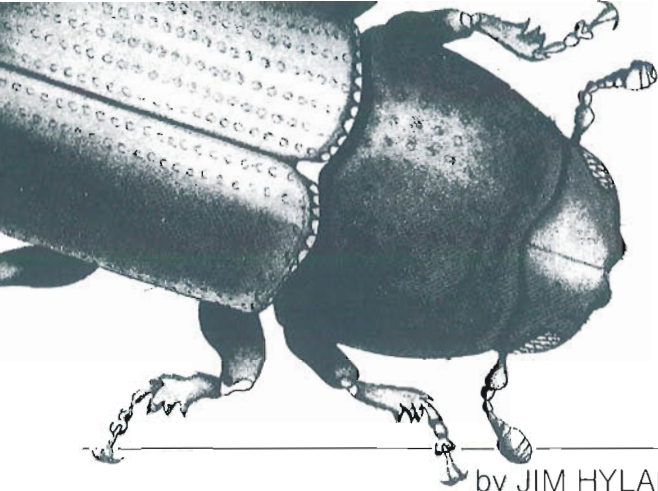
that land costs are not considered in most timber production analyses.

Q. Why are some trees sold by the cord and some by board feet?

A. When wood is used in bulk, as for pulpwood or firewood, then smaller and more irregular pieces are desired. These are usually measured in cords.

Sawn lumber (as measured in board feet) has a much higher value than an equal volume of wood used in bulk. It then becomes vital for the forest landowner to manage his trees to reach their most productive and merchantable product. This will enable him to measure and then sell his timber in terms of the quantity and type of wood product in his trees.

Have you got a question on trees or do you have any tips of interest to other forest landowners? If so, write to us in care of STUMPED?, Alabama Forestry Commission, 513 Madison Avenue, Montgomery, AL 36130.



RECOGNIZING THE PROBLEM WILL AID LANDOWNERS

COMBATING THE BEETLE

by JIM HYLAND, Chief Pest Management

Conservation rather than preservation is the overall theme of all TREASURE Forests. Conservation generally means to have renewable resources for every generation that will follow us. Preservation on the other hand means to keep the forest as it is. This preservation type of management is not possible since trees, plants and animals that make up the forest are living things; they grow, get old and die.

Like all trees, pines are living things that will die from a variety of reasons. To have a sustained renewable resource, we have to harvest the mature pines. This maturity may be economic maturity or biological maturity. If a pine dies before it is harvested, there is an economic loss. If the death is caused by something that will spread to other pines, control is needed or our TREASURE will be lost.

When pines die we have a need to know if what caused the death will kill only one tree or will kill the rest of the forest. One of the causes of death that will spread to other pines, and if not controlled could kill the forest, is southern pine beetles (SPB). We must be able to identify the southern pine beetle and distinguish it from other pine bark beetles. An active southern pine beetle spot may start in a few trees but can spread and kill several hundred acres of pines if not controlled.

How Do We Know If We Have Southern Pine Beetles?

There are several things to look for to determine if you have southern pine beetles or another less serious problem. The first thing to check is what kind of tree is killed. Southern pine beetles attack and kill only

pines. If the tree is not a pine, you don't have southern pine beetles.

The southern pine beetle is not the only pine bark beetle that will attack pines. Black turpentine beetles (BTB) and *Ips* beetles also kill pines, but usually in small numbers associated with damage and they don't require control. The landowner must be able to tell the difference between SPB attacks and those of the other bark beetles. (FIGURE 1).

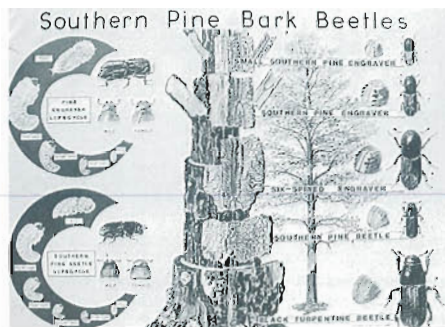


Figure 1 - Life cycles of the Pine Bark Beetles. (Southern Forest Research Institute).

There are ways to easily distinguish SPB from other bark beetles. The black turpentine beetle is much larger than the southern pine beetle (about 1/4 inch long compared to less than 1/8 inch long). The BTB usually attacks the lower 15 feet of a pine trunk while SPB attacks the entire length of the tree. Pitch tubes of BTB are reddish and much larger (the size of a walnut) than SPB (the size of a pencil eraser). The galleries of BTB follow no distinct pattern.

Most of the signs of attack of *Ips* and SPB are similar. Both are small beetles, have similar pitch tubes and attack similar locations on the pine. The galleries of *Ips* and SPB have distinct differences. *Ips* galleries are long straight tunnels that form "I," "Y" and "H" shapes. SPB have the

characteristic "S" shaped galleries.

In any SPB spot there are several stages of development that occur. The stages vary from fresh attacks, developing broods, and vacated by SPB. It is important to know the difference so you won't spend a large amount of time controlling vacated pines.

Stage 1 - Pines with Fresh Attacks*

When SPB bore into a tree, they produce chemicals attracting other southern pine beetles to the tree. This sets off a chain reaction. The attractants usually bring together more than enough beetles to kill the pine, and excess beetles spread to nearby trees. They, too, give off the attractant, which calls in still more SPB. The infestation grows. Because only freshly attacked trees are sources of attractant, it is important to identify their number and location. Only then can you determine if the spot is likely to spread. The following characteristics identify trees with fresh attacks:

Foliage...appears normal (green).

Pitch tubes...are soft and white or light pink and usually sticky to the touch. SPB normally attack first at heights of 10-20 feet above ground. So, if there are no pitch tubes visible at eye level, look higher on the trunk. In severely stressed pines, pitch tubes may not appear. Instead, reddish boring dust appears in bark crevices, on the leaves of shrubs, and in spider webs at the base of the tree (FIGURE 2).

Checkered beetles (clerids)...may be seen crawling about on the trunks of freshly attacked pines. They are common predators of SPB and respond to SPB attractant.



Figure 2. - SPB Boring Dust in bark crevice.

*Bark...*remains tight and hard to remove.

*Color of wood surface...*is white like that of unattacked trees, except close to new adult galleries, where it is brown.



Figure 4. - SPB Larvae in bark. (N.C. Extension Service)

Pitch tubes . . . are white and hardened, resembling popcorn (**FIGURE 5**).

*Exit holes...*may appear at this stage and mark where parent beetles have left the tree. They are round holes about the size of a pencil lead.



Figure 5. - SPB pitch tubes similar to popcorn. (N.C. Extension Service)

Ambrosia beetle dust . . . is white and begins to appear in small to moderate amounts around the base of the tree. It is not present in *stage 1* trees.

*Bark...*is loose and easy to peel away.

*Color of wood surface...*is light brown. It may shade into dark brown with blue or black section.

*Checkered beetle larvae...*show up in SPB galleries in the bark. The larvae are pink or reddish and about one-half inch long.

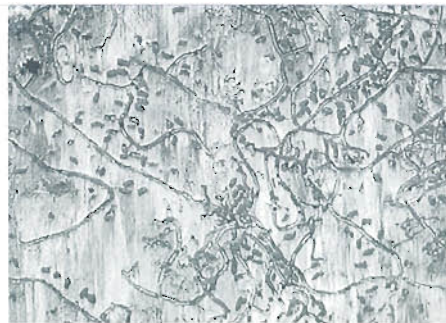


Figure 3. - SPB galleries showing the "S" shape. (N.C. Extension Service)

It is important to realize that the beetle has these various forms. To see the later beetle stages, carefully shave away outer layers of bark with an axe or machete (**FIGURE 4**). Other features of trees with developing brood are as follows:

*Foliage...*is green on most trees containing larvae, but may fade to yellow or turn red before the new generation of beetles emerge from the tree. Foliage color varies greatly by season and among individual trees, so it is not always a good indicator for this stage.

Stage 3 - Pines Killed and Vacated by SPB*

After maturing in the bark, new adult beetles bore their way out and fly off to attack another pine. A tree is termed "inactive" when no SPB of any stage can be found in it. Other features of inactive trees include the following:

*Foliage...*may be red needles that have started dropping.

*Ambrosia beetle dust...*is abundant at the base of the tree and is now off-white or cream colored.

*Pitch tubes...*are hard and yellow, crumbling easily in your fingers.

*Exit holes...*are numerous (**FIGURE 6**).



Figure 6. - SPB exit holes from vacated pine. (N.C. Extension Service)

*Bark...*is very loose and easily removed.

*Color of wood surface...*is dark brown to black with SPB galleries often obscured by the coarse, fibrous borings of sawyer beetle larvae.

*Checkered beetle larvae or pupae ...*are purple and occur in pockets within the outer bark shortly after the SPB brood leaves.

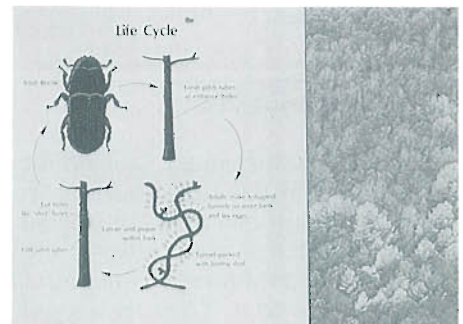


Figure 7. - SPB Life Cycle. (Mississippi Extension Service)

As you can see it is important to be able to identify which stage of SPB life cycle your dead pines are in. (**FIGURE 7**). With the above information you should be able to determine if your pines are infested with SPB and if the infestation is active and needs to be controlled.

Literature Cited:

*Billings and Pase. "A Field Guide for Ground Checking Southern Pine Beetle Spots," Agriculture Handbook No. 558, 1979.

BY FOLLOWING A FEW GUIDELINES, FOREST LANDOWNERS ARE FINDING ANOTHER BENEFIT IN PINE FORESTS . . .

BEEF CATTLE AND TIMBER

by BARRY LAWRENCE, Cattle Grazing Specialist, Alabama Forestry Commission

Our southern pine forest in Alabama provides the landowner an excellent opportunity to produce both timber and beef simultaneously. Many varieties of grasses are produced in the forest and provide grazing for short periods during the year. However, before a landowner decides to graze his woodlands, some planning needs to be done. The planning can be divided into four parts:

- 1) Identify opportunities.
- 2) Determine the amount and quality of forage.
- 3) Provide for supplemental feed.
- 4) Coordinate forest management activities.

Identify Opportunities

The landowner must first decide whether his land is suitable for grazing. The terrain has to be considered as to its steepness and vulnerability to deterioration if a large amount of cattle will run on it. The overstory of timber needs to be considered. Forage is best produced in an open canopied forest, or forest with many openings. As the canopy closes, the amount of forage produced will decrease. Future management recommendations of the stand must be considered before turning cattle loose. Such items as adequate fencing on watering troughs must be looked at also.

A quick way to determine the amount of forage present is to walk over the area to be grazed and estimate the amount of ground cover present. If the amount of grass cover is 25 percent or greater, a good grazing opportunity exists. This leads us to the next step in the planning.

Determine Amount of Forage Available

The landowner must be able to determine the amount of forage available before determining how many cattle need to be grazed. **TABLE I** shows an average yield of forage for various stands. These yields will vary depending on the species of grass present, density of tree cover and any prescribed burning that has been done.

Once the amount of forage has been determined, the landowner can decide how many cattle are to be grazed. **TABLE II** shows the suggested

stocking for various forage production. In determining the actual number, only areas accessible to the cattle should be used. Any physical barrier such as deep brush, lakes, or dense timber stands, should be excluded in the acreage figure.

Provide for Supplemental Feed

The third step in planning for a grazing operation is the consideration of a supplemental feeding program. Unfortunately, native forage does not supply the cattle with all the necessary supplements for best weight gains. To overcome this,

TABLE I
Livestock Forage Production

Stand size class	Forage production range Pounds/acre, air dry
Open-seedling & sapling stage	2,600 to 3,000
Saplings up to 6-inch diameter breast height	1,400 to 2,600
Poles & very young sawtimber	650 to 1,400
Sawtimber	650 to 1,500

TABLE II
Suggested Stocking (Acres Per Cow) By Grazing Periods

Grass Production Pounds/acre, air dry	Months				
	3	5	7	9	12
500	20	34	56	60	80
1,000	10	17	23	30	40
2,000	5	8	12	15	20
3,000	3	6	8	10	13



CALENDAR*

*Any member agency of the Alabama Forestry Planning Committee can be contacted about events listed in this section.

some type of supplemental feeding must be accomplished. This may be done through the use of improved pasture, liquid supplemental of some type of grain or protein blocks. To prevent damage to the stand, especially, a young plantation, this supplemental feed should be carried out on an area away from this. Potential right-of-ways, firebreaks, or natural openings are best suited for this activity.

Coordination of Management Practice

Perhaps the most important part of the planning is the coordination of forest management practices. Unlike improved pasture, the forest forage must be manipulated in a different manner. This is best accomplished in the various forest management practices available to the landowner.

Let's begin with an area to be site prepared and planted on a recently planted stand. Realizing that some sacrifice will have to be made in timber production, fewer trees will be planted per acre than normal. A spacing of 6' x 12' or 6' x 14' is recommended for higher and longer lasting production of grasses. In a normally established plantation, a light cattle stocking may be permitted if sufficient forage is available. An early thinning in the plantation will be necessary if the amount of forage produced is to continue at a high rate. Once the stand reaches the thinning stage, it is recommended that a chip harvester be used. By doing so, you will remove a large amount of cover and more sunlight will reach the ground and stimulate forage production. If a chip harvester

is unavailable, then the normal harvest operation should be conducted. This should be followed with a prescribed burn the following year.

If an area is to be clearcut, a chip harvester again should be considered. By doing so, all merchantable and a large amount of unmerchantable timber will be removed. The soils will be less disturbed, also.

Prescribed burning is a very useful tool in the promotion of forage. Each stand will have to be looked at to determine the type of fire needed. However, later winter burns are best for forage production. Burning should begin when the trees are ten to twelve feet tall and a burning program of every two to three years should be established during the rotation. In large sawtimber stands, summer burns may be used to estimate understory hardwood brush. Prescribed burning should not be conducted at least four to six weeks prior to grazing.

Integrating timber management and cattle grazing can be accomplished through proper planning. Cattle grazing may or may not fit into every landowner's forest operation. However, where practical, the landowner should consider producing both timber and beef simultaneously.

References

- Byrd, Nathan A. and Clifford Lewis. "Managing Southern Pine Forests to Produce Forage For Beef Cattle." USDA Forest Service, Forest Management Bulletin, 1976.
- Byrd, Nathan A. "Forestland Grazing, A Guide For Service Forester In the South." USDA, Forestry Report SA-FR10, 1980.

April 10 - 12 - Gainesville, Florida, Society of American Foresters, "The Regulated Forest: Do You Know the Rules?" Contact Jim Harrell, (984) 488-5168.

April 14 - Bibb, Jefferson, & Tuscaloosa Counties. Annual Meeting of the Alabama Forest Owners Association and Equipment, Services, and Supplies Show. Tom Wiseman of **Forest Farmer** magazine will speak. All will be held at Tannehill State Park south of Bessemer.

April 20 - Montgomery County. 5:45 p.m. Alabama Forest Festival Awards Banquet. Lamplighter Dinner Theater. Call Allane Wilson for tickets, 261-2540.

April 21 - Alabama Forest Festival, Montgomery's Garrett Coliseum. Arts & Crafts, Games, Music, Log Rollers, Chain Saw and Cross Cut Competition, Trout Fishing, Smokey Bear's Birthday Celebration. Call Anita Benton for more information, 261-2525.

April 26 - Site preparation demonstration in Tallapoosa County. Prescribed burning and Velpar L will be main techniques spotlighted. Starts at 9 a.m. at Extension Service auditorium in Dadeville's courthouse. Call Mary Tucker, 825-9284, or Connie Vaughn, 825-9436.

Cooperative agencies of The Alabama Forestry Planning Committee are sponsoring five one-day Continuing Education Workshops on "How To Do A Forestry Investment Analysis." Tentative dates and locations for the workshops are:

June 5: Solon Dixon Forestry Educational Center - Andalusia

June 6: Thomasville

June 12: Federal Building Tuscaloosa

June 13: Civic Center - Oxford

June 19: Alabama Farm Bureau State Office - Montgomery

For additional information contact: Bill McKee, Extension Natural Resources, Auburn University, AL 36849; (205) 826-5330.



by TOMMY PATTERSON, Forest Management Chief

Few forest landowners realize that one of the most valuable portions of their property is the first two or three inches of soil! This topsoil contains the majority of the soil nutrients that are essential to tree growth. By removing or otherwise damaging this first layer of earth, you will reduce the rate at which your trees can grow, making them more susceptible to the stresses of insects, diseases and weather. The loss of topsoil adds up to dollars lost because of smaller trees and a greater risk of your investment.

Anything you can do to protect your forest soil will be in your best interest. One of the major causes of forest soil erosion is site preparation. As you will remember from previous articles, site preparation is the activity performed just before tree planting. Site preparation is the removal of unwanted brush and trees which would compete with planted pine seedlings for light, water and other nutrients.

Site preparation can be accomplished mechanically using bulldozers to push the unwanted vegetation into piles (windrows) or by using a drum chopper to knock down the brush and trees. Site preparation may also be accomplished using chemicals sprayed, injected or applied to the soil to deaden the competition. Prescribed fire is also an effective method of site preparation on areas with small trees and brush.

There are many variations and combinations of these methods. The costs vary greatly between methods and so does the amount of soil disturbance which can lead to soil erosion. Different soil types have different tree growth rates; however, by selecting site preparation methods that cause as little soil disturbance as possible, you will be assuring that your stand of trees will be growing as fast and healthy as possible for that particular type of soil.

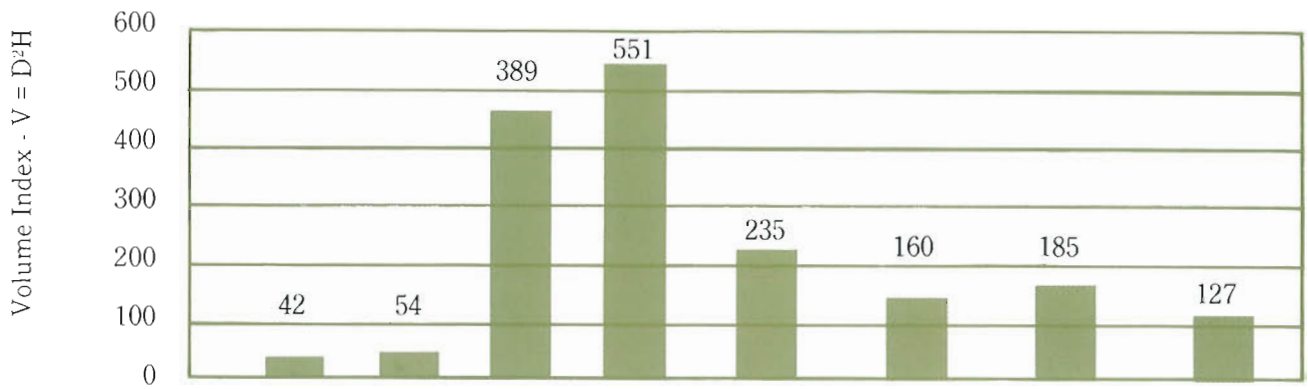
George Dissmeyer, a U.S. Forest Service hydrologist in Atlanta, has compiled available research in forest soil productivity. He and many other forest scientists agree that using site preparation to establish a pine forest usually results in more wood produced than restocking by natural regeneration. However, research has also

shown that some site preparation methods are better than other in regard to tree growth.

FIGURE 1 compares a variety of different site preparation and planting methods for a typical sandhill site in the Southeastern states. You will notice that survival of the planted seedlings was essentially the same for all mechanical treatments. However, there was a wide range of treatment costs. Tree heights and wood volume increased with costs up to \$120 an acre for the double chop and burn method. It is very interesting to see that the more expensive and intensive practices produced less tree height and wood volume on the same soil type. Shearing and rostraking are practices that remove topsoil and the growth reductions are associated with nutrient removals.

EXAMPLE A: Management Schedule

Year	Description	\$Amount	Wood Volume/Ac
1984	Light Site-Prep Tree Plant	-\$120.00	
1999	Thinning	\$101.59	10.2 Cords
2010	Thinning	\$213.10	1596 Bd ft 5.3 Cords
2020	Final Harvest	\$979.52	9541 Bd ft 2.5 Cords
Net Cash Flow/Acre		\$1174.21	11,137 Bd ft
Internal Rate of Return = 14.9%			18.1 Cords



Treatment	No Site Prep.	Burn Only	Single Chop & Burn	Double Chop & Burn	Single Shear & Burn	Shear Twice & Burn	Rootrake & Disk & Burn	Rootrake & Burn
Survival—Percent	52	61	71	71	70	66	70	73
Tree Height—Feet	12.8	13.4	25.6	29.8	21.6	19.0	22.0	15.1
Treatment Cost—\$/Ac.	\$40	\$45	\$80	\$120	\$145	\$170	\$170	\$170

FIGURE 1 Fifteen-year survival and growth of slash pine on a droughty sandhill prepared with fire and machines for regeneration.

The research has shown that these growth differences remain essentially the same through tree ages of 25 to 35 years.

To carry these findings a step further, I have developed two examples to illustrate the dollars you could lose as a result of topsoil loss when establishing a new forest.

Using typical Alabama soils, growth rates, costs and conservative timber prices, **EXAMPLE A** shows, that by using site preparation

methods that maintain the topsoil are less expensive, you might expect to receive \$1,174/acre or 14.9% return on your investment.

EXAMPLE B uses the same data except a more costly site prep method is used resulting in the loss of one inch of your topsoil. You now receive only \$874/acre of 12.5% return on your investment.

The differences show that by spending an additional \$50/acre for

intensive site preparation, you lost \$299/acre due to reduced tree growth.

These examples are purely illustrations and can vary greatly using actual data. However, the ratio of the differences should hold true in most real situations. Land costs are not included as we are assuming that the landowner already owns the land and does not wish to sell it.

In conclusion, you must remember that it is not always possible to use logic in selecting the best site-preparation methods.

I think you will agree that some of the less costly and less intensive methods are better, but they may not be available in your particular area.

Shearing and windrowing are traditionally the most common methods used in the Southeast making that method easier to contract. Those costly and intensive methods are still better than doing nothing, so use them if you must!

Contact a local registered forester for assistance in finding and planning the best practices for your individual needs.

Keep the dollars in your dirt! ♣

EXAMPLE B: Management Schedule

Year	Description	\$Amount	Wood Volume/Ac
1984	Heavy Site-Prep Tree Plant	-\$170.00	
1999	Thinning	\$ 72.78	7.3 Cords
2010	Thinning	\$133.55	377 Bd ft 9.6 Cords
2020	Final Harvest	\$838.30	8029 Bd ft 3.5 Cords
Net Cash Flow/Acre		\$874.63	8406 Bd ft 20.4 Cords

Internal Rate of Return = 12.5%

Assumptions for examples A and B:

Pulpwood Stumpage Price/Cord = \$10.00 Inflation Rate = 4%
Sawtimber Price/MFG = \$100.00 Inflation Rate = Scribner Log Rate

References:

Dissmeyer, George E. Meeting the Growing Concern for Maintaining and Improving Soil Productivity on Forest Lands.

ACTIVITIES

DISTRICT

1

DISTRICT 1—Calhoun County) A planting of dogwoods, pines, longleaves, and white oaks was conducted along the nature trail of the Anniston Museum of Natural history.

Johnny Roberts, Calhoun County, in coordination with the **Baptist Medical Center**, conducted a two day Red Cross Standard Course at Centre for District 1.

Stanley Anderson, Cherokee County, has been working with the **Little River Advisory Council** to plan JFK trail markings.

Camp Comer, DeKalb County, has been certified as a Treasure Forest.

Mitchell McClendon held a Career Day for **Etowah County Schools** and **Attalla City Schools** at the Mall in Gadsden.

Sardis Fire Department, Etowah County, was certified as a rural community fire department.

Scottsboro-Jackson County PRIDE Committee; Director of Scottsboro-Jackson County Chamber of Commerce; June Flowers of Section; Jackson County School Superintendent Willard Townsend, Bill Wheeler of Flat Rock and Mike Banzhoff of Jackson County Forestry Commission, along with **Sarah Betty Ingram and Melvin Helms**, chairman, gathered at the Chamber office to discuss the Committee's PRIDE sign project and the kickoff of the year's Beautification Contest.

Section firefighters have been busy over the past month outfitting a five-ton 1968 Ford truck which they received from the Forestry Commission.

Chuck Weber, urban forester, has been working with the **Huntsville Tree Commission** and the rest of the Huntsville Utilities to solve a long-standing community problem. A site survey was conducted to determine trees needing removal and their planting spaces.

A study and report to **Huntsville Utilities** concerning a county policy on trenching and augering near right of ways was presented by Chuck in February.

The **Alabama Space and Rocket Center in Huntsville** has been the site for examination and planting recommendations for multi-purpose plantings on grounds.

Chuck Weber has been assisting the **Huntsville Public**

Works department on effects of sidewalk construction on landowners' trees.

A county extension forestry tour was conducted in **Marshall County**. The tour included tree identification, wildlife habitat, and a slide presentation on control burning.

A prescribed burn demonstration was presented to the **Marshall County FIP landowners** in December.

The AFC forestry demonstration in **Operation Soil Facelift** was a tremendous success. A pine site and hardwood site were used to exemplify multiple-use management techniques. The forestry demonstration involved the donation of approximately \$4,000 and 160 man-days of work by **Hiwassee Land Co., Meade Paper Board, Georgia Kraft Co., Champion International Corp., Morbark Industries, Inc., Gafner Manufacturing, Moss Lumber Co., Drennen Forestry Services, and Love Timberlands, Inc.**, along with the **Alabama Forestry Commission**.

DISTRICT

3

DISTRICT 3—Tuscaloosa was the site of a three day meeting on forest soils, in late November. Instructors for the meeting were from the **U.S. Forest Service, and Soil Conservation Service**. A presentation by **Tim Sharp, DuPont Company**, on Velpar L ended the meeting.

District 3 was awarded the annual **State Markmanship Trophy** on December 1 by Assistant State Forester **Charles Pigg**. This was the second time District 3 has won the award for the best markmanship scores in the state.

Tuscaloosa County's entry in the annual **West Alabama Christmas Parade** received a 1st place in the Civic Division. Congratulations to Rangers **Elmore Moore, Dockery, Brown, Colburn, and Harryman**.

The **Pickens County** Ranger office was the site of a Smoke Management Meeting for AFC personnel and industry cooperators on December 6.

The **Sumter County Forestry Planning Committee** hosted their annual Forestry Field Day on November 1 at Lake Louise. The main topic of the Field Day was Selective Cutting.

Livingston University was the site for two meetings on November 14 which covered Tim-

ber Taxation. **Dr. Bill McKee**, Forest Economist, Alabama Cooperative Extension Service and **Terrel D. Hicks**, Professor of Accounting, Livingston University, were the speakers for the meeting.

Hale County Forester Landre Tomlinson and **Robert Walthall**, Mayor of Newbern, recognized **Randy Sneed** for his action in suppressing a wildfire near Newbern by presenting him with a check and a plaque.

Approximately \$30,000 in fire fighting equipment and money was presented to 33 RCFP departments in **Fayette, Hale, Lamar, Pickens, Sumter and Tuscaloosa** counties by the AFC.

The first **RCFP Mini-Steering Committee** in the state was held December 8, 1983. Twenty-five departments participated. The **Pickens County Fire Fighters Association** hosted the event.

Commitments were made by the **Pickens and Tuscaloosa County Fire Fighters Associations** to hold the RCFP County Competitions. An air pack has been received for each county as a grand prize.

Funds were committed to install a county-wide RCFP radio system in **Tuscaloosa County**. The **Tuscaloosa County Sheriff's Department** has accepted dispatching duties.

DISTRICT

4

DISTRICT 4—Jim Spradley and Bill McClelland came on duty as pilots for the district; **Jim** flies the Talladega National Forest for USFS and the counties, Talladega, Clay, and Cleburne. **Bill** flies Chambers, Coosa, Randolph, and Tallapoosa. **Steve Blanton** came on duty as Forest Ranger II in Talladega County.

Skip Turner assisted in teaching 2 portions of Fire Control (fire line construction) with **Hugh Moble** at Selma.

E. O. Moore, District Forester; **John Tyson**, RC&D Forester; and County Foresters **Tom Cambre, Earl Smith, Guy Slayden, Steve Nix, and Glenn Berry**, and Ranger Supervisors **Ralph T. Woolley, Clyde Atkisson, and Ronnie Ray** (assistant supervisor, Chambers) attended the Soil technical training session in Tuscaloosa November 29-December 1.

Ronnie Ray and **Euwell Giles** in **Chambers County** attended RCFP meetings at **Clackville** and **Five Points**; they also assisted in organizing a Boy Scout troop in **LaFayette** in November.

Clay County Forest Ranger **Keith Medforth** assisted in a leaf identification project at **Bar-**

field Junior High School; he also suggested and prepared a Smokey Bear Fire Prevention program at **Barfield Junior High**.

Cleburne County Supervisor Glenn Berry presented a TREASURE Forest program at the **Cleburne County Forestry Planning Committee** meeting; he also did a program on Prescribe Burning for this same group.

Forrest Johnson, assisted in Equipment Operation and Maintenance instruction at the Forestry Academy.

Charles Sikes, Randolph County, assisted in a program on burning and the need for obtaining permits. This program was at the FFA meeting at **Randolph Roanoke Area Vocational School**. Charles also assisted in doing a program on Home fire Safety with special attention given to fire extinguishers, smoke alarms, and the crucial and often forgotten planning of escape routes. He was assisted by **W. B. Moore**, Fire Chief, New Hope RCFP.

Nix is assisting with the program of the **Randolph Energy Action Committee**. They developed a slide/talk program on Potential Attraction of Wood-using Industry information for **Randolph County** for presentation to civic clubs and other groups. The first presentation was to the **Kiwanis Club** in **Roanoke**.

Steve Nix and **Ranger Sikes** hosted the **Randolph Volunteer Firefighters Association** meeting at the AFC Wedowee office. **Ranger Sikes** presented a 1½ hour program on obtaining county-wide radio (state) network. Members of their 8 participating RCFP units attended.

County Forester Nix is working with the **Roanoke** municipal governing body on **TREE CITY USA**. The program has been heartily approved by **Mayor Henry "Spec" Bonner** and the **City Council**. Representatives from **ASCS, Extension Service, Farm Home Adm., Vo-Tech Forestry Instructor, and the REMAP Forestry Chairman** met to nominate the editor of **THE RANDOLPH LEADER** for the **W. Kelly Mosley Environmental Award**.

John Tyson planned the two-day landowner's Tax Seminar with **Keith Utz**, U. S. FOREST Service tax specialist. The first session was held February 15 at 2:00 p.m. in **Heflin** the second session was held in **Dadeville** on February 16 at 10:00 a.m.

Jim Money, attended the \$390 Fire Behavior session. **Guy Slayden**, Urban Forest Coordinator, has compiled all the necessary information for each County Supervisor to carry on a successful **TREE CITY USA** program within their country.

Guy is also working with some of the schools with plans for ARBOR WEEK. He and **M. W. Tucker** are working with **Marsha Bankston** of **Alexander City** to prepare an ARBOR WEEK program. Mrs. Bankston and Mrs. **W. L. Radney** are members of one of the Alexander City garden clubs and Slayden is helping them with TREE CITY planning.



DISTRICT 5—The **Bibb County Alabama Cooperative Extension Service Office and Liberty National Life Insurance Co.** presented **Joe B. Barton**, Bibb County Supervisor, the 1983 Bibb County Rural Leadership Award in recognition of outstanding contributions to educational programs contributing to economic growth in Bibb County.

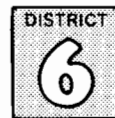
On December 6 **Marengo County's** minority landowner group was introduced to the TREASURE Forest program with a presentation by TREASURE Forest Coordinator **Neil Letson**, and on January 10 R.C.&D. Forester **Mike Hinson** discussed timber marketing with the group.

District 5 held its first RCFP mini-steering committee meeting in Selma on January 19.

An **Urban Forester Coordinator** meeting was held in Prattville on January 26. The meeting was hosted by the **Citizen's Bank of Prattville** and attended by urban foresters from around the state with key speakers—Prattville Mayor **Grey Price**, Prattville Tree Commission Chairman **Bill Stevens** and **Neil Letson**, AFC.

On December 15 ceremonies were held in **Marengo County** honoring two new Champion Trees, **Crepe Myrtle** and **"Olive"**. During the certification presentation to **Mrs. Gwyn Turner** and **Cal Floyd** of the Demopolis Pride Committee.

In **Dallas County** on December 14 a certification ceremony was held honoring the **Champion Red Mulberry** and its owner **Mel Gilmer**.



District 6—Approximately 37 people attended three seminars for bankers and lending institution personnel in **Troy, Eufaula, and Enterprise**. Sponsored by the RC&D Forestry Committee and the **Alabama Forestry Planning Committee**, these seminars were designed to provide valuable information on the timber investment potential in Southeast Alabama. **Bill McKee** and **Frank Roth** with the Cooperative Extension Service along with private consultant **Bill DeRolf** were instructors.

Wayne Craft, Pike County, was assisted by **Tommy Counts** with the Soil Conservation Service in organizing and conducting a beaver workshop for area landowners. The workshop covered setting traps with a demonstration at a nearby pond.

Houston County has a new RCFP department in **Hodgesville**. **Billy Martin** is the fire chief of this 50 member department. They have raised over \$2000 already.



DISTRICT 7—**Tim Money**, Crenshaw County Ranger, started a weekly radio program in November, 1983. The program covers aspects of forest management as well as local forestry related news.

RCFP Fire Fighters Competitions were held on December 17, 1983 in **Butler County**, with 7 departments competing, and on January 28, 1984 in **Escambia County**, with 3 departments competing.

On December 19, 1983, a slide tape program on pine regeneration was presented to the **Butler County Farm Bureau Forestry Committee**. Among guests attending the meeting were **Regional Forester Alvin Downing**, **Staff Foresters John Martin and Gib Burke**, and **Butler County Supervisor Brandon Burkett**.

The **Monroe County Forestry Committee** held a ceremony on January 25, in honor of the **Williams Family's** certification as a TREASURE FOREST. **State Forester C.W. Moody** gave an inspiring talk to the group and presented the TREASURE FOREST certificate to the family.

The **Evergreen Garden Club** was very pleased to have **State Urban Forestry Coordinator Neil Letson** talk with them about Urban Forestry during their club meeting on February 9.

On Friday night and Saturday morning, February 11 and 12 the **District 7 Headquarters and Escambia County** personnel participated in a "Semi-Pro" basketball tournament. The purpose of this tournament was to raise funds for the **Appleton Volunteer Fire Department**, an active RCFP Department in Escambia County.



DISTRICT 8—A **Demonstration Forest Tour** was held on the **Pace** property in **South Baldwin County** in October 1983. The tour was sponsored by the **Baldwin County Forestry Committee** and **St. Regis**

Paper Company.

Robert Dismukes, Baldwin County Supervisor, made a wildlife presentation to the **Robertsdale Rotary Club** in October 1983.

The **Clarke County Forestry and Wildlife Festival** was held in Jackson on November 5, 1983. There were games for the kids, chainsaw contest, Volunteer Fire Department competition, forestry equipment displays and various other forestry and wildlife related displays. **Daphne Fire Department** from Baldwin County won the Fire Department competition.

District 8 held a Fire Control meeting at **McIntosh in Washington County** on November 9, 1983. The purpose of the meeting was to exchange information and discuss common concerns relating to fire control. Forest industry and various landowners in the district attended the meeting.

The **Alabama Forestry Commission** had a fire suppression unit on display and an information booth in **Bel Air Mall** on November 16-18, 1983 in support of **Farm Bureau's Farm-City Week** in Mobile.

A **Smoke Management Workshop** was held in Mobile on December 8, 1983 by **Hugh Mobley** and **Ray Jones** from the AFC's Fire Control Section in Montgomery.

The **Choctaw County Forestry Committee** held a **Forestry Equipment Display** in **Butler** on December 9, 1983.

Fire Specialist Lynn Booth, RCFP Steering Committee representative **Bill Kilpatrick** and **Wesley Cain** held a meeting on January 9 with the citizens of **Wagarville** in Washington County to assist them in starting a Volunteer Fire Department.

Choctaw County Supervisor Chuck Quinn and **Choctaw District Conservationist Craig Peters** of the Soil Conservation Service presented a program on soil erosion to the 5th and 6th grades at **Butler Elementary School** on January 10, 1984.

Choctaw County Supervisor Chuck Quinn presented a program on prescribed burning to the forestry class of the **Tom Orr Vocational School** in **Choctaw County** on January 23, 1984.

A meeting was held in **McIntosh** by AFC Fire Specialist **Lynn Booth** on January 26, 1984.

District 8 held a **Forestry Poster Contest** for the schools in **District 8**.

Robert Dismukes, Baldwin County Supervisor, presented slide-tape programs on **Wildlife and Forest Range Management** to the **Loxley Optimist Club** on January 26, 1984.



District 9—The **Florence Garden Club** received a \$1000 grant from the **W. Kelly Mosley Foundation** to develop a wildflower garden at the **District 9 Headquarters** office.

The **Helen Mosley TREASURE Forest** inspection committee met in **Hamilton** to review the inspection forms for the state.

Thurston Nix, TREASURE Forest landowner in **Hamilton**, was named regional **Helen Mosley** winner. **Marion County** had three other TREASURES certified.

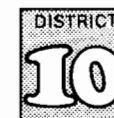
Colbert County celebrated **Arbor Week** by giving away 6000 hardwood seedlings. This event was sponsored by the **Southgate Mall Association** with the **Youth Volunteers in Action** assisting in packing the seedlings. **Smokey** also helped with the distribution.

Another giveaway was sponsored by the **Florence Beautification Board** in **Lauderdale County** during **Arbor Week**. Approximately 14,000 Virginia pines were distributed.

The **Florence Recreation Department** has completed a three-mile hiking trail at the **District 9 Headquarters**.

U.S.D.A. middle managers in **Area 1** met at the AFC office in **Florence**. Chairman **Gerald Steeley** gave a presentation on TREASURE Forest and led a discussion on prescribed burning.

The **Morgan County Soil and Water Conservation District** sponsored a tax seminar in **Morgan County** on February 9.



DISTRICT 10—The **Association of Volunteer Fire Departments** met at **Seale** in **Russell County** on January 26.

A **TREASURE Forest Field day** was held on February 26. The session convened at the **Farm Bureau building** on **South Court Street** and then adjourned to the **Mac Smith** property in the afternoon for a prescribed burning determination.

Smokey Bear was a guest at an open house for the **Friendship Fire Department** in **Elmore County** on March 17.

DuPont Representative Tim Sharpe spoke to landowners in **Elmore County** on March 8 about **Low Cost Regeneration**.

Cooperative Extension Service Forest Economist Bill McKee made a presentation in **Lee County**, February 23, on **Forest Taxation**. Local accountants **Jim Levins** and **James Powell** also participated.

Bruce Johnson received an award for **Community Resource Development Leadership**.

When you've mortgaged your wife's land and house

YOU'VE GOT TO DO SOMETHING!

by CYNTHIA K. PAGE, Editor

Rural Alabama looks much the same throughout the state. Scents of pine seem to hang in the brisk winter chill as cattle lazily graze on the hillsides. Country homes haven't changed much since the 1930's. Gentle breezes set front porch swings in motion and white wicker rockers invite friends and strangers to partake of the home's hospitality.

To look at the Owens' farm one might think that little has changed here either, but that's far from the truth! This farm does indeed have a typical farmhouse, pines, and cattle, but when Halsa and Bruce Owens moved back to her "old homeplace" in 1952, cropland and pastureland sprawled across most of the 1300 acres which is now dominated by timber! In fact, over 1000 acres now support trees!

Starting From Scratch

"When we came back here in 1952, all we had was 700 acres of pastureland and cropland where tenant farmers had squeezed out a living," Owens explained. "Halsa's father had sold some timber but didn't do much in the way of replanting or restoring the land. I bought a few head of cattle and started to manage the little bit of timber we did have. We sold some in 1960 and bought our first new car—a Chevrolet!"

Owens' interest really deepened, though, in 1964 when his brother-in-law, J. A. Kyser, decided to sell his 600 acre share of the estate. "I went

to the bank president and he said I didn't need any more land," Owens explained. "Well, the Farmers Home Administration (FHA) was offering low interest rates to landowners who wanted to buy timberland, so I took advantage of it." He laughed, "When you've mortgaged your wife's land and house, you've got to do something!"

Having worked for the Agricultural Stabilization and Conservation Service (A.S.C.S.), Owens took notice of the timber growing on the farms which he inspected. "It didn't take me long to realize that was how they survived!" he said.

One of the stipulations for the FHA loan was a 35 year management plan. The first plan was written in 1964 by Gordon Powell, then the Alabama Forestry Commission district staff forester. Timber production was emphasized with wildlife as a secondary consideration. Owens followed the plan until 1980 when he sold enough timber to pay off the mortgage—19 years sooner than originally expected!

Beauty and the Beast

In that same year, two new plans were developed. WRAP (Woodland Resource Analysis Program) and a Soil Conservation Plan. The new WRAP Plan treated hardwood management differently than the first plan. Because of this, wildlife is even more abundant now than it had been. Some upland hardwoods were purposely left both for wildlife and



Bruce Owens surveys his beef and timber operation.

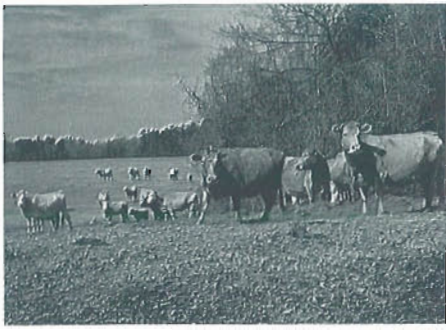
aesthetics. Some hardwoods are interspersed in pine stands but not to the point that pine production is minimized.

Prescribed burning plays a large role both in wildlife and timber management. Even though he has used some VELPAR quite effectively in hardwood control, Owens pointed out, "Burning is cheap and most chemicals are just too expensive for the average farmer and landowner who depend solely on their land for income." Owens has also girdled (cut outer bark on complete circumference) some unwanted hardwoods.

Owens initiated his burning program three years ago and plans to follow through every three to five years. "Not only does it help the wildlife," he says, "but the browse that comes up is excellent for the 100 head of beef cattle that I allow to graze in the woods."

Besides game species, the Owens also try to attract bluebirds and martins. Birdhouses occupy prime locations near the farmhouse and pyracantha has been planted. When the martin houses were first put out, no tenants could be attracted. Halsa remedied that by playing a tape recording of martins! Soon she had residents!

To supplement food from the hardwoods, some fifteen acres covering six different food plots have been planted in oats, rye, and clover. Small clearings and irregular cuts provide a beneficial edge effect for the wildlife.



This farm is proof that cattle and timber are compatible.

In sharp contrast to the landscape of trees and rolling hills, there is also a gravel pit on the farm. Owens remedied this by planting trees to veil its unsightliness! "The pit is a source of income for us, too, but we don't want to distract from the overall appearance of the farm," he explained. "The trees will serve a purpose of hiding it now and later provide some income themselves!"

Recreation

The Soil Conservation Plan included a three-acre fish pond which is stocked with bream and bass. Not only does it add to the appearance of the farm, but has become one of the favorite places for family and friends to relax and fish!

Hunting rights have been leased in the past with some success, but the sport is mainly enjoyed by the family and invited guests. Owens fondly told of his son-in-law being disappointed at his cutting some hardwoods. "That's when I decided to educate my children and their spouses about forest management. Some short term disadvantages may be necessary to accomplish what's most advantageous in the long run!"

Fire and Pests

Every TREASURE should be protected. Owens maintains between 20-25 miles of roads which serve a dual role as fire lanes. Turn-out bars were installed on those with steep slopes to carry away water without creating ruts and gulleys.

Of course, the prescribed burning once more plays a significant role in reducing the threat of wildfires. Besides, it also discourages insects



Mr. and Mrs. Owens both share in the treasure.

and disease attack.

Damage from the Southern Pine Beetle has been kept to a minimum by removing infested trees promptly. The same procedure has been used following ice storms.

Owens has a harmonious relationship with Stallworth-Majors Timber Company who generally accepts salvaged timber. In addition, they cooperate in marking timber to be thinned.

Most of the timber on the Owens farm was planted B.C.!



Turn out bars on roads keep erosion at a minimum.

A Matter of Determination

"Landowners can accomplish a great deal if they have the determination." Owens believes. "It's a slow income, and that's discouraging to a lot of people."

Owens has participated in a number of programs—Agricultural Conservation Program, Forestry Incentives Program, and the old Soil Bank Program. Any agency on the Alabama Forestry Planning Committee, whose members are listed in the front of this magazine, can give landowners information on existing cost-share programs.

On his success, Owens modestly remarked, "All I'm doing's the best I can with what I've got!" What has he got? A TREASURE Forest! ♣

EDITOR'S UNDERSTORY

by CYNTHIA K. PAGE, Editor

We all tend to date our lives to some significant event. For my parents it's "before the war." For me it's "after I graduate." Others establish it from the birth of a child or even a marriage. For the Bruce Owens family, it's "B.C."—"before the Chevrolet!"

The young couple, Harriet Sarah Kyser (Halsa) and Ira Bruce Owens, met in Montgomery where both worked for the Veterans Administration after the war. Cupid's arrow hit his mark and they were married. The opportunity for a college education beckoned and off they went to Auburn where Bruce studied business administration for three years.

The passing of Halsa's father and her inheritance of 700 acres and a house lured the Owens back to Carlowville in Dallas County in 1952. "Most of this was just pastureland where tenant farmers raised cattle and a little cotton," Halsa said.

Well, they decided to raise trees and a "little" family! First came Bruce, Jr., who now has a "little" family of his own with wife Pam and daughter Sarah in Camden. Then came Peggy who also has a "little" family—husband Jere (Peak) and son Dillon.

"Here I had a wife, a farm, a few cattle, and two children," expressed Bruce, Sr. I worked for the A.S.C.S. (Agricultural Stabilization and Conservation Service), and as I traveled around and checked the fields, I couldn't see how in this world the farmers made a living. I didn't think I could anyway." With a chuckle he added, "Then I got to looking at the trees, and I knew there was a better way! I mortgaged my wife's land and house and bought another 600 acres

from her brother and started planting! We cut our first timber in 1960 and purchased our first new car — a Chevrolet!"

That's how it started! Since then, the cattle and timber have helped to raise the "little" family, paid for two college educations, and bought a few more cars!

The Owens property speaks for itself—there's timber, cattle grazing, wildlife, aesthetics, and soil and water consideration. It is indeed a TREASURE. But, what about this family, what drives them and why?

Halsa is a reflection of a refined, southern lady—tall, graceful, gentle, and charming. On her face, though, is that look of confidence and determination that probably cemented the family's ties to each other and the farm B.C.! Her graciousness was demonstrated in every move from the time her smiling face appeared at the door. Tea cakes (like my grandmother made!) and fresh coffee restored the warmth which had been stolen by the brisk winter air outside.

Her love for the house is typical of women of her era. She had been raised here and she raised her own family here. Large rambling rooms

are filled with vintage furniture and country aromas allowing her memories to play in every nook and cranny. She once refused to allow a "bowed" screen to be removed when the house was renovated. "You see," she said, "the window swings out, and it's just so unusual that I wanted to keep it that way!" Perhaps.

Besides being a good husband, provider, and father figure, Bruce, Sr. is extremely well respected as a community leader. When he has time, heaven only knows, but he's been on the vestry of the church (so is Hal!), on the board of Pioneer Electric Cooperative, is a supervisor for the Dallas County Soil and Water Conservation District, serves as commodity chairman for the Farm Bureau Forestry Committee, works on projects to restore the Cahaba and the Mush Creek Watershed, and still maintains his TREASURE as a Demonstration Forest for Dallas County! WHEW!

The family also helps each other. Peggy and Bruce, Jr. love the farm as much as their parents do. Bruce, Jr., a C.P.A., has offered tremendous support in the way of tax treatment on timberland. Peggy's husband, Jere, is a wildlife fan and encourages his in-laws to continue to pursue this secondary objective.

Those not accustomed to a Southern lifestyle might look at the farm and envision a "laid back, slow moving" pace. The elder Owens says things have been pretty tough. "What help I have is only hired for a specific task — not regular! I've got my chainsaw to keep the little pines from being thicker'n fleas on a dog, my tractor, and two dibble bars. I'm always either in the woods or down in a gully helping a cow birth a calf. I hope that's were I am when I go."

When he does, though, there's a TREASURE Forest for his children. Wonder how they'll date their lives—"B.D." maybe, "because of Dad!"





The "camera" exposes the film, but the "person" makes the difference

Forest Photography Or Pictures Of A Forest?

by NEIL LETSON, TREASURE Forest Coordinator

Ask any forest landowner or forest resource manager to list the most important tool he uses, and you are likely to get just about any kind of response ranging from a dibble to a tractor equipped with a fire plow. One answer you probably won't get is a camera. Though not usually looked upon as a vital piece of forestry equipment, it can contribute to the enjoyment of Alabama's forest resources if the user is familiar with its operation.

For forest landowners, a camera can document management activities, record the growth of the forest over a period of years, and be a way of sharing his "story" with friends, family, and other landowners. To the professional, a camera can be helpful to lecturers, educators, forest specialists, and researchers.

Regardless of your interest or reason for taking forest photographs, there are some tips and pointers to be considered.

1. *Make sure your picture has a theme or tells a story.* Some pictures are worth a thousand words, while others are completely unintelligible. Your picture should have a subject that is easily recognizable and compatible with the surrounding objects.

2. *Take a close-up picture of your subject when the opportunity presents itself.* Pictures taken from a distance create unnecessary distractions. The closer the subject, the more personal the image.

3. *Avoid clutter.* It can be extremely frustrating when you are trying to highlight a particular subject and you have briars, vines, smokestacks, utility lines, and debris block-

ing or creeping into the view. Where you have obstructions to your intended subject, try different angles or eliminate the obstruction altogether.

4. *Place your subject away from the center of the picture.* Most good photographers place their subject to the left or right third of their picture. This creates a pleasing balance between subject and surroundings. When using people as your subject, be sure they are looking toward center of the picture—never outside.

5. *Take people-pictures.* Too many forest photographs are taken just of trees and nothing else. This can be monotonous and plain boring. Use people to help tell your story. Twenty years from now, wouldn't it be more meaningful to have a picture of your son helping to plant trees rather than a picture of a row of seedlings?

A few words about people pictures. Have your subject doing something—avoid the posed shot. The awkwardness of that person standing at attention and looking into the camera transcends his uncomfortable feeling to the person looking at the picture. People who are natural, relaxed, and doing their job make better pictures.

Some other tips include having your model direct his action toward the main point of interest (i.e., hunters looking toward a flushed covey of quail, hikers walking along a path, and a landowner inspecting one of "his" trees).

6. *Shoot your picture where there is plenty of sunlight.* This includes along roads, fields, firelanes, and rights-of-way. Early morning and late afternoon can accentuate color and contrast.

7. Finally, when taking forest photographs, *don't hold back on film.* Many photographers "gamble" with their pictures. They take one shot and hope it has the qualities of a good shot—in most cases it doesn't. Take several shots of your subject. Use different exposures, angles and groupings. The chances are good that with this approach, you'll get at least one good picture.

Taking pictures of the forest can be a pleasurable, as well as rewarding, experience. With all its beauty and multiple benefits, there's a gold mine of pictures just ready for taking. ♣

Reference

R. W. Neelands. **Tips For Forest Photographers**, U. S. Department of Agriculture - Forest Service.

A PARTNERSHIP IN PEST MANAGEMENT



by JEFF WISCHER, Program Manager, Integrated Forest Pest Management Cooperative



Alabama's forest landowners and managers share many challenges with foresters throughout the region and nation—particularly productivity and profitability in the face of rising costs, interest rates, and variable markets. Losses from insect and disease outbreaks are a constant risk, often tipping the balance from profit to loss. Alabama forest farmers have a new opportunity to employ the latest forest pest management techniques, thanks to the Alabama Forestry Commission's participation in a new venture in forest pest control research. That venture is the Integrated Forest Pest Management Cooperative. Before we talk specifically of this significant new development, we need to lay a little groundwork on forest pests and pest management.

A Look At Forest Pests

The organisms that we call pests—mostly insects and fungi—are actually an integral part of the forest ecosystem, playing their roles in the perpetual cycle of birth, life, death, decay, and renewal. Many pests, including fusiform rust, southern pine beetle, and annosus root rot, have been part of the Southern forest for thousands of years. Other pests, such as chestnut blight and gypsy moth, have been recently introduced by the activities of man. In all cases the term “pest” is ours because *our* vested interest is in the trees—no one has found a way to make plywood from bark beetles, at least not yet!

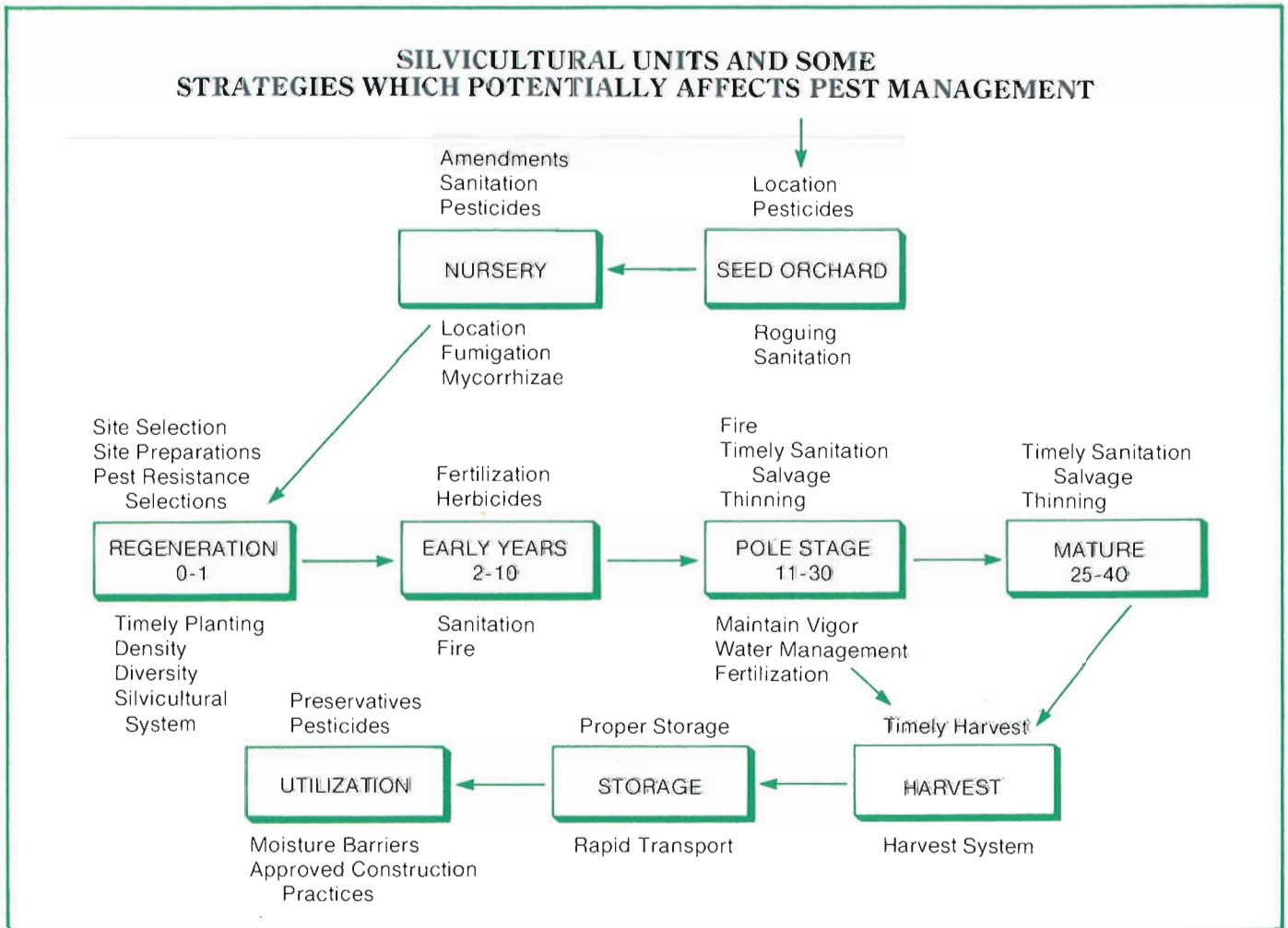
Modern forestry practices can influence the severity of pest outbreaks. Large expanses of fast-growing, even-aged, single-species forests create new opportunities for insects and disease-causing organisms to grow and multiply. The forest is a dynamic system, and when parts of the



system are altered significantly (in this case tree growth, spacing, species composition, genetic makeup, etc.), we can expect other parts to also

respond to that change. Forest pests are part of the system as always, but their importance changes as we modify the system to suit our needs.

SILVICULTURAL UNITS AND SOME STRATEGIES WHICH POTENTIALLY AFFECTS PEST MANAGEMENT





A New Approach

Integrated Forest Pest Management (IFPM), while it sounds imposing, is nothing more than a view of pest management as part of the overall forest management system. Every forest resource manager knows that the best way to control a wildfire is to stop it before it starts. Education, fire danger warnings, burn permits, hazard reduction, and even prescribed fire to limit fuel buildup are all steps to prevent wildfires. Only if and when these steps fail are suppression forces needed to put out a fire. Likewise IFPM considers every silvicultural treatment an opportunity to prevent pest buildup and reduce tree damage. Traditional control measures such as pesticide sprays and salvage cuts are only two points in a line of defense that begins in the seed orchard and ends at harvest. The IFPM Co-op is an applied research cooperative; it strives to determine the best ways to apply our present knowledge to minimize losses. Research of this kind—usually on a large and operational scale—is expensive and time consuming, demanding manpower and equipment beyond the capabilities of the forest farmer and all but the largest industries. The Co-op members (seven forest industries and the Alabama Forestry Commission) and sponsors (the U.S. Forest Service and the University of Florida) realize that mutual cooperation is the only way to tackle such a large project. As a result, the whole is capable of doing more than the

separate parts could ever attempt individually.

A First for the Forestry Commission

As the first state agency in the first cooperative of this kind, the Alabama Forestry Commission is a leader in bringing the latest pest management techniques to the forest farmer. Research results are distributed months or years before they appear in trade or professional journals. In this way the Alabama forest farmer with just a few acres has access to the research resources of industries with combined holdings in the millions of acres! Alabama's treasured forests can have the best protection, no matter how large or small.

As we stated earlier, integrated forest pest management in its fullest sense begins in the seed orchard and carries through the buzz of the chainsaw or the rumblings of the shear. To detail every possible treatment or input would take much more space than we have here. The accompanying diagram (FIGURE 1.) shows various opportunities to minimize pest problems during the successive stages of stand development. Recent issues of this magazine have explored management strategies for southern pine beetle, annosus root rot, and fusiform rust. More information is available from the Alabama Forestry Commission.

Dear Editor:

I'd like to compliment you and your staff on this much needed source of practical information for the small private landowner.

Very truly yours,
Larson & McGowin, Inc.
Robert J. Foster

Dear Editor:

I own a small tree farm in Conecuh County, Alabama. I spend about one-half of my time there.

I enjoy your publication very much and thank you for keeping my name on the mailing list.

S. R. Morris

Dear Mr. Moody:

Your letter came today. I am greatly flattered by the distinct honor of having my land certified as a Treasure Forest. I had never expected any recognition at all. I love forests and wildlife and taking care of God's earth so I was only "doing my own thing." How nice to have someone notice it!

Very truly yours,
Eleanor O. Gordy

Dear Editor:

You and your staff are to be commended for your efforts, good job. I am a forester and I use the magazine as a reference. When a landowner asks a question, I find your magazine has the answer to most of the questions and in a language people can understand.

Enclosed is my questionnaire and once again, thanks for making my job easier.

Sincerely,
Joseph S. Norton
Registered Forester
Alabama License #977

ALABAMA FORESTRY COMMISSION DIRECTORY

C. W. Moody, State Forester, 513 Madison Avenue, Montgomery, 36130, 261-2540

Charles A. Pigg, Assistant State Forester, 513 Madison Avenue, Montgomery, 261-2541

Timothy C. Boyce, Director, Forest Resource Development Division, 513 Madison Avenue, Montgomery, 261-2544

John C. Kummel, Director, Administrative Division, 513 Madison Avenue, Montgomery, 261-2554

Richard Cumbie, Director, Forest Resource Protection Division, 513 Madison Avenue, Montgomery, 261-2530

Alvin Downing, Special Assistant to the State Forester, 513 Madison Avenue, Montgomery, 261-2530

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