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Georgia

FORESTRY

MARCH, 1984



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ARBOR DAY IN GEORGIA

Georgia

FORESTRY

USPS No. 217120

March, 1984

No. 1

Vol. 37

Joe Frank Harris - Governor

John W. Mixon - Director

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Georgia Forestry is published quarterly by the Georgia Forestry Commission, Route 1, Box 85, Dry Branch, GA 31020. Second class postage paid at Macon, GA.



Cub Scouts Don Kelley, left, and Phillip Dove, are two of the 25 boys who participated in the Tifton tree sale.



TREE SALES AID STATUE RENOVATION

Dr. Jim Hook of the Coastal Plains Experiment Station, has been Cubmaster of Pack 62 in Tifton for four years, but he feels that one of the finest achievements in working with the young boys came this year when they sold 2,000 dogwood trees to townspeople to help renovate the Statue of Liberty.

The fund-raising project was co-sponsored by the Pack and the Tifton Garden Club, with the 25 boys serving as "door to door salesmen." Within a week, all trees were sold and after deducting wholesale costs, all profits were sent to New York to help festore the statue.

Now the Tifton Pack is challenging other Cub Scouts across the nation to conduct fund-raising projects for the same purpose.

The 30-month, \$39 million project to repair the weakened statue and get it in top condition for its 100th anniversary is now well underway.

Scaffolding is now being erected around the famous landmark and preservation officials said sightseers - and there are 1.8 million each year - will be able to visit the site only intermittently as crews work to replace the 1,600 wrought iron bands that hold its copper skin to its frame, replace the torch and carry out other needed repairs.

The 151-foot statue, a gift from France, will not be 100 years old until October 28, 1986, but the renovation is to be completed and a birthday celebration held July 4 of that year, when tall ships from around the world will sail into the harbor to honor the statue.

ON THE COVER

Drew Shugart and his sister, Olivia, plant a tree in observance of Arbor Day in Georgia. They are the children of Mr. and Mrs. Andrew Shugart of Macon.

INCENTIVES PROGRAM APPROVAL ANNOUNCED

The 1984 Forest Incentives Program has been approved, according to a joint announcement by John W. Mixon, director, Georgia Forestry Commission, and Roy Cates, executive director, Agricultural Stabilization and Conservation Service.

Georgia's basic FIP allocation of \$1,488,000 represents an increase of more than 20 percent over 1983, Cates said. The total for the nation is \$12.5 million.

Mixon emphasized that the program is designed to increase timber production through tree planting and/or timber stand improvement.

The local county ASCS office will approve the applications, keep records and make payments to the landowners. The Forestry Commission will provide the technical field assistance, he said.

In approving requests, high priority will be given to practices that result in the planting of 40 acres or more of trees, timber stand improvement of 40 acres or more or a combination of both.

FIP payments to the landowners are limited to \$10,000 per calendar year. Approved practices remain in effect until cancelled. The payments may be assigned to a vendor with the landowner's approval.

Those eligible, primarily small landowners, include private individuals, groups, associations, corporations or other legal entities who own nonindustrial and private forests capable of producing a commercial wood crop.

A landowner must have a forest management plan, prepared by a forester under the direction of the Georgia Forestry Commission, for the area in which the practice will be carried out.

The Forestry Commission has the responsibility for: (1) certifying the need and suitability for the practice, (2) preparing a forest management plan, (3) providing a prescription for the on-the-ground methods to be used in the application of the practice, (4) assisting approved landowners in securing the services of vendors and (5) certifying that the practice has been satisfactorily completed so that the cost-share payments can be made.

The following costs are the maximum flat cost-share rates, not to exceed 50 percent of actual costs, as recommended and approved by the State ASCS Committee:

Payments received by the landowner for FP-1: \$15 per acre where planting is done with farm equipment, \$20 per acre where planting is done by hand or with heavy equipment, \$27.50 per acre for light site preparation \$47.50 per acre for

(Continued on Page 14)



The Trust Company Bank of Middle Georgia recently donated this tree planter to the Georgia Forestry Commission. Charles Harmon, right, bank vice president, Macon, said the planter is to be used by the nonindustrial, private landowner. Looking on at left is Albert Lyons, Haddock, one of the thousands of Georgia landowners that annually plant millions of trees contributing to timber being Georgia's top value crop.

TREES NOW PRINCIPAL CROP

Trees are Number One! That's the message proclaimed by the Georgia Forestry Commission early in 1984 as final statistics became available to show that trees had taken the lead as Georgia's top crop in value.

When based on the value of raw forest products at first point of delivery, the figure for the year exceeds one billion dollars.

The impressive figure does not include salaries, transportation of logs, chips and other woodland materials. It does not include value after wood has been converted into a wide variety of finished products.

As a matter of fact, when all aspects of forestry's contribution to Georgia's economy is considered, the figure exceeds an impressive \$6.6 billion!

The endless stream of southern yellow pine pulpwood to feed the 17 big pulp and paper mills operating around-the-clock in Georgia leads all forest raw materials, with an annual value of almost \$386 million.

The annual volume of southern yellow pine sawtimber to supply more than 248 lumber mills across the state ranks second, with value set at \$288 million.

As a result of the Georgia Forestry Commission's promotion of wood as an energy source in recent years and the advent of superior wood burning appliances and systems, firewood is now third in value. It exceeds more than \$135 million annually.

Southern yellow pine veneer logs, totaling more than \$45 million annually, are fourth in value and hardwood sawtimber rates more than \$33 million.

Pulp and paper mills are buying hardwood pulpwood at the rate of more than \$36 million annually and companies spend more than \$18 million each year for whole tree chips. Modern machines have revolutionized harvesting of the forests and cull trees, limbs and residues that were once considered worthless are now being converted into valuable wood chips.

Even pine stumps, those obstacles that plagued Georgia's early settlers as they cleared the land, are now bringing more than \$21 million from companies that use them to extract a variety of chemicals.

Manufacturers spend more than \$10 million for hardwood veneer logs and the important naval stores industry in the state provides raw materials valued at more than \$2 million.

The state's rapidly expanding Christmas tree industry has an annual value well above \$4 million and southern yellow pine posts now bring in more than \$1 million.

Miscellaneous items, including cypress and locust posts, split rails, pine straw, forest seed and ornamental and decorative materials, sell for a total of more than \$3 annually at first point of delivery.

The total value of all products in 1983 (in the raw state as they are delivered to the processor or manufacturer) was \$1,002,862,497.



Commission Director John Mixon addresses a group on savings now benefiting prisons and other institutions that have turned to wood as a heating source.

ATTENDANCE HIGH AT FOREST WORLD

More than 15,400 visitors passed through the doors of Southern Forest World during 1983, according to an announcement at the recent annual meeting of the facility's board of trustees.

The educational exhibit at Waycross is designed to tell the history and development of forestry in Georgia and 12 other Southern States. It illustrates in exhibits and motion pictures the correct forestry practices that will further enhance the woodlands of the South.

William J. Martin, Director of Southern Forest World, said visitors came from 45 states and ten foreign countries. Many school children tour the unique center, which features a "talking tree" and a mummified dog in a hollow log.

Many old tools once used in forestry and naval stores operations are displayed alongside displays of modern machines used by today's forest industries. The centerpiece of the facility is a huge hollow pine tree which supports a spiral stairway to a second floor.

The \$4 million attraction located on Augusta Avenue in the South Georgia city, has the support of 102 corporations from across the South, as well as individual contributors. The facility also receives cooperation from the Georgia Forestry Commission.

The center is open to the public Tuesday through Saturday, from 10:00 a.m. to 5:00 p.m., and Sunday from 2:00 to 4:00 p.m. There is no admission charge.

Bill Barton, Southern Woodlands Regions Manager, Union Camp Corporation, Savannah, was reelected at the meeting to serve as President of the Board of Trustees. Other officers elected included Mr. S. Harold Gowen, Vice President; Mrs. S. William Clark, Secretary; Mr. J. Dan Lott, Treasurer; and Mr. W. Grady Pedrick, Legal Counsel.

PRISON WOOD-FIRED SYSTEM DEDICATED

The Walker County Correctional Institute, at Rock Springs, recently hosted ceremonies dedicating its wood-fired heating system. The Georgia Forestry Commission, Tennessee Valley Authority and the Department of Offender Rehabilitation sponsored the event.

Warden Doug Williams conducted a tour of the cost-savings heating system that utilizes 2,200 tons of green chips annually. He remarked that the system is expected to have a simple payback in approximately five and a half years.

The primary steel boiler generates steam which provides space heating and domestic hot water for the security facility. The system has been on line since April 1983.

John W. Mixon, Commission director, said that Georgia has wood-fired systems in 11 public facilities, including the state

headquarters at Macon. He emphasized that the state's taxpayers will realize annual savings of \$1.4 million over costs of fuels previously used. Conversion to wood as an energy source is also creating other economic activities, and the total annual benefit is estimated to be \$2.9 million.

An estimated 13.1 million tons of roundwood, chips and residues are being used annually for fuel in Georgia. Mixon pointed out that this represents an annual economic benefit to Georgia exceeding a half billion dollars.

The Commission director noted that the annual savings in fuel costs to wood users is estimated to be \$494.7 million. The current use of wood for energy by industry, government and households in Georgia results in \$44.1 million of additional economic activity, Mixon added.

FORESTRY CONFERENCE SET IN MAY

The 43rd annual Southern Forestry Conference will be held May 16-18 at the Marriott Hotel in Nashville, Tennessee. With the theme, Opportunities for Forest Farmers in the '80s, the meeting will feature a special technical assistance panel in which landowners may consult with experts in growing, harvesting, marketing and regenerating timber.

Forest Farmers Association sponsors the yearly event, which brings together timberland owners and forestry leaders from the South and from other areas.

Program participants will include U. S. Senator Jim Sasser of Tennessee; Dr. Fred Schelhorn, senior vice president, Packaging Corporation of America; William K. Condrell, general counsel for Forest Industries Committee on Timber Valuation and Taxation; Tennessee Governor Lamar Alexander; and Tennessee State Forester Roy C. Ashley.

The program will also feature other distinguished members of forestry and financial communities.

Commercial and educational exhibits displayed will include latest tools and equipment available to timber growers. Companies wishing to prepare displays should contact Forest Farmers Association, P. O. Box 95385, Atlanta, Georgia 30347.

The Marriott Hotel is holding a block of rooms for the conference at special rates of \$70 for single or double occupancy. Reservations should be requested by writing Reservations Department, Marriott Hotel, One Marriott Drive, Nashville, Tennessee 37210; or by telephoning 616/889-9300.

For additional information and a copy of the program, please contact Forest Farmers Association.

Development of two new exhibits has been approved by the Board of Trustees of Southern Forest World. The Herty Foundation of Savannah will have on loan to the Center a miniature paper making machine. It will take raw pulp and process it into paper in a matter of minutes and the entire process can be viewed by visitors. The machine will be operating for the first time during the Waycross/Ware County Forest Festival in May.

Also planned for the Center is the installation of a fire-still. The Union Camp Corporation is contributing the boiler and other essential parts.

For many years people in the South have been burning the forests for various reasons. Wooded areas have been burned to reduce undergrowth, prepare for seeding and planting, improve wildlife habitat, aid in insect and disease control and for other purposes.

"In most of these instances, however, little or no attention has been given to the problems created by the smoke emanating from these burns," according to David Westmoreland, chief of the Commission's Forest Protection Department.

"We are all aware of the importance of clean air to our lives and well-being," he said, "but forests are also important to us, producing much of the oxygen we breathe each day, and we need to understand how to control the smoke generated when we use controlled fire in the woods."

Westmoreland said it should be understood that fire in the forest is not all bad. "It is good for the reasons mentioned above, as well as a tool to avoid the devastation of wildfires," he said. When forests are not periodically burned, large amounts of dried grasses, pine straw, limbs and other debris accumulate on the forest floor, providing fuel for a disaster. But prescribed and controlled burning can be carried out safely to remove this danger, he pointed out.

The protection chief said that all fire produces smoke, sometimes in great quantities, and the content, volume and location of smoke can produce undesirable, as well as dangerous situations.

Burning forest fuels produce traces of carcinogens that are potentially harmful to humans and for this reason, burning should be done when wind will carry smoke away from populated areas. This is especially important where nursing homes, hospitals or population centers are located, he said. He also noted that large quantities of smoke can cover highways and airports, thus making travel extremely dangerous.

Smoke management is the application of specific guidelines before and during a fire to eliminate the smoke hazard and Westmoreland listed some guidelines to observe in reducing the impact from smoke:

1. Be sure you have considered the impact of your burn on the total environment-both on site and off site.
2. Use fire weather forecast - available through the Georgia Forestry Commission's county unit offices. Such information is needed to determine what will happen to the smoke, as well as to determine the behavior of the fire.
3. Do not burn during pollution alerts or temperature inversion. Smoke will tend to stay near the ground and will not disperse readily.
4. Comply with air pollution control



WHERE THERE'S SMOKE...

FIRE AT TIMES IS BENEFICIAL, BUT SMOKE IS ALWAYS THE CULPRIT THAT SHOULD BE ARRESTED WHENEVER POSSIBLE.

- regulations in your area.
 5. Burn when conditions are good for rapid dispersion. The fire weather forecast will supply this information.
 6. Determine the direction and volume of smoke that will be produced.
 7. Notify local fire control offices, nearby residents and adjacent landowners.
 8. Set a fire in the area to be burned, away from roads, populated areas, etc., to test and confirm smoke behavior.
 9. Use backfires when possible. Backfires, burning against the wind, give more complete consumption of fuel and produce less smoke. Less pollutants are released into the air and visibility is less restricted.
 10. Burn in small blocks. Large area burning reduces visibility. Down wind and a higher concentration of particles is put into the air. Make every effort to burn when weather conditions are best for rapid dispersion of smoke.
 11. Burn out and eliminate all smoke as soon as possible along roads to reduce impact on visibility.
 12. Be cautious of nighttime burning. Predicting smoke drifts and visibility is more difficult at night. The wind may lessen or die out completely. This will cause smoke to disperse slowly while remaining close to the ground.
 13. Contain your fire to a size that can be controlled or extinguished if undesirable situations develop.
- "By following these guidelines and preparing a plan, you will reduce the production of smoke and ensure proper smoke dispersion," Westmoreland said, "and assistance in this area can be obtained by contacting your local forestry unit."
- He emphasized that it is of primary importance that, before any burning is done, "the safety and welfare of people and the environment be considered."

Oglethorpe County is not really blessed with a whole lot of big city services. Then again, we are not blessed with a whole lot of big city taxes either. What we do have in abundance, for a rural county of our population, is good fire protection at a cheap price...We applaud the men and women in the respective communities that have seen fit to give of their time and energy to this worthwhile cause...The county government also gets good marks for their participation in fire protection. They help the departments get a running start in leasing their fire knockers and in most cases make an effort to provide housing for the fire department.

The Sheriff's office chips in with yeoman service on handling fire calls and dispatching fire trucks from the various communities. Maurice Mathews of the Oglethorpe County Forestry Unit is always ready to help apply for grants and to counsel with the various fire departments.

—OGLETHORPE ECHO

Oglethorpe County is 435 square miles of rural Georgia dotted with a half dozen farm communities and three small towns. For generations, its citizens could do little more than stand by when fire struck and watch it consume a home, barn, cotton gin or a crossroads store.

But thanks to the Rural Fire Defense program and the overwhelming support it has received from the people, all that has changed.

Oglethorpe County now rates as one of the best protected counties in the entire state. When the fire alarm sounds, more than 150 volunteer firemen in 11 departments across the county are ready for action.

Ranger Maurice Mathews of the Oglethorpe Unit, Georgia Forestry Commission, marvels at the transition.

"Back before the RFD units were formed we would get a call on a roadside fire and before we could move equipment into place, it would often eat into the woods," the ranger said, "but now the volunteers beat the fire out before we get there...sometimes three departments will show up and prevent the blaze from spreading into the forest."

The ranger said volunteers on one occasion fought a blaze in the attic of a big two-story country home. "They vented the roof and saved that house...they performed just like big city firemen."

County Commissioner Thomas Meyer commented on the same fire. "The attic was on fire in the house about two miles from the nearest fire house and I wouldn't have given you five cents for the building." But, he said, in minutes, "trucks began coming from every direction and they saved it."

Meyer said "a lot of good people have put a lot of time into the program and it



Volunteer firemen confer with Forest Ranger Maurice Mathews at the Sandy Cross Fire Station, one of many established across Oglethorpe County to make it one of the best protected rural counties in the state. The county's volunteers represent all walks of life. Shown with the ranger are, left to right, Marvin Burt, farmer; Roy M. Glenn, Army retiree; and Jim Stepp, a Gold Kist supervisor.

COUNTY SOLVES RURAL FIRE PROBLEM

OGLETHORPE COUNTY CITIZENS UNITE TO FORM EFFECTIVE NETWORK OF VOLUNTEER FIRE DEPARTMENTS UNDER THE RFD PROGRAM. PROPERTY SAVED, INSURANCE RATES REDUCED.

is one of the best developments we have ever had in this county."

J. W. Griffiths, Chairman of the Oglethorpe County Board of Commissioners, agreed. "The Rural Fire Defense program has worked out much better than we had expected...it just couldn't have been any better!"

Griffiths and others cite the savings in insurance premiums as a result of the program. Generally, the class 9 insurance rating now in effect in the county has brought about an 18 to 29 percent savings in insurance costs.

Griffiths said he owns some commercial property in Arnoldsville and when the rating was changed, he received a refund of more than \$300 on an annual premium.

The RFD program was inaugurated in 1968 by the Forestry Commission and it is administered by the agency. The Commission aids counties in obtaining, modifying and equipping trucks, helps secure funds for communications systems and sets up professional training classes.

Ranger Mathews pointed out that many of the units had their start when local citizens decided to raise funds to buy

a used truck and build a building to house the vehicle.

Cakewalks, barbecues and raffles were some of the events staged to raise funds. Willis Colquitt, one of the founders of the county's Sandy Cross Fire Department, remembers that one barbecue brought in \$1,457. "Wives had a big part in it," Colquitt said, "and we had the support of a lot of people in our section of the county."

Sandy Cross provides protection for about 200 homes and Colquitt, who learned fire fighting in the Navy, said the community has not only gained security, but has come closer together socially as a result of events held for the cause.

The county has aided in building or providing materials for construction of many of the fire houses. Some double as voting precincts.

Ralph Maxwell, Jr., editor of the Oglethorpe Echo, said "people all over the county have taken a great interest in the program, they have truly rallied around the cause." He pointed out that another good feature of RFD is that it is achieved "at minimum cost to the taxpayer."

FORMER MEMBER OF BOARD DIES

W. George Beasley, 60, Lavonia, a past member and chairman of the Georgia Forestry Commission Board of Commissioners, is dead.

John W. Mixon, Forestry Commission director, said Beasley was a steward of forestry during his 13-year tenure in the 1960s and '70s. His actions and guidance were always in the best interest of the people of Georgia and in the perpetuation of forestry, Mixon added.

Beasley was the owner and operator of Transplant Nursery, farm manager for Lavonia Manufacturing Co., a member of the American and Georgia Nurserymen's Assn., member of the American Rhododendron Society, a past president of the William Burton Chapter and was nationally recognized as an innovator and leader in the field of hybridizing native azaleas.

He was a deacon and Sunday School teacher in the Lavonia First Baptist Church and a former Scoutmaster.

The veteran of World War II was a member of the First Cavalry Division, organized the first National Guard Unit in Franklin County and served as its unit commander with the rank of Major.

Beasley is survived by his wife, Mrs. Mary Shuss Beasley; daughter, Mr. Thurman Hill; and sons, Walter George, II, John Hamilton, and Jeffrey Brown, his mother, Mrs. Lucille Brown Beasley, and four grandchildren.



Jim Gillis, left, shown with Governor Harris at capitol following his reappointment to the Commission Board.

GILLIS REAPPOINTED TO BOARD

Governor Joe Frank Harris has reappointed Jim L. Gillis, Jr., Soperton, to the Georgia Forestry Commission Board of Commissioners. Gillis, who just com-

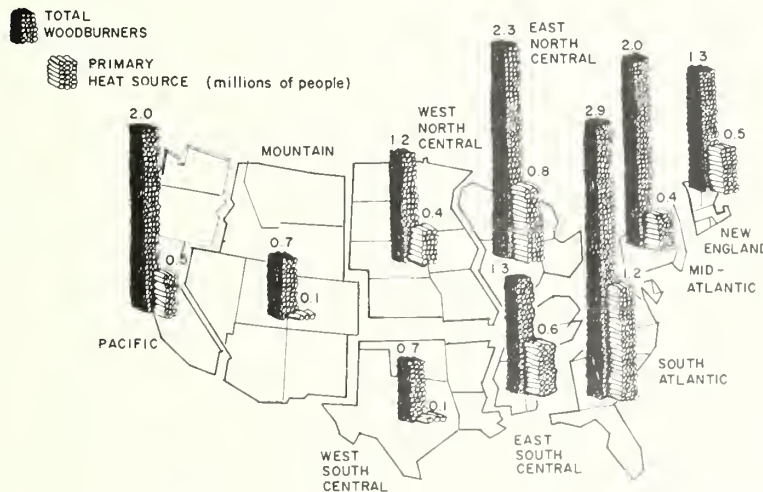
pleted a seven year term, is chairman of the Board.

The Treutlen County woodland owner is one of five commissioners that supervise the forestry program in Georgia. Other members are Felton Denney, Carrollton; Eley C. Frazer, III, Albany; Ms. Patricia B. Robinson, Atlanta; and Robert Simpson, III, Lakeland.

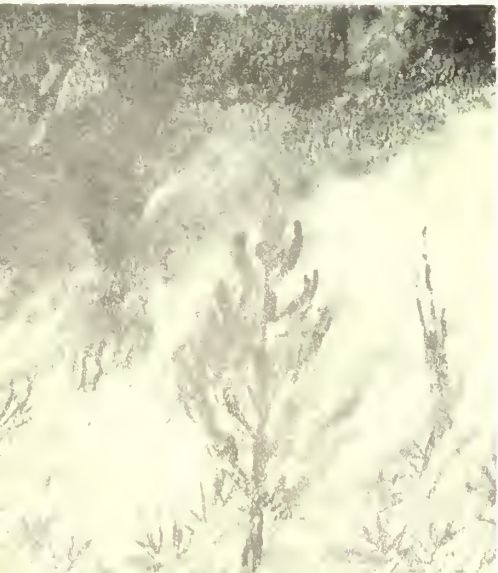
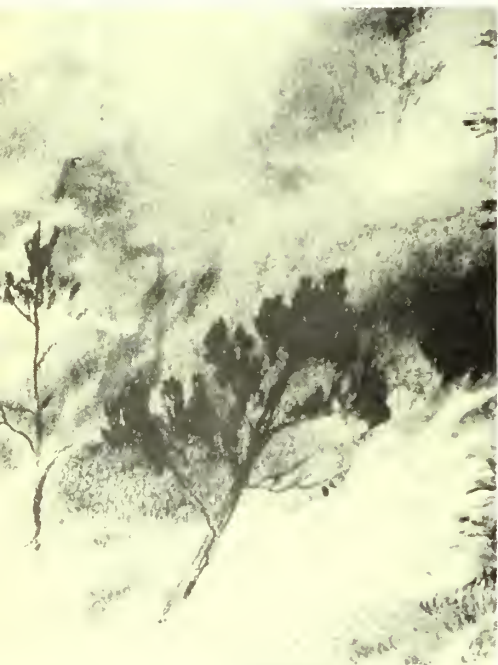
Gillis is president and a past director of the American Turpentine Farmers Association, a director and past president of the Georgia Forestry Association, a member and past chairman of the State Soil and Water Conservation Committee and Board chairman and past president of the Bank of Soperton.

The former state senator and mayor of Soperton is on the Board of Directors of the Georgia Agri-Business Council, chairman, Ohoopsee Soil and Water Conservation District, supervisor in the Ohoopsee Soil Conservation District and a past president of the Georgia Beef Cattle Improvement Association.

Gillis is married to the former Miss Katherine Hudman of Screven County. They have three children and 10 grandchildren. The family is a member of the First Baptist Church of Soperton.



This illustration shows figures obtained from the Energy Information Administration by the publication, Wood n' Energy. It shows that Georgia and the South Atlantic area leads the nation as wood burners. New England, often thought to be the largest bastion of wood burners, lags far behind. The data includes all types of wood appliances, including fireplaces, by users who reported wood as a primary or auxiliary fuel.



March 10 marks the anniversary of South Georgia's "Big One," the spectacular forest wildfire that oldtimers continue to talk about and young foresters, rangers and patrolmen continue to hear about.

The year was 1955 and the big fire was actually the climax of a series of disastrous wildfires that started in the fall of 1954.

George and Tom Shelton, prominent naval stores operators and timber growers in the Valdosta area, said recently that they find it hard to believe that 30 years have passed since the worst forest fire in Lowndes County occurred.

In recalling the 1954 fire, George Shelton said it left a "black landscape for miles and miles, with nothing green in sight." His brother, Tom, said he remembered that the heat was so intense "it actually charred leather washers in a farm well that was 35 feet from the flames."

The fire started on a Friday at noon and before it was contained at noon on the following day, more than 6,500 acres of some of South Georgia's finest timber were destroyed.

The fire, believed to have been deliberately set in the Indianola section of the county, quickly whipped out of hand and spread through the huge tracts of pine timber.

Georgia Forestry Commission rangers and patrolmen, joined by industry firefighters and volunteers, battled the fierce blaze which destroyed at least eight homes, several barns and livestock.

THE FORERUNNERS

Jimmy Copeland, reporter for the Valdosta Daily Times, wrote that "Despair and fear were common among the onlookers as the mass of flame crazily danced about the highest trees, mocking the efforts of one man to wet down his home...Sudden winds, changing directions as suddenly as they came up, gave strength to the fire, carrying it over and beyond such a break as Highway 84. Great spirals of flame and smoke would belch forth from dry pine."

The Shelton Brothers, who lost considerable timber in the fire, recall that an extended drought prevailed that summer and even some of the swamp areas were "bone dry."

Reporter Copeland, who also made photographs of twisted bedsteads in burned out homes and pigs that were roasted in their pens as the flames swept across the land, said "the thick pall of smoke that rose over the burning area was clearly visible in Valdosta, some terming it just like pictures of an atom bomb explosion."

But the Lowndes County fire in early May and the countless other smaller fires that plagued Georgia's southern counties that year were the forerunners of the fire in 1955 that the local historians now re-

gard as the "Big One."

Forest firefighters throughout most of the South Georgia area had been battling outbreaks as fire danger continued to mount during rainless days of February and the first week of March.

FIREBREAKS FAIL

Finally, on March 10, a blaze which has already burned over 2,000 acres in the Okefenokee Swamp, broke through firebreaks placed around the area by the Ware County Unit and others in the district.

The flames, fanned by a steady wind, crossed firebreaks and headed toward Highway No. 1, a four-lane stretch near Waycross. The fire was held at the highway with an occasional jumpover, but it then turned and raced southward.

Ed Ruark, now retired from public service and operating a large Christmas tree farm near Bostwick, was the Commission's Chief of Forest Protection at the time and directed wide ranging suppression operations in the area.

He said last week that he vividly remembers the terrifying experience of seeing roaring flames "crown in trees 80 feet tall" and race unchecked across vast areas of forestland. The magnitude of the great fire was further realized, he said, as he surveyed the widespread devastation from a helicopter brought into service by the Georgia National Guard.

Ruark said the big fire, which consumed more than 25,000 acres, was the result of a record drought and a tremendous build up of fuel.

Emergency equipment was dispatched from the Georgia Forestry Center in Macon and by the weekend men and equipment from units in Cherokee, Floyd, Richmond, Morgan, Walton, Fulton, Franklin, McDuffie, Warren, Polk, Gwinnett, Hall, Jackson, Jefferson, Monroe, Candler, Glynn and Wayne Counties were on the line in Ware County, or on the way to the area.

Pulpwood, turpentine and lumber companies, as well as other industries, threw all available manpower and equipment into the fight and by Monday, March 14, an army of men with heavy suppression equipment, joined by five airplane pilots on observation duty, had invaded the area.

THREE MAJOR AREAS

By that time, the fire developed into three major danger areas. The first, the "Mudge Fire," the one that had come out of the swamp, was centered about 15 miles south of Waycross.

As it raced along Highway 1, it threatened the Commission's district office and shops. Homes in the area were evacuated and residents were taken to Waycross. The fire destroyed some 15,000 acres in the state forest, the preserve known to-

THE BIG ONE



day as Dixon Memorial State Forest.

Further north, another offshoot of the swamp fire came to be known as the "Double Branch Fire." It raced seven miles to the Brunswick highway, where equipment was concentrated, but the fire could not be stopped before it jumped that highway and threatened several homes.

A third fire, known as the "Suwannee Lake" fire, burned hundreds of acres west of Waycross.

BEGINS WITH SHAVINGS

Former Forest Patrolman Johnny Hickox, who resigned from the Commission to work for the Okefenokee Swamp Park several years ago, said he was one of the first to respond to one of the big fires, which started from a small pile of shavings at a pole mill at Homerville.

"The more I plowed, the bigger it got," he said. "We had others to come in and we plowed all the way to Fargo and even across the dry bed of the Suwannee River before it was under control."

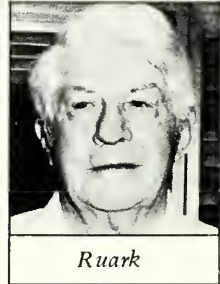
Firefighters battled the blaze for days before it finally ate into a peat bog deep in the swamp, where it smoldered for several months.

B. S. Booth, retired district ranger of the Waycross District, said he was with several other firefighters in the woods when he heard a roaring sound in the distance. "I told the others that we needed to get out in a hurry," he said, "and just as we got out of its path, a great ball of fire rushed through the swamp...we got out just in time."

Elbert Griffin, a retired towerman, also remembers some harrowing experiences during those great fires. He looked out the cab of his tower and saw a sea of



Westmoreland



Ruark

flames heading his way. He "ran" down the many steps and made a hasty retreat to safe ground.

Joey Hall, present day district forester in the Waycross District, was a schoolboy in nearby Offerman during those March days of the big fires and he well remem-



RETIRED FIRE FIGHTERS REMEMBERED

Johnny Hickox, left, a former forest patrolman; B. S. Booth, center, who served as a district ranger for many years; and Elbert Griffin, retired tower operator, discuss the event they remember most often from their careers with the Forestry Commission - the big fire of '55.

The fire with the most intriguing origin during the disastrous 1954-55 season of big blazes in South Georgia was definitely the celebrated "Mule-tail Fire."

When memories hark back three decades, versions of the fire sometime differ from storyteller to storyteller. But all agree that the fire in Charlton County was indeed started by a mule's tail.

It seems that several naval stores workers were laboring in the woods on a wintery day and had a small fire going to keep warm. An old mule used to pull a barrel wagon was standing nearby and suddenly switched his tail into the open flame.

He bolted and ran through the woods, setting the extremely dry forest ablaze with his flaming tail.

The "Muletail Fire" burned more than 18,000 acres of forests and swampland before it was finally subdued.

bers that "clouds of smoke hovered over the southern part of Georgia and North Florida for several days."

During 1954-55, more than 25,400

wildfires occurred and they destroyed a total of 474,723 acres of forests, with the heaviest devastation, of course, in the pinelands of South Georgia.

CAN HAPPEN AGAIN?

Can that kind of fire damage ever happen again?

David Westmoreland, who is now Chief of the Commission's Forest Protection Department;

"There is always that possibility that a big fire could occur, but I think the probability of it happening is much less than it was in the middle fifties.

The key to keeping fire size small is early detection and immediate response with sufficient resources to put the fire out before it becomes uncontrollable. With the respect forestry in Georgia commands today, the Forestry Commission is provided the capability to maintain a respectable average size fire.

This can be attributed to several things. We have the biggest and best firefighting equipment we have ever had. This, coupled with a detection system consisting of a statewide network of fire towers, supplemented with air patrol during periods of high fire danger, allows for the earliest possible detection of wildfire. Also, increased population in rural areas has resulted in an increase in the number of fires reported by the general public.

Normally, a fire does not burn uncontrolled very long before we know about it. Continuous contact through two-way radio communication among fire suppression resources of the Forestry Commission, industry cooperators, and city and county fire departments provide for a coordinated suppression effort not formally realized.

More emphasis than ever before is being placed on the training of firefighting personnel so that maximum results can be realized from the firefighting effort at all levels.

Yes, even with all the equipment, manpower, modern communications, co-operator assistance, and training we have today, the threat of the big fire is still present under certain conditions. The one influence over which we have no control is weather. Although we have the latest, most modern fire weather information which gives us advanced warning of fire danger, we still can't change it."

WILDFIRES IN GEORGIA IN 1954-55 DESTROYED MORE THAN 474,000 ACRES OF FORESTS

First...
IN SOUTH GEORGIA
...the Latest!

The Valdosta

VALDOSTA, GA.

No. 174



TRY IN THE FOREST — Raging fire roars through valuable pine woodlands east of Valdosta as efforts of trained firefighters and volunteers to check its progress of waste through the area.

Raging Forest Fire Sears 6,500 Acres Near Valdosta

By JIMMY COPPELAND
Involved in the fire. Thanks to a north wind, Highway 84 to Waycross was not closed to traffic because of smoke during the night hours.
Despair and fear were common among the onlookers as the highest tree, mocking the efforts of a man of his family to wet down their home in one instance of a family to save what few possessions they had earned over the years.
He stood with fist clenched, the dirt and soot clinging to his hair and clothes.
Forest rangers joined by many

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WASHING for a halt to tomorrow on Surge's commensurate experts in Salk vaccin
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Former Fire Chief Ruark:
"Yes, I believe it could happen again under certain circumstances. The forests are more dense now, more trees per acre, more to burn. People now have more leisure time and it brings more people into the woods for fishing, camping, and hunting. Firefighting crews are smaller now, apparently because of budget restrictions. When your key people are fatigued, you need a reserve to take over."

But Ruark said there is also a positive side.
"Counties in South Georgia now have a better and more widespread telephone service and people are willing to call in and report a fire. Suppression equipment is superior and communications have greatly improved. You know, 30 years ago we had radios in our trucks, but we had to leave the trucks at a safe distance and go into a fire without benefit of the portable hand-held radios personnel have

today. We did not have radios on our tractors. You also have controlled burning today - a practice that was not used very much years ago - and that, of course, helps prevent the buildup of excessive fuel to feed a fire."

TERRIBLE AFTERMATH

"The terrible aftermath of these March fires in South Georgia," declared the late Guyton DeLoach, director of the Commission at the time, "will be felt for years to come."

He made the observation after he had witnessed flames jumping 2,000 yards and wildfire heads creating 40-mile-an-hour winds. Flames at times were shooting 60 feet above tree tops and moving more than two miles an hour.

Scars of the big fires were visible until the early sixties, but replanting and volunteer growth has now erased most of the desolation.

PLANS ANNOUNCED TO PLANT SURPLUS STATE LANDS IN FOREST TREES

All department heads in Georgia's state government are being directed to search lands under their jurisdiction to determine whether some of the acreage could be profitably planted in trees.

The lands would include surplus acreage at hospitals, colleges and other state-owned institutions as well as acreage controlled by state agencies that is not being

utilized for other purposes.
Governor Joe Frank Harris directed department heads to make the study following the passage of a resolution by both the state senate and house of representatives which calls for state lands not now being utilized for designated needs to be placed under a forest management plan, to be carried out by the Georgia

Forestry Commission.
The governor called for the reforestation move after he had noted that the state presently owns approximately 118,000 acres of forests and other acreage in pasture, with some parcels of the property being in open or idle land.

PROGRAM APPROVED FOR NAVAL STORES

The 1984 Naval Stores Conservation Program has been approved, according to Roy Cates, state executive director, Agricultural Stabilization and Conservation Service, Athens.

He said the maximum cost-sharing is \$3,500 to each producer, including any ACP earnings under the current program. The Georgia ASCS office will make the cost-share payments.

The only change from the 1983 program is the increase from 12 to 15 cents per face for the elevation of cups and aprons using double-headed nails.

The rates and practices are 25 cents per face on a 9-inch practice, 31 cents per face on a 10-inch practice, 35 cents per face on an 11-inch practice and above, and 35 cents per face on a restricted cupping practice, with spiral gutter or Varn apron and double-headed nails applying to all four practices.

Others include 33 cents per cup for new plastic, two-quart cups, and eight cents per unit for a new plastic apron-gutter.

Grady Williams, naval stores specialist, Georgia Forestry Commission, McRae, said at least two streaks and one dipping will be required before qualifying a face

(Continued on Page 15)



Almost 100 acres of the Horseshoe Bend Seed Orchard were recently inspected for blue tag qualification and checking a tree for the proper block, space and serial number are, left to right, John W. Johnson, seed orchard superintendent; Marvin Zoerb, project leader, Union Camp Corporation; and Terrell Brooks, Forestry Commission seed orchard manager.

BLUE TAG CERTIFICATION APPROVED

The Georgia Crop Improvement Association has inspected and approved for blue tag certification 97.3 acres in the Georgia Forestry Commission and the Georgia Forestry Commission-Union Camp slash pine seed orchards at Horse-

shoe Bend Seed Orchard. In the cooperative section, Union Camp personnel perform the progeny testing and Commission personnel establish and manage the orchard. The seed are divided equally.

In 1976, there were 12.8 acres of slash pine given Blue Tag status at the Davisboro Seed Orchard.

At the Horseshoe Bend Seed Orchard, there are 48 trees per acre, ranging in age from 18 to 28 years, with an average height of 45 to 75 feet.

Terrell Brooks, seed orchard manager, Georgia Forestry Commission, said the 1985 cone and seed crop will be approved for Blue Tag certification. This will make blue tag certified tree seedlings available for the 1986-87 planting season from this orchard, Brooks added.

Barnard M. Dillard, inspector for the G.C.I.A., approved the certification.

John W. Mixon, Forestry Commission director, pointed out that the ultimate goal in this program is to provide landowners only certified tree seedlings. The director emphasized that this certification marks 30 years of work by the Forestry Commission in the Tree Improvement Program.

James C. Wynens, chief of the Commission's Reforestation Department, said that 298.8 acres of seed orchard and the tree seed processing facilities at the Georgia Forestry Center near Macon were certified for the Green Tag in 1969.

The Forestry Commission has provided improved loblolly and slash pine tree seedlings for purchase by Georgia landowners since 1964.



Mrs. James W. Phillips of Moultrie, left, State Poster Contest Chairman, Garden Clubs of Georgia, confers with two of the judges who will determine the best Smokey Bear-Woodsy Owl posters entered by school students, as well as some adults, around the state. Judges are Forest Ranger Newell Lastinger of the Colquitt County Forestry Unit, Mrs. Eudora Simpson, tower operator at the unit and Howard Bennett, Macon, Chief of the Commission's Education Department (not shown). Winners in categories, ranging from kindergarten to adults, will be announced at the Garden Clubs annual convention later this year.

SEVERAL WORKSHOPS PLANNED IN SPRING

Several workshops of interest to foresters, land managers, consultants and others have been scheduled this spring at the Center for Continuing Education, University of Georgia.

A short course on The Use of Microcomputers in Forestry will be held April 24-25.

The course is designed to introduce fundamental components of microcomputers and to discuss the use and potential use in a variety of forest and resource management applications.

A workshop on Point Sampling and Prism Cruising will be held May 9-10.

The course is designed for foresters and selected technicians with little or no experience in point sampling and prism cruising.

The two-day course will be taught by Dr. Richard G. Oderwald, Assistant Professor of Forestry at Virginia Polytechnic Institute and State University.

The number of conference participants is limited and preregistration is required.

A Selling Skills Workshop for Foresters will be held June 5-6.

The workshop is designed to help foresters relate effectively with individual landowners, employees, and others with whom they contact in situations associated with forest management, employee relations, environmental concerns, and other matters.

For further information on these workshops, contact Dr. Leonard A. Hampton, 237 Center for Continuing Education, University of Georgia, Athens, Georgia 30602, or call 440/542-3063.



Bruce Greene, left, Georgia and National 4-H Forestry Champion from Crisp County, and Eley C. Frazer III, president of the Georgia Forestry Association and president of F & W Forestry Services, Inc., Albany, measure timber on one of Greene's winning forestry projects near Cordele.

CRISP YOUTH IS TRIPLE WINNER

What are the three main ingredients to success? To 18-year-old Bruce Greene of Crisp County, recipient of the first annual F & W Young Forester Award and both Georgia and national winner in 4-H forestry competition, hard work, determination and dedication are the pay-off.

Greene, a freshman at Abraham Baldwin Agricultural College at Tifton, said "The 4-H Club has taught me an invaluable lesson -- not only in the techniques of forest management but that I can achieve what I want out of life with a lot of effort and a lot of self-discipline."

Greene never thought it would be possible to be a national winner until about a year ago when George B. Lee, the Crisp County Extension Agent and his 4-H leader, challenged him to go for it.

"Mr. Lee has been like a big brother to me. There were times when I thought I had too many irons in the fire and that I should give up my goal for the national title, but he pushed and encouraged me to continue with my projects," the student said.

"When I was worried about how to pay for college, Mr. Lee reassured me that if I worked and tried hard enough, the money could be there. He was right," said Greene.

He entered ABAC with the assistance of a \$500 scholarship from F & W Forestry Services, Inc. of Albany, which created the award to recognize outstanding achievements in forestry by 4-H members.

He was presented with the F & W award at the same time he was declared

the state winner in the 4-H forestry competition. He later went on to become a national 4-H winner in forestry at the nationwide 4-H conference in Chicago.

On a recent tour of Greene's 4-H forestry projects in Crisp County, Eley C. Frazer III, president of F & W Forestry Services, Inc., praised Greene for his grasp of forest management and the range of his interest and activities. Frazer is currently president of the Georgia Forestry Association.



The Bracke Scarifier, a machine manufactured in Sweden which prepares the soil and plants forest tree seed as it moves across a field, is demonstrated by the Commission on a plot in Telfair County. The cost of the operation, an alternative to setting out seedlings, will probably run less than \$40 per acre, according to foresters assigned to the study.

LEGISLATORS PRAISE FOREST PROTECTORS



The Smokey Bear Fire Prevention Program was born during World War II days when it was feared that saboteurs might attempt to destroy valuable timber through forest fires.

"Smokey" officially became a national symbol in 1945 and gained immediate success. Today, he is still an outstanding symbol of forest fire prevention and said to be one of the most effective fictional characters ever created in the advertising world.

Smokey, through the news and advertising media, had a large job to do at the outset. He had to break the public habits of tossing lighted cigarettes and matches from car windows, warn hunters, fishermen and campers about leaving burning camp fires, and caution landowners on how to burn off their land for planting.

The results of Smokey's program has been evident in Georgia over the past 40 years. The first part of the program saw Georgia's forest fire losses reduced to one-half of one percent of the protected forest acreage. Today, less than one-fifth of one percent of the protected forest acreage is being damaged or destroyed by wild forest fires.

This record has been accomplished through the combined efforts of the general public, Georgia Forestry Commission and the U. S. Forest Service in putting over Smokey's fire prevention program. Radio and TV programs, fair exhibit and parade themes, talks and demonstrations have been aimed at making

Georgia a greener state.

Smokey has created an army of civilian forest rangers who put into practice fire prevention practices prescribed by the symbol. These civilian forest rangers are not the only ones that have helped in forest fire prevention. Boy Scouts, Girl Scouts, Camp Fire Girls, 4-H Clubs, Safety Patrols and Smokey Bear Clubs have come to Smokey's aid.

Every year more people are doing their part; all because a kindly bear convinced the country that forest fire prevention is important.

How popular is Smokey the Bear as he celebrates his 40th birthday this year?

An elderly woman stepped out in front of Smokey as he marched in a parade in a Northwest Georgia town not long ago and declared: "I have always wanted to shake Smokey's hand." She did. She stopped the entire parade.

When Smokey appears at fairs and festivals, he draws kids like a magnet. They usually want to pose with him while parents make photographs. Let Smokey walk across a school yard and he immediately attracts a large following.

The Georgia Forestry Commission joins others across the nation in wishing Smokey a Happy Birthday!

The Georgia House of Representatives during the recent 1984 session of the General Assembly passed a resolution "commending the forest protection services personnel of the Georgia Forestry Commission; and for other purposes."

The resolution is as follows:

WHEREAS, among the most important natural resources possessed by the State of Georgia are abundant forest and timber lands; and

WHEREAS, the worst enemy of our forests is fire, whether accidental or deliberate, which historically destroys an average of 60,000 acres through 12,000 individual fires yearly; and

WHEREAS, in 1983, 6,922 forest fires were reported and 26,529 acres were destroyed; and

WHEREAS, the rangers and forest protection personnel of the Georgia Forestry Commission serve each county of our state, exposing themselves to extreme hazards in fighting the fires which endanger these important economic and ecological assets; and

WHEREAS, this stellar group and the true professionalism which they exhibit in achieving their outstanding contributions to the safety and betterment of our natural surroundings deserve the gratitude and praise of all citizens of the state.

NOW, THEREFORE, BE IT RESOLVED BY THE HOUSE OF REPRESENTATIVES that the forest protection services personnel of the Georgia Forestry Commission are heartily commended for their outstanding record of service to all Georgians.

BE IT FURTHER RESOLVED that the Clerk of the House of Representatives is authorized and directed to transmit an appropriate copy of this resolution to John Mixon, director, Georgia Forestry Commission.

COUNTIES GET FUNDS

"The U. S. Forest Service will return \$1,081,424.18 to 25 Georgia counties this year," Chattahoochee-Oconee Forest Supervisor Pat Thomas announced today. These funds represent 25 percent of all fiscal year 1983 receipts for activities which occurred on land owned by the Forest Service in Georgia, he pointed out.

Thomas noted that the total amount returned to the counties is approximately \$374,000 more than returned in 1982. He credited this to a general upswing in the economy, which resulted in increased timber sales.

The federal treasury will return the money to the state for distribution to the counties. Each county is required by law to use the funds for roads and schools.



This scene from a previous Timber Harvesting Expo will be repeated this year as hundreds attend from Georgia and several other states.

EXPO TO SHOW HARVEST ADVANCES

Timber Harvesting Expo--Southeast, scheduled for April 26-27 in Tifton, will put the latest in harvesting equipment to the test in a 25-year-old plantation pine stand.

It will be the sixth biennial Expo, which combines the woods demonstrations with class workshops and static displays.

More than 1,000 people are expected to attend from Georgia, Alabama, Florida, Tennessee and the Carolinas, as well

as other states.

The Expo is sponsored by the University of Georgia's Cooperative Extension Service and Timber Harvesting Expo--Southeast Inc., a nonprofit educational corporation.

Bill Murray, Extension forester, said the Expo draws loggers, timber dealers, sawmillers and representatives of forest product firms to learn how to do their jobs better and more profitably and to see what's new in timber harvesting technology.

Some 60 to 80 exhibitors are expected for the two-day event at the Rural Development Center in Tifton.

Talks by political and forest-products industry officials kick off the first day of the Expo.

The action switches the second day to a woods site about 20 miles from Tifton, where harvesting equipment will work. A barbecue lunch will be served and individual demonstrations will continue in the afternoon.

Registration is \$10 for two days, \$7 for one day. Walk-ins will be charged \$12 for two days, \$9 for one. To register or for more information, contact Murray at 912/386-3418 or P. O. Box 1209, Tifton, Ga., 31793.

INCENTIVES PROGRAM

(Continued from Page 3)

medium site preparation, \$75 per acre for heavy site preparation, and \$5 per acre for tree seedlings.

Landowner payments for the FP-2 practice are \$20 per acre for precommercial thinning, \$1.88 per acre for prescribed

McLAUGHLIN IS NAMED UNION CAMP CHAIRMAN

After graduating from high school in Brooklyn, N.Y., young Peter McLaughlin landed a job as company ditto machine operator by answering a newspaper help-wanted ad.

Today, at 55, he heads that billion dollar forest products company as Chairman and Chief Executive Officer.

It was in 1945 that McLaughlin accepted that first employment with Union Camp Corporation, then called Union Bag Company, and during the first ten years he worked as a junior auditor, cost accountant, assistant comptroller and tax manager, with the exception of a two-year tour of Army duty in Korea.

During that period, as a night student, he earned a BBA degree from Pace University and later a JD degree from Fordham University Law School.

The company, which maintains the world's largest paper mill in Savannah, named McLaughlin comptroller in 1965, vice president-finance in 1969, director in 1970, and executive vice president in 1972. He became president in 1977 and chief executive officer in June, 1980. He was recently elected chairman, while retaining his post as chief executive officer.

Gene Cartledge has been named president of the company.

burning, and \$30 per acre for site preparation for natural regeneration.

Practice FP-1, tree planting, is to establish a forest stand for timber production purposes and to preserve and improve the environment. Cost-sharing under this practice, in addition to tree planting, is authorized for clearing land occupied largely by scrubby brush when it is essential to permit planting desirable tree species.

The tree species will be determined by the Forestry Commission, and must be planted between November 1 and March 31. The trees must be spaced uniformly over the area, with a minimum of 600 trees per acre.

Practice FP-2 is for improving a forest stand. This is applied to forest stands needing improvement for the purpose of producing sawtimber and veneer logs where the potential productivity of the stand or site meets or exceeds minimum forestry standards.

Cost-sharing, for the FP-2 practice, is authorized for precommercial thinning or releasing desirable tree seedlings and young trees. Also included are prescribed burning and site preparation for natural seeding. This improvement should be carried out in such a manner as to preserve or improve the environment, especially wildlife habitat and the appearance of the area.

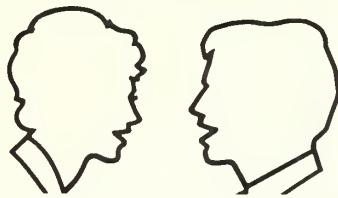
Don't be a heartbreaker

Have regular medical check-ups.



American Heart Association
WE'RE FIGHTING FOR YOUR LIFE

PEOPLE



IN THE NEWS

ROBERT MILLER, a forester educated at Auburn University, has been named ranger of the Randolph-Terrell County Unit. A native of Alabaster, Alabama, Miller succeeds Ranger Ronald Roland in the post. He is a Methodist and hopes



Miller



Hammond

to get involved in community projects. He plays a clarinet and considers camping, hunting and photography his favorite hobbies. JOHN HAMMOND, Assistant Chief, Forest Management, recently retired after having served the Commission for more than 30 years in several capacities. A dinner honoring the veteran forester was held in Macon...Bleckley County Ranger HALL JONES, who began work as a patrolman in 1947 and received rapid promotions, retired recently. He was honored at a dinner in his home town of Cochran...ZELLA WILBANKS, secretary, Gainesville District, was recently honored at a retirement party in Dahlonega. She came with the Commis-



Jones



Wilbanks

sion in 1951 and was cited for her long years of faithful service...CHARLES WEIR, aircraft pilot who served the Commission for 24 years, retired recently from service in District 12. Following a dinner in his honor, he returned to his home in Douglas...DAVID MOORHEAD joined the Rural Development Center staff in Tifton as a forest regeneration specialist with the Georgia Extension Service. He is a native of Louisville, Ky., with degrees in forestry, silviculture/

soils and forest eco-physiology from the University of Kentucky, Mississippi State University and the University of Missouri. He was research assistant at Mississippi State and the University of Missouri. The forester is a member of the American Society of Agronomy and the Soil Science Society of America...FREDERICK W. HAEUSSLER of Savannah, has been elected Vice-President and President-Elect of the Society of American Foresters. Haeussler, who holds a bachelor's degree in forestry from the University of Georgia and a master's in forestry from Duke University, is employed by Union Camp Corp. of Savannah. He directs the land-management activities of the Savannah Woodlands Region. Haeussler will serve on the 14-member SAF Council, the governing body of the national professional forestry organization, and move

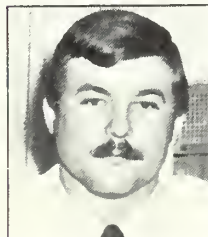


Moorhead



Haeussler

into the position of president in 1985. The current president is William E. Towell...JEFF LASSITER, formerly a patrolman in the Bleckley County Unit, has been named ranger of that unit. A native of Warner Robins and a graduate of Cochran High School, Lassiter also attended Abraham Baldwin Agricultural College for a year. He is married to the former Miss Karen Purser and they are members of Faith Baptist Church in Bleckley County...COY WOMACK, who has been in charge of Davisboro Nursery and ranger of Johnson and Washington Counties for several years, has been named District Ranger for the Milledgeville District.



Lassiter



Womack



SEEDER STICKS NOW AVAILABLE

The Georgia Forestry Commission is making available to Georgia landowners a seeder stick and loblolly and slash pine tree seed to aid in their reforestation efforts.

John W. Mixon, Commission director, said the elongated seeders are available for loan free of charge. The tree seed are also provided at no charge. Mixon pointed out that this will give landowners an alternate to machine and hand planting, as well as broadcasting.

The seeders are available on a first come first serve basis. To borrow seeders, landowners are asked to contact their local county forest ranger.

Druid N. Preston, chief of the Commission's Forest Management Department, emphasized that the seeder can be calibrated to use different size seed. This enables the planter to have control over stocking.

The seed are dispensed from a one-half quart container which enables the landowner to plant from five to eight acres, depending on spacing, without refilling.

PROGRAM APPROVED

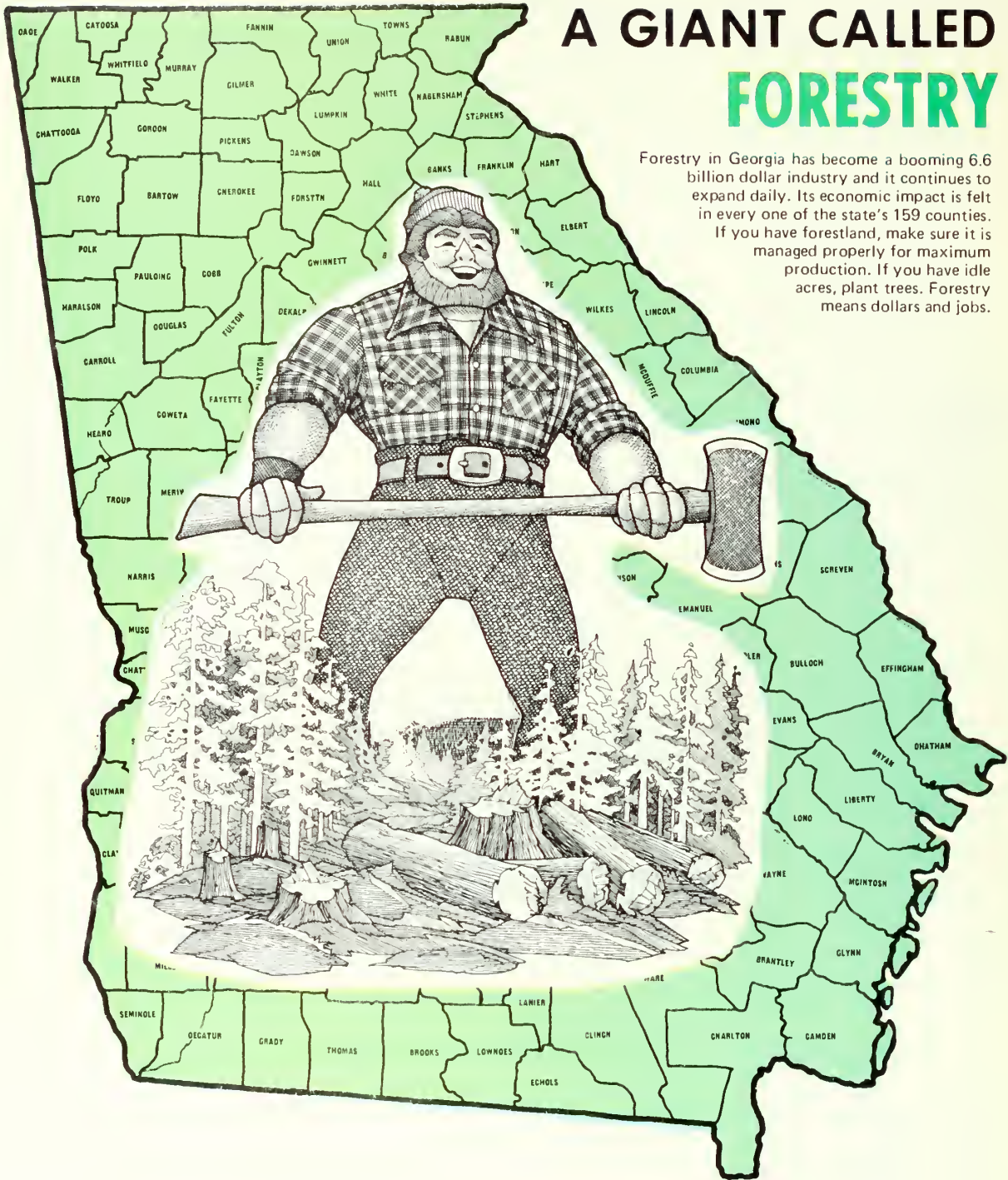
(Continued from Page 11)
for cost-sharing in any practice.

Gum naval stores producers may make their requests for NSCP participation through their county ASCS office or county forestry office.

Jim L. Gillis, Jr., president, American Turpentine Farmers Association, Soperton, made the request for the program's continuation on behalf of the Association's membership.

A GIANT CALLED FORESTRY

Forestry in Georgia has become a booming 6.6 billion dollar industry and it continues to expand daily. Its economic impact is felt in every one of the state's 159 counties. If you have forestland, make sure it is managed properly for maximum production. If you have idle acres, plant trees. Forestry means dollars and jobs.



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USPS No. 217120

June, 1984 No. 2 Vol. 37

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Georgia Forestry is published quarterly by the Georgia Forestry Commission, Route 1, Box 85, Dry Branch, GA 31020. Second class postage paid at Macon, GA



*SEEDLING TO HARVESTING / THE CONTINUOUS CYCLE
A Commission employee seeds the beds at Morgan Nursery near Byron, while a skidder operator in another section of the state works with a logging crew.*



ON THE COVER Georgia's summertime mountain greenery is an intricate pattern made up of leafy oak, hickory, poplar and a diversity of other species that not only provide scenic beauty, keep trout streams clear and prevent soil erosion, but are valuable hardwoods that complement the pines of Central and South Geor-

GEORGIA TREE PLANTING RECORD SET

Landowners and industry in Georgia set an all time record this season by planting more than 370,450 acres of trees.

GEORGIA'S ANNUAL ACREAGE PLANTED IN TREES

YEAR	TOTAL	YEAR	TOTAL
1925	103	1955	99,185
1926-27	0	1956	126,936
1928	6	1957	91,648
1929	800	1958	191,947
1930	2,542	1959	335,593
1931	459	1960	330,196
1932	752	1961	203,467
1933	672	1962	69,696
1934	639	1963	129,054
1935	3,921	1964	114,534
1936	9,838	1965	106,608
1937	5,653	1966	114,460
1938	17,472	1967	135,249
1939	24,387	1968	126,338
1940	32,622	1969	106,119
1941	27,266	1970	85,898
1942	6,644	1971	102,817
1943	3,625	1972	132,645
1944	1,241	1973	95,074
1945	7,000	1974	138,849
1946	18,843	1975	141,070
1947	13,692	1976	124,538
1948	42,303	1977	144,755
1949	30,949	1978	157,327
1950	55,874	1979	159,345
1951	40,213	1980	182,000
1952	50,338	1981	216,000
1953	62,712	1982	306,000
1954	103,464	1983	370,488

Commission Director John Mixon said the planting in the season just ended broke a previous record of 336,000 acres, which occurred back in 1958-59 when the federal government sponsored the Soil Bank Program.

Although the new record in reforestation is encouraging, the director was quick to point out that "this great year in which we have significantly increased our forested acreage does not mean that we are slowing down...in fact, we are currently harvesting more than 560,000 acres of forests annually and we must maintain our momentum and even accelerate our planting program if we are to meet industry's needs."

It was noted that in addition to supplying Georgia's booming pulp and paper industry, as well as lumber mills and other manufacturers, with a steady stream of raw materials, the Commission is working with the Department of Industry and Trade to promote export of forest materials.

Mixon said he credits the statewide reforestation campaign spearheaded by the Commission for the dramatic increase in tree planting during the 1983-84 season. The campaign, which had excellent support from industry, landowners, other state agencies, U. S. Forest Service, Georgia Farm Bureau and other organizations, involved the organization of county committees which encouraged tree planting on unproductive croplands, marginal lands and other idle acres.

Commercial tree planting in Georgia started in 1925, when 103 acres were set

out, according to Druid Preston, Chief of the Commission's Management Department. He said no trees were planted the following two years, but after that the planting resumed and the acreage began to gradually increase (see chart).

SEEDLING ORDERS ACCEPTED IN JULY

Tree seedling orders for the 1984-85 planting season will be accepted by the Forestry Commission beginning July 1, according to the agency's Reforestation Department.

Jim Wynens, chief of the department, said the state nurseries this year are growing approximately 128 million seedlings, a substantial increase over the previous year.

In announcing the availability of seedlings, Commission Director John Mixon reported price increases of \$2 per thousand on improved loblolly and slash pine, high gum yield slash pine and longleaf and Virginia pine. Transportation costs were increased to \$2 per thousand trees and \$1 per 500 trees on seedlings delivered to county unit headquarters for landowner pickup.

Mixon cited the increased cost of operations for the price increases.

Wynens said early placement of orders and payment is encouraged and delivery cannot be made before payment is received. All orders that have payment enclosed will be filled on a first come first serve basis until the seedling supply is exhausted, he said.

Wynens emphasized that only checks, money orders and purchase orders made payable to the Georgia Forestry Commission are accepted. He added that no refunds will be made on orders cancelled after January 15, 1985. Seedlings cancelled after this date become the responsibility of the landowner.

The minimum order accepted is 50 seedlings, or multiples of 50 at the small order price. Orders for 500 or more are accepted in multiples of 500 and sold at a bulk rate price. Any fraction thereof will be charged at the 50 package rate.

To order, application forms may be obtained from the Georgia Forestry Commission county unit headquarters, district offices, Macon headquarters, county agents, and Soil Conservation or Agricultural Conservation Program offices.

Mail the completed application and payment to the Georgia Forestry Commission, P. O. Box 819, Macon, GA 31298-4599.

For assistance in determining your reforestation needs, contact your local county forest ranger.



This marginal land is typical of thousands of acres in Georgia that are being planted in pine as a result of the Commission's Reforestation Campaign and the efforts of other organizations that cooperated in the county-by-county drive.

FOREST TENT CATERPILLAR



MALE MOTH



EGG MASS ON TWIG



LARVA



FEMALE MOTH

LUMBER PRODUCTION INCREASE REPORTED

Although 40 of the approximately 280 Georgia sawmills that were in operation three years ago no longer exist, the state's annual sawtimber production has increased 15 percent during that period.

Druid Preston, Chief of the Commission's Forest Management Department said Georgia's current lumber production is 2.8 billion board feet. He said pine timber production shows a 20 percent increase over the 1981 figure.

Preston, who said the findings are from a recently completed forest products survey to be published in a wood using directory in August, pointed out that the dramatic increase in production with less mills in operation is attributed to the large modern, often computerized mill of today.

"In fact," Preston said, "Nine mills in Georgia now cut 60 million board feet annually, while 24 mills are turning out 40 million board feet." He said 414 million board feet go into plywood production, an increase of 35 percent over the three-year period.

Preston said the high capacity of today's mill is further appreciated when you consider that we had approximately 2,800 sawmills in this state during the 1930's and again during World War II." He explained that most of the mills, however, were portable and very small.

RETURN OF TENT CATERPILLAR NUISANCE EXPECTED IN SPRING

April of '84 will be a month to remember for many frustrated Georgians.

Homeowners in some sections of the state were plagued by thousands of caterpillars during April of this year.

The forest tent caterpillars when full grown may measure up to two inches in length. They are easily recognized by a line of white key hole shaped spots down the middle of the back.

"After the caterpillars strip the leaves from various hardwoods, they begin to crawl down the trees to look for places to spin cocoons and sometimes, hundreds of thousands will invade carports, porches, sides of homes, sidewalks and picnic tables in search of suitable hiding places," said Terry Price, Commission entomologist.

Tree species preferred include tupelo, sweetgum, and oak. A tree that is defoliated for four or more years in a row may be killed and usually the defoliation weakens the tree to other organisms such as fungi and bacteria, he said.

"Unlike the larvae of the gypsy moth, tussock moth and puss moth, the forest tent caterpillar does not cause any noticeable allergic reactions in humans. Therefore the "worms" are more of a nuisance than anything else," Price pointed out.

This year, defoliation has been heaviest in Effingham County and local residents have been inundated by the caterpillars. Homeowners living adjacent to hardwood bottoms and swamps should expect to have the "worms" as an annual visitor, Price said.

"There are several insecticides that will control the caterpillars in and around the home and aerial applications of pesticides to large forested areas are effective, but

must be continued every year during peak moth activity," the entomologist explained.

Price added one optimistic note, however: "Usually the caterpillars are brought under control eventually by natural enemies such as ants, spiders, ground beetles, parasite flies and wasps.



The Commission's Woodsy Owl float, shown here as it moved down Cherry Street in a parade during Macon's Cherry Blossom Festival, captured the Chairman's Trophy in that city and has been a popular entry in parades at the Ware County-Waycross Forest Festival, the Thomasville Rose Festival and in other celebrations. The float will be featured in the Atlanta-Fourth of July parade and during Georgia Forestry night at Atlanta-Fulton County Stadium July 19. The float has a movable head, eyes, and wings.

MID STATE SITE PREP STUDY INITIATED

A \$100,000 pilot project has been initiated in an eight-county area in Central Georgia to determine the feasibility of harvesting nonmerchantable material as a method of reducing site preparation for tree planting.

Forestry Commission Director John W. Mixon said the three year program is being administered under the Forest Incentives Program. The project goal, he added, is to treat 3,000 acres per year to reduce or eliminate the need for traditional intensive site preparation, which severely impacts soil and water resources.

Lynn Hooven, associate chief, Forest Management Department, said the eight designated counties are Bibb, Crawford, Houston, Jones, Monroe, Peach, Twiggs and Wilkinson. He pointed out that the 43 requests received involve \$282,000, which exceeds the initial project funding.

Hooven noted that the greatest response came from Wilkinson County, with 21 requests involving \$169,000. He emphasized that the requests are being screened to see if they meet the program requirements.

Cost sharing is authorized for wood chipping of unmerchantable trees and brush only where it is essential to permit the planting of desirable tree species. The trees must be planted for the production of forest products where the potential productivity of the site meets or exceeds



the established minimum standards.

A forest management plan is required and must include biomass and cruise inventory. In addition, the practice must be maintained for a minimum of ten years following installation and establishment.

Cost sharing is not authorized for planting trees on less than ten acres; planting orchard and Christmas trees and for ornamental purposes; fencing; measures to protect tree seedlings from wildlife destruction; and areas not meeting the biomass tonnage requirements of not less than 35 tons or more than 75 tons per acre.

Hooven said the cost share rates are \$15 per acre for light planting (light tree planters and regular farm type equipment), \$20 per acre for heavy planting (hand or heavier equipment) and \$5 per acre for tree seedlings. Chipping for site preparation will be based on \$50 per acre for 35 tons on a graduated scale to \$10 per acre for 75 tons.

The U. S. Forest Service has assigned the technical responsibility for carrying out the pilot project to the Georgia Forestry Commission.



It is hopeful that this pilot cost share project will show that there is less need for intensive site preparation, thereby enhancing the conversion of marginal and submarginal lands and regeneration of harvested areas into productive forests.

LANDOWNERS GIVEN ADVICE ON GROWING PROFITABLE FOREST

"You can make money growing trees" was the direct message given to the more than 100 persons attending the recent Landowner Assistance Conference in Atlanta. They heard lively discussions on increasing tree growth, handling taxation, and obtaining assistance in forest management.

Many of the participants were "absentee landowners" who possess forested acreage in rural areas, but now reside in the city.

"Timber prices historically have outpaced inflation, and the consensus among timber marketers is that the past trends of timber prices will continue," said Kate Robie, Director of Timberland Management, Wagner Southern Forest Investment, Inc. She said three factors are responsible for a tight wood supply: declining amount of land available for timber growing, increasing export market, and general lack of timber management by private landowners.

Druid Preston, Chief of the Commission's Forest Management Department, advised those attending not to sell their land. "You as a landowner can manage the land as well as anyone," he assured them.

Preston explained that a timber management plan is the key to a substantial return on forest land investments, and he summarized services provided by the Georgia Forestry Commission to landowners at little or no charge.

John Gunter, Head of Extension Forest Resources for the Georgia Extension Service, explained various financial and technical aids.

Following the speakers' presentations, James S. McLelland of Riverdale spoke briefly of his experience in forestry. A dentist in Georgia, McLelland has been named Alabama Tree Farmer of the Year for his outstanding tree farm practices.

Donald W. Smith, Director of Forest Resources, Southern Forest Institute, moderated the conference and conducted the question and answer session. John Mixon, Commission Director, gave opening remarks and contrasted the large number attending with the ten persons that attended such a conference a few years ago.

Cosponsors of the event were the Commission, Georgia Forestry Association, Georgia Extension Service, Southern Forest Institute, the International Trade Development Center, Small Business Development Center, and Small Business Administration of the University of Georgia, School of Business Administration.



Your ground level seat will be one of the best in the stadium and you'll be getting a 20 percent discount on the \$7.00 ticket. The big Braves vs. Phillies game at 7:00 p.m. on July 19, 1984 will honor forestry, forest industries, forest landowners and others with forest interests, as well as their families.

Be a part of it! Order your tickets now (\$5.60 each) from the Education Department, Georgia Forestry Commission, Box 819, Macon Georgia, 31298-4599. Make checks payable to

Forestry Baseball. For further information, please call (912)744-3362.

Braves

GEORGIA FORESTRY NIGHT

(Make checks payable to FORESTRY BASEBALL)

Pre-game festivities in the salute to forestry at Georgia Forestry Night will include an appearance by Miss Georgia Forestry, the Woodsy Owl float and Smokey with his 40th birthday cake. A forestry official will throw out the first ball and a well known forestry retiree will perform the National Anthem.

FORESTRY CENTER TOURS ARRANGED

Students and other groups are invited to visit the Georgia Forestry Center at Macon.

The Forestry Commission recently designated one person from each of its six departments to serve as a tour guide for visiting groups to the facility just off Interstate 16 about five miles south of Macon.

The alternate guides were named so that at least one would be available on the grounds on any date requested by visitors.

The tour includes the Administrative Building, which houses the Management, Protection and Administration Departments and the library; the Research Building, which includes the Research, Education and Reforestation Departments and the center's auditorium; the seed processing plant, general shops and other facilities.

A nature trail and a forest museum, which are now in the development stage, will be added to the tour route. Visitors may also visit facilities of the U. S. Forest Service on the grounds, including the National Tree Seed, Southern Forest Fire and Forestry Science Laboratories.

Tour guides include Foresters Terry Price, Chuck Place, Bob Burns, Johnny Branan, Fred Allen and Garland Nelson.

Persons interested in a tour are asked to contact the Forest Education Department, Georgia Forestry Commission, P.O. Box 819, Macon, Georgia 31298-4599, or phone 912/744-3364 for further information.

TWO STUDIES SET AT SCHOOL CENTER

A workshop on The Income Approach to Timberland Appraisal will be held at the University of Georgia Center for Continuing Education on July 11-12. The workshop is designed for practicing foresters, consultants, investment counselors, land managers, timberland owners and others concerned with evaluation of forestry cash flows.

A one-day seminar on Risk Management in Forestry will be held at three locations in Georgia—The Rural Development Center, Tifton, August 15, University of Georgia Center for Continuing Education, Athens, August 29, and Macon Junior College, Macon, September 12.

For additional information, contact Dr. Leonard A. Hampton, Director of continuing Forestry Education, 237 Center for Continuing Education, University of Georgia; Athens, Georgia 30602, or phone 404/542-3063.

GEORGIA SECOND IN THE NATION IN ACREAGE SOLD TO FOREIGNERS

Nationally, U. S. agricultural land owned by foreign interests rose from 13.5 million acres in 1982 to 13.7 million acres in 1983, according to J. Peter Debraal, a research attorney with the USDA.

He said those 13.7 million acres represent slightly more than one percent of all U.S. agricultural land.

The figures are based on reports foreign landowners must submit to the federal government under the Agricultural Foreign Investment Disclosure Act passed in 1978.

Fred Greer, head of agribusiness development at Atlanta-based Citizens and Southern National Bank, said Georgia has more land available at a better price due to the adverse economic forces.

"Land prices have declined steadily over the last three years. Foreigners are taking advantage of this opportunity to acquire land at a reasonable price," Greer said. "And of course timberland is quite a hot investment now that stumpage prices are moving upward steadily."

More than 145,000 acres of Georgia farm land and timberland were purchased by foreigners in 1983, pushing

foreign-owned agricultural holdings in the state to over 1-million acres.

The U.S. Department of Agriculture said that foreign holdings of agricultural land totaled 1,089,347 acres in Georgia as of Dec. 31, 1983, up 15 percent from the 944,154 acres in 1982. There are an estimated 29 million acres in Georgia devoted to farmland or timberland use, according to the Georgia Crop Reporting Service and the Georgia Forestry Commission.

The USDA only reports overall statistics and does not identify individual transactions. However, most of the increase in Georgia's foreign holdings can be traced to the largest single land sale in the state's history made public in October 1983.

New York-based International Paper Co. sold 65,000 acres of timberland in east central Georgia for an estimated \$50 million to London-based Evergreen Timberland Co., a private group of European forest land investors.

Georgia's amount of foreign-held land was second behind Maine, which had 2,687,408 acres owned by foreigners.

By Keith Herndon

THE ATLANTA CONSTITUTION

FIRE PREVENTION FILM RELEASED

"There's A Fire In Your Wallet," the latest motion picture film to be produced by the Commission, is now in the lending

library and copies are also available for organizations desiring to buy them.

A synopsis of the 18-minute film reads as follows:

"Forest fires are burning up your money—even if you don't own a single tree. Every forest fire has a direct financial impact on each individual. Taxes are needed to support fire control organizations; forest products increase in cost; and, in some instances, jobs of woods workers and mill employees may be affected.

This film discusses many of the ways man caused wildfires start and some of the things that can be done to prevent them. The economic impact of fire prevention and control is brought home to each viewer."

The film has been entered in competition in the Forest Film Festival of the Society of American Foresters, with winners to be announced in August at the organization's national convention in Quebec City, Canada.

The film has been added to the Commission's library in the Education Department at the Georgia Forestry Center in Macon. Prints of the film are available at \$120 each.



ELIMINATING HARDWOODS IN A PINE STAND

• MID STATE LANDOWNER DOES IT A BETTER WAY

When you approach his spacious country home in Twiggs County, with its rustic shingled roof, batten board walls and four wood-burning fireplaces, you somehow feel that Duross Fitzpatrick is a man who truly appreciates the beauty, durability and utility of wood.

You're thoroughly convinced of it when he takes you and his consultant forester in his pick-up across a meadow behind his home and deep into a forest of towering pine. He is proud of his well managed forest, and he should be!

"Continuous thinning down through the years has caused this stand to mature about ten feet higher than the adjacent tract," Fitzpatrick declared, as he pointed to trees that are at least 90 feet tall. Billy Humphries, owner of Forest Resource Consultants, Inc. of Jeffersonville, who is retained to provide guidance in management of the property, agreed that the forest has received expert maintenance for a very long time to attain its present status.

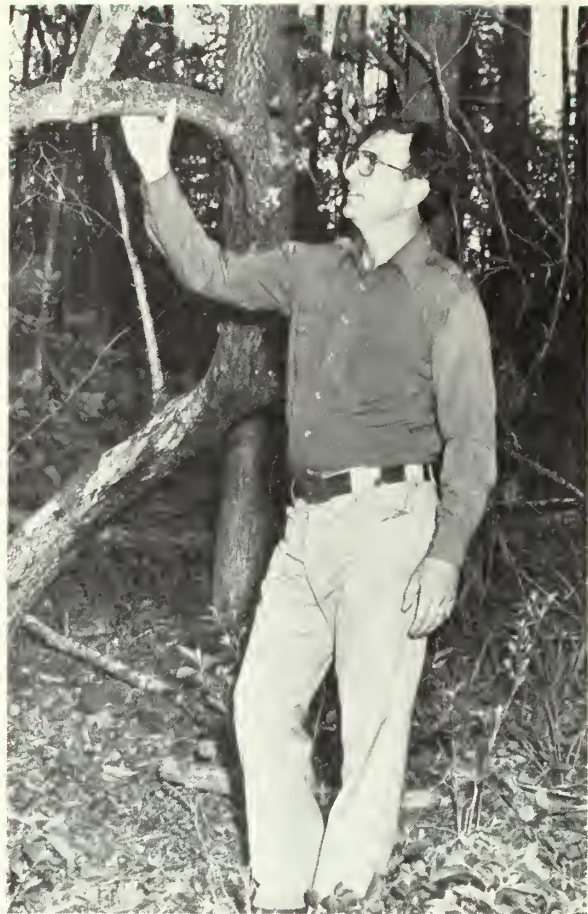
But Fitzpatrick, the graduate forester—practicing attorney, is not particularly interested in a showplace forest on this day. As the winding trail finally passes through the large tract of magnificent pine, it comes upon a forest of scattered pine and dying hardwood. Here is where the landowner's interest lies.

"When we logged this tract, I was concerned about the pine character," he said as he stopped the truck on a ridge overlooking a large area where hardwoods had dominated the sunlight for years. He said a company from Monticello, Arkansas was hired through Consultant Humphries to chemically inject and kill the hardwood species.

"We did the injection on 130 acres in April of 1983," he said, "and by the middle of July we began to see definite results. By fall, the bark was slipping on the trees."

The Arkansas company, with a foreman and a crew of seven, used hypo hatchets to encircle the unwanted trees about waist high with deep gashes. The tool automatically injects the chemical—Tordon 101R—into the wood when the cut is made.

Humphries, who said his consulting firm has supervised the injection



of more than 3,000 acres of forests in the Middle Georgia area in recent years, pointed out that each workman is capable of treating about two or three acres a day.

Fitzpatrick has found that the cost of having his trees killed by injection runs from about \$38.00 to \$55.00 per acre. He had an additional 110 acres treated last month.

The landowner and the consultant noted that hickory and dogwood are the hardest to kill, while sweetgum and oak species are the first to show signs of dying.

Mature trees down to one-inch stems are poisoned in the operation and Fitzpatrick pointed to some good sized hardwoods that were sacrificed in the kill. He said some of the logs are being

Above: Duross Fitzpatrick checks dying hardwoods shortly after injection procedure. At left: Billy Humphries, right, owner of Forest Resource Consultants Inc., and Ross Huffman, a consultant forester with the firm, watch the landowner check the age of a pine tree



At left: Fitzpatrick and Forest Entomologist Kerry Thomas of the Georgia Forestry Commission look over an area in which hardwoods are being eliminated, but selected pine seed trees are left standing. Below: The landowner and his son, Mark, show scars of an injected tree amid a tangle of hardwoods that have died and fallen.

salvaged for firewood.

The injection has left a strange landscape of tilted and fallen tree trunks and a mass of dead limbs entangled with the greenery of young pine, ferns and other plant life on the forest floor.

During the timber harvest prior to the chemical treatment, the landowner and his consultant made sure that sufficient seed trees were left standing. Today, young pines are beginning to peep out of the rotting hardwood debris.

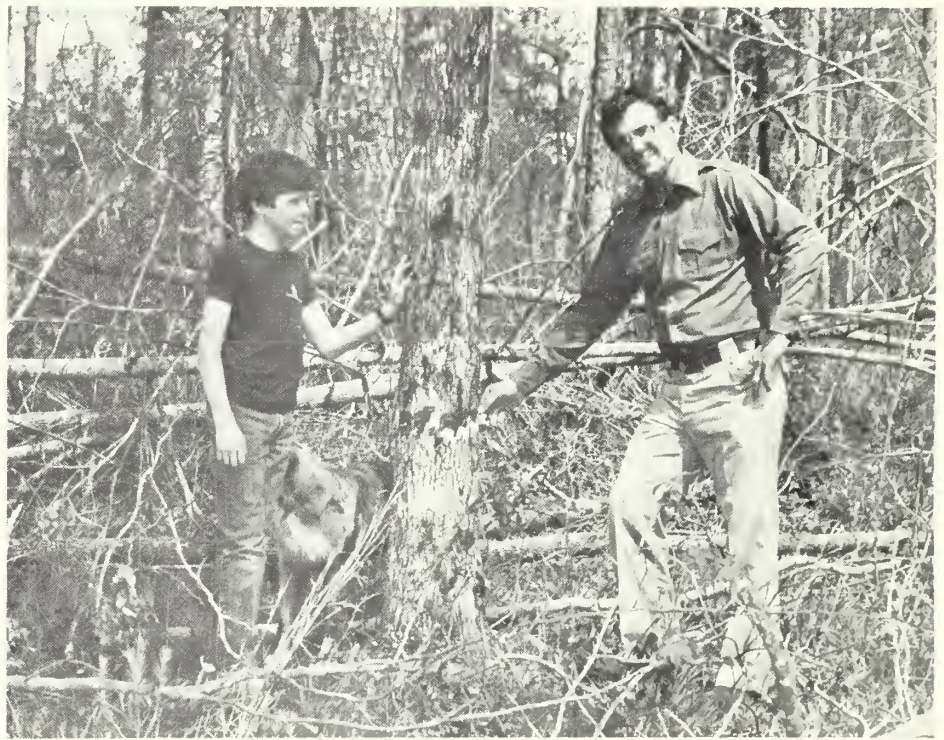
When Fitzpatrick earned his degree in forestry from the University of Georgia, his father presented him with an 87-acre forest tract near Jeffersonville as a graduation present. That property, which is several miles from his home, a cattle farm and forest holdings in the historic Taversville section of the county, was chemically injected two years ago.

"It's been a tremendous release factor," he said. "I would say the stand has improved 150 percent!"

Fitzpatrick, whose father was a state legislator, maintains a law office in Cochran, said his property in the rural Taversville community is part of a 16,500-acre cotton plantation that existed until the turn of the century. It was said to be one of the largest plantations in the state.

A portion of that vast acreage was acquired by the Fitzpatrick family in 1901 and through the years it has been subdivided and inherited by family descendants.

"My father was an engineer," Fitzpatrick said, "but when the boll weevil struck in the early twenties, he quit his job and mortgaged his property to a land bank for \$20,000. He then



had to operate a portable sawmill and cut and sell lumber from his timber to save his land."

Fitzpatrick has a keen sense of history, as did his father before him, and he comes up with some interesting observations as you walk with him through the woods. He knows the location of old vine covered foundations that once supported cotton gins and mills. He keeps brush cleared from a stone chimney, the only remains of a slave cabin, and keeps the forest from overtaking a stone grave marker where, for some unknown reason, a black Union soldier lies buried.

Fitzpatrick is often asked why he earned degrees in both forestry and law.

"Well, after I graduated in forestry in the early sixties," he explained, "I got

a job cruising timber and it was lonely being out there in the woods day after day with nobody to talk with." He said that experience and others convinced him that he was perhaps "too sociable" to be in that profession. He said he likes to "be with people."

He returned to Athens and earned his degree in law.

Although Fitzpatrick is not a practicing forester, he remains vitally interested in his forested land and takes every opportunity to help promote Georgia's role as one of the nation's leaders in forestry.

He is a personal friend of Senator Sam Nunn and supports the senator's proposed legislation for a return of a Soil Bank Program to further advance forestry in Georgia and the Nation.



Major modernization and expansion project to greatly boost linerboard production at Interstate's Riceboro mill.

TREE FARMER HONOR GOES TO LANDOWNER IN CHATTOOGA COUNTY

By Leon Brown

When World War II came to a close, thousands of veterans came home to look for work in a newly industrialized America. Many of these returnees had been farm boys before the war that would never again return to the rural environment. But when Henry Owings returned to Georgia in 1946 he didn't follow the crowd to the city. Instead, he bought land in his native Chattooga County-70 acres. Five years later, Henry bought 130 acres to add to the original parcel. This, coupled with land acquired through his wife, Ruth, was the basis for a northwest Georgia tree farm, which has earned Henry the status of being named the 1984 Georgia Tree Farmer of the Year.

"I'm sold on the idea of forest management," says Henry, who is now the owner of 700 acres of land scattered over four counties, 500 of which are certified as a tree farm. "I believe that this is the answer to a lot of the problems farmers in this area of the state are having economically. Why this county alone (Polk) is over 60% forested."

Henry Owings' background is well suited for his present profession. For 30 years Henry was the District Conservationist for the United States Soil Conservation Service/SCS until his retirement in 1979. "I think the SCS has trained me pretty well in the basics of forest management," says Henry. "I just happen to be practicing what I used to try and teach other people."

Unlike many SCS advisors of Henry's day who knew only the barest minimum about forestry and relayed only as much information as they had to, to farmers on the subject, Henry pushed forestry whenever the opportunity arose. "I've always tried to sell forestry in speeches for the SCS and to the landowner with whom I had contact. I really believe that it's the best use for the land in this area."

The area to which Henry refers is the ridge and valley region of northwest Georgia. This is one of the harshest geologic areas of the state, plagued by rocky, infertile soil and steep slopes that make farming a nightmare.

Henry began tree farming soon after he was married. His first attempt at planting trees had a somewhat unhappy ending, when they were destroyed by fire. Undaunted, Henry continued to believe in forestry.

Utilizing the abundant natural growth

INTERSTATE EXPANSION UNDERWAY

International Paper Corporation has announced it is currently investing in excess of \$20 million to modernize and expand its kraft linerboard mill at Riceboro, Ga.

The project will increase production by more than 25 percent -- 192,000 to 245,000 tons per year -- when completed by the end of 1986, company officials said. The plan to upgrade the Riceboro mill was announced by John J. McLaughlin, president and chief executive officer of Interstate Resources Inc., the Cincinnati, Ohio-based parent of Interstate Paper. He said it is timed to capitalize on the projected expansion in demand for kraft linerboard over the next several years.

McLaughlin said the modernization would result in improved operating efficiencies and reduced use of purchased oil and electricity. When completed, Interstate Paper will be 70 percent energy self-sufficient, he said.

Edgar L. Hart, Jr., executive vice president and general manager of the Riceboro facility, said main components of the modernization program include construction of a new secondary fiber system, improvements in the pulp mill, and an upgrading of the paper machine.

"This program is designed to make Interstate Paper a leader in the production of quality kraft linerboard in the country," Hart said. "It is reaffirmation of our commitment to our employees, our community and our customers that we intend to remain a competitive member of the industry."

Hart said the mill currently employs some 300 persons, with an annual payroll of more than \$10 million, including employee benefits. It is the largest industrial employer on the Georgia coast between Savannah and Brunswick. Some 200 jobs

will be created as a result of the expansion, he said.

Interstate Paper Corp. and its workers have provided one of the most touching human-interest stories in many a day. It's a story of mutual trust between management and labor. Teamwork and the old "we're in this together, through thick or thin" attitude also come into play.

Interstate Paper, located at Riceboro in neighboring Liberty County, fell on hard times a little over a year ago. It faced a choice: lay off a lot of people, or persuade them to accept pay cuts during the crisis.

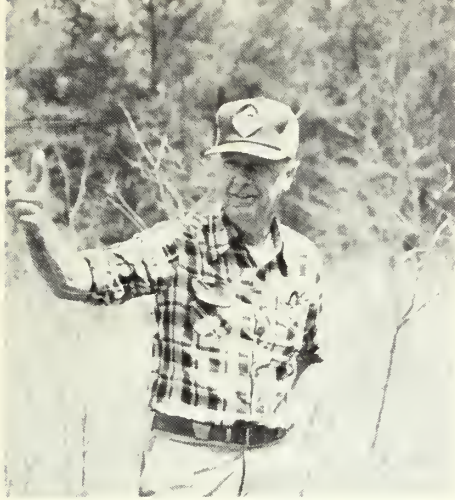
Interstate put the proposition to its workers. Would they or wouldn't they? Take the pay cuts, they'd keep their jobs. Refuse, and some would have to hit the unemployment lines.

A promise went with the proposition. "Let us get over this hump," Interstate said, "and we'll restore the lost pay at a future time."

From January through July of 1983, the pay cuts were in effect. Normal wages were restored in August as Interstate's business picked back up.

Then this week, Interstate delivered on its promise. It came up with \$192,000 to cover the lost pay of some 211 employees during the January-July lull. Deferred wages, they called it, ranging up to \$1,499 for some individuals, the average pay restoration around \$900.

—Savannah Morning News



HENRY OWINGS

of pine trees on his land, Owings began a program of selective thinning and timber stand improvement to foster his forestry aims. From the beginning, Owings has acted as his own forest management advisor and performed most of the tasks with only the help of his wife, Ruth. Together they have managed to place the farm in timber production. Utilizing a Big Stick Loader, which Ruth operates while Henry fells, trims and bucks the logs, the Owings manage to produce e-

nough income on which to live. "So far, our objective in harvesting has not been to make the most we can out of our woods," says Owings. "Actually, we are selling only the culls. Ruth and I manage to cut about 200 tons of pulpwood a year in our thinnings."

Educating his neighbors is very high on Henry Owings' list of priorities. In fact, when he was first contacted about being selected as Tree Farmer of the Year, he was reluctant to accept, but then he had second thoughts because, as he said, he had tried to promote sound, multiple use timber management to the community and to the SCS for 35 years. Maybe this selection will accomplish what he has sought all this time.

Multiple use is what Henry Owings accomplishes on his lands. On one tract he has established a nature trail to a scenic overlook. This he leaves open to the public. He also allows people to hunt on any tract of land he owns. Deer are abundant on the Owings' farm and he does not post his lands or keep hunters away.

When the Georgia Forestry Association Tree Farm Committee chooses a Tree Farmer of the Year, attitude, pur-

(continued on pg. 15)

PUBLICATIONS

Forest landowners who are interested in other than timber production may also find some useful tips in the booklet for management of forests to produce the best wildlife habitats, recreational enjoyment, watersheds, or dual use for livestock range and timber.

Copies of *Managing the Family Forest in the South*, are available at \$2.75, payable to Superintendent of Documents. Write to the GPO Regional Book Store, 275 Peachtree Street, Atlanta, Georgia 30303.



Georgia Forest Facts, a booklet containing some interesting information on the state's forested acreage, forest industries, employment, economic impact and other aspects, is now available.

The book also lists Georgia's 15 "Forestry Firsts."

For a free copy of the publication write the Forest Education Department, Georgia Forestry Commission, P.O. Box 819, Macon, Georgia 31298.



Cattle could be grazed more profitably on large acreages of forest land in the South if the owners combine the management practices outlined in a new publication of the U. S. Department of Agriculture's Forest Service, according to the federal agency.

The publication, *Managing Pine Trees and Bahigrass for Timber and Cattle Production*, is available at the U.S. Government Printing Office Bookstore, 275 Peachtree St., Atlanta, Georgia 30303. Cost is \$1.25.



A listing of motion picture films, dealing with a wide range of forestry and related subjects and maintained in the Commission's film library, has been updated and published in booklet form.

For a free copy of the catalog, write to the Forest Education Department, Georgia Forestry Commission, P.O. Box 819, Macon, Georgia 31298.



A recently published book, *Forest Farmer Manual*, describes nearly every aspect of correct timber management for enjoyment and big profit.

The book is on sale now for \$10 through Forest Farmers Association, P.O. Box 95385, Atlanta, Georgia 30347.



Patrolman Joseph Palmer of the Commission's Walton County Unit started curing wood for next winter hardly before the old winter ended. He discovered that this "tent" method is a new way of quickly drying wood to be used in the unit's efficient wood burning stoves. The Forestry Commission is reminding all Georgians who use wood as a fuel that now is the time to cut and properly store wood for the coming heating season. Brochures on wood selection, cutting, curing and storage as well as pamphlets on proper installation of wood burning appliances, are available at all Commission district and county offices throughout the state.



ASSOCIATION PLANS ARE ANNOUNCED FOR JEKYLL ISLAND MEET

Approximately 800 landowners, industry representatives, foresters and others are expected to attend the annual convention of the Georgia Forestry Association June 24-26 on Jekyll Island, according to officials of the organization.

Eley Frazer of Albany, president of the association, which is supported by forest interests throughout the state, will preside at the meeting.

A seafood buffet will kick off the annual convention on Sunday, June 24, followed by a business session, a banquet and other activities the following day.

Sen. Sam Nunn (D-Ga.) will be the featured speaker and participating in a panel discussion entitled "The Urban Viewpoint" will be Robert Kerr, Executive Director, Georgia Conservancy; Durwood McAllister, Editor, The Atlanta Journal; and State Senator James W. Tysinger, DeKalb County.

An opposing viewpoint will be discussed by T. M. Reid, St. Regis Corporation, Jacksonville, Fla.; Joe Parrott, ITT Ray-



Lisa Layfield
Macon County



Lori Noble
Crisp-Dooly County



Jennifer Norris
Liberty County



Tasha Taylor
Occonee County



Chris Heffner
Greene County



Susan Lynn Scott
Toombs County



Yvette Franklin
Fannin County



Bridgett Burke
Lincoln County

Forestry pageant winners from many counties throughout the state will be gathering on Jekyll Island June 24 to vie for the Miss Georgia Forestry crown. The local contests are sponsored by garden clubs, civic clubs, Jaycees and other civic minded organizations interested in promoting forestry in their regions by sponsoring the young ladies. County rangers or other Commission personnel serve as chaperones for the young ladies during their three-day visit to the island and many parents also accompany their daughters to the state competition.



Kathy Kent
Emanuel County



Shonda Lynn Hale
Madison County



Maria Swinson
Ware County



Jennifer Williams
Jenkins County



Lori M. ...



... ..



Kathy Howell
Johnson-Washington



Lisa Blake
Bulloch County



Lisa Fountain
Montgomery Co.



Lisa Ursery
Richmond County

onier, Atlanta; and Bonner Jones, J & H Timber Company, Milledgeville.

Zorka The Magician will entertain during the buffet.

One of the highlights of the convention will be the traditional selection and crowning of Miss Georgia Forestry. Frank Craven of Macon, retired chief of the Forestry Commission's Education Department, will be master of ceremonies for this portion of the festivities.

Young ladies representing 30 counties will appear in sports attire and later in evening gowns to compete for the state title. In addition to those county queens pictured, girls from Bacon, Bulloch, Burke, Charlton, Clinch, Coffee, Columbia, Early, Emanuel, Miller, Pierce,



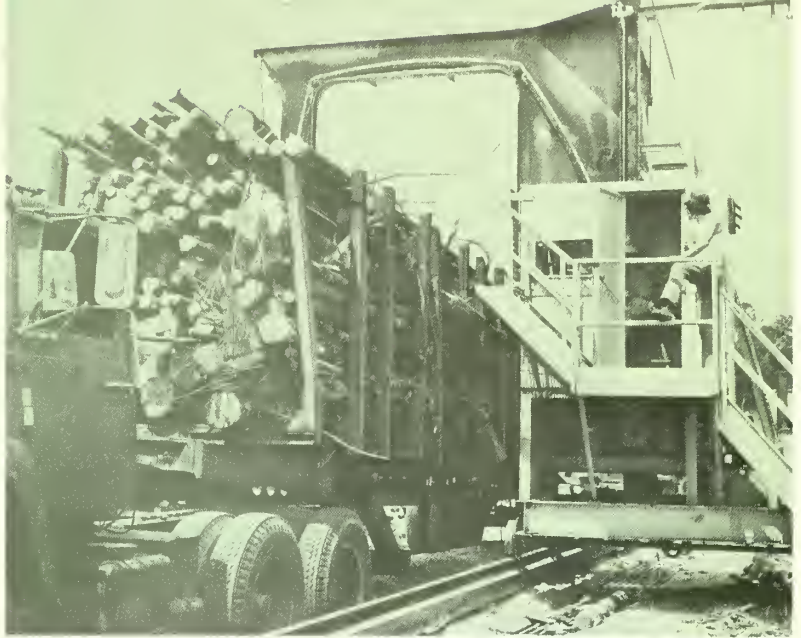
SENATOR SAM NUNN Featured Speaker

Treutlen and Wilkes counties will also be represented. Photos of those contestants were not available at press time.

Glenn Anthony, Executive Director of the Association, said Miss Georgia Forestry will receive a \$500 scholarship to the college of her choice in Georgia. During her reign, the title holder will represent the forest industry at various functions throughout the state. The Association will coordinate her activities.

Miss Kathleene Elaine Rice of Augusta, the current Miss Georgia Forestry, will crown the new state winner.

Other activities will include the election of officers and the presentation of awards. These will include the Tree Farmer of the Year, Outstanding County Agent, President's Award, Performance of Excellence Awards and Reforestation Awards to Georgia Forestry Commission personnel.



Pulpwood production in Georgia remained steady in 1982, the latest year in which statistics are available.

The 8,745,100 cords produced was one percent lower than '81 and one-half percent lower than '80.

There was no change in the roundwood production of 6.1 million cords. However, in wood residues the 2.6 million cords represented a four percent drop over the previous year.

In Georgia, there were 12 counties that produced more than 100,000 cords of round pulpwood. Laurens County led Georgia with a production of 157,717 cords of round pulpwood.

Other Georgia counties included Appling, Bacon, Ben Hill, Brantley, Burke and Camden. Clinch, Crawford, Dodge, Ware and Wayne Counties complete the list.

The daily pulping capacity of Georgia's 16 pulp and paper mills was 17,917 tons. This represents a three percent increase, despite the loss of one mill. The 112 mills throughout the South, two less than the previous year, had pulping capacities of 115,402 ton per day. This is up about one percent from the previous year.

The data is from the Southern Pulpwood Production, 1982, report recently released by the Forest Service, U.S. Department of Agriculture.

The report includes the number of companies procuring wood, mill capacity, production increases and declines and detailed tables on all phases of production by state. Round hardwood and pine pulpwood cordage is listed by stand and county.





Swainsboro FFA Chapter team members are front row, left to right, Tracy Hall, Tim Morrison, David Roundtree, Robert Hudson, Andy Meeks and Joey Claxton. Back row, Mark Driggers, Kyle Carter, Mark Hudson and Tim Roundtree. Flanking the back row are Frank Dillard, Trust Company Bank of Georgia official, left, and Gene Smith, advisor, right.

SWAINSBORO TEAM TAKES STATE TITLE IN STUDENT FORESTRY MEET

The Swainsboro Future Farmers of America Chapter is the winner of the statewide FFA Forestry Field Day and the Pierce County FFA Chapter placed second. The field day was held at Veterans State Park near Cordele.

Don Register, consultant forester, Vocational Agricultural Department, said the event was sponsored by the Trust Company of Georgia and its affiliate banks. He emphasized that the FFA Field Days give each member an opportunity to display the forestry skills he has acquired in Vocational Agriculture. In addition, it gives the FFA advisor a means of creating an interest in forestry for FFA members.

Some 200 contestants, representing 19 chapters that were first and second place winners in the area field days, participated in the state finals.

The participating counties included Bleckley, Clinch, Early, Echols, Franklin, Gilmer, Harris, Lowndes, Newton, Oconee, Pierce, Towns and Ware. Other schools were Louisville, Harlem, Hepzibah, Swainsboro, Pelham and Perry.

First place winners in the various events were Frank Whitehead and David Butler, Oconee County, planting; Tim Barnes, Pelham, standing pulpwood estimation; Theron McDaniel, Harlem, standing sawtimber estimation; Bernie Davis, Pierce County tree identification; Payton Crawford, Pierce County, ocular estimation; and Tony Fain, Harlem, land measurement.

Others included Jodey Claxton, Swainsboro, compass line; Thomas

Perry, insects and disease; Stacy Hall, Swainsboro, forest management; and Keith Floyd, Bleckley County, selective marking.

The Swainsboro FFA Chapter, directed by Randall Tanner, received an inscribed plaque and \$100. The Pierce County Chapter, directed by Jimmy Mark received an inscribed plaque and \$50. First place winners in the individual events were awarded \$20.

Richard Gill, State FFA president, presided at the awards ceremonies. Frank Dillard, Trust Company of Georgia official, presented the awards.

ENVELOPE AND STAMP TO HONOR SMOKEY

Smokey Bear, one of the greatest and most effective fictional characters of all time, is 40 years old and to mark the occasion a special envelope and affixed postage stamp is going to be issued.

Having been conceived during World War II when the need for fire prevention was at a critical point in this country, Smokey is a product of America's willingness to rally behind worthy causes. He has achieved a 98 percent recognition factor among youngsters in this country as the symbol of fire prevention.

In appreciation for his fire prevention efforts, the National Association of State Foresters will commemorate the 40th anniversary of the Smokey Bear Cooperative Forest Fire Prevention Campaign with a cacheted envelope (Official First Day Cover) cancelled on the first day of issue of the Smokey Bear stamp at Capitan, New Mexico.

The envelope cachet and affixed stamp were designed by Rudy Wendelin, nationally known Smokey Bear artist and former illustrator for the Forest Service, U.S. Department of Agriculture.

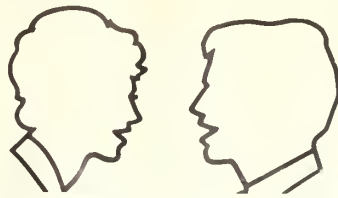
The cachets will be marketed at a cost of \$2.00 plus \$.50 postage and handling each. All proceeds will be retained by the National Association of State Foresters to be used for fire prevention and the advancement of forestry in the United States.

All orders should be sent to Allene Wilson, Alabama Forestry Commission, 513 Madison Avenue, Montgomery, AL 36130. Checks and/or money orders should be made payable to the National Association of State Foresters, with delivery expected the first part of September.



PEOPLE

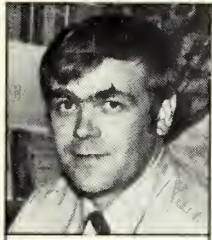
IN THE NEWS



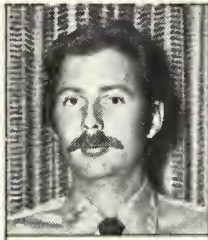
Faye Wilson



Evelyn B. Vause

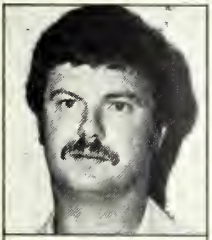


W. Spencer McGraw



Wm. H. Woodyard

PROMOTIONS...W. SPENCER MCGRAW, ranger, Haralson-Polk Unit to district ranger, Rome District...WILLIAM H. WOODYARD, ranger, Whitfield Unit, to district ranger, of the Newnan District...JAMES ALEXANDER, ranger, Taylor Unit, to district ranger, Americus District...HOWARD BROCK, ranger, Worth Unit, to district ranger, Tifton District...JERRY JOHNSON, ranger, Baker-Mitchell Unit, to district ranger, Camilla District...EARL COOK, ranger, Candler-



James Alexander



Howard Brock

Evans-Tattnall Unit, to district ranger, Statesboro District...JOHN ATCHLEY, pilot, McRae, to district ranger, McRae District...W. ALLEN ROBINSON, ranger, Wayne Unit, to district ranger, Waycross District.

NEW PERSONNEL...JOAN ADAMS, Gainesville, is the new secretary at the Gainesville District office, succeeding Zella Wilbanks who recently retired after 32 years service with the state...Joan is a graduate of Hall County High School and was formerly a legal secretary. She and

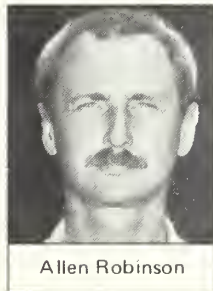


Jerry Johnson



Earl Cook

her husband, Michael, have two daughters, Chesire and Ashley. The couple is active in the Baptist Church...MARY ANN GROVER is the new public relations and information specialist. She works out of the DeKalb County Unit. The Illinois State University Journalism graduate comes to the Forestry Commission from Penn State University where she was a History instructor. She has a daughter, Marjorie...FAYE WILSON has taken over the secretarial duties at States-



Allen Robinson



John Atchley

boro, succeeding Evelyn B. Vause who retired. Faye came to the Forestry Commission from the Willing Way Hospital where she was a records keeper. She and her husband, Clyde, have two daughters, Pamela and Amanda. The family is active in the Baptist Church.

RETIREMENTS...EVELYN B. VAUSE has retired as secretary of the Statesboro District. The native of Statesboro served in that position for 24 years. She and her husband, Harry L. Vause, have four daughters, Dee Anne Durden, Susan



Joan Adams



Mary Ann Grover

McGlamery, Jenny Hopkins and Jean Nessmith. The Vause's are members of the First United Methodist Church of Statesboro...JOHN A. OSBOLT, JR. retired after 29 years service with the Forestry Commission. He was ranger of the

Lamar-Pike-Spalding-Upson Unit at the time of his retirement. He began his career as ranger of the Pike County Unit. The native of Atauga County, Alabama, is a member of the Pike County Lions Club and Pike County Sportsman Club, having served as president of both organizations. The

World War II Army veteran holds the Silver Star and Purple Heart. Osbolt and his wife, the former Hazel L. Bankston, have a daughter, Melissa, and three sons, Terry, Charles and John A., III. The Osbolts are Catholic.

TREE FARMER HONORED

(continued from pg. 11)

pose and motivation play about as big a part in that selection as management techniques. Many tree farmers in Georgia have extraordinary stands of timber, more land and more income from forestry than Henry Owings, but you will be hard pressed to find a more motivated, harder working, more helpful and benevolent tree farmer than the Georgia Forestry Association's 1984 Tree Farmer of the Year, Henry Owings.

Attaining second place in the stiff statewide competition for the Tree Farmer of the Year distinction was C. M. Stripling of Route 3, Camilla.

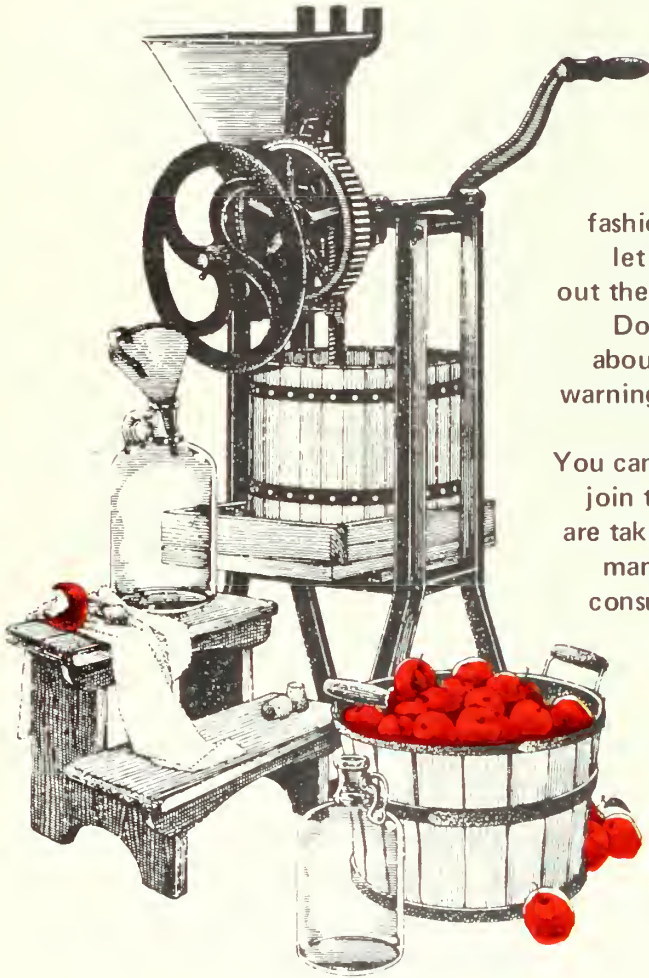
The master farmer said he planted some trees several years ago "just to have something growing" and discovered that there was a real profit in growing trees. He has been planting and carefully managing forests on his farm ever since.

As president of the Mitchell County Farm Bureau, he has set up a permanent forestry committee to promote forestry in the county.

Stripling has planted 238 acres to trees in recent years and he plans to plant 30 to 40 acres a year for the next several years. His forests are well protected by firebreaks and prescribed burning is carried out as needed. He is currently experimenting with after-planting weed control and fertilization.

This book must not be
in the Library

YOU CAN MAKE APPLESAUCE THE OLD FASHIONED WAY



And you can grow trees the old fashioned way, too. Don't bother them. Just let them grow. Don't thin them. Don't cut out the diseased and poorly formed specimens. Don't worry about bark beetles and forget about prescribed burning. Ignore fire danger warnings and don't waste time with firebreaks.

You can go the old fashioned route, or you can join the progressive Georgia landowners who are taking full advantage of good, sound forest management practices. Contact a registered consultant forester or a professional forester of the Georgia Forestry Commission. They'll show you the way.

Applesauce or forest acreage, there is a better way to make it.



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BEFORE YOU SELL OR BUY

Selling your tract of timber? Considering buying timber?

Whether you're a seller or buyer, a good, sound contract is extremely important.

Regardless of the size of the timber sale, all parties involved in the transaction should be protected by a written, legally binding and mutually agreed upon sales contract. While individual sales will be somewhat unique in circumstances, all will have some common provisions. Here is a checklist to consider when a contract is being drawn.

IDENTIFICATION OF PARTIES INVOLVED

--Names and addresses of all parties involved, usually buyer and seller.

DATE OF AGREEMENT AND PLACE OF EXECUTION

-- Include city, county and state.

CONSIDERATION

--Method and terms of payment (lump sum sale, installment sale, etc.).

--Special provisions.

DESCRIPTION OF TIMBER TO BE SOLD

--Description should be detailed and specific.

--Estimated volume of timber to be sold.

--How timber is measured (unit of measure) and products to be sold.

--Manner in which trees to be cut are to be marked or designated and who is to do marking.

--Provisions for trees that grow into harvestable size during contract period.

EXACT LOCATION AND LEGAL DESCRIPTION OF SALE AREA.

--How corners and boundary lines are to be marked and who pays.

--Adjacent ownerships.

--Established improvements subject to damage (description and condition before sale).

--Potential adverse possession and trespass problems should be considered.

PROOF OF SELLER'S RIGHT TO SELL.

--Title search and abstract.

--Title insurance (if required).

PROVISIONS FOR INGRESS AND EGRESS (TO COME AND GO).

--Who shall acquire and pay for right-of-way required.

--What entrances and exits can the logger use and which are restricted from use.

--Who shall pay for road construction or repair needed.

CARE OF OTHER PROPERTY OR IMPROVEMENTS.

--Allowable damage to residual stand (exact specifications and requirements should be used.)

--Method of assessment of damage to improvements and provisions for repairs and/or payment (roads, fences, buildings, culverts, etc.).

METHODS OF LOGGING.

--Layout and plans of decks, log roads, and areas to be cut.

--Restrictions on equipment or logging during wet seasons, hunting seasons, etc.

--Provisions for supervision of logging crews and for inspections before, during, and after logging by both parties or their representatives.

PENALTIES FOR NONPERFORMANCE.

--For cutting nondesignated timber, not cutting designated timber, damage to stand, damage to improvements, etc.

--Provisions for payment of penalties, such as escrow accounts, bonds, etc.

DURATION OF THE AGREEMENT.

--Designation of beginning and ending dates.

PROVISIONS FOR OR AGAINST RENEWAL.

ARBITRATION CLAUSE.

--Provides for selection of arbitration panel and outlines its duties.

PROVISIONS IF TIMBER IS DESTROYED OR STOLEN DURING CONTRACT PERIOD.

--Should clarify as to who will bear the loss-buyer or seller.

THE BOTTOM LINE.

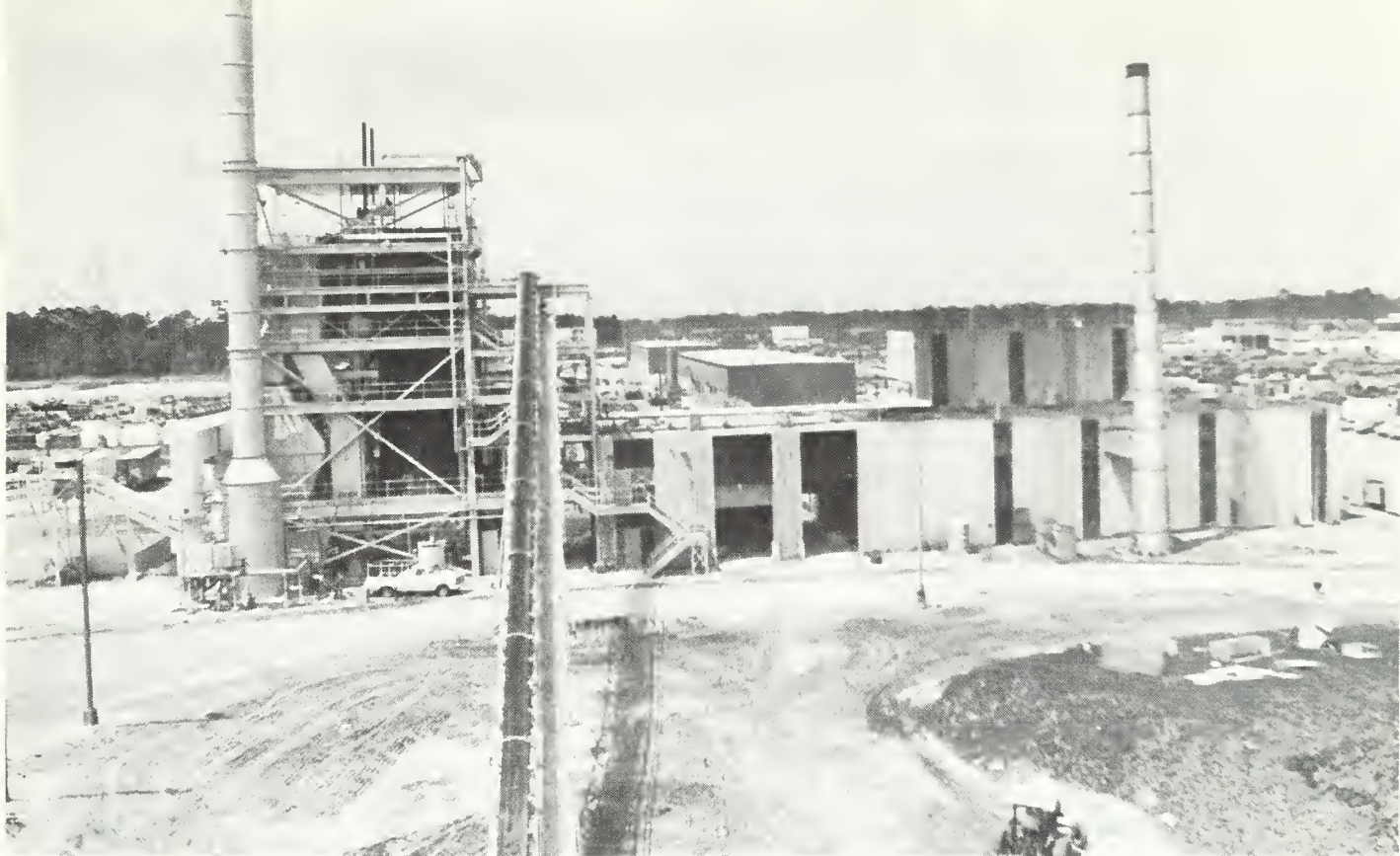
--Signature of all parties.

--Dates signed.

--Notarization of the agreement.

--Registration of the agreement.





This wood energy complex will provide steam heat, domestic hot water and chilled water cooling for base hospital, barracks,

administrative buildings and other facilities at Georgia's big army training center near Hinesville.

FORT STEWART FIRST ARMY INSTALLATION TO CONVERT TO WASTE WOOD ENERGY SYSTEM

The first Waste Wood Burning System for the U. S. Department of The Army is expected to become operational at Fort Stewart in mid-October and save the Army millions of dollars.

Ken Snyder, Fort Stewart Mechanical Branch chief, said the \$7.2 million boiler system is expected to pay for itself in four or five years.

"The savings will be tremendous," Snyder said. "One ton of waste wood, which will cost us \$12.18 per ton, will produce nine million BTUs. Without the wood burning system, we would have to burn \$49 worth of oil to get the same result."

During construction and design of the facility, Snyder said he received valuable information from the Georgia Forestry Commission on their waste wood burning studies. The Commission now has similar facilities at several sites in the state. Results from monitoring these Commission-initiated facilities show highly positive results.

Snyder agrees with these results. "From the standpoint of a renewable source of fuel, I believe this type of system is the coming thing for the future."

he said. "The Army got into this mainly because it wanted to use a renewable source of fuel."

The Savannah District of the Army Corps of Engineers designed and supervised construction of the new system; all design and operation must pass final inspection of the Corps. Corps officials said the new facility will be completely turned over to Fort Stewart personnel after the final performance testing. A formal dedication ceremony for the new facility is planned for approximately 60 days after the plant becomes operational.

The plant provides steam heat, domestic hot water and chilled water cooling to all newly constructed buildings including barracks, administrative buildings, motor pools, mess halls, chapels and the base hospital. Steam from the plant produces 385 degree water which is channeled through miles of underground pipe lines. The actual steam never leaves the central plant.

The system has a conveyor capacity of 70 tons per hour to remove wood from trucks. Conveyor capacity for feeding wood to the boiler is 25 tons per hour. The variance in these two conveyor sys-

tems enables the system to support another boiler in the future.

"If our growth continues as it is now, I feel certain we will add another boiler," Snyder pointed out.

According to design specifications, a major positive factor of this system is cleanliness. Specially designed "scrubbers" wash soot, ash, etc. from the air (exhaust) before it is released into the atmosphere. Snyder emphasized that this system of cleaning the air exceeds state environmental requirements, making it much better than burning fossil fuels.

Another plus factor of the system is safety and efficiency. The boiler is computer controlled. One man assigned to a control room will monitor the operation with closed circuit television. If necessary, this single monitor can shut the boiler down.

Snyder said that during fiscal year 83 Fort Stewart used more than three million gallons of fuel. An estimated 80,000 tons of waste wood is expected to be burned the first year the system is operational. As Snyder said, "The savings will be tremendous."

GEORGIA'S NATIVE OAKS PLAGUED BY DISEASE

Oak leaf blister disease, which can occur in all species of Georgia's native oaks, has increased this year primarily as a result of increased rainfall throughout the state.

Everything from backyard shade trees to a historic Oglethorpe Oak on St. Simons Island has been infected, according to Terry Price, Commission entomologist. However, Price said the unsightly disease is seldom fatal, and certain things can be done to prevent it.

Although the infection can strike single trees severely, it is not a threat in forest conditions because the disease is not virulent enough to spread through whole stands of trees. Usually, only three or four oaks at the most are effected in a stand of trees.

STREET TREES HIT

"Leaf blister of oaks is probably the most conspicuous disease of street trees," Price said. "The tree may look like it is going to die, but in the majority of cases it will recover."

Infected trees develop yellowish-green leaf blisters and partially dead leaves. The blister-like distortions are caused by fungus invading the tissues. In cases of severe infections, the leaves may fall off prematurely. The disease is most prevalent during cool, wet springs.

Price emphasized that although the disease can attack any species of Georgia oak, it usually occurs in pointed-leaved species, such as the southern red oak and certain entire-leaved trees such as the water oak.

MANY CALLS RECEIVED

"Trees along the coast damaged by last year's late frost appear to have been hit hardest by the disease," Price said. "But the Commission headquarters in Macon has received calls from all over the state concerning the problem."

One diseased tree which has caused much concern is the historic Oglethorpe Oak on St. Simons Island. However, Price examined the oak and said it will recover and should live many more years. He recommends the same treatment for this tree as any other oak infected by the disease.

To control the disease, dead leaves that have fallen to the ground should be collected and destroyed. If the leaves are allowed to remain on the ground near the tree, rain can spatter the infectious spores



SOUTHERN RED OAK
(*Quercus falcata* Michx.)

back on the tree; then only the slightest wind current is necessary to carry the microscopic spores back to the leaves and cause the disease to recur.

WET CLIMATE BLAMED

Price points out that if the disease is allowed to recur before the leaves develop fully again, there is a possibility of varying degrees of damage, or even death. The infectious spores thrive in wet weather, but many of the spores die in dry weather. The current increase of the problem is mainly the result of the wettest year the

state has experienced in more than 20 years.

Preventive measures should begin in the spring just before the buds open. A recommended fungicide should be applied three times: (1) Just before buds open, (2) When leaves are half grown, and (3) When leaves are 10 to 14 days old. Summer sprays are of no value in controlling the disease. It is generally not economical to spray large trees unless they are of high specimen value.

A severe case of leaf blisters may result in the loss of numerous small branches. When this occurs, the first impression is often that there is no hope for recovery. However, the damage usually appears worse than it is and the tree can be saved with proper treatment.

For specific recommendations on fungicides and treatment of oak leaf blister disease, contact your local forestry office.



WATER OAK
(*Quercus nigra* L.)

LESSER KNOWN FOREST MANAGEMENT PLAN TOLD

Oftentimes in forest management, it's the lesser known programs which are among the most successful. This fact, according to Wildlife Technician Doug Watson, would certainly apply to the U.S. Forest Service's on-going wildlife management program to increase the wood duck population in Georgia.

Watson, who works on the U.S. Forest Service's Chattooga Ranger District in Clarkesville, "I feel the wood duck program has been very successful and I can see a definite increase in the number of ducks nesting in our selected areas since this program began seven years ago."

According to Watson, "The wood duck has very specific habitat requirements. They live in dense woody areas near good water sources such as beaver

ponds or marshes, and nest in decaying tree cavities ranging anywhere from five to 70 feet above the ground." Recent river bottomland and swamp drainage for agriculture and river damming for navigation, flood control, power, and other purposes has destroyed thousands of acres of wooded bottomland attractive to wood ducks, he pointed out.

The Forest Service constructs nesting boxes for the ducks and places them on poles or tree snags in or near the water.

Wood duck boxes are made of wood or plastic and are built to protect the ducks from wind, rain, heat, and predators (which include snakes, raccoons, and opossums). The boxes are then placed on poles or tree snags.



NEW DIRECTORY LISTS 1520 FOREST RELATED INDUSTRIES IN GEORGIA.

Wood Using Industries in Georgia, a 1984 directory and report of timber utilization during the previous year, has been completed and is being distributed through offices of the Commission.

Paul Butts, Commission Utilization Forester who prepared the 105-page publication, said the directory portion serves as a marketing aid for Georgia grown or manufactured forest products, while the report section is designed to show trends in timber production and use.

He said the publication, which is based on a statewide survey, is compiled at three year intervals.

Primary industries, such as sawmills, are those which use round timber as raw material, and 635 listings are in this section. Secondary industries, such as furniture plants, use lumber and other partially manufactured material as furnished. Listings in the secondary processors section total 885.

The directory also includes 16 pulp mills, which process wood, and 10 which process waste paper or dried pulp.

Primary processors are listed by county, plant type, facilities, employment class, species used, and major products. Secondary plants are listed by type, county, employment class, and major products.

The utilization report shows that round timber use in 1983, excluding

pulpwood, firewood, and fence posts, totaled 2.9 billion board feet for a 19 percent increase over 1980.

Thirty-two percent was processed in the southeastern part of the state, 14 percent in the southwestern, 36 percent in the central, 11 percent in the north central, and 7 percent in the northern section. Pine species accounted for 86 percent of the total use, which is an increase from 70 percent pine in 1964.

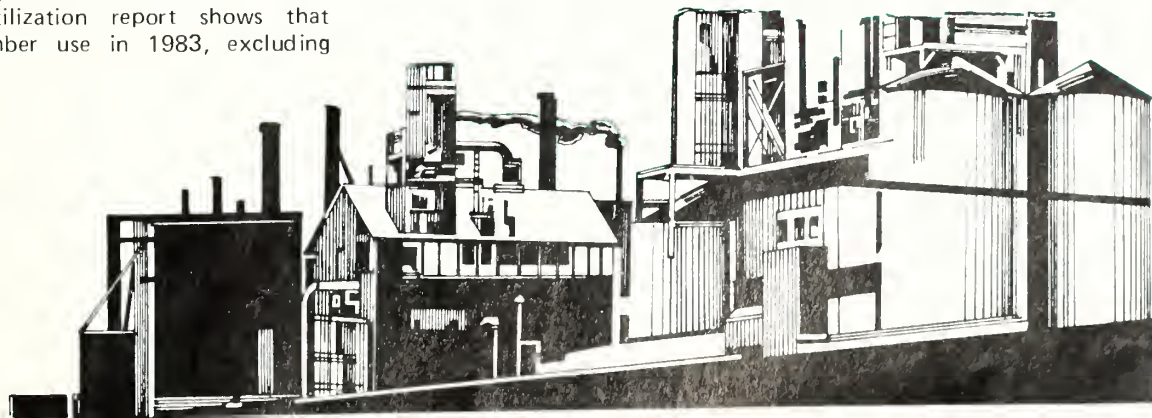
The report reveals that 210 sawmills processed 82 percent of round timber, 18 veneer and plywood plants manufactured 14 percent, 22 primary treaters used 2 percent, and 22 other timber

processors used two percent. Timber processed has increased by an average annual rate of 6 percent over the past 19 years, while pine timber use has increased at more than 8 percent.

Including pulp mills, 93 percent of all bark, 72 percent of sawdust-shavings, and 9 percent of chippable residue was used for industrial fuel. Eighty-five percent of chippable material was used for pulp.

Secondary processors include 64 box and pallet, 495 cabinet and millwork, 48 mobile home-camper prefab, 13 picture frame, 30 independent planer, 49 treating, and 132 furniture plants and shops.

From giant pulp and paper mills and high production sawmills, to small pallet plants and picture frame shops, hundreds of enterprises across the state depend on Georgia's abundant forests for existence.



POISON IVY



POISON OAK

POISON SUMAC



always produce a rash. The plant must be crushed enough to release the poison, but even an insect chewing on it can accomplish this.

The actual poisonous matter in poison ivy is a sticky substance called urushiol. This long-lived poison sticks to anything it touches: tools, clothes, door handles - anything. In one experiment, a contaminated glove was put away for ten months, then washed with hot water and soap, and ironed. The glove still caused dermatitis among volunteers who handled it.

SAP LINGERS

Other experiments show the poisonous sap remains virulent for at least 18 months after the plant has been cut and dried.

About half the population is immune to poison ivy. However, some authorities say everyone is born immune, but the immunity is broken down by repeated contact. For individuals extremely sensitive to poison ivy, immunotherapy has proven effective in many cases; immunotherapy is small injections of urushiol given at intervals in early spring.

A popular myth about immunity concerns eating poison ivy. Some people claim that eating small amounts of the plant in early spring will create immunity. Don't try it. All this is likely to accomplish is give the consumer an internal rash in the mouth, throat and stomach. Anyone eating poison ivy and suffering no ill effects has probably not yet developed a sensitivity to it.

SOME VALUE RECOGNIZED

In spite of poison ivy's bad reputation, nature has given it value in the scheme of ecology; it serves as a food for numerous animals. Deer browse on the plant during winter, and its fruit (waxy-white berries present from August through November) is eaten by quail, pheasants, turkeys, grouse, woodducks, squirrels and many songbirds.

Poison ivy also has two unpleasant relatives: poison oak and poison sumac. Both have the same poisoning agent as poison ivy - the sticky urushiol. However, both of these relatives are more easily identified than poison ivy.

Poison oak occurs as a low growing shrub and usually does not climb as a vine. Leaflets are in threes, but are lobed somewhat similar to an oak leaf. The size of leaves vary in size, even on the same plant.

Poison sumac grows as a woody shrub or small tree and never in the vine form. It usually grows in swamps or bogs to a height of five or six feet, but can reach 25 feet. Leaflets range from seven to thirteen and are arranged in pairs with a single leaflet at the end of the rib.

(Continued on Page 14)

RAINS BRING POISON THREAT

Going to the woods for any reason this year can be hazardous to your skin. The Georgia Forestry Commission warns that poison ivy cases have reached epidemic proportions in the state.

Georgia's rainiest season in more than 20 years is the main reason the abundant plant has become even more prolific.

Poison ivy can grow almost anywhere - wet woods, dry woods, paths, roadways, fence rows, hillsides, level ground, up the sides of houses and even manicured lawns.

In spite of this year's tremendous increase in the poisonous plant, it can be avoided. The Commission recommends the best way to escape poison ivy is to recognize and avoid touching it. But this may be difficult; the poisonous plant is a master of disguises. Many plants are mistaken for poison ivy and vice versa.

DESCRIPTION MISLEADING

The characteristic "three leaflet" description of poison ivy may be misleading because the leaf edges may be smooth, jagged or lobed. Sizes range from tiny vines to erect shrubs. Poison ivy also ap-

pears in rope-like vine form, often more than two inches in diameter, that climbs to the tops of tall trees. The adaptable plant can attach to and climb almost any surface.

The Commission recommends that the best way for the average person to identify the plant is to have someone who knows identify it for them in its various forms. Children, especially, should be taught to recognize the plant and become poison-ivy-conscious.

Although recognizing and not touching the plant will prevent most poison ivy cases, there are other ways the rash can be caused.

MANY MYTHS

Myths about poison ivy are numerous. Some people believe they can catch poison ivy by just looking at it; this is not possible. But it is a fact that smoke from a burning plant can produce a severe rash anywhere the smoke touches the skin. Any plant debris to be burned - especially in a home fireplace - should be identified.

Direct contact with the plant does not



This individual will be making a mistake if he saws this pile of treated lumber into fuel wood for use in heating his home this winter.

FIREWOOD USERS ARE CAUTIONED NOT TO BURN TREATED MATERIALS

Now that another heating season is approaching, the Georgia Forestry Commission is warning residents of the danger of heating with wood fuel that has been treated with certain preservatives.

A mysterious array of ailments afflicting a Wisconsin family prompted a university medical study which revealed that burning any wood treated with the preservative chromated copper arsenated (CCA) produces extremely poisonous smoke, fumes and ashes.

The family, that had been burning scrap plywood and lumber in their kitchen stove for three years, began to lose hair and have respiratory problems. Other symptoms suffered by all eight family members included rashes, muscle cramps, diarrhea, headaches, earaches, burning eyes and tingling in the fingers.

University of Wisconsin medical researchers found the entire family and everything in the house to be contaminated with arsenic, which was traced to the CCA preservative. Medical staff reports stated that CCA contains arsenic, copper and chromium; all three elements are toxic.

Dr. Henry Peters, a University of Wisconsin professor of neurology, emphasized that poisoning from CCA could become a serious problem because of the increasing number of people using wood burning stoves.

According to state statistics, more than one third of all Georgia homes

now burn firewood. The Commission urges that you not burn any firewood unless you are certain about the type and source.

CCA-treated wood usually has a greenish or brownish tint, but again, if you are not certain - do not burn it. The wood-treating industry is aware of the hazard and cautions against the use of CCA-treated wood as a fuel.

GEORGIA CHAPTER CITED

The Georgia Chapter of the Soil Conservation Society of America was presented the Hornaday Conservation Education Award at the Society's recent annual convention in Oklahoma City.

Only one chapter is cited each year and the award is given for chapters that conduct successful conservation projects involving young people or teachers and other adults.

Georgia was honored for conducting the annual Natural Resources Conservation Workshop held at Abraham Baldwin Agricultural College at Tifton. It was pointed out that more than 5,000 students have attended the workshop since 1942.

Forester Chuck Place of the Commission's Education Department has been instrumental in directing classes that pertain to forestry at the annual workshops and several other GFC foresters have been involved in the training.

"Trees don't just drink water, they clean it."

"It's a fact. Long before we had purification plants, the green leaves on the world's plants and trees filtered all the water.

"But as we've made room for a growing population and larger cities, we've lost much of that purifying power.

"And the fact remains, our forests can do a lot for us. We need to replenish them—and manage them—more carefully than ever before.

"Our job is growing. Help keep our water clean. Write..."



Society of American Foresters

5400 Grosvenor Lane
Bethesda, MD 20814

Ralph Waite

Ralph Waite for America's professional foresters.



SITE PREPARATION

THE ALTERNATIVES • THE HIGH COST OF NEGLECT

Preparation for replanting a forest, one of the largest expenses in forest management, has been greatly reduced in cost by harvesting whole trees and leaving the site clean for replanting. The process is called "site prep."

Druid Preston, chief of the Georgia Forestry Commission's Management Department, said the absence of proper forest management techniques usually means that more complex site prep will be required; and more complex site prep means higher cost. He explained that different forms of harvesting create different problems for reforestation and site preparation.

For instance, harvesting operations leaving high stumps and big tops require more effort to prepare for replanting, while operations leaving large diameter stems and cull trees require more effort to clean up.

"The point is both of these harvesting situations create higher site prep costs," Preston pointed out. "More effort creates more cost."

WHOLE TREE METHOD

However, when the tree is cut at ground level and the whole tree used (as in whole tree harvesting), the debris problem is almost entirely eliminated and reforestation is relatively easy. The result: site preparation costs are kept at a minimum.

Site preparation methods are classified from light to heavy. Light preparation costs are minimal. Heavy preparation costs are expensive.

The least expensive method of site prep is prescribed burning. This method actually reduces or completely eliminates site prep costs.

Prescribed burning is frequently used when reforestation is accomplished by natural regeneration. Georgia Forestry Commission studies show that very little site preparation is ever required when natural regeneration occurs in connection with proper burning. Burning prepares the seed bed and controls undesirable vegetation.

NATURAL REGENERATION

In the natural regeneration method, burning is sometimes done prior to the last sale of timber on a tract; cull hardwoods may also be deadened at this time. Hardwood control should be done in advance of harvesting by mechanical girdling or herbicide injections. All suitable hardwoods are left to be sold with the pine.

Light site preparation methods include drum chopping and scarification. These



methods are very effective if used properly in conjunction with certain harvesting situations. Drum chopping is often followed by a burn to complete the site preparation. A benefit of scarification is that the site is prepared and seeds planted in a single operation.

When more complex situations result from harvesting, heavy site preparation methods using heavier machinery is required. These methods include root raking, shearing, windrowing, disking, and bedding.

WINDROW ADVANTAGE

Preston stressed that when any form of mechanical site preparation is used, soil disturbance should be minimized to reduce soil erosion. Windrows should not be pushed against the timberline; they should have frequent breaks for access of firefighting equipment. An undisturbed area should be left along streams as a habitat for wildlife and to protect water quality.

Bedding is another special treatment frequently used in conjunction with other methods. In bedding, the soil is arranged in elevated ridges or beds to promote drainage and aeration. Bedding promotes rapid root development is often essential in soils with high water tables.

The use of chemicals for site preparation is another method. Preston pointed out that chemical site prep is not classified as light or heavy. "It's entirely separate," he said. "And cost can range from low to high, depending on which chemicals are used and the condition of the site site."

RISKS ARE INVOLVED

Landowners should be aware that although broadcast application of herbicides are effective, the process is not without risks. Clear designation of the areas to be treated is necessary. Protected areas, such as those along streams, must also be designated. Fences are not reliable markers. "Save trees" must also be marked before injections start.

It should be noted that restrictions have been established concerning the use of broadcast herbicides on federal lands. Some herbicides are highly toxic and expert advice should be received before using them.

Preston said that Georgia law requires a pesticide applicator's license to apply restricted use pesticides. Herbicides used in chemical site preparation are scientifically classified as pesticides.

"In spite of certain risks," Preston said, "chemical site prep is the upcoming thing because it has definite advantages." He said a major advantage is that chemical site preparation does not create soil erosion problems. Most of the chemicals used are biodegradable; they break down in the soil and are rendered harmless.



The Bracke Scarifier, on opposite page, prepares the soil and plants forest tree seed as it moves across a field. It is one alternate to setting out seedlings. In the top picture, a feller buncher is used to carry out a whole tree harvesting operation, thus leaving the area prepared for replanting and saving the landowner the expense of site preparation. Land in the above photo is typical of erosion damage that occurs when forests on this type terrain are not replanted.

When no form of site preparation is used, many tracts become choked with thick, undesirable vegetation. The small landowner is usually hardest hit by this lack of planning because he must pay a high price for future planting. The expense stems from the contractor's fixed high cost of moving equipment and crews to the site. However, there are cost share programs, such as the federal Forestry Incentive Program (FIP), that offer financial assistance to landowners.

Preston emphasized that site preparation methods are frequently used in various combinations for most effective results.

"Above all," Preston stressed, "landowners should seek the advice of professional foresters to prescribe the correct type of site preparation best suited to individual needs." He added that the Georgia Forestry Commission is staffed to provide complete information on all site preparation needs.



Harvest time is near at the Commission's four tree nurseries.

FOR SALE: 125 MILLION YOUNG, VIGOROUS TREES

How do you sell 125 million little trees? That's a merchandising problem now facing the Georgia Forestry Commission, but the solution is in sight.

The Commission last year conducted a successful county-by-county reforestation campaign and as a result, more than 370,400 acres of Georgia land were planted in forest trees to set a new record.

Director John Mixon has vowed that "we're not slowing down," and said he expects a renewal of last season's campaign will "help us sustain the momentum we have built."

Under leadership of Commission foresters and rangers, committees are being formed in practically every county in the state to again encourage landowners to plant marginal lands, unproductive row crop acreage and other idle areas in trees.

Serving on the committees with Commission personnel are representatives of the U. S. Forest Service, Georgia Farm Bureau Federation, Extension Service, Soil Conservation Service, consultant foresters, forest industries, landowners and others.

Mixon pointed out that "it is extremely important that we begin now, in this decade, to accelerate reforestation to meet the future demand for raw materials...our pulp and paper mills, our many timber mills and other forest-related industries in the state must depend on an ever expanding supply base to maintain high level production."

The Commission is working closely with the Soil Conservation Service and the Agricultural Stabilization Service to identify marginal and sub-marginal lands around the state. Committee members are working up on the details of the program

and showing them the profits that can be expected by converting idle acreage into forests.

When landowners agree to plant trees,

technical assistance in site preparation, planting procedures and other aspects of forestation or reforestation are provided. If government payment programs are in-

ORDER NOW FOR NEW PLANTING SEASON

Landowners planning to buy trees this season from the Commission nurseries are advised to place orders as soon as possible to assure an adequate supply of seedlings.

Seedlings offered and prices are as follows:

<u>Pines</u>	<u>Per 1000</u>	<u>Per 500</u>	<u>Per 50</u>
Eastern White	\$42.00	\$24.00	\$9.75
Improved Loblolly	18.00	12.00	5.00
Improved Slash	18.00	12.00	5.00
Longleaf	18.00	12.00	5.00
Slash-High Gum	18.00	12.00	5.00
Virginia	25.00	15.50	6.25

Shipment of above species begins November 20.

Species below will be shipped after January 1, 1985.

Dogwood	\$60.00	\$33.00	\$13.25
Lespedeza	50.00	28.00	11.25
Oak, Sawtooth	50.00	28.00	11.25
Oak, White	50.00	28.00	11.25
Red Maple	50.00	28.00	11.25
Sycamore	50.00	28.00	11.25

A transportation charge of \$2.00 per 1000 trees and \$1.00 per 500 trees must be added to the above cost on seedlings delivered to County Ranger Headquarters for landowner pick up.

Application forms may be obtained from Forestry Commission county unit headquarters, district offices, county agents, and Soil Conservation or Agricultural Conservation Program offices. Completed forms are to be mailed to the Georgia Forestry Commission, P. O. Box 819, Macon, GA 31298-4599.

volved, assistance is also provided the landowner by Commission personnel.

The promotion also involves landowners who have harvested timber, but have failed to reforest their land. They are encouraged to get their land back into trees by planting seedlings or, in some cases, allowing re-seeding by the natural regeneration process.

Although the 125 million seedlings now being grown in the state's three nurseries will be the largest crop in several years, Johnny Branan, Chief of the Commission's Reforestation Department, said the inventory probably will be depleted before the planting season ends next March. He emphasized that orders are now being accepted and they will be filled on a "first come, first served" basis when tree lifting and shipping begins in November.

Meantime, Druid Preston, Forest Management Chief, estimated that at least two million acres of marginal and sub-marginal lands still exist in Georgia and "we have just scratched the surface in turning our idle acreage into productive forests."

He pointed out that trees are not only profitable as timber, but also prevent erosion and help retain top soil. "Trees," Preston said, "provide a permanent cover, and that's what we need in many areas of our state."

Further information concerning the current reforestation campaign and literature dealing with planting, managing and harvesting trees, is available at all Georgia Forestry Commission offices across the state.



TOUR IN SAVANNAH AREA IS PLANNED

"A day in the Woods - Forests for Profit and Fun," is the theme of an all day bus tour from Savannah on October 25, according to H. L. Merck, Extension Forester, Cooperative Extension Service.

Returns from regeneration investments and management practices will be illustrated and the phenomenal growth of planted pines through intensive management will be seen.

Other areas will be visited to show alternatives for low cost natural and artificial regeneration. Marketing opportunities will be shown, with a stop at a modern sawmill and an in-woods chipping operation. Wildlife and other values will be discussed.

The forester said the tour is being provided for landowners and others interested in forest investments. For further information, contact the extension service in Statehouse



Left to right, Commission Director John Mixon, Felton Denney, board member; Ray Shirley; and board members Jim L. Gillis, Jr., Eley Frazer, III, Patricia Robinson and Robert Simpson, III.

SHIRLEY NURSERY DEDICATED

The Georgia Forestry Commission's newest tree nursery, a modern 257-acre complex near Reidsville, has been officially named the Shirley Nursery in honor of A. Ray Shirley, former director of the Commission.

John Mixon, who became Commission director upon the retirement of Shirley in January, 1983, and the agency's board of commissioners, led a delegation of Commission employees and representatives of other agencies and forest industries in paying tribute to the former director during a dedication ceremony at the nursery site.

Jim L. Gillis, Jr., chairman of the board, told the gathering that "Ray Shirley has a record of forestry leadership for 23 years as head of the Commission... he was a leader and a promoter." Gillis noted that the nursery named in his honor "will be here a long time after we have gone."

Mixon praised Shirley for his foresight in planning the nursery and told of substantial savings to Georgia taxpayers by having Commission personnel do most of the construction work on the huge facility.

In response to several other tributes expressed by board members, Shirley told of the ground work carried out to get financing for the nursery and the many state leaders who gave support to the needed expansion of the Commission's tree nursery program.

Although Shirley declared he didn't deserve the honor, he said he was pleased to "see my name associated with something living."

tion of the big nursery into a carpet of greenery. The Shirley Nursery is capable of producing 165,000,000 seedlings annually when all acreage is planted. It is presently producing 40,000,000 trees for the forthcoming planting season.

Construction on the new Shirley Nursery, destined to be one of the largest forest tree nurseries in the nation when fully operational, was begun in 1982.

Shirley is credited with leadership in research in the state's seed orchards and nurseries which led to genetically improved trees as early as 1964. The superior

(continued on pg. 13)

SHIRLEY NURSERY FACTS

- Engineers were confronted with three large depressions which required moving some 182,000 cubic yards of soil in grading and filling work.
- A 12-inch well, drilled 950 feet deep, was completed in May, 1983.
- The elaborate irrigation system has an output of approximately 1,600 gallons of water per minute.
- The irrigation system consists of about 68 miles of pipe.
- More than 12 miles of drain tile were installed at a depth of 3½ feet to aid in soil drainage. The nursery consists of 257 acres, with some 220 acres under irrigation and the remainder devoted to roadways, windbreaks and building sites.

MISS GEORGIA FORESTRY CROWN CAPTURED BY RICHMOND ENTRY

Miss Kathy Usry, daughter of Mr. and Mrs. Pet Usry of Augusta, is the reigning Miss Georgia Forestry.

The 20-year-old pageant winner will be a junior this fall at Augusta College. She jogs several miles each morning, likes to cook deserts, conducts a puppet program for children at Burns Memorial Methodist Church in her neighborhood and is a loyal Atlanta Braves fan.

Miss Usry competed with young ladies who had won pageants on the county level in other sections of the state. The state finals were held during the annual convention of the Georgia Forestry Association on Jekyll Island.

The new Miss Georgia Forestry received her crown from the retiring queen, Miss Kathy Rice, also a resident of Augusta.

The pageant winner each year represents forestry and forest-related industries throughout the state in promotional events, parades, fairs, conventions and other activities.

Thus far, Miss Usry has appeared in the Atlanta July 4 parade and was featured in pre-game activities at the Atlanta-Fulton County Stadium during Georgia Forestry Night.

She said she likes to spend some time in the kitchen "especially if I am prepar-

ing some kind of desert." She makes her own puppets for the childrens program and creates her own scripts.

Miss Georgia Forestry has three brothers, Steven, Wesley and Wayne.



Miss Georgia Forestry poses with her trophy and red roses minutes after she was crowned during the pageant on Jekyll Island. In photos below, she plays some of her favorite pop hits of the day and stirs ingredients for a cake. For exercise, she jogs several miles with an uncle during an early morning hour.



MARIA SWINSON MISS GUM SPIRITS

Miss Maria Swinson, representing Ware County, captured the title of Miss Gum Spirits of Turpentine in the Miss Georgia Forestry Pageant this year.

A graduate of Southwood High School in Waycross, Miss Swinson participated in various school activities. She was a cheerleader throughout high school and served as co-captain of the cheerleading team her junior year, and captain of the team during her senior year.

Miss Swinson was also president of the student council her senior year. She plans to attend Valdosta State College in the fall and major in business.

Maria is the daughter of Mr. and Mrs. John Swinson of Waycross.



FORESTRY RELATED COURSES SCHEDULED

A short course on the use of microcomputers in forestry will be held at The University Of Georgia Center for Continuing Education October 16-17.

The course will introduce fundamental components of microcomputers and discuss the use and potential use in a variety of forest and resource management applications.

The course will be of benefit to practicing foresters, forestry consultants, and resource managers with interest in quantitative problem solving. Topics will include an introduction to microprocessors and microcomputer systems, general applications of microcomputers, application of microcomputers in forestry, land management and business related applications.

A short course on the Essentials of Forestry Investment Analysis will be held at the Center for Continuing Education October 23-25.

The course will introduce the analytical techniques for handling long-term investments, decision criteria for choosing among investment alternatives, valuation of land and timber at intermediate stages in the life of the forest and the application of decision criteria with adjustments for inflation and real price appreciation.

The course also explores methods for budgeting forestry investment to maximize scarce capital resources.

This course is intended for practicing foresters, forestry consultants, and resource managers with interests in analyzing forestry investments.

A workshop entitled "Aerial Photo Interpretation and Application" will be held at the University of Georgia Center for Continuing Education on November 27-29 for practicing foresters.

Enrollment will be limited to 25 and topics to be covered include an overview of Photo Interpretation and Remote Sensing, The Geometry and Scale of Aerial Photos, Practical Exercises with Aerial Photos, Mapping and Timber Cruising from Aerial Photos and other aspects.

Other courses planned include a conference on the Use of Herbicides in Site Preparation and Release of Coniferous Forests on December 4-5.

The conference is designed to present a "state-of-the-art" use of herbicides in southern pine forests.

A Basic Industrial Hydraulics workshop will be held at the University Center January 22-25, 1985. The 3½-day course has been developed to provide participants with skills in basic hydraulics and system trouble-shooting.

The workshop is for people who are



THE LATE JEROME CLUTTER

GEORGIA PROFESSOR IS POSTHUMOUSLY ENTERED INTO HALL

Jerome L. Clutter has been posthumously named to the Georgia Foresters Hall of Fame.

The high honor came at the recent annual meeting of the Georgia Chapter, Society of American Foresters.

Clutter, professor of Forest Biometrics at the School of Forest Resources, University of Georgia, died Nov. 21, 1983, at age 49.

Writing in the April issue of the Journal of Forestry, James Bethune, Connecticut, pointed out that Clutter "provided much of the methodology that makes modern, quantitatively based techniques an integral part of present-day forestry. His variable-density yield tables were a quantum jump from former, percent-of-normal-stocking based methods. Diameter distribution yield tables, which he conceived and developed, greatly increased management's decision-making abilities."

Computer simulations and optimization techniques developed by Clutter and his associates are said to be now in use on more than two million acres of managed forests in North America, Australia and New Zealand.

responsible for specifying, repairing, trouble-shooting and maintaining industrial hydraulics systems (mobile or stationary).

For further information on any of the above courses contact Dr. Leonard A. Hampton, Room 237, Georgia Center for Continuing Education, University of Georgia, Athens, Georgia 30602 or phone 404-542-3063 or Andy Little, Conference Coordinator, 404-542-1585.

PUBLICATIONS

Directory of Consulting Foresters, 1984, is now off the press and is available from the Society of American Foresters, 5400 Grosvenor Lane, Bethesda, Maryland 20814. Cost is \$7.50



Selected Native Shade Trees, a Georgia Forestry Commission publication recently revised, provides information for homeowners in the state's Piedmont and Upper Piedmont areas. The publication provides information on growth rates, shape, average height, flower and other data on the various species. It also contains illustrated instructions on bare root and balled planting, pruning and fertilization. For a free copy, contact any Commission office in the Piedmont area or write to the Commission's Education Department, P. O. Box 819, Macon, Ga. 31298-4599.

FOREST LANDOWNERS ATTEND CONFERENCES

Four Forest Landowner Assistance Conferences have been held in Georgia cities in recent weeks and the landowners, including many "absentee owners" who live in urban areas but have holdings in rural sections of the state, have benefited from the sessions.

The conferences, which concentrated on recommended forestry practices to increase production, taxation relating to timber growing, and sources of financial and technical aid, were held in Atlanta, Augusta, Macon and Gainesville. Plans are now being made to offer the conferences to other cities.

Co-sponsors of the events include the Commission, Georgia Forestry Association, Extension Service, Southern Forest Institute, and several other forest oriented agencies and organizations.

SHIRLEY NURSERY DEDICATED

(continued from pg. 11)

tree is now produced in the millions at the Commission's four nurseries each year to help perpetuate Georgia's 24.8 million acres of forests.

A native of Bowersville, Shirley earned a degree in forestry from the University of Georgia in 1936. During World War II, he served as a captain in the U. S. Army's Corps of Engineers, with duty in Africa and Europe.

Shirley and his wife, Mary Virginia, reside in Macon. They have two sons, Ray, Jr., a chemical engineer, and Rudy, a medical doctor, and five grandchildren.

THREE ARE AWARDED FOR QUICK ACTION IN AIDING CO-WORKER

Three Dekalb County employees of the Georgia Forestry Commission received Commendation Awards recently for aiding a coworker during an accident at the Stone Mountain office.

Patrolmen Walter Koch was repairing a commission vehicle when the battery exploded, spewing acid into his eyes. Patrolman Randy Sockwell and Wade Skinner, and Forester Chris Barneycastle immediately administered first aid by washing his eyes with water and applying eye irrigating solution. They then took him to a local physician, who credited their quick actions with preventing serious damage to Koch's eyes.

Commission Director John Mixon signed the certificates of commendation and wrote to each of the employees in appreciation of his quick response to the incident. Robert Lazenby, Field Supervisor for North Georgia, presented Sockwell, Skinner and Barneycastle with the awards.



POISON THREAT ANNOUNCED

(Continued from Page 6)

Urushiol poisoning from any of these plants may produce symptoms in a few hours or seven days or more. Itching water blisters are the first sign. Severe infections may result in abscesses, enlarged glands, fever, and other complications.

Washing with alkali soap and water within a half hour of contact may prevent a rash. Clothing and other articles that may have made contact should also be washed.

Prevention can eliminate the need for a cure. It is important to eliminate poison ivy and related plants from around homes, school yards and similar areas. Since burning spreads the poison, plants should be buried or taken to the landfill in plastic bags. Pulling or mowing will not control the plant because roots resprout. However, a herbicide properly used in June or July can control poison ivy and its poisonous relatives.



CONFERENCE SLATED

The 44th annual Southern Forestry Conference, sponsored by Forest Farmers Association, will be held May 29-31, 1985.

Association officials said the announcement is being made early in order for members to mark their calendars for this annual event.



PEOPLE IN THE NEWS

Recent Forestry Commission changes in PERSONNEL...JAMES G. TURNER, patrolman, Haralson-Polk Unit, to ranger Haralson Unit...BOBBY C. McELWEE, assistant ranger, Haralson-Polk Unit to ranger Polk Unit...HENRY A. CANNON, patrolman, Clayton Unit, to ranger Whitfield Unit...CHARLES W. ROBINSON, assistant ranger, Johnson-Washington Unit...OWEN L. BROWN, patrolman, Montgomery Unit, to ranger Taylor Unit... HUBERT C. WATFORD, patrolman, Burke Unit, to ranger Worth Unit... WARREN N. KAVANAUGH, patrolman, Dougherty Unit, to ranger Baker-Mitchell Unit... H. A. STANFIELD, assistant ranger, Candler-Evans-Tattnall Unit, to



Walker Rivers



Sharon Dolliver

post vacated by Fontaine has been filled by WILLIAM S. (BILL) EDWARDS of Macon, who has worked on Georgia newspapers and has had considerable experience as a free lance writer...TOMMY HOGG, ranger, Houston-Pulaski Unit, retired August 1 after more than 30 years of service...TOMMY LOGGINS, formerly a forester specialist, has been named Assistant Chief, Forest Research Department, Macon Office...SONIA SCOTT of Macon, who came with the Commission in 1979 and served as accounting clerk in the Forest Administration Department, has transferred to the Education Department, where she has assumed the position of Exhibit Designer...ELLEN BARBEE, formerly secretary in the Land Reclamation Office of the Department of Natural Resources in Macon, is now receptionist



J. L. Stanford



Rip Fontaine

ranger Candler-Evans-Tattnall Unit... HOMER L. BENNETT, assistant ranger, Lamar-Pike-Spalding Unit, to ranger Lamar-Pike-Spalding Unit...THOMAS H. McINVALE, patrolman, Lamar-Pike-Spalding Unit, to ranger Upson Unit... KENNETH B. BELL, patrolman, Calhoun Unit to ranger Randolph-Terrell Unit... BEN W. KIRKLAND, assistant ranger, Calhoun-Clay Unit, to ranger Thomas Unit...GEORGE R. DAVIS, JR., patrolman, Ben Hill Unit, to ranger Irwin Unit... EARNEST G. HOWARD, patrolman, Houston-Pulaski Unit, to ranger, Houston-Pulaski Unit...JAMES L STANFORD, ranger, Clarke-Oconee Unit since 1978, to district ranger, Athens District...THOMAS R. (RIP) FONTAINE, JR., journalist in the Forest Education Department, retired August 1 to end a career that spanned more than a quarter of a century...The



Tammy Johnson



Roger Browning

for the Commission's Macon office. She replaces PAULA KAPLAN, who recently resigned...TAMMY JOHNSON of Dublin, a graduate of the School of Forest Resources, University of Georgia, has been named urban forester to serve in the Augusta area...KERRY THOMAS, forester and entomologist, resigned August 15 to enter into a forest consultant partnership in the Gainesville area. Thomas has been replaced by WALKER RIVERS, forester, who joined the Commission in 1979 and served as management forester in the Newnan District...SHARON N. DOLLIVER has joined the GFC staff at the Macon Office to serve as senior forester in the Management Department. She



Bill Edwards



Tommy Loggins

has previously worked with the Commission...ROGER BROWNING, who previously worked in the Protection Department, has returned to the Commission as RFD Specialist in that department.



H. L. Neal



Bob Lazenby

NEAL ASSUMES POST VACATED BY LAZENBY

Bob Lazenby, Field Supervisor of the Commission's Region One, resigned August 15 to enter into a forestry consultant business in the Gainesville area.

He is succeeded by H. L. Neal, who transferred from his post as McRae District Forester to accept the position.

Lazenby, a native of Tennessee, transferred from Gainesville, where he had served as district forester, to assume the field supervisory position.

He earned a degree in forestry at the University of Georgia and came with the Commission as a forest technician in 1971.

Lazenby and his wife, the former Miss Claudia Robbins of Tifton, have two children, Robyn and Robert. The family is active in the Methodist Church.

Neal, a graduate of the School of Forestry, University of Georgia, is a native of Laurens County. He came with the Commission as a reforestation assistant in 1971. He became district forester (District 9) in 1972.

the new field supervisor and his wife, the former Miss Laura Pearl Hardin, have one child, Brian Lee.

BRANAN IS NAMED REFORESTATION CHIEF

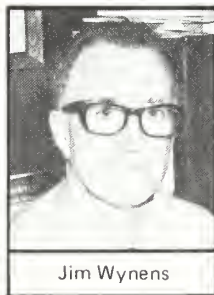
Jim Wynens, Chief of the Commission's Reforestation Department, retired August 1 to end a career of more than 30 years with the agency.

Wynens, a native of Hillsboro and a graduate of the University of Georgia, with degrees in forestry and horticulture, is succeeded by Johnny Branán, who had served as forester specialist in reforestation.

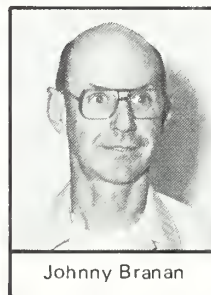
The retired department head served in the U. S. Coast Guard during World War II, with duty in the Asiatic-Pacific area. He worked as an industrial forester prior to his employment in the Commission.

Wynens and his wife, the former Miss Dorothy Heard of Cumming, have one daughter, Alisa. They are members of Highland Hills Baptist Church in Macon.

Branán, a native of Bibb County and a graduate of the University of Georgia, with a degree in forestry, has been with the Commission over 14 years. The newly appointed chief and his wife, the former Miss Polly Merritt, have a daughter, Cindy.



Jim Wynens



Johnny Branán

INDUSTRY OFFICIAL NAMED TO TOP ASSOCIATION POST

William F. Torrey, Jr., wood procurement manager for Brunswick Pulp Land Company, has been elected president of the 4000-member Georgia Forestry Association.

Torrey, along with other newly elected officers of the GFA, was installed at the Association's recent annual convention held at Jekyll Island.

Torrey, a native of Detroit, Michigan, has been with Brunswick Pulp since 1960. He is a former board of directors member for the Southern Forest Institute and presently serves on the board of the Georgia Agribusiness Council. He ascends to the GFA presidency from the position of vice president of the Association.

Other newly elected officers of the GFA are Dr. Sydney B. Kinne, III, manager of woodlands for the Georgia Kraft Company, Coosa, Georgia, vice president; and Dr. Albert A. Montgomery, senior research associate, College of Business, Georgia State University, treasurer. Eley C. Frazer, III, president of F&W Forestry Services, of Albany, Georgia, immediate past president of the Association, moves to the position of chairman of the board.

William Riley Wilkinson, III, has been named mill controller. Wilkinson graduated with an A.S. degree in Industrial Engineering and a B.S. in Industrial Management from Georgia Southern College, before joining Interstate Paper in 1972 as a computer operator.

Jerome Davis Butler has been named production planning and traffic superintendent. A graduate of Georgia Southern College with a B.B.A. in accounting, he joined Interstate in 1976 as a mill accountant.

Danny Lee Horne, Interstate's EDP Supervisor, has assumed additional responsibilities at the mill including systems design, programming, and computer operations. Horne, who attended Falls EDP School in Atlanta, has been with Interstate since 1973.

*

DR. WISEMAN NOW MAGAZINE EDITOR

Dr. Thomas L. Wiseman was recently named editor of Forest Farmer magazine, the trade publication located in Atlanta, and issued to owners and managers of more than 40 million acres of southern forest land.

The magazine is the official publication of Forest Farmers Association, which is made up primarily of private nonindustrial timberland owners in 15 southern states.

A native of Garibaldi, Ore., Wiseman attended Willamette University in Salem, Ore. and later graduated from Pennsylvania State University with a B.A. in English summa cum laude in the Honors Program. After winning a National Defense Education Act Fellowship, he went to Tulane University in New Orleans, where he received his M.A. and Ph.D. in

English.

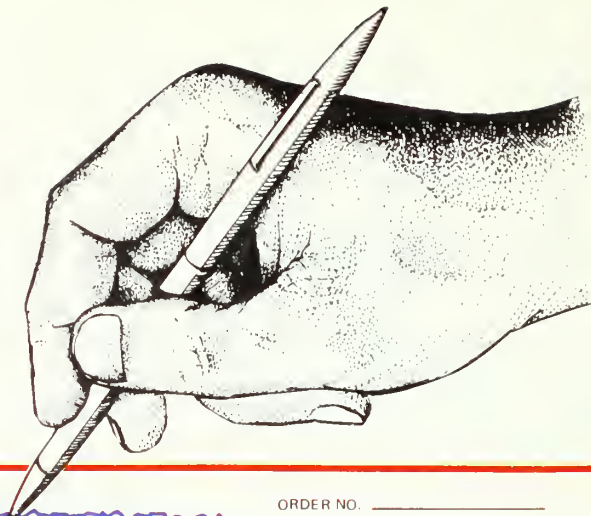
He began his editing career in 1977 with the U. S. Forest Service's Southern Forest Experiment Station in New Orleans. He joined Forest Farmers Association in 1979 as assistant editor and later became feature writer, then associate editor in 1982.

With Wiseman's promotion, B. Jack Warren becomes managing editor of Forest Farmer with overall responsibility for the magazine.

INTERSTATE PAPER PROMOTIONS TOLD

Interstate Paper Corp. has announced promotions for three employees at its Riceboro, Ga., kraft linerboard mill.

TOMORROW'S FORESTS BEGIN HERE!



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TYPE OF OWNERSHIP: (Check one)

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Does a horde of deer hunters present a forest wildfire hazard when free to roam through thousands of acres of powder dry woodlands? "Not in Greene County," answers Forest Ranger Brion Williams. "In fact," he said, "they are a real asset."

Ranger Williams should know. Greene County, with 82 percent of its 256,000 acres in forests, is said to be the state's number one deer hunting county.

"I would say that 99 percent of the deer hunters who come to our county are very cooperative," Williams said. "If they pass by a campfire that is not completely out, they will take time to make sure it is out."

To illustrate the cooperation his unit receives from hunters, the ranger said "on the opening days of the season this year, 400 deer were put in the freezers and that means a lot of hunters were in the woods. . .but we didn't have a single fire on that day."

Williams said he visits many of the hunt camps at the beginning of the season to seek the cooperation of the hunters. "I tell them that I hope they bag the biggest deer in the woods and that they enjoy their stay in Greene County, but I ask that they help us protect our forests from fire."

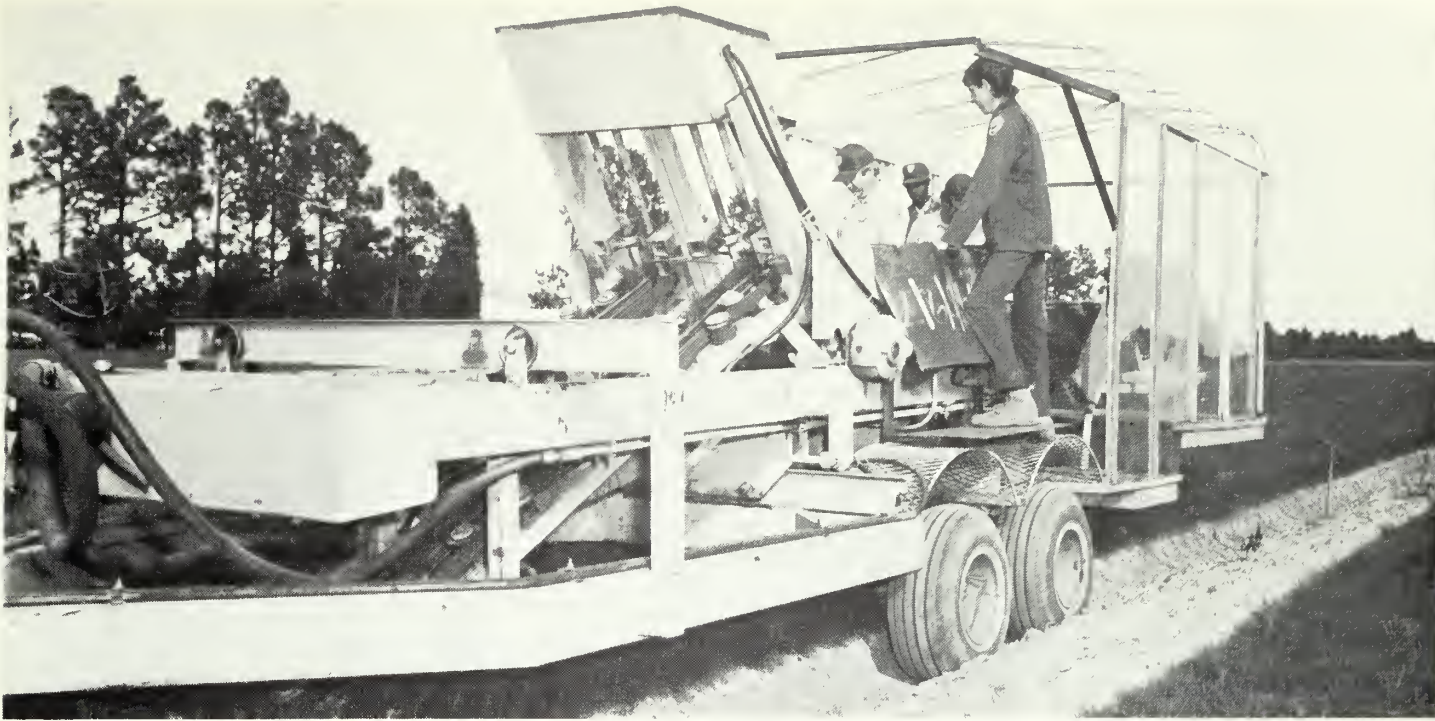
There is an estimated 200 hunt camps in the county and the ranger said he visits as many as possible during the season and has seen his appeal for caution pay off.

"Deer hunting is big business in Greene County," Williams said, "and I've talked to visiting hunters from here in Georgia and practically every other Southeastern state. They give us complete cooperation. He said they put out fires, they report fires and they are "a real asset."



Forest Ranger Brion Williams of the Commission's Greene County Unit discusses fire safety with two hunters he met on the trail to a hunt camp. He has seen his counseling pay off as thousands of hunters throughout the county have demonstrated cooperation.

COVER: The forests of Georgia provide much more than lumber, paper, fence posts and Christmas trees. The lowly pine cone, intricately made by nature, continues to be an ideal material for attractive Christmas wreaths.



A tree lifter, which pulls seedlings from the seed bed and conveys them to a packing platform, moves across a field of young

trees at the Commission's Morgan Nursery near Byron. It's a sure sign that another planting season has arrived.

BUMPER TREE HARVEST NOW UNDERWAY

Last call for seedlings.

The Commission in November began harvesting the bumper crop of 136 million young trees in its four nurseries to fill orders that started coming in from landowners in early July.

"Sales have been exceptionally good," said Johnny Branan, Chief of the Commission's Reforestation Department, "and our inventory of some species is now exhausted." He said slash and Virginia pine are in "fairly good supply at the moment, but landowners who have not yet ordered should do so at once to be assured of trees for the current planting season."

The crop this year is one of the largest ever grown in the state nurseries, and the recent completion of the new Shirley Nursery near Reidsville will facilitate ever higher production in the years to come, according to Branan.

Georgians last year planted more than 370,400 acres in trees, a new annual record in reforestation, and the campaign to plant more trees on marginal and other unproductive lands continues this year.

Committees are at work in almost every county in the state to urge landowners to cooperate in the campaign to keep the forestation and reforestation momentum that had been built in the initial drive in 1983.

The Commission has been joined by other agencies, forest industries, farm organizations and other groups in the effort to convince Georgia landowners that growing trees can be profitable and to

point out the excellent market conditions that exist in a state where 16 large pulp and paper mills consume a tremendous inventory of raw forest materials.

Order forms for trees from the state

nurseries are available at all Commission offices, the agency's headquarters in Macon, or at any county agent, and Soil Conservation or Agricultural Conservation Program offices.

Dentist Makes Things Happen

You might not expect a Riverdale dentist to purchase 400,000 tree seedlings from the Georgia Forestry Commission, but that's exactly what Dr. James S. McLelland has done over the past eight years. This year he expects to plant another 50,000 Georgia Forestry seedlings.

That's because Dr. McLelland is a tree farmer as well as a dentist. He knows that growing trees can be a rewarding profession, too.

Ever since he purchased his first 140 acres, McLelland has been planting trees. He manages his land well - building fire lanes, doing prescribed burning, thinning trees, preparing sites, and always replanting harvested timber.

Unlike those who "just wait" for their forest land to prosper, McLelland believes, "If you don't do something with it, you're really missing a tremendous potential." He draws the analogy to investing savings in a regular passbook account rather than in high-yielding certificates. It has always been his practice to "put in the best growing trees and as many as possible."

"I want to make something happen," he explains, and in forestry, unlike in real estate or other types of investments, "one can make something happen."

Purchasing and planting an average of 50,000 seedlings per year, McLelland has also used species other than pine, such as red cedar and bicolor lespedeza, to improve wildlife habitats on his forest land. For the dentist, his wife and three children, recreation is a major pleasure of the land, and he and his son enjoy hunting quail, turkey and deer.

McLelland believes that forest landowners who ignore their land are missing out. They can get more enjoyment, recreation and satisfaction from active tree farming.

Dentist/tree farmer James McLelland does.



The Thompson Mills Forest, used by the University of Georgia's School of Forestry as a teaching and research facility, has received an additional 151-acre donation of land.

Lenox T. Thornton of Roswell conveyed the tract to university president Fred C. Davidson. Thornton donated the original tract in 1980 for use as an off-campus field laboratory and establishment of arboretum of regional and national significance. The forest, comprised of almost 700 acres in Jackson County, is named after Thompson's maternal forebearers.

Dr. Claud Brown, university Alumni Foundation professor of forest resources, said one of the primary objectives of the forest management program is to have an arboretum containing all trees native to Georgia. Brown, who has played a vital role in establishing the forest, said 80 percent of the state's 214 native trees are already growing in the forest.

"Insofar as we are aware," Brown said, "not a single arboretum in the Southeast currently possesses a complete collection of native trees."

Brown said another high priority objective is the establishment of a pinetum (a collection of pines and other conifers) for teaching and research purposes. He emphasized that having

LABORATORY FOREST EXPANDED



many exotic or foreign pine species at this location for breeding experiments could lead to practical future use in Georgia.

Pines from as far away as the Himalayas, China and the Soviet Union have already been planted in the forest. Of the 92 species of pines in the world, Brown said 65 species are already growing in the forest.

"The pinetum provides researchers with an excellent opportunity to learn about genetic relationships and hybridization among pine species," Brown explained.

Although many pines growing in tropical and subtropical zones cannot survive frost or the occasional extreme cold in the Georgia Piedmont, researchers believe certain strains from higher tropical elevations can be successfully grown in Georgia. Research in the pinetum is expected to provide valuable information in this area.

(Continued on Page 9)

Tom Thornton, of Roswell, top photo, donor of the Thompson Mills Forest to the University of Georgia, examines old growth shortleaf pine. Included in the forest management program's development is an arboretum that will have all 214 species of Georgia's native trees. Thornton's recent donation added a 151-acre tract to the 700-acre forest. Below, a black cherry tree is identified on the "Red Trail" of Thompson Mills Forest. More than 70 species of woody plants may be seen along the trail.



Forestry personnel operate the Commission's new wood shingle machine. The photo below is another angle, which

shows the shingles being stacked in a packing frame for bundling.

THE RETURN OF THE YELLOW PINE SHINGLE

Settlers who built their cabins deep in the forests of Georgia had few roof problems. The hand hewn shingles they fashioned from resin-soaked heart pine seemed to last forever.

Even in modern times, some homeowners have managed to use durable heart pine to roof their homes, but in later years as the great virgin forests began to disappear, shingle mills found that the required heart pine was no longer available in sufficient quantity.

Now the Georgia Forestry Commission is attempting to bring back the pine shingle. This time, however, chemists will have to replace nature in providing the preservatives.

The Commission recently purchased a modern shingle machine to demonstrate the manufacture of shingles from yellow pine and thus further promote the wider use of the species. If successful, the native pine of Georgia could conceivably replace the red cedar of California as a desirable species for shingle production.

Now that housing starts are showing an increase in Georgia and the South, and rustic architectural styles are popular among new homeowners, Commission officials feel that this is an opportune time to introduce the project.

The equipment installed at the Forestry Center in Macon consists of a shingle machine and not a complete mill. Cants

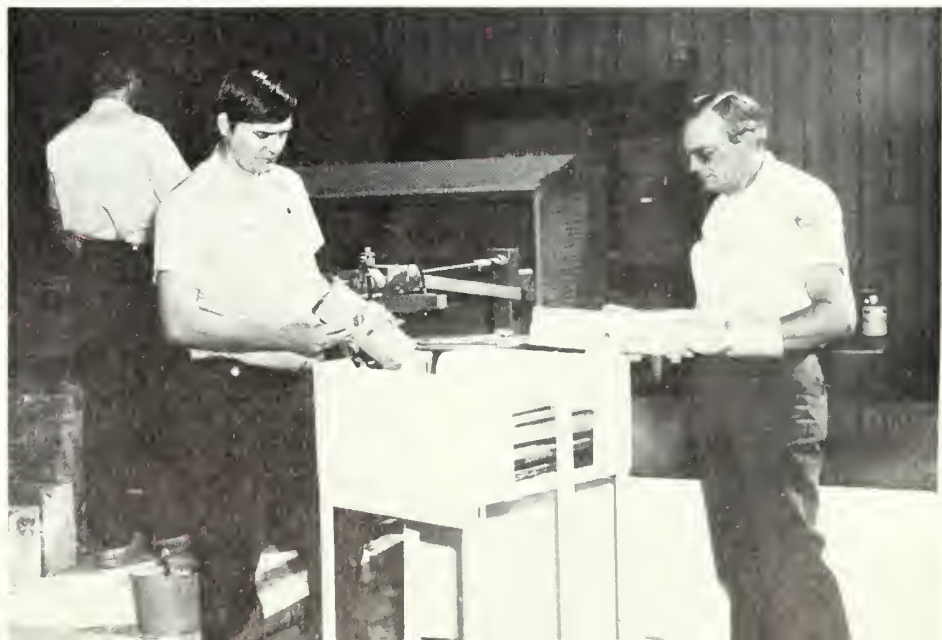
are produced and blocked into 18-inch lengths at another location and brought to the machine for the final manufacturing phase.

The shingles are dipped to retard surface stains and then bundled and hauled to a preservative plant for pressure treatment.

The Commission plans to roof all of

its future buildings with the new wood shingles and re-roof some existing structures. There are also plans to experiment with yellow poplar, sweet gum and some other species.

Building contractors, materials manufacturers and others are invited to contact the Commission's Forest Research Department for further information.





William Bartram's painting of the Franklinia Alatamaha is in the British Museum at London.

GEORGIA'S MYSTERY TREE

The Search Continues

For more than 15 years, Dr. John R. Bozeman (botanist) has been looking for a lost tree - the mysterious Franklinia alatamaha. For a botanist, finding this tree would be similar to an ornithologist finding a nest of passenger pigeons.

It's not a case of a life form having disappeared from the face of the earth; you can order a franklinia from practically any modern nursery that could not be distinguished from the one William Bartram discovered in 1765 on an expedition through Georgia.

However, Bartram's discovery created a mystery that lingers on after 200 years. After Bartram's discovery, botanists recorded the presence of the tree until 1790. That was the last reliable sighting. Since then, botanists have scoured Georgia sand ridges, pine barrens and swamps in search of the tree; but not one franklinia has been found in its natural habitat.

Dr. Bozeman, assistant chief of marshes and resources for the Georgia Department of Natural Resources, said the small area of South Georgia where Bartram recorded his discovery is the only place in the world the franklinia has been found in its natural environment.

WIDELY CULTIVATED

"What this means," Dr. Bozeman said, "is that although the tree is widely distributed

in a cultivated state throughout the Southeastern United States, Southeast Asia and parts of Europe - all franklinia trees now in existence must be presumed to be descendants from cuttings of the cluster discovered by Bartram more than 200 years ago."

Named for Benjamin Franklin, the franklinia is also called the "franklin tree" and the "lost camellia." Considering all the intensive searching, one might imagine the franklinia as a reclusive little plant secluding itself from throngs of eager botanists. Not so. It's a hardy, flowering tree that can reach 30 feet in height. A member of the camellia family, it's considered unusually beautiful.

However, the franklinia's beauty presents a problem for searchers; it can be easily confused with the gordonia (in bloom) or loblolly bay, unless the exact configuration of its fruit and blossoms are examined carefully. The large, snow-white blossoms may appear as early as April and last until the first frost. However, the most significant distinction is that the franklinia loses its leaves in the fall; the gordonia is an evergreen.

One thing is for certain; franklinia flowers in full bloom will not go unnoticed. James Audubon, who includes a picture of it in one of his bird books, describes it as "one of the most beautiful of our Southern flowers."

This striking beauty was probably

what initially attracted Bartram's attention. Bartram's interest becomes more significant when his background is considered. He was America's first native-born, artist-naturalist. A resident of Philadelphia, he became financially secure enough to pursue his interests as a naturalist and made a botanical excursion through Georgia, Florida and Carolina. The purpose of this expedition was to collect objects of natural history (including botanical specimens) for a wealthy London patron. In Bartram's day, it was fashionable on British estates to have various plants from the "New World."

In his book "Travels," Bartram describes his impression of the franklinia. "In the course of these excursions and researches, I had the opportunity of observing the new flowering shrub, resembling the Gordonia, in perfect bloom as well as bearing ripe fruit. It is a flowering tree of the first order of beauty and fragrance of blossoms."

Bartram describes the franklinia in technical detail, then comments on the unusual nature of the tree:

UNUSUAL NATURE

"This very curious tree was first taken notice of about 10 or 12 years ago, at this place, when I attended my father (John Bartram) on a botanical excursion;

(Continued on Page 14)



Senator Trulock and District Forester Paul Bledsoe check the growth of young pines planted where an unproductive hardwood stand once occupied the land. The Commission forester, with offices in Camilla, said the personnel in his district work closely with Senator Trulock and other landowners in the promotion of good forestry practices. The elimination of hardwood is one of the practices that is opening up more productive land in the rich pine belt of South Georgia.

The helicopter made runs back and forth above the 85-acre forest tract in Decatur County, leaving a trail of chemical spray that spelled doom to oak, gum and other unwanted hardwoods that had long dominated the land.

Today, vigorous young pines peep above the tangle of fallen hardwood. Another profitable forest is born.

It is an example of modern forest management practices that employ knowledge, tools and chemicals that were not available a brief generation ago.

The tract is the property of State

MODERN MANAGEMENT ELIMINATES HARDWOOD

Senator Paul Trulock, who retains consultant forester Mayo Livingston to manage his 1,500 acres of pine lands.

The senator, who is also engaged in a farm seed and supply business with offices in Whigham in Grady County, is one of many progressive landowners across the state who realize the true value of converting unproductive land into valuable forests.

In another tract, hardwoods were killed by chemical injection and a third

tract in his holdings was once a virtual swampland, but construction of a mile-long drainage ditch has changed the site index and transformed the property into one of the fastest growing pine stands in the area.

Although the senator has some land in peanuts, soybeans and corn, he indicated that more and more of his acreage is going into forests as profits in row crop cultivation continue to dwindle.



At left, Senator Trulock examines a fast growing pine that is just three years old. The tract is in a fertile, low lying area that was greatly improved by installation of a drainage ditch. At right, the landowner stands in a forest his father planted years ago - the type of forest he plans to develop on other lands as he continues the hardwood eradication program.





ACID RAIN

During the past two years, the effect of acid rain on the American forest industry has become an increasingly controversial issue. However, in Georgia, there is no evidence that forests anywhere in the state have been damaged by acid rain.

Although there is no evidence of damage, the Georgia Forestry Commission is monitoring the situation closely to protect the state's \$6.6 billion forest industry (employing 74,000 workers) from any possible threat. The Georgia Forestry Commission, the Environmental Protection Division of the Department of Natural Resources, the University of Georgia's School of Forest Resources and the U.S. Forest Service Southeastern Experiment Station have combined efforts through the Governor's Task Force on Acid Rain. The goal of the task force is to monitor and analyze the amount of acid rain fallout and its effects upon Georgia's environment.

Commission Director John Mixon was recently appointed by Governor Joe Frank Harris to serve on the task force. Other members include Leonard Ledbetter, Commissioner of Natural Resources; Dr. Klaus Steinbeck, School of Forest Resources, University of Georgia; and John Hendee, U.S. Forest Service.

The governor reflected his concern with the Acid Rain problem when he said, "Although there is no conclusive evidence to show that acid rain is impacting our forests, water quality, fish or

aquatic organisms, it is important that Georgia take all possible steps to protect its natural economic resources."

WHAT IS ACID RAIN?

Acidity is measured on the pH scale which runs from 0 to 14, with a value of 7 being neutral. Substances having measurements above 7 are alkaline, while those below 7 are acidic. Unpolluted rainfall has an acidity ranging from 4.8 to 5.6 depending on the area, climate and other factors.

PROBLEM IS NOT EVIDENT IN GEORGIA, BUT MONITORING IS UNDERWAY

Acid rain results from the burning of fossil fuels. Sulfur dioxide and compounds from burning fuel rise into the atmosphere and fall back to earth in rain, snow or fog; this acid deposition may also fall back to earth in dry form. Sometimes, the acid deposition in its various

forms is carried hundreds of miles by winds before it falls to earth.

Three-fourths of the total acid falling on the eastern United States originates in sulfur emissions. Sources of emissions include electric utilities and heavy industries and automobiles. Georgia's power plants and large industries burn coal containing about two percent sulfur. Georgia's air quality regulations allow the burning of coal with up to three percent sulfur content; this compares favorably with many midwestern states allowed to burn coal having four to six percent. Georgia's plants are also newer than many of those in the Midwest and Northeast, with new and better controls.

Many natural sources such as volcanoes, forest fires, lightning and the decomposition of plants and animals have always contributed acid to soils and water. On a global basis, natural sources add about the same amount of sulfur to the atmosphere as do human sources. However, in the industrial regions of North America and Europe, human sources account for about 95 percent of the yearly sulfur input.

UNEXPLAINED FOREST DAMAGE

Although Europe has experienced extensive forest deterioration from unexplained causes, U. S. forests have shown a comparatively small amount of damage. However, the high elevation forests of New England is one area indicating some problems. This region has shown unusual

dieback of red spruce and Fraser fir during the last few years. The New England dieback, show similarities to diebacks in parts of Europe. Since both areas receive large amounts of acid deposition and other air pollution, possible connections are being investigated.

Even more recently, the spruce-fir ecosystems of the southern Appalachian Mountains have revealed dieback and decline of vegetation similar to that found in the northeastern United States and Europe. The incidence of unexplained damage closest to Georgia has occurred on Mount Mitchell, North Carolina, the highest peak in eastern America. A 1983 survey found the red spruce at higher altitudes to be in a state of decline. Defoliation, growth reduction and unsuccessful reproduction were observed. Trees at lower elevations on Mount Mitchell (below 6350 feet) were found to be healthy and vigorous.

Authorities from North Carolina State University report that no single cause can explain the Mount Mitchell situation. Since there has been no drought in the area for 53 years, drought conditions cannot be a contributing factor.

Reports from North Carolina State University emphasize that many various possibilities must be investigated before conclusions are reached. Possible causes include insects, disease, climatic factors, soil changes, stand dynamics, and it is also possible that a combination of all or part of these factors is causing the damage.

In Georgia, the Environmental Protection Division and the University of Georgia have conducted research on acid rain. According to the publication, *Acid Rain - The Georgia Situation*, the most common pH level was 4.5. Even though this measurement indicates acidity is increasing, no problems have been confirmed.

FUTURE DIRECTIONS FOR GEORGIA

These agencies are establishing five permanent stations for long term monitoring. There will be two in north Georgia, two in the piedmont and one in south Georgia. At each station, data on existing vegetation will be collected, precipitation and soil samples will be collected and analyzed, and near surface wells will be installed to monitor ground water. The major emphasis will be on monitoring changes of pH level in precipitation and

soil and ground water.

Government agencies, industry groups and others are aware of potential threats to the state's forests and are committed to continuing research of acid rain and related factors. Unquestionably, more study will be helpful in resolving the uncertainties about the effects of acid rain on Georgia's environment.

Director John Mixon of the Georgia Forestry Commission represented Governor Joe Frank Harris and the State of Georgia on a recent European Acid Rain Study Tour.

The governor said Georgia, one of nine states selected by the National Governors Association to participate in the study, "is the nation's leader in the production of pulp and paper and is one of the top lumber-producing states...we must be sensitive to any possible adverse effects that could potentially result in decreased growth of our forests."

Mixon and representatives of the other eight states were briefed in Washington by Administrator Ruckershaus of the Environmental Protection Agency and several scientists prior to their departure for London, where they met with British government, industry and environmental groups.

They later visited Stuttgart, Germany, where the group toured the Black Forest and other study sites and research facilities.

The tour was concluded in Brussels, Belgium, where they met with officials of the Commission of the European Communities (Common Market) and the European Parliament.

Director Mixon said he is presenting a report on the tour to the governor.



(Continued from Page 4)

Those involved with development and management of the Thompson Mills Forest consider the extreme diversity of sites to be one of the most promising features; this diversity offers opportunities for a variety of research projects. The highest knolls exceed 1,000 feet. These knolls have large granite outcrops sloping down to flood plains and natural swamps on the Mulberry River.

"There are four distinct soil types that present a wide diversity of habitats for trees adapted to dry, moist, or flooded environments," Brown said in describing the forest as "invaluable" to botanists and foresters.

Approximately 10 acres of the forest is set aside for a memorial garden for Thornton's mother. This area will be known as the Eva Thompson Thornton Gardens. The memorial gardens will be adjacent to the arboretum.

FOOT TRAILS

As part of the arboretum development, four foot trails are being established to conform to the natural features of the land. Each trail is marked by color coded tree identification labels, and a list of woody species found along each trail are identified in color coded listings.

RED TRAIL

The Red Trail begins at the top of a knoll extending through slopes of oaks, hickories and maples. It then turns downward through an old grove of shortleaf pines to a small spring branch where rare shrubs and ferns grow. Finally, the trail returns to a lower edge of the garden where numerous species of large hardwoods thrive. Over 70 woody plant species can be seen along the Red Trail. Leisure walking time is 30 minutes.

YELLOW TRAIL

The Yellow Trail begins at the lower section of the garden and leads downward to lower slopes and spring branches where a prolific array of bottomland hardwoods (beech, black tupelo, maple, birch, yellow poplar, northern red oaks) thrive in a beautiful setting. The trail then turns up to granitic outcrops and a dry ridge covered by blackjack oaks, hickories and green ash. Lower plants (cacti, lichens, ferns and mosses) also cover these granitic soils. Finally, the trail slopes to a scenic end in an area of mineral springs. The Yellow Trail includes over 75 species of woody plants. Walking time is 45 minutes.



New Directory Lists Consultant Foresters

A new directory of registered consulting foresters in Georgia has been compiled by the Commission's Forest Management Department and is available free to interested persons.

The directory lists 111 consultants, their mailing addresses, phone numbers, the areas of the state they serve and a code defining the various services they offer.

The services include timber cruising, damage and trespass appraisals, forest litigation, forest management plans, resource investigations and economic studies, investment counseling, land acquisition, recreational land development, real estate brokerage, surveying, taxes, timber loans, timber marking, timber sales environmental impact studies and vendor services, including prescribed burning, site preparation, timber stand improvement and tree planting.

Some of the consultants also provide services such as kudzu control, herbicide distribution, Christmas tree advice, aerial surveys, wildlife management, shade tree appraisals and pesticide applications.

The listing also denotes foresters who are members of the Society of American Foresters and the Association of Consulting Foresters. Registered land surveyors are also noted.

For a copy of the directory, contact any Forestry Commission county unit or district office or write to: Forest Management Department, Georgia Forestry Commission, Macon, Georgia 31298, or telephone (912)744-3241.

25,000 Attend Pine Festival

The 12th annual Million Pines Arts and Craft Festival was held in Soperton recently, and as promised in the promotional material for the event, it was "bigger and better" than ever!

Officials reported that more than 25,000 persons passed through the gates during the two-day festival, which featured 209 booths offering everything from watercolor landscapes and homemade quilts to wooden toys and apple cider.

There was also a salute to Smokey the Bear, who is celebrating his 40th birthday. Smokey was featured on a parade float entered by the Commission's Treutlen County Forestry Unit.

A blacksmith was on hand to show off his skills and juice was sold at a mule-powered sugar cane grinding mill. Herb Bridges, author and lecturer, showed his collection of *Gone With the Wind* memorabilia, said to be the largest collection of its kind in the world.

Miss Georgia Forestry, Kathy Usry of Augusta, assisted Smokey in cutting his birthday cake and all children 12 and younger were invited to help eat the huge five-tiered cake.

Special entertainment for the celebration was

Artist Harry Rossoll, who was Smokey's artist until his retirement in 1971. He demonstrated his talents during both days of the festival. Mike Fuller, a Macon magician, and several gospel singing groups and clogging clubs were also on hand to entertain the thousands who crowded the festival grounds.



Great throngs gathered from throughout Georgia and bordering states to attend one of the best organized forestry festivals in the state.



Forester Eley C. Frazer III, president of an Albany-based forestry service company, stands in a young planted stand of longleaf pine, a species which is becoming more of a common sight in the coastal plains of Georgia and the Southeast.

Longleaf Revival Predicted

The historic longleaf pine, most majestic and stately of all Southern pines, has been threatened with extinction as a major commercial tree but may be making a comeback in Georgia and the Southeast.

Once the dominant species in the vast virgin forests of the Southeastern Coastal Plain, the longleaf pine may have covered million acres when the first settlers began pushing inland from the Atlantic Coast in the 16th and 17th centuries.

Land clearing and logging reduced longleaf forests to less than 10 million acres today, according to the reliable estimates.

But the long decline of the longleaf may be ending. Eley C. Frazer III, a well known Georgia Forester who heads F&W Forestry Services, Inc., of Albany, believes a renaissance may be in the making for the tall longleaf, which often grows to a height of an eight or nine story building.

"Because it has a reputation of being difficult to plant, tending to delay in height growth for several years, and an infrequency of seed drops, the longleaf pine has been replaced on much of the acreage it originally occupied by pines of other species," Frazer said.

Longleaf would have done better than slash and loblolly on some sites, he said.

Frazer, who is a board member of the Georgia Forestry Commission and board chairman of the Georgia Forestry Association, offers the following advice

to landowners considering planting longleaf pine:

1. Determine in consultation with a knowledgeable forester or the U.S. Soil Conservation Service if the site is adaptable to longleaf. Longleaf grows on a wide variety of soils especially the soils that are more droughty. It is well adapted to the courser sands of some Southern sites because it puts down a tap root that reaches deeper into the earth for moisture and food.

2. Properly prepare the site in such a way that vegetative competition will be virtually eliminated during the first and second year after planting of the seedling.

3. Planting must be done carefully with a mechanical tree planter so that the bud of the longleaf seedling is placed at the ground line which will generally be below the berm. (The berm is the mound of dirt left by the planter packing wheels.)

4. Care must be taken to see that the roots are carefully inserted into the soil. This will require that the planter be run at a slower speed than when planting loblolly or slash.

5. If seedlings are to be planted during the coming 1984-85 season, orders should be placed promptly with the Georgia Forestry Commission. Supplies are limited and orders are filled on a first-come, first serve basis. For further information contact local Georgia Forestry Commission offices or state headquarters at Macon.

Guidelines for Managing Pine Bark Beetles in Georgia - A handy, loose leaf hardcover manual that provides guidelines for predicting, evaluating and preventing bark beetle outbreaks. Authored by Terry Price, Georgia Forestry Commission entomologist, C. Karpinski, Jr., forester, Clemson University; R. L. Heddon, Professor of Forest Entomology, Clemson; and R. P. Belanger, Principal Silviculturist, U. S. Forest Service. A limited number of copies are available to resource managers interested in the management of bark beetles.



Management of Southern Pine Forests for Cattle Production - This publication by the U. S. Forest Service points out that use of forests in the South for grazing has changed drastically in the past 30 years, but some grazing continues to exist. Tells how to combine cattle and timber production and achieve other multiple-use goals on certain lands. Query U. S. Forest Service, Southern Region, for cost. Publication is General Report R8-GR4.



How to Make a Dibble - Materials list, dimensions and instructions for making a dibble, a simple tool used in manually planting tree seedlings. Leaflet also illustrates proper planting procedures. Free. Send request to Forest Education Department, Georgia Forestry Commission, P. O. Box 819, Macon, Georgia 31298-4599.



Georgia Forestry Commission Opportunities - Pamphlets on requirements, duties, training of tower operators and forest patrolmen and patrolwomen. When vacancies exist, positions open to all qualifying persons, regardless of sex, color, national origin. Free. Send request to Forest Education Department, Georgia Forestry Commission, P. O. Box 819, Macon, Georgia 31298-4599.



The Georgia Forestry Commission has entered into agreement with the Georgia Department of Defense for use of the Army Guard CH54 helicopter in case of emergency forest fire situations requiring massive water drops.

The CH54 helicopter has two 4500 horse power jet engines providing it with the tremendous capability of lifting a 2,000 gallon water bucket. Commonly called "sky crane," the heavy duty army helicopter is especially designed for hauling cargo.

Although the Georgia Forestry Commission has three conventional helicopters for suppressing forest fires, they seem small by comparison. The Commission's helicopters are equipped with 250 gallon water buckets, which are considered highly effective in combating forest fires.

However, seeing the need to protect Georgia's \$6.6 billion forest industry in emergency situations, Commission authorities obtained the services of the special helicopter through an agreement with the Georgia National Guard. According to guidelines established in the agreement, the Commission notifies the Georgia Emergency Management Agency (GEMA) in an emergency situation; GEMA then contacts the Department of Defense and the CH54 helicopter is dispatched immediately to any required area of the state.

Commission authorities coordinating this special project state that several possible situations could create a need to use the CH54 in addition to their own aircraft. However, the most likely possible causes are multiple fires or a single fire increasing to a size that threatens potential disaster.

The CH54 is stationed at the 1160th TC Army National Guard Unit, Hunter Air Force Base in Savannah, Georgia. The effectiveness of the craft was recently demonstrated for all parties involved in the project. Demonstrations were conducted at Fort Stewart (Hinesville, GA) where Army personnel set controlled fires which the CH54 rapidly extinguished.

Operating procedure for the CH54 in a fire suppression situation is usually to drop the 2,000 gallon water load at 200 feet or less; this altitude provides the optimum water dispersal without evaporation. The bucket can be adjusted to regulate the amount of water released. Depending on speed of the CH54 and adjustment of the water release, the 2,000 gallons of water can be effectively spread over an area covering from one-fourth to one-half mile.

As observers of the demonstration noted, when a water drop is made from the CH54 at the head of a fire (part of the fire that is spreading with the wind and generally doing the most damage), the extinguishing power appears incredible.

The CH54 is a highly sophisticated aircraft, requiring a minimum crew of three: pilot, copilot, and crew chief. Commission authorities emphasize that in emergency situations, the CH54 could be one of Georgia's most valuable means of protecting the state's vast forest resource.

Photos: Army explains function of the big helicopter to Commission personnel. Aircraft is ready for takeoff with big water container attached to towing cables. After water is scooped up from a nearby source, copter makes the delivery over burning forest.



Harold Pace, of Cordele, and a helper have loaded 350 bales of pine straw for delivery to a new housing development project in Powder Springs. Pace is one of many straw dealers who carry out a small operation with limited personnel and equipment.

Straw Harvest: Profit Or Loss

Is it profitable to harvest and sell pine straw from your forest tract?

That is a question many landowners are asking as they see an increased number of trucks and trailers headed for the market with bales of straw piled high.

"Yes, it can be profitable," said Druid Preston, Chief of Forest Management, Georgia Forestry Commission, "but only under certain conditions."

He said "the answer is no" if the removal of this cover from the forest floor is going to deprive the trees of needed moisture.

Although the widespread sale of straw has just started in recent years, Preston said the practice is not new. "I remember seeing straw marketed in the early 1940's," he said, "and back then it was primarily longleaf pine, but over the years that species has given way to slash and loblolly as dominant trees in our forests."

Preston contended that straw can be added to the long list of profitable products from the forests, and at the same time rid the tract from a buildup of fuel that would feed a potential wildfire, if the soil texture and site would not require excessive moisture.

Straw harvesting is relatively easy, he said, in pine plantations where trees are planted in rows with plenty of room for rakes to move between the trees.

In pointing out the disadvantages, the management chief said trees growing on sandy and certain other light soils need retention of moisture and when the for-

est floor is robbed of this litter, the tree growth rate declines. In times of severe drought, he said, the removal of the mat of straw can be crucial.

Preston said in natural stands there is some danger of raking equipment, "skinning the trees, thus leaving them open to insects and diseases." It was also pointed out that harvesting straw in natural stands would call for more manual labor and "that might make the operation too labor intensive to be profitable."

Landowners who need help in making a decision concerning sale of straw from their property are urged to contact the nearest Commission district office and have a forester take a look at their stand, Preston said.

Young Forester Award Given

Michael R. Risher, a 16-year-old Clarke County high school senior, has won the second annual F & W Young Forester of the Year Award for outstand-

Slime Flux Seen On Georgia Oaks

If you prize the stately oaks and elms on your lawn or other property, now is the time to make a close inspection of your trees. Slime flux, a disease caused from bacterial infections, has been observed on those two species in several sections of the state.

Terry Price, Commission entomologist said the disease, which is seldom fatal, indicates that the tree is in need of attention. Periodic prunings and fertilization are the best control practices, Price pointed out.

He cited spring, early summer and fall as periods of the year when the infection is most noticeable. Sap may be seen dripping from cracks and crevices in the bark. It is especially prevalent following periods of consistent rainfall.

The entomologist emphasized that a "V" crotch or old wound is the location emitting the foul smelling sap. The liquid attracts numerous species of insects such as yellow jackets, flies, fungus gnats and beetles, bees, ants, moths and earwigs.

Price added that trees infected with slime flux "may not ooze sap every year." Usually, a tree will flux heavily for one or two seasons and then slow down considerably, he said. However, once fluxing begins, it may continue intermittently throughout the life of the tree.

The sap is toxic to the bark, grass and shrubs. To combat this effect, drain pipes can be installed to lower the internal pressure caused by the gases that are produced by the bacteria. The pipes enable the homeowner to drain the excess fluid away from the tree trunk into a catch basin.

For further information on the slime flux disease, contact your local Georgia Forestry Commission office.

ing achievement in Georgia 4-H Club forestry activities.

Risher was selected by a panel of judges from the University of Georgia Cooperative Extension Service, which directs 4-H activities in the state. The award carries a \$500 college scholarship.

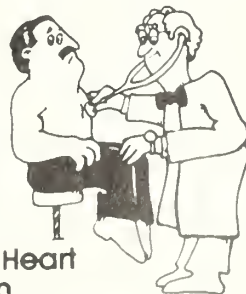
Eley C. Frazer, III, president of Albany-based F & W Forestry Services, Inc., which established the award and scholarship, presented Risher with a plaque commemorating the award.

Risher was also selected the winner of the statewide 4-H forestry competition and represented Georgia at the national 4-H Congress at Chicago in November.



Have regular medical check-ups.

American Heart Association



Forest Landowners Seminar Planned

Forest landowners in the Atlanta area can find out how to make their forest lands profitable at a seminar in Atlanta February 16 at the Georgia-Pacific Building.

The Southeastern Forest Landowner Seminar is designed for Atlanta area absentee landowners by the Georgia Extension Service forest resources department. Speakers from the Extension Services of five states, the Georgia Forestry Commission, the University of Georgia, Wagner Southern Forest Investments, Inc., U.S. Forest Service and other organizations will offer speeches and panel discussions.

The morning session will cover long-term trends, tax advantages and rates of return, selection of property and financial and technical assistance. In the afternoon, speakers will explain the basics of forest management, regeneration alternatives, integrating timber and wildlife, tips on selling timber and timber taxes.

The seminar will begin with registration at 9 a.m. and concludes at 4 p.m. It is sponsored by the Cooperative Extension Services of Alabama, Florida, Georgia, South Carolina and Tennessee, state forestry organizations in those states, the Georgia-Pacific Cooperation, the Georgia Forestry Association, Forest Farmer, Georgia Association of Consulting Foresters and the Southern Forest Institute.

For further information, contact your county Extension office or Gae Broadwater, Conference Coordinator, Rural Development Center, P.O. Box 1209, Tifton, GA 31793 or call her at (912) 386-3416.

Former Richmond Ranger Deceased

Retired Forest Ranger T. M. Strickland of Richmond County passed away November 18 following a lengthy illness and services were held at Fleming Baptist Church in Augusta.

Sympathy is extended to Mrs. Strickland and other survivors.

Strickland is remembered as one of the most innovative forest rangers in the state during his long career. He initiated many programs to help promote forestry in the Augusta area and continued to work with the current Richmond County ranger, Harold Smith, on various projects long after his retirement.

(Continued from Page 6)

but, it being late of autumn, we could form no opinion to what class or tribe it belonged."

"We never saw it grow any other place, nor have I ever seen it growing wild, in all my travels, from Pennsylvania to Point Coupe, on the banks of the Mississippi, which must be allowed a very singular and unaccountable circumstance; at this place, there are two or three acres of ground where it grows plentifully."

Later in his notebooks, Bartram pointed out something that compounds the mystery:

"And what is very singular, it is so hardy as to stand in an often exposed situation, in the Garden of Pennsylvania without suffering least injury from our most severe frosts, when very few plants from that country will do in our green-houses."

Today, Bozeman echoes Bartram's views, emphasizing that the hardy franklinia could have survived numerous planting and logging operations by continuing to sprout from the roots.

So, if the tree is such a hardy specimen, why has it been found in its natural environment in only one tiny cluster occupying a few acres?

ONE THEORY

Nobody knows for sure, but one interesting theory is offered by Gayther L. Plummer, professor of botany at the University of Georgia. In his published writing titled "Franklinia Alatomaha Bartram Ex Marshall: The Lost Gordonia (Theaceae)," Plummer suggests that the franklinia was introduced from Asia as part of the tea trade. Although there is no proof of this, Plummer makes a good case for his theory.

Dr. Bozeman, who has a Ph.D. and master's degree in botany, from the University of North Carolina, first became interested in the franklinia while in graduate school. "I saw a newspaper article, got a map, and started doing research," he said.

The map Bozeman obtained years ago is narrowed to a six-square mile section near Fort Barrington on the Altamaha River. This is the exact location where Bartram discovered the cluster of franklinia trees.

15-YEAR SEARCH

This six-mile square area has become a major part of the lives of Bozeman and Dr. George Rogers, a historical geographer and amateur botanist from Statesboro. Rogers has shared Bozeman's interest and search efforts for the past 15 years. However, they are not alone.

Finding the franklinia in its native habitat seems to have become one of botany's most desired quests. The interest is so intense that the possibility of some-

one attempting to fake a discovery cannot be ignored. Bozeman and Rogers agree that a fake is possible, but very unlikely.

"It's not just a matter of finding one tree," Bozeman said. "There would have to be an actual colony of them with appropriate age distribution. This would not be simple to fake." He added there are also numerous other aspects of authenticity that would have to be established.

Another question that cannot be avoided is - what is so important about finding this tree?

Bozeman answers this first from a scientific viewpoint: He explains the franklinia in its natural habitat could reveal valuable, strengthening characteristics that a cultivated tree would not show; because the more inbred a creation of nature becomes, the more dependent on man it becomes.

EVERY SPECIES VALUABLE

Approaching the question from the standpoint of basic values, Bozeman's answer is different. "We want to find the franklinia because every living species is valuable - adding to our diversity and perception of the world around us. Our world is enhanced by diversity. The loss of any living species is our loss."

Bozeman admits that at first he wanted to find the franklinia for the fun of it and whatever prestige it might bring. Now, as his answers reflect, the search has evolved into a thing in itself, related to a wide spectrum of academic and ecological value.

So Bozeman and Rogers wait for their weekends - that's when they search - and ride the unpaved, twisting sand ridge roads. They reconstruct earlier searches and plan their hikes through the scrub oak country and swamps accordingly.

After so many years of searching, Bozeman sums up his feelings. "Some people might think I'm egotistical to think I could find it," he said. "But any way you look at it, it's a great way to take a field trip."

Tree Farm Named

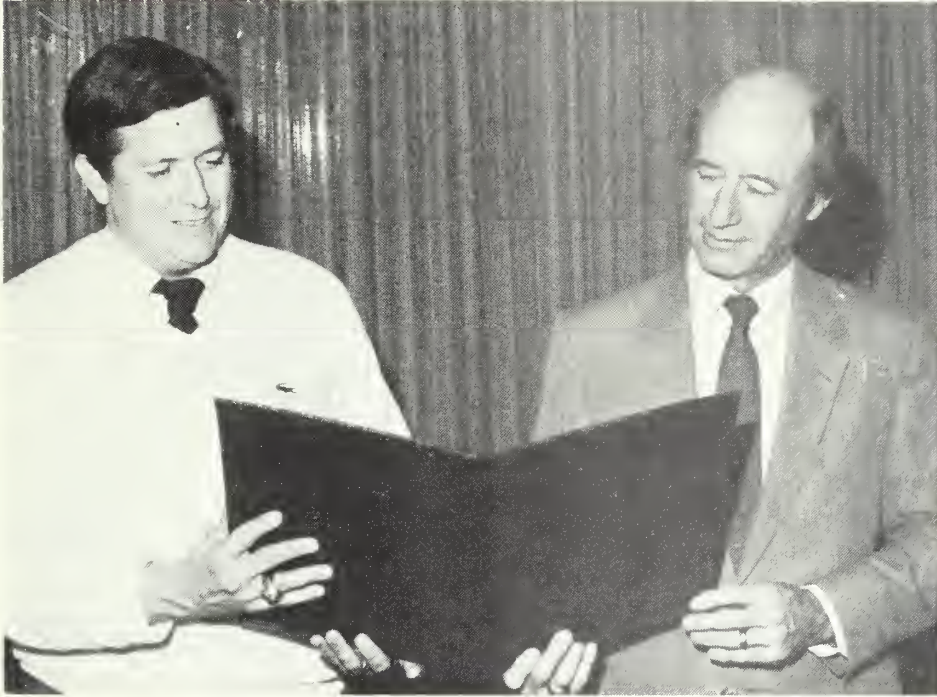
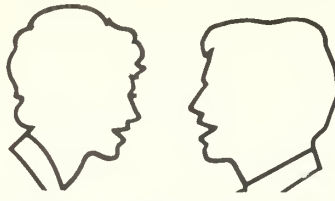
The farm of Richard and Ruth Heck has been selected as the 1984 National Tree Farm of the Year.

The Heck's 145-acre farm, chosen over 52,000 private tree farms, lies in the Ohio River Valley of Indiana. A judging committee composed of 23 top forestry experts assisted the American Forest Institute (AFI) in making the selection.

Henry Owens of Chattooga County was selected as Georgia's Tree Farmer of the Year and was featured in the June issue of Georgia Forestry. Owens impressed the judges with management techniques used on his 700 acres of forests in four counties.

PEOPLE

IN THE NEWS



Fred Allen, left, Chief of Forest Research, and John Mixon, director, Georgia Forestry Commission, admire a national plaque presented to the Commission for its role in innovative use of wood as an energy source.

Commission Wins National Award

The Georgia Forestry Commission was recently presented the National Award for Energy Innovation by the U. S. Department of Energy in ceremonies in Washington, D.C.

The award, presented by Secretary of Energy Don Hodel and Under Secretary Pat Collins, was accepted on behalf of the Commission by Fred Allen, Chief of Forest Research.

As part of the Department of Energy's Technology Transfer 80's Program, state and territorial energy offices were asked to submit 10 outstanding energy innovative projects from their jurisdiction to an interagency federal review panel for consideration for a national award.

The Commission submitted the Wood as an Alternative Fuel Source project in the competition.

Nearly 1000 applications were received and the most outstanding were forwarded to the Technology Transfer 80's Program. This is an ongoing program at the Department of Energy which strives to transfer research and development accomplishments to the private sector as early as possible. The scope of the programs submitted ranged from photo-

voltaic projects to energy-efficient land tillage techniques.

Four hundred attendees from across the country attended the awards ceremony and received congratulations and a certificate for their projects.



In photo below, William C. Humphries, Jr., left, and Ron Thompson of Forest Resource Consultants, Inc., Jeffersonville, work at a computer. The two have been invited by the British Institute of Chartered Foresters to present a paper to an International Conference on the Application of Computers to the Management and Administration of Forest. The December 11-14 conference will be held in Edinburgh, Scotland at the Herriott-Watt University Conference Center.

Duke University's School of Forestry and Environmental Studies will receive \$7.67 million over the next 16 years from a Georgia timber executive's bequest.

The bequest from Raymond E. Sullivan of Preston, who died in December, 1983, is one of the largest in Duke's history. The school will receive the gift in 16 annual payments of \$479,866.50.

Sullivan, a native of Ledbetter, N.C., was a 1926 Duke graduate in business administration. He went to southwestern Georgia to work in an uncle's lumber company after graduation, later striking out on his own to build one of the state's largest timber holdings.

He once estimated that he had planted more than 40 million pine trees during his career.

Sullivan was featured in the December, 1978, issue of Georgia Forestry. At that time he was managing his lumber mill near Preston, one of the most modern plants in the state. In the interview, he said he "started out on a shoestring" and over the years gradually added more land to his holdings. He eventually owned 47,000 acres of land, which made him one of the largest landowners in Georgia.



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Georgia Forestry is published quarterly by the Georgia Forestry Commission, Route 1, Box 85, Dry Branch, GA 31020. Second class postage paid at Macon, GA



REMEMBERING ARBOR DAY

The bell rang on that wintry afternoon and every student spilled out of the old two story brick school building. They gathered with the teachers at the front of the campus. Some of the high school boys lingered in the back and well out of sight of the teachers so they could talk and tussle. But we were fifth graders and eager to get up close and help plant trees in the big holes that some men had dug earlier in the day.

The occasion was Arbor Day.

The maples and the oaks were ceremoniously placed in the holes and the smaller kids had the honor of throwing a handful of dirt around the roots. Older students later shoveled in the dirt and packed it around the plants.

In her celebrated novel, *A Tree Grows In Brooklyn*, Betty Smith mentioned a tree growing out of a crack in the street pavement and its struggle to survive. Well, the tree planted in our school yard fought equally as hard for life. Perhaps even harder!

Hundreds of running and jumping feet packed the earth around the young trees each day at recess. Too often, young hands reached out to break a twig or two. A couple of the trees died, but the others somehow managed to show signs of survival.

We watched the trees from our classroom window and when spring came, the maples were suddenly alive with tiny, fragile light green leaves. Darker foliage later appeared on the struggling oaks.

Several other trees failed to make it through the following fall and winter, but some gradually grew into handsome shade trees.

But survival of the trees was not really *that* important. It was the Arbor Day experience that mattered. All of us had climbed in trees and played in their shade and drawn their leaves in school projects. Some of us had whittled sling shots from forked branches and even watched trees being sliced into veneer down at the box factory, but until this day we had never really appreciated the trees in our lives.

A pretty girl from the senior class read Kilmer's "Trees" slowly and reverently and the old familiar poem seemed to take on a beauty and a meaning we had not known before. The school principal, apparently sensing that high school students would be harder to sway emotionally, aimed his address at kids in the middle grades. It was his most eloquent moment. He concluded the moving ceremony by touching the tip of one of the maples and declaring that "these trees we plant here today are dedicated to your generation."

Many of us were inspired to plant and enjoy trees in our yards in the months and years that followed that special day.

In a recent visit to the old home town, I was anxious to see the school yard trees. Unfortunately, they were gone. Someone in the neighborhood explained that a vicious tornado that roared across the campus twisted the trees from the ground and rammed them through the side of a nearby house. The school was gone, too. Its bricks were scattered for a couple of miles.

Although the trees we planted and the school we attended no longer exist, the memory of that long ago Arbor Day lives on.

It lives in all the trees I will ever see.

—Howard Bennett

ON THE COVER

This is one of a great fleet of log trucks that crisscross the state each day in Georgia, bringing timber from Georgia's abundant forests to the hundreds of lumber mills and manufacturing and processing plants. Transportation is just one of many factors that forestry is contributing to Georgia's healthy economy.

Glynn County Commissioner Alton Wooten completed his first reforestation project when he was 15 years old. Wooten is 75 now, but doesn't look it. He is tall and lean and moves like a man 20 years younger.

Looking out the window of his courthouse office at the giant coastal oaks, Wooten recalls in vivid detail going to a 4H camp at the University of Georgia when he was 15 and being introduced to reforestation. He returned home to Jeff Davis County and informed his



Wooten

father that the 365 acre farm they lived on could be improved by properly applied reforestation techniques.

After listening to explanations of what could and should be done, Wooten's father said "Alright, son, the mules and plows are out there. Go to it."

So Wooten and his three brothers plowed and planted where they could on 365 acres. They invested very little money-but a lot of manpower, mule power, and time. Around 40 years later, one of Wooten's brothers wound up with 135 acres that four teenage farm boys plowed with mules to plant in pine trees; he sold the timber for \$190,000.

Today, Wooten seems far removed from the mule-and-plow days, but he still relates to the basic values of that initial reforestation effort because the laws of nature remain constant. He came to Glynn County when he was 21 and later was married and settled in the lumber business. For virtually all of his life, Wooten has been involved with farming and timber.

With 700 acres in timber, reforestation is an obvious priority interest. In today's world of diminishing natural resources, Wooten considers reforestation an obligation to the landowner, "I don't really like controls," Wooten said, "but I wouldn't mind seeing a law passed requiring some pines be left for seed trees when an area is cut."

This reflects Wooten's basic reforestation philosophy of "no idle acres." He prefers that pines be renewed wherever possible, but if not pines, he urges, "at least plant something."

Wooten practices what he advocates. He is now clear cutting 300 acres in one area and setting out 14,000 seedlings in another. He sees reforestation as an investment with "no way not to profit" if a few simple basics of management and fire protection are applied.

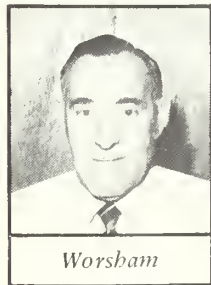
He also brings up another interesting point related to the running debate on whether a landowner should invest in reforestation or something else-or just put his money in the bank to draw interest.

GROWING TREES

THREE LANDOWNERS, REPRESENTING NORTH, SOUTH AND CENTRAL GEORGIA, PRESENT SOME SOUND REASONING

"I like reforestation as an investment," Wooten said, "because you are going to profit if you do it right. But there's another side to this. Suppose a landowner hasn't got \$25,000 to put in the bank and draw interest? Suppose he hasn't got any money at all to invest? Well, if he can scrape up \$200 and plant some pines-he can make an investment."

Grover Worsham does not consider himself a big tree farmer, but he considers himself a serious one. His model forest is well known throughout the state. In 1984, this serious approach earned him the title of Georgia's Tree Farmer of the Year.



Worsham

His 420-acre tree farm (250 acres in Lamar County) is well known in forestry circles. Tall timber, a clean swept forest floor, thriving deer and turkey populations, and well kept trails characterize the area.

This classic example of a tree farm did not just happen. Worsham cultivated, orchestrated and nurtured it. He gives much of the credit to precisely applied techniques of selective thinning and controlled burning.

"I am a believer in controlled burns," Worsham emphasized. "Last year, we burned all 420 acres during three night-burns. I believe it was the most successful burn I've ever seen."

Although Worsham's approach to reforestation is scientific, his main objective is not making money. It's not that he has anything against money (Worsham is vice president of Farm Credit Service, a nationwide organization specializing in agricultural loans). He simply does not regard monetary profit as his top priority in reforestation.

Priorities of the Worsham tree farm are clearly outlined in a 33-page management plan. The Introduction states:

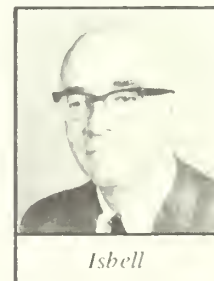
"Money is not the main objective... Periodic income is desired... Clearcuts of less than 50 acres are preferred... Leave hardwood bottoms in natural state... Burning program for understory control and wildlife habitat enhancement... Regeneration following clearcuts."

Interest in forestry seems to run in the Worsham family. Wayne, his 22 year old son, wrote the 420 acre management plan as a senior project while attending the University of Georgia School of Forestry. Wayne now works as a consultant for Forest Resources Consultants, Inc. in Jeffersonville.

Worsham's intense interest in reforestation and other aspects of forestry has made him a key figure in certain forestry initiatives. In April of 1984, Worsham was one of several key landowners who testified at public hearings sponsored by Second District Congressman Charles Hatcher. The hearing concerned a bill designed to establish and maintain protective vegetative cover on open land.

Although Worsham has done selective cutting a number of times, his plans call for the first real commercial sawtimber sale around 1990. After that, Worsham expects the farm to enter into a sustained sawtimber yield system

In today's world of shrinking natural resources and population explosions, James Isbell does not basically consider reforestation as a convenient investment option for the landowner—but an obligation.



Isbell

"All you have to do is look at what happened to ancient civilizations and what is happening in various parts of the world today," Isbell said while sitting on the porch of his North Georgia farmhouse. "Parts of Africa and China are prime examples. First they cut the trees and don't replant; then

they over graze livestock on soil depleted by erosion, and the next thing you know they can't grow anything, feed the livestock, or feed themselves."

A retired educator with a master's degree from the University of Georgia, Isbell sees reforestation and other conservation practices as answers to many of the world's rapidly developing problems.

"Reforestation is like growing money, and I've made money over the years selling timber," Isbell emphasized. "But my basic reason for planting trees is to make a contribution to the ecology, and I think it should be every landowner's ultimate goal."

Isbell now has 300 of his 375 acres, located near Talmo, in pines. He said his father bought the land he lives on in 1937 and began reforestation. Although his father died shortly after buying the family farm, Isbell continued reforestation through the years and estimates approximately 100,000 trees have been planted.

"Some trees that Daddy and I planted in 1937 are still here," Isbell said. He made a circle as big as he could with his arms. "Some are this big-and bigger."

Isbell did not live on the family farm all his life. He married, raised three children, and served in various capacities of education as what he describes as "teacher, counselor, coach, disciplinarian, principal, judge, jury, and executioner." Despite this busy schedule, Isbell found time through the years for reforestation and to return to the land. He grew up on a farm and has always felt a close relationship with nature. One of his greatest satisfactions from reforestation is the resulting population of wildlife.

"I don't hunt-rather catch a snake than kill it-but I like to watch wildlife," Isbell said. "This place has a lot of deer and other animals, and I've been thinking about turning some turkeys loose to get them started."

A firm believer in reforestation management, Isbell recently cut 15 acres and is planning site preparation to replant. He realizes his intense feelings about the ecological necessity for reforestation may seem peculiar in some circles. "But," he explains, "I've lived with the problem all my life, watched it, studied it, and related it to famines and disasters throughout history. But you take a fellow who lives in a condominium or a slum, and he's removed from it if for no other reason than environment."

Isbell believes more public awareness of the need for reforestation is required. "Governments around the world are beginning to get interested and promote it," he pointed out. "This will help economically, ecologically, and prevent future disasters."

And what about planting trees as an



Forester William Lamp of the Commission's Camilla District, right, top tree farm inspector for 1984, is presented a certificate of appreciation by Jim Meadows, Georgia Tree Farm Chairman.

TREE FARM GROUP HONORS LEADING INSPECTORS, SETS GOALS FOR 1985

William C. Lamp, forester of the Georgia Forestry Commission's Camilla District, was honored as the Outstanding Tree Farm Inspector of 1984 and James McGurn of Hercules, Inc., Folkston, was recognized as Outstanding Tree Farm District Chairman at a recent meeting of the Georgia Tree Farm Program.

Jim Meadows of Brunswick Pulp Land Company, statewide Chairman of the program, presided at the meeting and told of the outstanding progress made during the past year and outlined goals set for 1985. He said the organization hopes to achieve 610 re-inspections before the end of the current year, and 67 have already been made. Another goal is to sign 210 new tree farmers this year, and 56 have been signed to date.

The district chairmen and inspectors also discussed plans to improve service to landowners and increase publicity on the statewide tree farm effort.

investment for the future? "Trees haven't devalued yet," Isbell said. "And with the growing demand..." he paused for a moment, then repeated, "It's like growing money."

For the last 20 years of his career in education, Isbell taught French. He doesn't get to use it much any more and says he's getting rusty, but he did say, "J'aime les fourrets tres bien," which means "I like forests very much." Isbell thinks it wouldn't be a bad idea to make that a household saying in all languages.

Superior Inspectors - the 15 that earned the most points during 1984 - were also cited at the meeting. They were:

Bill Johnson and William Lazenby, self employed forest consultants; John R. Walker, Brunswick Pulp Land Company; Frank Wills, Continental Forest Industries; James Castleman, Crawford Cooper, Jack Hold, Jerry Marsh, Robert McMurry, Phil Porter, Will J. Royal, Michael Ryfun, Leonard Schaeffer, Hubert Strickland, and Fred Warnell, all of the Georgia Forestry Commission.

Master Inspectors - those who earned 35 or more points - were also honored. They included:

Russell Weber and Rob Routhier, F & W Forestry Service; Ed Banks, Bennie Brant, John Dickinson, Willard Fell, Gerald Green, Harry Graham, Billy James, Carl Melear, David Nicholson, James Richey, George Turk and Joseph Wall, all of the Georgia Forestry Commission.

APPOINTMENTS MADE

The U. S. Forest Service recently announced the appointments of John R. Erickson as Director of the Forest Products Laboratory in Madison, Wis., and Christopher Risbrudt, Director of Policy Analysis on the Programs and Legislation Staff in Washington, D. C.

Erickson, who has been the Deputy Director at the Laboratory since August 1983, succeeds Dr. Robert L. Youngs who retired after 36 years of service.

Risbrudt will succeed H. Fred Kaiser.

DECADE OF RESEARCH BRINGS RUST RESISTANT BREAKTHROUGH

A joint research program of the Georgia Forestry Commission and the Southeastern Forest Experiment Station has produced a genetic breakthrough in disease resistant seeds that will save pine producing states of the South millions of dollars annually.

Commission Director John Mixon said the "breakthrough" is the result of ten

years of intensive research. Mixon explained that the newly developed pine seed is highly resistant to fusiform rust.

"More pines are killed by fusiform rust than by fire or insects," Mixon explained. "The total cost to Southern states of pines killed by this fungus," he said, "is estimated at \$110 million annually." He added that the new disease resistant seeds will be especially valuable in central Georgia, where 75 percent of all pines are infected by the fungus.

Dr. Harry R. Powers and Dr. John Kraus, both of the U. S. Forest Service, were vital contributors to the research program. Dr. Powers, who devoted the majority of his research of the past ten years to the project, was also head of the program that established the 60-acre orchard now growing the seeds. The orchard is located in the Baldwin State Forest near Milledgeville.

The orchard will eventually produce 12 to 15 million seedlings a year, according to Powers. The program is by far the largest effort to produce rust resistant pines of any state forestry organization in the South.

Preliminary test on seedlings from the orchard indicate their rust resistance will significantly exceed that of any currently available seedlings. Test results show infection will be 50 percent less for slash pine and 40 percent less for loblolly pine.

FOREST CONFERENCE SET IN NEW ORLEANS

Sen. Russell B. Long (D-La.) will be featured speaker at Forest Farmers Association's 44th annual Southern Forestry Conference May 29-31 at the Royal Orleans Hotel, New Orleans, Louisiana.

Other speakers on the theme, "Your Timber Investment--Past, Present and Future," include U. S. Forest Service Chief R. Max Peterson; John F. Rasor, vice president for Georgia-Pacific Corporation's Mid-Continental Division; and Bill Ganser, president of Southern Forest Products Association.

Peterson will examine the present and future timber supply in the South. His discussion will be complemented by Dr. William R. Sizemore, a prominent Alabama consulting forester; and Gary Palermo, a New York investment analyst.

A timber taxation panel will be moderated by William K. Condrell.

For further information, contact Forest Farmers Association, Box 95385, Atlanta, Ga. 30347 or telephone (404) 325-2594.

PUBLICATIONS

Venomous arthropods are a menace to persons whose profession or recreational interests lead them into forested areas of our state. Stings and bites from insects often cause intense pain and some actually lead to death if not properly treated. A new publication, entitled *Venomous Arthropods Affecting Forestry Workers in Georgia*, is now off the press and copies are available free of charge. The booklet, written by Commission Entomologist Terry S. Price, is illustrated with full color photographs to help readers better identify pests they will encounter in the woodlands. For a free copy, write Forest Education Department, Georgia Forestry Commission, P.O. Box 819, Macon, Georgia 31298-4599 or phone 912/744-3364.



Buying, installing and operating a wood stove, installing stovepipes and chimneys, properly utilizing your woodlot for firewood and other factors that concern homeowners who plan to heat with wood or are already using wood for fuel should be interested in a Guide to *Safe and Efficient Heating with Wood*, a new publication which combines material from several brochures. The handy guide, compiled by the Forest Research Department, is free of charge and request for a copy should be made to: Forest Education Department, Georgia Forestry Commission, P.O. Box 819, Macon, Georgia 31298-4599, or phone 912/744-3364.



Littleleaf disease is the most serious disease of shortleaf pine in the Southern United States, and its greatest impact is found in Georgia, Alabama and South Carolina. The U.S. Forest Service has published a leaflet describing the disease, a map showing where it is most prevalent, and management alternatives for control of the disease in high-hazard areas. For a free copy of the leaflet, write or call the Commission's Education Department. (Address and phone number listed above.) Ask for Forest Insect & Disease Leaflet 20.



TREE CITY USA

Avondale Estates has been designated a Tree City USA by the National Arbor Day Foundation and becomes the second city in Georgia to warrant the distinction.

Columbus was awarded the title seven years ago, after the city met certain requirements of the foundation.

Foresters with the Georgia Forestry Commission's Urban Forestry program had interested Avondale Estates in pursuing the title several months ago, according to Bea Sutton, mayor pro tem, who spearheaded the project. The Commission was filming an urban forestry movie and used several scenic locations in the city.

To be named a Tree City USA, a community must enact a city tree ordinance, establish a tree governing body, design a comprehensive urban forestry program, and observe Arbor Day.

Commission Director John Mixon presented the Tree City USA flag and award to Avondale Estates officials in an Arbor Day ceremony at the city's clubhouse.

Americus District Forester Rowe Wall and Area Supervisor H. L. Neal presented the flag and award to Columbus officials in a re-dedication of that city's participation in the program.

What do Christmas tree growers do after Christmas and in the days and weeks immediately following the yuletide?

Relax and count their profits? Not exactly.

Ed Ruark, a professional forester and a prominent Georgia tree grower who keeps his scenic acreage called Jack's Creek Farm near Bostwick in trim condition the year 'round, recalled that "I got on my tractor and started plowing on Christmas day" to take care of some winter weeds and prepare for the Christmas that will surely come in '85.

Ruark and other growers point out that there is always plenty of work involved in producing quality trees. "Planting and fertilizing and pruning and spraying and irrigating and on and on and on," is the way one producer explained it." He might have added "worrying." Too little rain, a weak market, poor economic conditions in December and other factors determine the profits-or losses-at harvest time.

Ruark this winter has planted 15,000 white pine, 15,000 Virginia pine and 5,000 red cedar. Some trees went into

NORTH GEORGIA

spaces where trees were cut during the season, while others were set out on newly prepared sections of the farm. He is also getting into a species called Leyland cypress, which is becoming popular with many who visit the farm.

The farm is a "come and select and cut your own" type of operation and sales generally begin on Thanksgiving and reach a peak two weeks before Christmas. Ruark and his wife, Kaye, work as a team in entertaining kids who come out in groups of 20 to 30 from kindergartens in Madison and other nearby towns. "We tell stories, hang candy canes on a magic tree for the children to find...things like that," Ruark explained. The gesture is building good will among families in the area and it's cultivating future customers of another generation.

Ruark said he is getting into a vineyard operation, but Christmas trees will continue to be the principal crop at scenic Jack's Creek Farm. He is active in state and national organizations devoted to advances in growing methods and the promotion of tree sales.

Ruark said some buyers want a tree they can plant in their yard after Christmas and he is now producing a limited supply of container grown trees.

*

Howell (Bubber) Evans is principal owner and manager of a limited partnership devoted to growing quality Christmas trees on about 300 acres of rolling hills in the



THE CHRISTMAS TREE BUSINESS

GROWERS DISCUSS PROBLEMS AND PROSPECTS

Smarr Community near Forsyth.

Picturesque Rosebub Farms - a name derived from Evans' wife's name coupled with his nickname - is strictly a wholesale operation. Unlike the Santa's Forest concept where families come out and choose and cut their own trees, most of the farm's trees are sold by September.

"We start cutting and bundling the first weekend after Thanksgiving and then it's all over for another year," explained Evans. But he certainly didn't mean the work was "all over" for another year.

Evans planted 20,000 Virginia pine seedlings in a new section of his farm in January and an additional 5,000 went into the ground in late February. Some red cedar was also planted.

CENTRAL GEORGIA

Evans grew up in an attractive 145-year old farmhouse that is now almost completely surrounded by Christmas trees. He waved his hand toward the row on row of neatly trimmed pines and declared that any person "going into this business had better be prepared for some hard work."

The tree farmer comes from a background of dairying and peach growing, but his late father became disenchanted with the orchards and told the son to "never plant another peach tree." Evans is now in his seventh year in the Christmas tree business, although he said he "piddled with it several years before that" on a small scale.

One valuable lesson he has learned, he said, is that the "perfect Christmas tree is seven and one-half feet tall...that's what the customer wants." He said the bulk of his trees are harvested within that range.

Rosebub Farms consists of four parcels, and only one presents a weed problem. Evans explained that the acreage had been in grass long before plans were made to convert to trees, but herbicides are now being used to slowly win the battle. No fertilizer is used in the operation and none of the land is under irrigation.

The farm uses a cone-shaped tree trimmer mounted on a small tractor. The complete unit costs about \$23,000 and the farm owns four of the machines. Actually, the trimmer was developed and is now patented by Evans and his associates. There are plans to market the equipment - which trims four trees per minute - to other growers, according to Evans.

Part of the farm borders on Interstate 75 "and our sign out by the fence and the rows of trees seen from the road are our best means of advertising," declared Evans. Several people traveling through Georgia have spotted the sign and the shapely trees from the highway and returned later to buy a truckload, the grower said.

Although many of the trees end up in the Atlanta market, the bulk of Evans' trees hit the Florida market in early December. The Monroe County grower and other growers in the state agree that Florida will become increasingly important as a prime sales target if the state continues to receive quality trees from Georgia.

Evans expressed some concern over competition from manufacturers of artificial Christmas trees, but he doesn't view it as a major threat. Evans, as well as other growers interviewed by Georgia Forestry, is a member of the Georgia Christmas Tree Growers Association and the National Christmas Tree Growers Association. He said the national organization this year will assess each member to help finance a nationwide advertising campaign to convince families to use a real tree instead of the fake item.

*

Back in 1974, Myles Greene was named Georgia's Tree Farmer of the Year. He won the distinction for his excellent management of woodlands on his Coffee County farm.

If the tree farm judges visited the farm today, they would find that Greene has added another successful dimension to his tree-growing enterprise.

Greene's father was in the sawmill and

SOUTH GEORGIA

timber business and for years the son followed in that career. He later got out of the mill business and concentrated on timber and general farming. Four years ago, however, he decided to divert some of his land - and a lot of his energy - into a Christmas tree operation.

He started with three acres of Virginia



ED
RUARK
INSTRUCTS
TREE PLANTER



MYLES
GREENE
AND SON,
BILL, EXAMINE
VIRGINIA PINES



HOWELL
EVANS
OPERATES
CHRISTMAS
TREE TRIMMER

pine. Today, 30 acres of precisely cut Christmas trees are growing in front and at the side of his attractive country home. This past Christmas was his first season for sales and things went so well he is expanding his plantation.

"This winter, we planted 5,000 Virginia pines on new ground," Greene said. Although he said "we'll stop there for now," he indicated that he will probably continue to expand. After all, he won't have trouble finding land for additional trees. His farm consists of 1,900 acres.

Greene operates a "choose and cut" Christmas forest and during the holiday season drew customers from a 50-mile radius of his farm between Douglas and Broxton. Some of his trees were bundled and sold at wholesale to Florida markets.

"We have some problems this far south that growers in other sections of the state don't have," Greene said. "Pine tree moth is a serious problem down here and we have to really spray frequently all through the summer." Rapidly growing weeds is another serious threat to the trees, especially the young seedlings. "We have to mow every other week during the summer and use herbicides to try to stay ahead of the weeds," he pointed out.

But the grower listed at least two advantages in establishing a Christmas tree farm in South Georgia: the proximity of the Florida market, and ample rainfall that eliminates the need for an expensive irrigation system. He also cited the faster growth most trees experience in the warmer climate in Georgia's southern region.

Greene's son, Bill, a Douglas city fireman who has a "24 hours on and 48 hours off duty" schedule, helps his father in the tree business. Among many other duties throughout the year, he operates a tree trimmer with a vertical and adjustable set of blades. The motorized trimmer circles each tree three times a year.

Greene's trimmer, as well as the various types used by other growers, leaves some shearing to be done by hand, especially in the tip of the trees. But the trimmers are tremendous labor and time savers and have made larger plantations possible.

Tommy Greene, another son, also helps in the planting, fertilizing, trimming, spraying and marketing of the trees. Extra labor is hired as the harvest nears its peak around the middle of December.

Greene said he welcomes - and as a member fully supports - the American Christmas Tree Growers Association's forthcoming advertising campaign to sell the public on choosing a fresh green tree instead of an artificial tree.

The Georgia Forestry Commission nurseries provide the bulk of seedlings for the three growers featured in this article, as well as for most Christmas tree producers in the state.



Destined to be the nation's leader in pulp and paper production, as well as internationally recognized in forestry, Georgia's initial efforts at mass producing paper were relatively obscure.

The state's first paper mill was established in 1810 on the Oconee River in Greene County. Zachariah Sims, a resourceful individual never lacking in money-making ideas, realized the state's growing number of newspapers were forced to rely on outside sources for paper. He accurately envisioned the number of newspapers mushrooming in the future.

In 1809, Sims began running his advertisement in an Athens, Georgia newspaper, the *Foreign Correspondent & Georgia Express*: "PAPER MILL". The Subscriber intends erecting a Paper Mill on the Oconee near the Scull Shoals, and wants a large quantity of all kinds of RAGS, For which a liberal price will be given. The great want and utility of such an establishment in this state, in which we have no Paper Mill, it is hoped will induce its citizens to offer their co-operating aid in such an undertaking. ZACHARIAH SIMS, Greene County, Nov. 2, 1809."

In contrast with Sims previous entrepreneurial projects, it soon became obvious that visions of developing a paper mill on Scull Shoals exceeded his financial resources. But standing by and watching one of his projects fail to materialize was not Sims nature. He approached the state legislature for a \$4,000 loan, citing potential benefits of a paper mill to the state. The state was impressed and granted a \$3,000 loan for three years guaranteed by two securities and a mortgage on Sims real estate.

The Athens newspaper was pleased with Sims success and predicted that he would "be able to furnish what paper may be wanting in this state in a very short time."

The prediction proved true. Sims was soon producing much paper. He even built a hotel near the Scull Shoals mill to house workmen. The Athens editor, who secured his newsprint from the mill, instantly reminded his readers of the mill's need for rags. Everything seemed to be going well. Sims seemed to be retracing his previous steps of successful business projects.

But, in spite of Sims business abilities, he was soon in financial trouble. The reasons have never been determined. One certain cause for his problems, but not serious enough to result in financial collapse, was the long drought in 1814 when

At left, a portion of the ruins of the Marietta Paper Mill, which once produced paper for printing Confederate money and bonds. It is now designated a historic site.

PULP & PAPER

GEORGIA'S 175-YEAR RISE FROM HISTORIC SCULL SHOALS TO NATIONAL LEADERSHIP

the Oconee became so low the mill could not operate.

In any case, Sims saw financial collapse ahead as time closed in on him to repay the \$3,000 state loan. The situation was further complicated by Sims other business interests. At the time, he was also operating a grist mill and a distillery.

Sims attempted to repair his crumbling financial situation, but the day of reckoning finally arrived. On April 3, 1814, Sims virtually sold out to Thomas Ligon for \$5,000. What Sims sold was two-thirds interest in a seven-acre tract where his mills and distillery were located, "and all the machinery thereunto belonging."

Sims retained ownership of the remainder of his 206 acre tract. Ligon, however, managed to arrange advantages on this remaining acreage; he acquired the right to timber and firewood, "and the privilege of conducting the water by pipes to the aforesaid machinery in the most convenient direction in the neighborhood of the place of the present direction."

There apparently has never been a successful explanation of how a man of Sims business talents got into such a financial tangle. Nevertheless, more peculiar events were to follow.

SOLD AT PUBLIC AUCTION

In the complicated process of Sims losing his property, without an explanation of how Ligon came to suddenly no longer own it, the Greene County Sheriff sold it at public auction to Thomas Stocks on March 7, 1815, for the nominal price of \$75.

The sale included all the property Sims had originally owned and was "sold under the encumbrance of a mortgage to the State of Georgia."

Ten days later, Stocks sold it back to Ligon for \$75.50. These transactions obviously seemed as peculiar then as they

do now. The explanation of the transactions, included on pages 221-29 of the Greene County Deed Record, mysteriously disappeared and have never been found.

Despite the loss of explanatory records, two things are obvious. The State of Georgia collected its \$3,000 loan; Thomas Ligon became owner of the 206 acres and the mills.

Ligon became very successful in several industrial establishments, but he never revived the paper mill. So Georgia's first paper mill was a paradox; a success and failure. But history can now view it as the initial effort of great things to come for Georgia.

In 1847, another paper mill was built about 20 miles up river from the Scull Shoals site. Located near the enterprising university town of Athens, the mill was initiated by two men with foresight and money. One was a physician, John Linton, who abandoned medicine for business pursuits. Linton also ran a plantation and owned a large number of slaves until they were set free after the Civil War.

The other founder of the mill was Albon Chase, an energetic Yankee who migrated from New Hampshire sometime before 1832 to "live and die in Dixie." Chase evolved true to his words. He became a "dyed-in-the-wool" Southerner; one of his sons died fighting for the Confederacy.

In 1832, Chase bought the Athenian newspaper and converted it to the Southern Banner. He turned the publication into an excellent newspaper and edited it for 15 years.

In 1847, Chase and Linton combined forces and established the mill. They decided on manufacturing writing paper and wrapping paper, as well as newsprint.

Since water power on the Oconee had already been developed, they erect-

ed the mill about three miles south of town on Barber Creek. The mill consisted of a stone basement and a two-story wooden building. The operation was soon producing 600 pounds of paper a day.

EARLY MILL BURNED

The mill prospered for 10 years, then burned to the ground. The loss was estimated at \$16,000. An indication of the mill's profit potential was demonstrated when the owners promptly rebuilt it after the fire-although there was no insurance coverage. The origin of the fire was suspect. The editor of Athens other newspaper, the Southern Watchman, said, "It may have been an accident, or it may have been the work of an incendiary...as it is a great convenience to have our paper manufactured at home."

The mill was in operation a year later, however, it was apparently a disappointment. The mill's previously stalwart advocate, the Southern Watchman, now dismally commented that "it (paper produced) is not such as that establishment formerly furnished, nor does any other paper mill supply such paper as we had before the war."

Despite such negative reflections, the mill prospered. It developed into a joint stock company, capitalized at \$30,000. Throughout its many years of operation, it consistently produced 600 pounds of paper daily. Eventually, a community called Paper City, grew up around the mill. The company became known as Pioneer Paper Mill.

From the mill's beginning until Chase's death, he was the driving force of the mill's success. When he died in 1867, a committee of stockholders stated his value to the mill's sustained success was "inestimable."

Although the Pioneer Paper Mill be-

gan making paper from pulp in 1884, it was not a "pioneer" in the use of pulp. In fact, use of the inescapable new technology resulted in the mill's economic collapse.

When it was realized that pulp made better quality paper than rags and cotton stalks, Pioneer converted its machinery to process wood pulp. To finance the conversion, Pioneer borrowed \$12,500 from the Bank of the University. However, the financial burden proved too much. Three years later the mill was sold by the county sheriff at public auction to the highest bidder, who paid only \$132.20 above the mortgage.

THE REAL BEGINNING

The first sustained, successful effort in the United States to manufacture paper from southern pine probably took place near Atlanta in the 1870's. The pulp was made from shortleaf and loblolly pine. The Marietta Paper Mill was the site of this historic event which revolutionized paper making for modern society.

According to historic records, the buildings of the Marietta Paper Mill were constructed near Marietta between 1853 and 1859 on Sope Creek. Legend says the creek was named after a Cherokee Indian called "Sope," who refused to leave when his tribe was driven out. Sope is said to have remained in the area, living on the creek bank and telling Indian stories to children in the area.

Following the 1859 incorporation of the Marietta Paper Mill, more detailed records were kept and preserved. These records included a description of the mill's operation. According to this description, the first building was the stock house where old rags and paper were stored. Next was a five room structure called the main building. The first room was the sorting room. The second was the cutting room, which extended to a platform for loading and unloading. The third was also used for rag-cutting, but had no platform. The fourth was for grinding pulp, and the last room contained all machinery used in the paper making process.

Initially, the mill made paper for tissue, writing, wrapping and printing. However, during the Civil War, the mill produced stock paper for printing Confederate currency and bonds.

During July 1864, the mill was burned by Union troops moving out from Kennesaw Mountain. However, the owners did not forget their success and rebuilt the mill after the war. By 1868, the mill was in full and prosperous operation again.

But misfortune continued to plague the mill; it burned again in 1870. This fire, coupled with a depressed Southern economy, forced the owners into bankruptcy. What was left of the mill was sold in 1873 to James Brown, a Cherokee



The Pyntree Paper Company in Gordon as it appeared in 1923. The tall smokestack at right stands today at the old mill site in the Wilkinson County town as a reminder of the once prosperous industry.

County resident. Brown rebuilt the facility and incorporated it again in 1874 as part of the Marietta Paper Manufacturing Company.

In 1874, Saxon A. Anderson became manager of the Sope Creek mill. Anderson anticipated the future of paper making. He installed a wood pulp mill in addition to a rag paper mill. Anderson's following years of success motivated him to move some of his machinery from the Sope Creek facility to a new mill in Marietta in 1894. Using the Sope Creek machines, the new mill was immediately successful. Its initial efforts produced 10,000 pounds of white print paper a day.

Anderson's Marietta mill operated successfully until the beginning of World War II. The history of this mill marks the beginning of modern paper making for Georgia and the United States. The historic ruins of the Sope Creek mill are now being preserved by the National Park Service. The picturesque area is part of the 6,800-acre Chattahoochee River National Recreational Area. The ruins, with hiking trails nearby, have become a popular location for picnics and sightseers.

HISTORIC REMINDER

Preservation of the Sope Creek ruins will serve as a symbolic reminder for future generations. Although small and basically simple by today's comparisons, the Sope Creek mill was the embryonic stage for Georgia's development into the nation's current leader in pulp and paper production.

Another mill that flourished in the early twentieth century was the Pyntree Paper Company at Gordon. Ruins of that mill still exist in the Wilkinson County town.

Although many individuals made contributions to paper making throughout

its history, no one revolutionized the industry so dramatically as Dr. Charles Holmes Herty.

When President Roosevelt took office in 1933, he said, "The Southeast is the nation's number one economic problem." Dr. Herty's work in paper making later transformed the Southeast into the nation's number one opportunity.

Herty was a genius in forestry and marketing. His research proved that pines are not too resinous for paper making. He also proved that Georgia pine could grow to pulp wood size in one-fourth the time required for northern spruce, which had previously been used in paper making.

So Herty marketed his ideas, and backed them with proof. He emphasized to industrialists that they no longer had to wait 50 or 60 years for Canadian Spruce to reach usable size. Now they could take advantage of the prolific slash pine that virtually blanketed much of the South.

Already an internationally known chemist, Herty began laboratory research on pine trees in 1931. At the time he was serving as research director for the Georgia Department of Forestry. His project was supported by the Georgia Department of Forestry and the City of Savannah, and a laboratory was established on the Savannah waterfront.

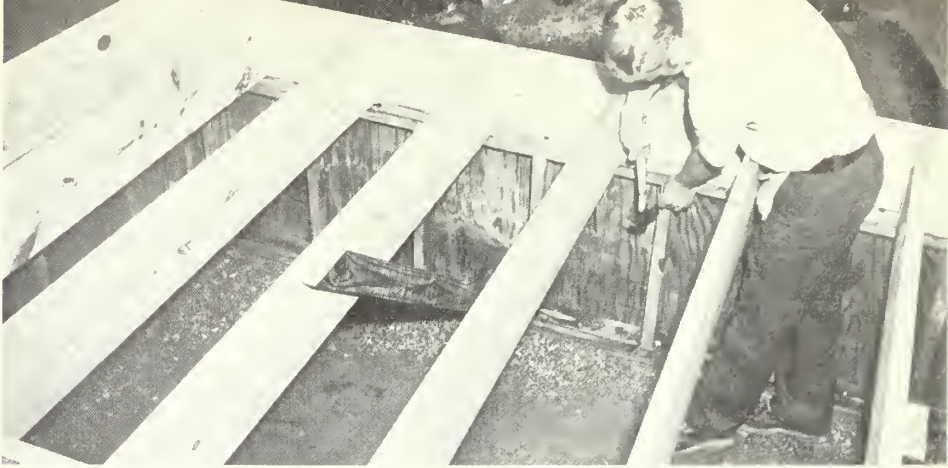
Herty's research proved that the secretions of turpentine and resins is a protective process, emitted only when the pine tree is cut or damaged. His research stressed that young pines are relatively free of such secretions--so the wood is as suitable for pulping as spruce or other commercially used woods.

In 1932, Herty's operation turned out the first successful run of newsprint, and he immediately began trying to acquire backing for a large scale test. A Canadian mill volunteered and the test

was conducted.

The results of this test made history on November 20, 1933, when the Savannah morning News and eight other Georgia newspapers printed their editions for the first time on paper made from Georgia pine. The Atlanta Journal printed in its now famous edition that the event...will become a page, perhaps a momentous chapter, in the history of Georgia and the South."

This day marked the beginning of a new period of industrial and agricultural life in Georgia. In 1935, Union-Bag Paper Corporation announced plans to establish a draft paper plant in Savannah. Now known as Union Camp, this Savannah plant is currently the largest pulp and paper mill in the world; and forestry in Georgia is an \$8.6 billion industry employing 80,000 people.



Pine studs and plywood form foundation wall for Commission's new building at Stone Mountain. Fill dirt is tamped against the outside of the treated wood.

COMMISSION INSTALLS WOOD FOUNDATION

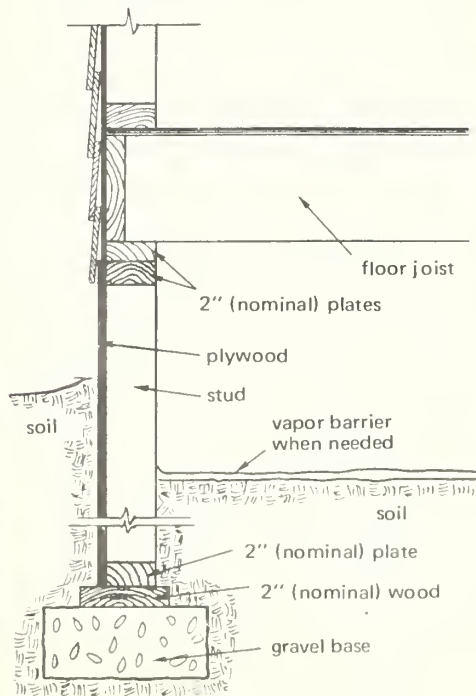
The first Georgia Forestry Building to feature an all-weather wood foundation system is nearing completion at the agency's Urban Forestry headquarters at Stone Mountain.

Although the construction method which utilizes gravel for a footing and pressure treated plywood and studs in below grade foundation walls was first tested in 1965, to date it has not become commonplace in the building industry. Suppliers and contractors contend, however, that it will become more popular as structures now built under the system meet the test of time.

Costs and flexibility are two main advantages builders cite when choosing the system. The foundation can be installed under most weather conditions and considerable time and labor is saved when all the details of building forms and pouring and curing concrete are eliminated.

The system was developed through the cooperation of the National Forest Products Association, The American Wood Preservers Institute and the Economics and Marketing Division, U. S. Forest Service. The earliest feasibility study was conducted by the National Association of Home Builders.

Ken Bailey, coordinator of the Commission's Urban Forestry section, said the building at Stone Mountain will function as a suite of offices, but will also serve as a "showplace" for builders and others interested in inspecting the foundation construction. Completion is expected this summer.



TREE CARE TIPS



Well construction: (A) dry well, (B) ground tile, (C) upright belt tile.

During construction and landscaping, especially in Georgia's urban areas, trees often become affected by changes in grade. This is especially true when fill is placed around the tree to raise the grade. This process often drastically reduces the roots' air and water supply and causes dieback and mortality. This type of injury can be prevented by the construction of a dry well and proper tiling around the tree. Often, trees affected by grade changes can also be saved by dry welling.





Thinning as a beneficial management strategy remains a controversial topic in Georgia forestry today. Other than site quality, stand density is one of the most influential factors of stand productivity. Whether or not density control through thinning increases the total economic yield depends on the desired end product and the timing of the operation.

Pre-commercial thinnings involve thinning a stand before the trees have commercial value. These thinnings are very beneficial to stands but are rarely implemented since they require expenditures with no immediate return.

Commercial thinnings involve the harvest of merchantable trees and are rarely done before the stand is 15 years old.

There are two basic types of commercial thinning: Selective and row thinning. Selective is generally the best thinning procedure if timber production is the goal. The chief criteria for selective thinning are quality and spacing of the residual stand. The diseased, badly formed or slow growing trees are most commonly removed so that growth of the well formed, healthy and vigorous trees is favored.

However, selective thinning is less desirable to the logger now that logging has become more mechanized and larger harvests are preferred. Row thinning is a harvesting compromise that lets the landowner realize the best return from planted pine stands, while allowing the logger to utilize his modern equipment. The disadvantage of row thinning is that all trees in each selected row are cut, whether they are of sub-merchantable size or are high value trees that have not reached their full potential.

A combination of row thinning and selective thinning encourages greater selectivity while allowing use of modern harvesting equipment.

Each timber stand has variables such as species, site, spacing, timber prices, and owner's goals that must be considered before a thinning recommendation is made. In many instances, whether the stand needs thinning is determined more by economic than silvicultural factors. After all, the purpose of thinning is to maximize the net value of the products removed during the entire rotation. The factors determining this

net value are: quantity, quality, utility, and size of the products as well as harvesting and manufacturing costs.

A computerized yield program that can project timber yield and economic return for individual stands is now available for Georgia landowners. The program was developed by the Tennessee Valley Authority and is ready for use in each Georgia Forestry Commission district office.

In the following example, the yield program shows the economic benefits of thinning versus not thinning on a pine

THINNING

THE PROS AND CONS

stand being managed on a 30 year rotation. The analysis is based on average stumpage prices and average site quality and excludes inflation variables.

The unthinned stand would yield 39 cords of pulpwood and 4,414 board feet of sawtimber per acre at the end of the 30 year rotation. Assuming the price of pulpwood was \$15 per cord and sawtimber was \$130 per thousand, this stand would yield \$1159 in present value dollars.

The same stand thinned at 17 years would yield a total of 26 cords and 6,965 board feet per acre. Fourteen of the 26 cords would be harvested at year 17. Assuming the same stumpage prices, the total value of the stand would be worth \$1295 in present value dollars.

Taking into account the reinvestment of the income from the first thinning, the real price increase and economic inflation, a 33% increase in stand value would be realized by application of one thinning.

Economic losses from fusiform rust and insects are less in thinned stands than in unthinned stands. Efficient thinning operations remove trees infected with fusiform rust and slow-growing or weak pines that are prime targets for



TWO CONFERENCES, WORKSHOP PLANNED

southern pine beetle attack.

Benefits of thinning will be decreased if the stand is managed on rotations of less than 20 to 25 years. The trees remaining after thinning do not have enough time to take advantage of the extra growing room before the final harvest.

Moreover, there is not a large market for the size and kind of material harvested during thinning. This is in part because the cost of harvesting a given unit of product from an immature stand is greater than that from a final harvest.

Opening the stand sometimes encourages the establishment of an understory of shrubs and trees which could increase regeneration costs. Thinning may also increase the risk of wind damage as well as attack by black turpentine beetles, Ips beetles and Fomes annosus root rot. However, it is rare that these risks make thinning inadvisable.

A general rule of thumb in deciding if a stand needs thinning is based on the percentage of the length of the stem that has live branches. Individual tree crowns whose length drops to less than 30-40% indicates a loss in growth and vigor.

If the landowners goal is to grow sawtimber, thinning should start early while the trees have the capacity to add green crown surface. This will help attain maximum diameter growth and maintain stand vigor, as well as provide early cash returns.

If the objective is to harvest the entire stand at an early age and sell it as pulpwood, a thinning would only decrease the total yield and lower the return.

Whatever the objective, a professional forester can help weigh the advantages and disadvantages and determine if thinning will be profitable for your stand.

In addition to the availability of cash returns before the end of the rotation, products of a larger and more profitable size can be produced on a shorter rotation than in unthinned stands. Since thinnings remove trees that would possibly die, it increases the amount of useful material removed from a single rotation. The removal of poor quality trees also increases the quality of wood in the final harvest.

A conference on Managing the South's Urban Forests will be held at the University of Georgia Center for Continuing Education April 16-17.

The course is designed for consulting and municipal foresters, city and county planners, mayors, park tree directors, state foresters and landscape architects, and others who are concerned with trees in cities.

The conference will address the managerial, planning and policy needs of a comprehensive urban tree management program.

A conference entitled "Timber and Timberland: A Time to Buy? A Time to Sell?" will be held at the center May 13-14.

The conference is designed for practicing foresters, consultants, investment counselors, land managers, and others who are concerned with timberland investment.

It will feature presentations on the past, present, and future of timberland investment. A panel of buyers from forest industry, pension funds, private investors, limited partnerships, and insurance companies will discuss their objectives of ownership and investment criteria.

A workshop on point sampling and prism cruising will be held at the center May 14-15. The course is designed for foresters and selected technicians with little or no experience in point sampling and prism cruising.

The workshop is sponsored by the Council on Continuing Education for Foresters and will consist of a review of sampling with probability proportional to size, construction and application of volume and tree factors, design and statistical control of a cruise, and a practical exercise.

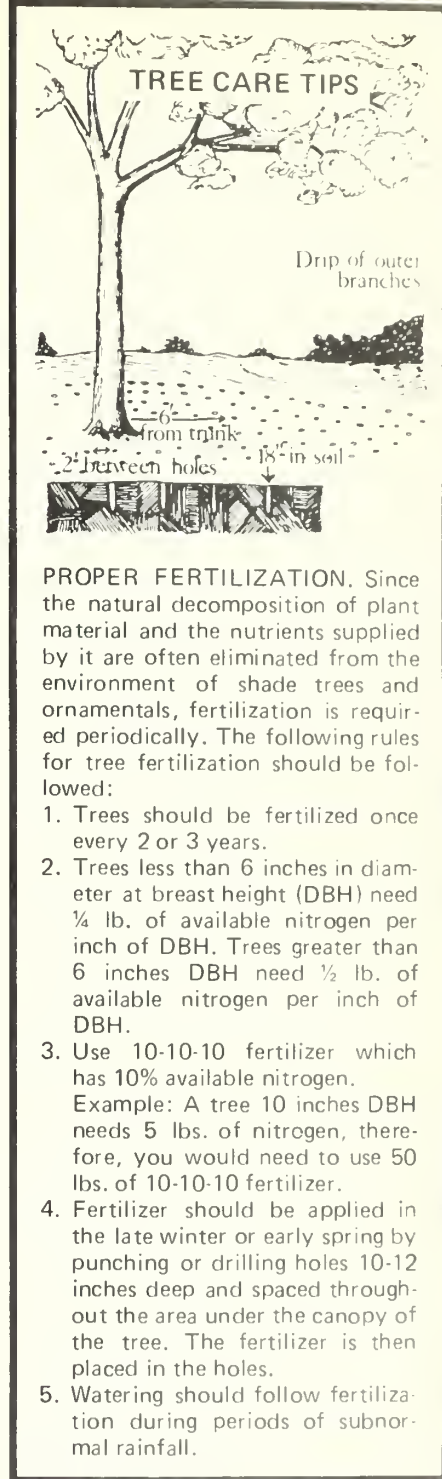
For further information on any of the courses contact Dr. Leonard A. Hampton, Director, Room 237, Center for Continuing Education, University of Georgia 30602-phone 404/542-3063 or Mr. Andy Little, Coordinator, phone 404/542-1585.

WARE PLANS ANNUAL FOREST FESTIVAL

Waycross and Ware County will hold the region's 28th annual salute to forestry April 27 with a series of events.

The highlight will be a Saturday morning parade through the streets of Waycross. Forestry Commission's Joey Hall, Waycross District Forester, is chairman of the parade and he said he is working with entrants on a "best ever" Forest Festival parade.

Other events will include an arts and



crafts show, Miss Forestry pageant, log truckers' rodeo, forestry field day, annual banquet, a barbecue and an equipment expo.

The annual event in Waycross and the Million Pines Festival each year in Soperton are the state's largest celebrations honoring forestry and forest industries.

WE'RE DOING IT AGAIN!



Last year, Georgia Forestry Commission personnel, Georgia Forestry Association members, forest industry people, consultants, landowners and others that have an interest in forestry, gathered at the Atlanta-Fulton County Stadium for the first **GEORGIA FORESTRY NIGHT**. It was an enjoyable outing for hundreds of families and a successful promotion of forestry in our state. This year, the special night will be Friday, July 12. Tickets to the Salute to Georgia Forestry and colorful pre-game festivities are \$5.60. That's a 20 percent discount on one of the best seats in the stadium. To order your tickets or for further information, please call the Commission's

Education Department at 912/744-3364.



Braves

NELSON BECOMES ADMINISTRATIVE CHIEF AS SMITH RETIRES FROM POST

Garland Nelson, who had served on the administrative staff at the Georgia Forestry Commission's state headquarters in Macon since 1978, was recently named Chief of the Administration Department.

Nelson succeeds Floyd Al Smith, who had held the top administrative post since 1976. Smith recently retired.



Nelson



Smith

Nelson, a graduate of Fort Valley High School, who attended Middle Georgia college and later graduated with a degree in Forestry from the University of Georgia, came with the Commission as forest technician in the Atlanta area in 1971.

In replacing Smith, Nelson is responsible for coordinating and monitoring the income and disbursement of funds from all sources, including all accounting procedures, procurement, personnel processing, payroll, property and inventory control, federal excess equipment and supplies.

His department is also responsible for the supervision of the mechanic shop, carpenter's shop, central warehouse, seed processing plant and cold storage for seed held in inventory, buildings and grounds maintenance, security, and computer coordination at the Macon headquarters.

Nelson, a native of Montezuma, served seven years in the Army Reserve. He was

manager of the Cumming Branch of Home Federal Savings and Loan Association prior to his employment with the Commission.

The new Administrative chief and his wife, Anne, have three children, Matthew, 17; Holly, 14; and Chris, 10. The family resided at 1607 Laura Lane in Fort Valley and is active in the Methodist Church.

Commission personnel, other friends, relatives and representatives of other state and federal agencies recently gathered in Macon to honor Al Smith at a gala retirement dinner.

Smith, who began his 37-year career with the Commission as forest ranger in the Camilla District and through several promotions rose to the position of Chief of the Administration Department, was named Manager of the Year in State Government in 1980.

A native of Bluffton, S.C., Smith is a graduate of the University of Georgia with a degree in forestry. He is active in Vineville Baptist Church in Macon and is a member and past president of the Optimist Club.

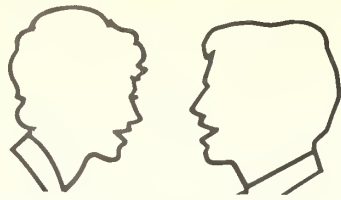
The retired administrator and his wife, June, live at 734 Dogwood Circle in Macon. Their children include Daniel, Jodie, Julia and Polly.

Garland Nelson, who succeeded Smith in the post, served as master of ceremonies at the dinner and John Mixon, Commission director, presented an outstanding service award to the retiree.



At right, judges inspect dozens of posters to determine winners in several categories in the annual Smokey Bear/Woodsy Owl Poster Contest sponsored by the Garden Clubs of Georgia, in cooperation with the Forestry Commission and the U. S. Forest Service. Left to right are Mrs. James Phillips of Tifton, state chairman of the contest; Donald Bennett, patrolman, Mrs. Eudora Simpson, tower operator, and Ranger Newell Lasteringer, all of the Commission's Colquitt County Unit; and Mrs. Bernard Simpson of Tifton. Poster winners will be announced at the Garden Clubs' annual meeting this summer in Atlanta.

PEOPLE

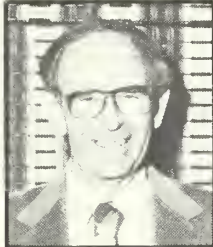


IN THE NEWS

The Commission recently said farewell to two veteran rangers who served their careers with distinction in some of the northern counties of the state. A dinner honoring the two - GEORGE E. BOWER and WILLIAM A. DEMORE - was held in Gainesville and attended well by fellow workers, relatives and other friends.



Bower



Demore

Bower, who was District Ranger at the Gainesville office at the time of his retirement, came with the Commission as ranger in Barrow County in 1953. During his 30-year career, he served in management, fire control and as an aircraft pilot. DeMore retired as ranger of the Habersham-Rabun-White Unit. He came with the Commission in the summer of 1951... JIMMY SMITH, JR. has assumed the duties of district ranger for the Gainesville District. A native of Toccoa, Smith



Morgan



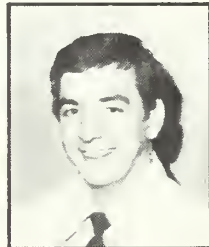
Smith

graduated from high school in Clarksonton and attended Oglethorpe University in Atlanta for one year. He came with the Commission in 1974 as a forest patrolman with the Clayton-Fayette Unit. Smith is married to the former Marie Sheriff of Toccoa and they have two children, Deidra, 16, and James, 11. Smith succeeds George E. Bower, who recently retired...WADE MORGAN, formerly serving as patrolman in the Glascock-Jefferson Unit, has been named ranger of the unit to succeed Richard Phillips, who was recently named district ranger. Morgan, a native of Louisville, came with the Commission in 1980. A graduate of Louisville High School, he served four years in the Air Force and is a member of

the Lions Club and the National Rifle-mens Association. The new ranger and his wife, Diana, have a son and a daughter. They attend the First Baptist Church of Bartow...FORESTER MARK RAINES, a native of Thomaston and a graduate of the University of Georgia, has been named to the staff of the Commission's Washington District office. He also attended Robert E. Lee Institute and was an outstanding cadet in the ROTC program. Formerly employed as woods supervisor for a company in Mississippi, the forester is married to the former Miss Elva Lawson of Kentucky. They attend the Methodist Church...MONROE GAINES, formerly a patrolman in the Berrien County Unit, has been named ranger of the unit. A native of Fitzgerald and a graduate of high school in that city, Gaines came with the Commission in

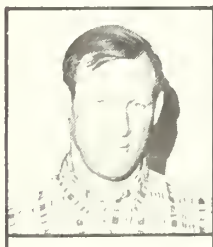


Gaines



Raines

1980 following employment as a mechanic and custom auto painter. He attended a technical school in Atlanta and later worked several years in Arizona. He is married to the former Miss Kathryn Smith of Fitzgerald and they have a son and a daughter...CHARLES RAY GREMILLION has assumed the duties of management forester with the Newnan District Office...He succeeds Walker Rivers, who was transferred to the Macon Office. Before joining the Commission in 1984, he worked as a forestry consultant



Gremillion



Roland

in Louisiana, his native state. Gremillion has a degree in forestry from Louisiana Polytechnic Institute. A Navy veteran with four years service, Gremillion is a

member of the Catholic Church. He is married to the former Karen Leslie Cheshire of Douglasville. They have two children, Michiel, 14, and Kristy, 13... BILLY W. ROLAND has been named ranger for the Barrow-Jackson Unit. Roland succeeds George Davis, who retired from the position. A native of Colquitt, Roland is a graduate of Miller County High School. He came with the Commission in May 1968 as a patrolman in the Worth County Unit. Roland is a member of the Baptist Church. He is married to the former Jane Harrell of Colquitt. They have two children, Jeffery, 20, and Steven, 16...BRION WILLIAMS, who had

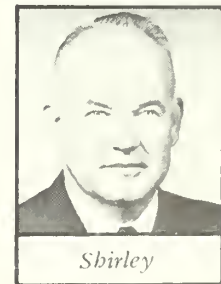


Williams



Smith

served as ranger of the Greene County Unit, was recently named senior ranger in the Habersham, Rabun, White Unit. Williams came with the Commission in 1978 as patrolman in the Bartow County Unit. A native of Fort Oglethorpe, the ranger and his wife, Linda, have one daughter. They attend the Baptist Church...JOHNNY B. SMITH, JR., who succeeds Williams as ranger in Greene County, came with the Commission four years ago. A former Greene County deputy sheriff, Smith is married to the former Miss Cathy Duvall. They reside in the Greshamville community and attend New Hope Baptist Church...RAY SHIRLEY, former Commission director, was recently presented an attractive plaque by the U. S.



Shirley



Stone

Forest Service for Outstanding Service in Fire Management. The award was presented in ceremonies at the Commission library, with LeRoy Jones, USFS Atlanta, presiding...JEFFERY STONE, formerly a patrolman in Burke County, has been named ranger of the Liberty, South Bryan County Unit. A native of Thomson, he graduated from the local high school and attended Abraham Baldwin Agricultural College. The ranger came with the Commission in 1980. He is married to the former Miss Peggy Smith of Miami and they have one son...

NOW FORESTRY IN GEORGIA IS AN \$8.6 BILLION INDUSTRY

Yes, economists have now determined that forestry and its related activities currently comprise an \$8.6 billion industry in Georgia and provides employment for more than 80,000 citizens. The state leads the nation in pulp and paper production and naval stores and leads the South in lumber production. The Georgia Forestry Commission is conducting a vigorous statewide reforestation program to assure continued expansion of the booming forest industry.



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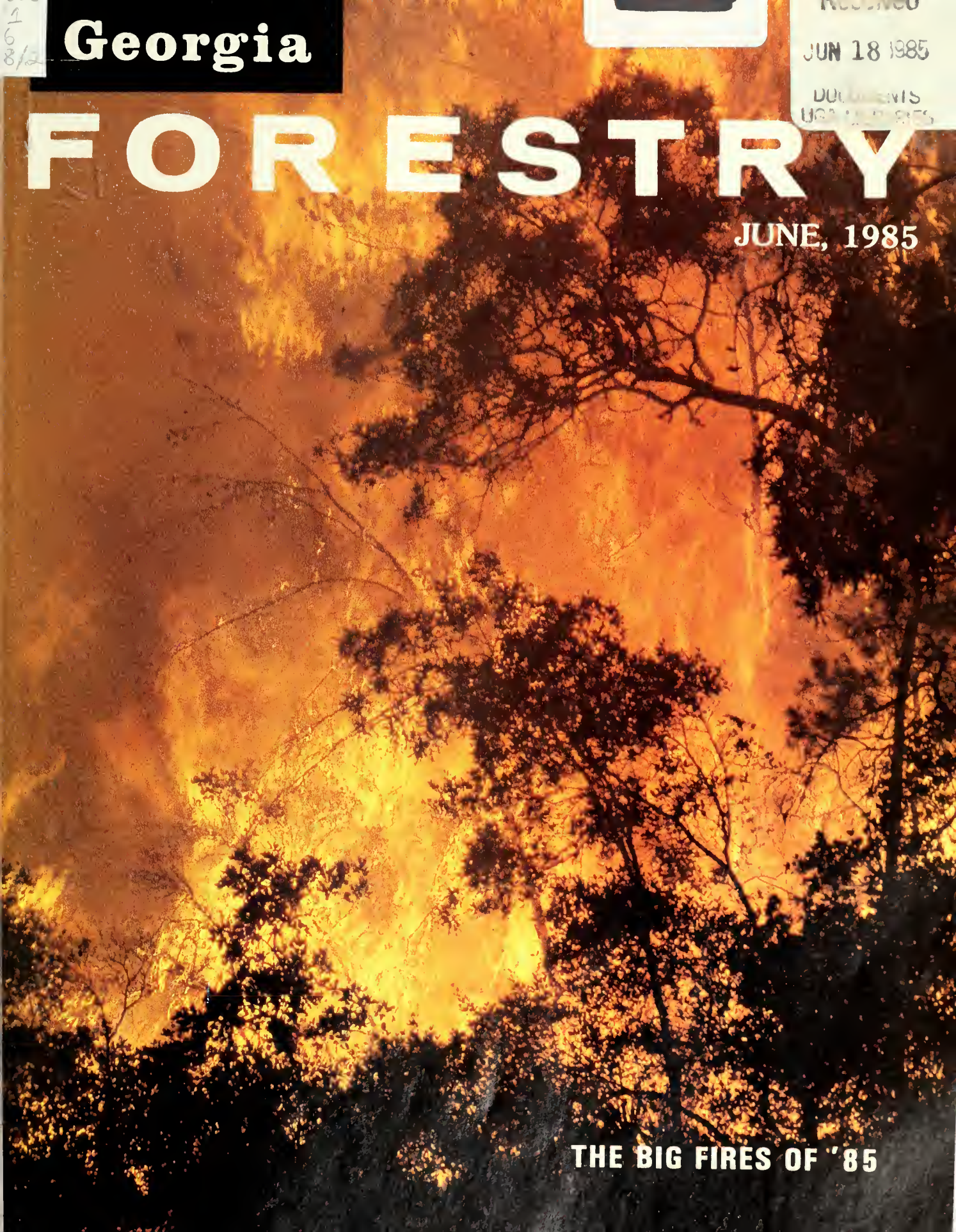
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THE BIG FIRES OF '85

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DISTRICT OFFICES

District One

3088 Martha Berry Hwy., NE
Rome, GA 30161

District Two

Route 11, Box 37
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Georgia Forestry is published quarterly by the Georgia Forestry Commission, Route 1, Box 85, Dry Branch, GA 31020. Second class post age paid at Macon, GA.



RENEE DEKLE



MIKE RISHER

TWO GEORGIA STUDENTS AWARDED NATIONAL FORESTRY SCHOLARSHIPS

There were six national scholarships of \$1,000 each to be awarded in forestry at the annual 4-H convention in Chicago and Georgians came home with two of them! Renee Dekle, a 19-year old college freshman and daughter of Mr. and Mrs. Johnnie Dekle of Louisville, followed in the footsteps of her brother, David, as a national winner and was asked to address students from throughout the nation on her achievements.

Mike Risher, born in Scotland where his father was formerly employed but now very much at home in the pine forests of Georgia, also took top prize in the annual meet. Son of Mr. and Mrs. Thomas Risher of Athens, Mike was the highest scoring individual in the statewide Forest Field Day competition.

He is a senior this year at Cedar Shoals High School in Athens and plans to enter the School of Forest Resources, University of Georgia, this fall.

Renee's national award was based on a project her father, a county agent, proposed for his daughter and son back in 1977. They planted a two-acre Christmas tree farm that year to provide money for their college education. Each year, they added two acres to the project and last year they sold 2,000 trees from their 13-acre farm and grossed \$24,000.

Renee was 11 years old when the first trees were planted and she remembers that she had to make some sacrifices to work with her brother in planting, weeding, spraying and shaping the trees on many weekends for the past eight years. She had to turn down schoolmates when invited to many Saturday functions, but she considers the discipline and the experience well worth it.

The 4-H winner and her brother sell most of the trees in a choose-and-cut operation to people in a 50-mile radius of Louisville, while some are sold wholesale to out of state buyers.

Renee considers herself "strictly an outdoor type." She likes to swim, water ski, and is an expert in archery. Although trimming the trees, controlling weeds and insects and planting new trees with a dibble are not easy tasks, Renee said she thoroughly enjoys the project.

Meantime, Mike is also involved in a Christmas tree project. He uses his knowledge in forestry by planting Christmas trees at a county land fill near Athens. His 4-H chapter expects to harvest about 4,000 trees this Christmas.

He is a member of practically every 4-H judging team in Clarke County and he also received the Young Forester Award and a \$500 scholarship from F&W Forestry Service.

The \$1,000 scholarships awarded to Renee and Mike were provided by International Paper Company, national donor for 4-H forestry awards.

ON THE COVER

This spectacular blaze was one of many that raced through the woodlands of Georgia and the South this spring in one of the most severe wildfire outbreaks in several years. This photo courtesy of Barry Nehr, U. S. Forest Service, Atlanta.

Georgia has experienced the worst fire season since 1981 with more than 14,000 fires that burned over 80,000 acres and kept fire fighting crews throughout the state working round the clock.

Commission Chief of Forest Protection David Westmoreland described the past fire season as a paradox. "In a sense, it was the worst of times and the best of times," he said. "Considering the number and intensity of fires, our state units were pushed to the limit and did an excellent job of preventing a serious situation from becoming a statewide disaster.

During the first week in April a total of 1,000 wildfires broke out across the state. Despite this staggering total, fire fighting units held the loss down to 12 acres per fire. Total acreage previously lost during the year averaged only five acres per fire.

Commission records show that forest industries throughout the state provided vital assistance in suppressing the sweep of wildfires by supplying fire fighting equipment and personnel on a round-the-clock basis.

Factors contributing to the serious fire season were three-fold: lack of rainfall, high winds, and low humidity. With these three factors present to the extent Georgia experienced, there is a tremendous potential for wildfires. Debris burning continued to be the number one cause of the state's wildfires.

As much needed rains came and Georgia's vegetation turned green, Commission fire fighting units began to relax to some extent. However, the resting period was brief.

Within days of Georgia's relief from raging wildfires, Florida suffered an outbreak of fires that burned more than 150,000 acres. One fire, near Fort Myers, even forced the evacuation of a hospital.

Georgia responded to Florida's dilemma with assistance. The Commission sent fire fighters and equipment from North, South, and Middle Georgia to the Ocala area where 130,000 acres were engulfed in flames. Equipment included 12 suppression units (with tractors, fireplows and radios) and two pickup trucks. Twenty-four operators ran the tractors on a 24-hour rotating basis. Commission headquarters in Macon sent two mechanics with the operators.

"Personnel and equipment sent to Florida were strategically selected," said Commission Field Supervisor H. L. Neal.

Neal's planning was needed. During the Florida situation, a number of Georgia fires (apparently set by arsonists) broke out. One of these arson fires, along U.S. 441 adjacent to the Suwannee River, burned approximately 1,000 acres before being brought under control.

"Georgia had one of its worst fire seasons," said Neal, "but the excellent performance of our personnel has proved them to be among the best fire fighters in the country."

COMMISSION WINS FIRE BATTLE AND AIDS FLORIDA IN OUTBREAK





Bill Crews, pioneer pulpwooder and veteran patrolman, takes a break at the landscaped base of the fire tower at the Meriwether County Unit. He had to beat great odds to lead an active, productive life.

PATROLMAN OVERCOMES HARDSHIP

When Forest Patrolman Bill Crews was 12 years old he was caught in a grist mill and his legs were broken in 17 places. Now 59 and a patrolman with the Meriwether County Unit, Crews incredibly recovered from his childhood accident and has been an active fire fighter for more than a quarter of a century.

But recovery was not quick or easy. Crews vividly remembers shoveling corn to the grindstone of Hall's Grist Mill when his jacket caught in the shaft and he was pulled in. By the time his jacket was cut off, the damage was done.

"Yeah," Crews said sitting at the base of the unit fire tower, "My legs were broken real bad and my right arm was chewed up, too. I was 16 before I got back in shape to do any kind of real work."

But Crews did recover and has only a slight limp. What is even more unusual than Crews sustained abilities to handle the rigorous duties of his job is his pulpwood cutting experience.

Crews' experience as a "pulpwooder" is unusual from a historical as well as a physical standpoint. There is a three-to-one chance that Crews cut the first stick of pulpwood from Meriwether County in 1947.

"There were only three of us," Crews said. "So I might have been the one. I just don't remember - didn't think it was important at the time."

Crews recalls that he and two others cut the pulpwood with bowsaws and loaded it by hand into boxcars. That was before railroads provided special flat cars for pulpwood.

Although he was told the wood was going to be used to make paper, he wasn't

sure whether to believe it or not; and he's still not sure where it was shipped.

"Back then it was just a job," he said. "We cut it off Old Man Duck Roberts' place. Worked from sunup to sundown."

But now Crews views it differently. "When I think back on it, what really gets me is to think how much money people burned up before they knew what pine trees were worth," he said. "We used to burn off the pine woods to kill boll weevils, and the pine trees turned out to be worth ten times more than the cotton."

Today, Crews and others know the value of pines. He considers his work as a forest patrolman valuable, and he likes it. Crews could retire in five or six years, but he has no such intentions. He plans to stay on the job as long as he can. If being healthy and active has anything to do with it, he should be there for a long time.

Crews said there has been a lot of changes in forestry since he came with the Commission - changes for the better. "When I started, we had a two-cylinder John Deere tractor with just a plow," he said. "These big, modern tractors we've got now have the down pressure to drive the plow into the ground and wipe out the growth. We can stop these fires now."

But Crews said the most important change in forestry over the past 30 years is the major economic role it now plays in our society.

"It's put a lot of people to work," he said. "The biggest change in this county has been the move from farming to pulpwood. People have learned you can make more growing trees than farming. This reforestation thing is getting bigger and bigger."



MARIETTA NOW TREE CITY USA

Marietta was recently designated a Tree City USA by the National Arbor Day Foundation and was presented an award by Commission Director John Mixon for becoming the third city in Georgia to earn the distinction.

Marietta also became the first "Clean City" in Georgia to be designated a Tree City. Director Mixon presented the award during an afternoon ceremony in Glover Park on the square, in conjunction with Keep America Beautiful Week.

Accepting for the city was Mayor Robert Flournoy. Kathy Harvill, executive director of the Marietta Clean City Commission, had spearheaded the project. Volunteers helped plant 1,200 pink and white dogwoods around the Route 120 Loop.

Marietta has been a "Clean City" since 1983, one of 40 communities participating in Georgia Clean and Beautiful, which is part of the national Keep America Beautiful campaign.

To be named a Tree City USA, a community must enact a city tree ordinance, establish a tree governing body, design a comprehensive urban forestry program and observe Arbor Day.

Marietta met all qualifications with the assistance of one of the Commission's urban foresters, Larry Morris.

Other cities previously designated Tree Cities are Avondale Estates and Columbus. Avondale Estates was named earlier this year and Columbus was awarded the title seven years ago.

Several other Georgia cities and towns have expressed interest in the program and some are actively seeking the title.

MERCK NAMED TREE FARMER



When Walter C. Merck of Kingsland began working as a dog trainer for a wealthy landowner west of town, some of his friends told him he was in a vocation that had no lasting security and that he should find work with a more promising future.

The young man held on to his duties of training hunting dogs, however, and began to take on many other responsibilities in managing thousands of acres of forests in the estate along the scenic St. Mary's River.

The land was owned by Mrs. Alicia Guggenheim of New York City, a prominent publisher and art patron, who used the estate as a frequent retreat from life in the city.

She often brought friends, including Adlai Stevenson, Senator Edmund Muskie and other nationally known figures, down to hunt on the game preserve that was well tended by Merck.

A close bond developed between the owner and her employee as a result of a mutual respect and love for the land—especially the vast tracts of timber. When Mrs. Guggenheim died in 1963, she left more than 1,500 acres of the estate to Merck.

For the past 23 years, Merck and his wife, Dawn, have maintained the land in a fashion that would have pleased their benefactor. It is an impressive tree farm

that includes a registered quail shooting preserve. The forest is a balance of young planted pines and old growth stock. About ten miles of roads and fire breaks are maintained, prescribed burning is carried out each year and a good annual planting schedule is established.

For these and many other reasons, Walter Merck has been named Georgia's Tree Farmer of the Year.

The tree farmer has personally planted more than a half million seedlings on the property and he does his own burning and the cultivation of the game food plots.

He is a member of the Board of Directors for the Camden County Unit, Georgia Forestry Commission, and he encourages other land managers and forest landowners to participate in a multiple use forestry concept. He has appeared on a television talk show to discuss forestry and game conservation.

Merck receives technical assistance from Forester Roger Campbell through a program sponsored by Union Camp Corporation. He has also taken several short courses to better acquaint himself with forest management.

The tree farmer and his wife maintain an attractive home on the bank of a picturesque bend on St. Mary's River some five miles from Kingsland. They have two married children, Lisa and Steven.

Georgia's Tree Farmer of the Year poses at a sign on his attractive multiple use forests.



Tree Farmer Walter Merck stands at an ancient oak on the St. Mary's River. Beneath its branches is a simple stone with this inscription: "Alicia Patterson Guggenheim, Oct. 15, 1906; July 2, 1963. A wish has been fulfilled that her ashes mingle here with the earth." She left a portion of her estate to Merck.



Giant export facility warehouse is shown under construction on Colonel's Island. Now completed and operational, the new warehouse was built entirely of Southern yellow pine. Architectural designers determined concrete and steel were unsuitable for construction because of highly corrosive materials to be stored. The pine structure, treated with fire retardant chemicals, is expected to last indefinitely.

AUTHORITY TURNS TO PINE FOR CONSTRUCTION

The Georgia Ports Authority's newest export facility is now operating on Colonel's Island near Brunswick with a 90-foot-high, 134,000-square-foot warehouse constructed entirely of Southern yellow pine.

The \$32 million project is Georgia's latest addition in modernizing the state's ports to better accommodate international bulk trade. Governor Joe Frank Harris dedicated the facility with a ribbon cutting ceremony. As part of the ceremony, the road leading from U.S. 17 to Colonel's Island was designated Joe Frank Harris Boulevard.

The warehouse is equipped with machinery to automatically discharge stored contents at a high rate of speed. The skillfully designed port facility also includes dredging, docks, a shiploader, and transfer equipment.

Koppers Company, Inc., based in Pittsburgh, prepared the basic building design for the warehouse, fabricated the 180-foot-long wood roof arches, and erected the structure. The arches were formed entirely from laminated pine produced in Koppers' Raleigh, North Carolina plant.

James Burns, of Koppers Architectural Building Producers Division in North Carolina, said the use of concrete or steel would not be acceptable for such a facility because of the highly corrosive nature of much of the material (such as salt and potash) to be stored.

ALL PINE WAREHOUSE

"The solution was to build a warehouse entirely of wood," Burns said. "Specifically, Southern yellow pine because of its high strength value - and it's economical. Pine is also readily available in the area." He pointed out that all plywood and most of the lumber used in the facility came from Georgia.

Approximately 640,000 board feet of laminated pine were used to construct conveyor supports, catwalks and other areas of the facility. More than 200,000 board feet of solid lumber is included in roof joists and other segments. Roof decking required 202,000 square feet of 5/8 inch plywood.

Burns said the Colonel's Island facility is not the largest of its kind, but "it is one of the largest." Koppers has built similar facilities in Florida, Oregon, Louisiana, and Indonesia.

PINE FIRE RESISTANT

Another factor influencing the selection of pine for the structure is receptivity to being treated with fire retardant chemicals. Southern yellow pine is relatively easy to treat. Some types of wood have to be specially treated by incising - a process that involves perforating the wood so it will accept fire retardant chemicals.

Except for the arches, all pine used in

the Colonel's Island facility was pressure-treated with Dricon fire retardant chemicals. The treated pine carries an Underwriter's Laboratories rating for surface burning characteristics. Dricon has a flame spread rating of 25 or less, based on a scale in which 0 is asbestos board and 100 is untreated red oak. The Dricon treated pine's low moisture absorption makes it suitable for Georgia's humid coastal climate.

Another architectural plus factor is the large laminated wood components providing inherent fire resistance because of their size.

WOOD LAMINATED

"Also," Burns pointed out, "laminated wood members retain their structural integrity long after the sag temperature of steel."

Koppers precisely designed construction required each curved 127-foot-long roof member be cut with end finger-joints and then bound together. Adhesives, stronger than the wood, were used to form the one-piece laminations which were tested for load capacity and planed to shape. The boards were then spread with glue, mounted on steel frames, and cured to the exact curve designated for construction.

Burns said these arch components were designed to be transported on flat-bed railroad cars, without having to be



Specially designed 127-foot-long roof members are transported to Colonel's Island by flat-bed railroad cars during warehouse construction. Adhesives, stronger than wood, were used to form the one-piece laminations which were tested for load capacity and cured to exact curve designated by architectural plans.

cut or respliced. Similar aspects of precise design and architectural planning were emphasized throughout the project.

Such meticulous planning and design was more than warranted, according to John Powers, trade relations director for the Georgia Ports Authority in Savannah. Powers said that in terms of untapped potential, Colonel's Island is the Georgia Ports Authority's greatest raw resource.

"It's one of the few sites on the east coast offering deepwater sites with rail, highway, and utility services in operation," Powers said.

WOOD PAVED THE WAY

U. S. Highway 17 bisects Colonel's Island and connects with major north-south artery, Interstate 95, only three minutes away. The Seaboard and Norfolk Southern rail systems connect with Colonel's Island Railroad. Electricity, natural gas, and water are also available.

Powers said the Georgia Ports Authority spent nearly \$4 million to dredge a channel from the existing East River waterway to the bluff at the northern end of the island. This enables six berths to operate for various industrial and transportation purposes.

"This access to the rear of Colonel's

At right, aerial view of Georgia's newest dry bulk facility during latter stages of construction shows size of giant warehouse. Constructed near Brunswick entirely of Southern yellow pine, the 90-foot high warehouse dwarfs vehicles and construction equipment around it. More than 640,000 board feet of laminated pine were used in constructing catwalks and other specified sections.

Island also makes this section well-suited to barge operations," Powers said. "These barge operations become even more appealing in view of the short five and a half mile trip to the intracoastal waterway."

The well planned design of the facility is reflected in operating efficiency. When

vessels arrive for loading, a 2000 ton-per-hour scraper reclaimer retrieves products from storage and transfers them to a conveyor belt from flat storage or rail receiving to a 600 ton surge bin.

CONTINUOUS LOADING

The surge bin permits continuous loading despite interruptions in reclaimer operations or railcar discharge, and will continue to accept reclaimed products while the ship is being shifted. A remote controlled proportioning gate controls the flow rate to the waterfront.

The dock measures 580 feet in length and is served by a 2,400 tph travelling shiploader. The unit shuttles to a maximum outreach of 94 feet. A telescoping chute carries products down into the hold where a spoon disperses it and assures a level fill throughout the loading process.

To insure operating efficiency, a computerized control system directs all activity of the Colonel's Island dry bulk facility. Two graphic color terminals in the main control building direct flow paths. The computerized system also continuously monitors all machinery and provides instant electronic notification of any problems.

Georgia Ports Authority's studies determine the Colonel's Island facility - focused on the pine warehouse - will ultimately add 1.5 million tons annually to throughput total for the Port of Brunswick.



GEORGIA SETS NEW RECORD IN REFORESTATION

The Commission's second year in a concerted county-by-county campaign to promote reforestation has resulted in a record breaking tree planting season.

Records compiled by the Management Department show that Georgia landowners and industry during the 1984-85 season set out more than 432,929 acres in pine species, the greatest number ever planted in a single season.

Commission Director John Mixon said "this tremendous effort by our personnel, with the cooperation of other agencies, organizations and individuals, proves that we can indeed close the gap between the

trees we are planting and the mature stands that we are harvesting."

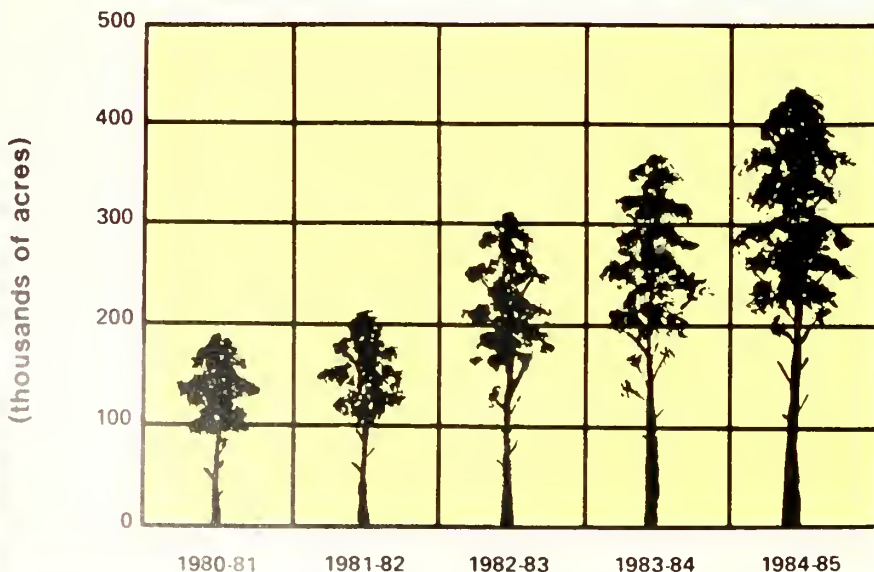
Druid Preston, Chief of Forest Management, said 214,311 acres represented non-industrial private landownership, 213,712 acres is land owned by forest industry and the remaining 4,906 acres is under federal, state and municipal government ownership.

Preston also said 9,320 acres of direct seeding and 35,007 acres of natural regeneration across the state during the season brings the total pine reforestation effort to an impressive 477,256 acres.

The drive for greater reforestation was launched in 1983 for the 1983-84 season, with the Commission spearheading county committees in which agencies, industries and landowners worked to encourage the planting of trees on marginal, sub marginal and low productive croplands. The program resulted in the planting of more than 370,000 acres.

In topping last year's record planting, it was pointed out that this season's effort included 16,183 acres planted under the FIP program and 12,397 acres planted under the ACP program, or a total of 14 percent of the non-industrial

GEORGIA'S ACREAGE PLANTED IN PINE SEEDLINGS



SECOND



private land acreage planted under a cost-share program. Also, 46,911 acres of the non-industrial private lands were planted by forest industry under their Landowner Assistance Programs. This is 22 percent of the total non-industrial private land acreage planted.

Mixon and Preston also praised Georgia's forest industries for their effective Landowner Assistance Programs. "It is interesting to note that 12 companies in Georgia have an active program to assist landowners," said Preston, "and I know of no other state having such accomplishments."

The record planting far exceeds the peak years of the Soil Bank Program from 1956 through 1960 when planting hit approximately 279,000 acres annually.

HIGHLIGHTS OF 1984-85 PLANTING SEASON

- * 432,929 acres planted in pine seedlings.
- * 214,311 acres planted on non-industrial private forest lands.
- * 46,911 acres planted by forest industry landowner assistance programs.
- * 12 forest industries have active landowner assistance programs.
- * 16,183 acres planted under Forest Incentive Program.
- * 12,397 acres planted under Agricultural Conservation Program.
- * 28,580 acres planted under cost-share programs.
- * 35,007 acres received planned harvesting for natural regeneration.
- * 9,320 acres were direct seeded.



A rapidly maturing stand of pine will soon be ready for harvesting, while a large field of newly planted seedlings begin growth to help close the gap between harvested timber and trees planted.

YEAR IN STATEWIDE CAMPAIGN

NEW LAW PROTECTS SELLERS OF TIMBER

The 1985 session of the state legislature passed a bill of major importance to woodland owners in Georgia.

House Bill 232, which requires certain purchasers of trees or timber to report the volumes cut to the landowner, will become law on July 1, 1985.

The new law applies to any person, company, or corporation which cuts trees or timber from lands in Georgia and who buys this timber by weight, cord, or measure of board feet. Those who buy timber in this manner will now be required to furnish the owner of the land where the timber was cut a wood load ticket for each load cut and taken from the property.

If the timber is purchased for a lump sum, or if the landowner harvests his own timber, this law will not apply. Likewise, if the wood is sold for firewood only, no ticket will be required.

The wood load ticket furnished to the landowner should be clearly understandable and contain certain basic information. Each ticket should be numbered and should give the name and address of the company and its facility where the load of wood is received and measured. The ticket should also be dated and show the landowner's name, address, and tract name, including county and state of origin. If a wood dealer was involved, his name should appear along with the name of the producer or logging company.

If the wood is sold by weight, then the ticket should indicate the weight of the loaded truck, the weight of the empty truck, and the net weight of wood delivered. When wood is sold by scale, the total volume should be shown. Should any wood be deducted from the load, then the amount and reason (i.e. cull, containing metal, knots, etc.) should be stated.

It is also required that the individual who weighs or scales the load include his name on the ticket.

In the past, many landowners who sold wood on a unit basis had to rely on the honesty of the loggers to report what was cut from their lands, or else have the timber carefully measured prior to cutting. Legislators feel the new law should help reduce the occasions when wood being cut is unreported and will provide the landowner with better information for his records. Failure to comply with this law constitutes a misdemeanor.

Landowners with questions concerning the new law should contact their county forestry unit or nearest district office of the Georgia Forestry Commission.



Several hundred residents of Habersham County and vicinity, and busloads of students from the nearby North Georgia Vocational School, came to see the Commission's portable sawmill and they were impressed with the versatility of the machinery as it sliced pine logs into thick planks which the students will finish into table tops and furniture. The field demonstration was held near Clarkesville and was coordinated by Forest Ranger Brion Williams and Mike Smith, head of the school's Continuing Education program. The demonstration was held in a heavily wooded site owned by the school and the location will be developed into an experimental forest. The Commission's Habersham-Rabun-White County Unit will aid in the development of the project.

FIRE EQUIPMENT SHOW HELD

The Commission recently sponsored its fifth Fire Equipment Show at Macon Coliseum and hundreds of professional and volunteer firemen, city and county officials and others from around the state were on hand to see exhibits and demon-

SOILS MANAGEMENT WORKSHOP PLANNED

A workshop entitled Soils and Forest Management will be held at the University of Georgia Center for Continuing Education July 10-11. The 1½-day course will introduce practicing foresters to concepts of site quality maintenance and improvement through silviculture and soil conservation.

Topics to be covered include Forest Soils and Site Quality, Influences of Silviculture on Soils, Impact of Regeneration Methods and Their Influences on Site, Using Soil Mapping Information as a Silvicultural Tool in Forest Management and small group assignments.

For more information contact Dr. Leonard A. Hampton, 237 Center for Continuing Education, The University of Georgia, Athens, Georgia 30602 - phone 404/543 3063 or Mr. Andy Little, Conference Coordinator, 251 Center for Continuing Education, The University of Georgia, Athens, Georgia 30603 - phone 404/542 1515

strations staged by suppliers and manufacturers.

The last show of its kind was held by the Commission five years ago and since that time several important innovations have been made in firefighting equipment, according to officials. They said most of the visitors were impressed with strides that have been made.

The Commission coordinates the Rural Fire Defense program in Georgia and in recent years the state agency has assisted many rural and small towns in securing fire trucks and other equipment and in aiding in the training of volunteer firemen. Many of the RFD units brought their equipment and personnel to the one-day show in Macon.

David Westmoreland, Chief of the Commission's Forest Protection Department, was moderator for the morning session of the event and others appearing on the program included John Mixon, Director of the Forestry Commission; Major Tom Richmond, Chaplain, Georgia State Firemen's Association; State Representative Lauren (Bubba) McDonald, Jr.; Scott Wood, Executive Assistant to Mayor George Israel, Macon and Harold Thompson, Superintendent, Georgia Fire Academy.

The afternoon was devoted to demonstrations on the parking area of the Coliseum.



FOR THE SECOND YEAR!



Your ground level seat will be one of the best in the stadium and you'll be getting a 20 percent discount on the \$7.00 ticket. The big Braves vs. Phillies game at 7:00 p.m. on July 12, 1985 will honor forestry, forest industries, forest landowners and others with forest interests, as well as their families.

Be a part of it! Order your tickets now (\$5.60 each) from the Education Department, Georgia Forestry Commission, Box 819, Macon, Georgia, 31298-4599. Make checks payable to Forestry Baseball. For further information, please call (912) 744-3374.

Braves

GEORGIA FORESTRY NIGHT

(Make checks payable to FORESTRY BASEBALL)



**PAGEANT
WINNERS
COMPETE...**

JEKYLL ISLAND-JUNE 9-11

This year, young ladies representing 42 counties - the largest number to compete since the program was inaugurated - will vie for the Miss Georgia Forestry crown at the annual convention of the Georgia Forestry Association.

The Jeekyll Island event, to be held June 9-11, will feature the girls in sports attire at a Sunday night seafood dinner and in evening gowns for final judging at the banquet on Monday evening.

The contestant chosen for the state title will ride the Georgia Forestry Commission's float in the Atlanta-Fulton County Stadium on Forestry Night July 12 and also be featured in the July 4 parade in Atlanta. She will represent the Commission and forest industries in parades, festivals and other forest related events around the state during her reign for a year.

Participation in the contest on the local level is the first experience for many girls to wear a pretty gown and appear before an audience. It's an introduction to poise and self confidence. It is an opportunity for the county winner to meet other young ladies from across the state and often form lifetime friendships.

The pageants also spotlight the importance of forestry in the various counties as the finest young ladies compete to help promote forestry locally and statewide.



Laura Bass
Oglethorpe County



Angie Brewer
Wheeler County



Michelle Carman
Porterdale



Penny Freeman
Lincoln County



Teresa Lynne Grooms
Charlton County



Lisa Gunter
Miss Winder-Barrow



Michelle Humphrey
Montgomery County



Dottie Kohn
Henry County



Kathy Jo Lee
Richmond County



Flora McClarin
Ware County



Tammy Meeks
Toombs County



Julie Ann Meunier
Oconee County



Jennifer Pittman
Jackson County



Penny Proctor
Treutlen County



Ansleigh Riddle
Macon County



Angela Lynn Rogers
Towns County



Carla Jane Satterfield
Sumter County



Teresa Scarborough
Pierce County



Mary Frances Ussery
Telfair County



Jerret Lee Watson
Crisp-Dooly



Penny Whitley
Taylor County

FESTIVALS ARE HELD AROUND THE STATE

Forest festivals held throughout the state were highlighted by competitive events, keynote speakers, parades, educational programs, awards, craft shows, and a man who broke his own tree-sitting record.

The Lakeview-Fort Oglethorpe Festival packed the area with 250 students from seven area high schools competing in the Lumberjack Contest. The contest is designed to promote interest in forestry and provide students with practical experience.

Northwest Georgia High School sawed, axed, and climbed its way to first place in the Lumberjack Contest.

Special guests for this year's contest were John W. Mixon, Georgia Forestry Commission director, and Senator Sonny Huggins of LaFayette.

The Barrow-Jackson Field Day, held near Arcade, concentrated on educational programs ranging from marketing to herbicides. This day's educational approach emphasized the Barrow County's Board of Commissioner's earlier resolution designating 1985 as "Year of the Tree."

Druid Preston, Chief of Forest Management for the Georgia Forestry Commission, started the series of sessions with a look at future potentials. Preston's program was titled, "Trees - Tomorrow's Needs."

District Forester Theron Devereaux approached the future from another angle with "Pine Potential Growth."

The University of Georgia provided the basics on how to make money from pine trees. Professor Reid Parker, of the University's School of Forest Resources, discussed marketing with emphasis on the vast financial potential involved.

The festival moved to a field site for afternoon sessions, which included prescribed burning, planting, scarifying, and wildlife.

Commission Director John Mixon reflected the state's enthusiasm for its booming forestry market when he addressed the first annual Patterson Forest Festival.

"People are making money with timber," Mixon said. "This is the timber basket of the world. We can grow trees faster than anywhere else in the world."

Among the awards presented at the Patterson Festival and the Million Pines Festival in Soperton are the state's largest celebrations honoring forestry and forest industries.

Swainsboro pulled out the stops for its forest festival which included a parade, pet show, flower show, golf tournament, arts and crafts exhibit, car race, and a man who sat in a pine tree for 32 days to promote forestry.

The growing Swainsboro Forest Festival attracted some 12,000 people to this year's parade.



The Harlem High School Chapter of the FFA won first place in the Annual Statewide Forestry Field Day. Front row, left to right, are Stephen Meyers, Kenneth Rockefeller, Kevin Floyd, Bubba Dickens, Jimmy Moore and Kenny Green. Back row: Larry Moore (adviser), Jeff McNair, Trent McDaniel, Mark Ivey, Patrick Lusk and Brad Collins.

HARLEM STATE FFA WINNER

After nine regional forestry meets throughout the state, competitors were weeded down to the cream of the high school FFA crop. Harlem High and Louisville High emerged as winners in the 26th Annual State Forestry Field Day held near Covington.

Harlem took top honors in the intense competition. Louisville placed second. Both winning schools, less than 40 miles apart, are from the same FFA region.

Competitive events in the meet included tree planting, standing pulpwood estimation, standing sawtimber estimation, tree identification, ocular estimation, land measurement, compass, insects and diseases, forest management, and selective

marking.

Sponsored by Trust Company of Georgia and its 19 affiliates, the annual meet was held at the State FFA-FHA Camp. State FFA President Craig Padgett presided over the meet.

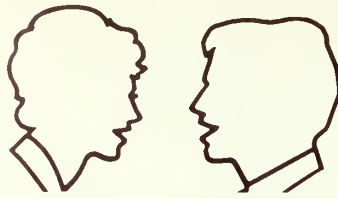
D. M. Dillard's introduction of regional teams was followed by Don Register's introduction of the judges. Mark Parker, of Trust Company Bank of Atlanta, presented awards to the winning teams.

The Harlem FFA Chapter, directed by Larry Moore, received an inscribed plaque and \$100. The Louisville FFA Chapter, directed by Robert McGill, received an inscribed plaque and \$50.



Regional winning FFA teams from throughout Georgia pack dining hall of State FFA-FHA Camp near Covington following annual statewide meet as they wait for state winners to be announced.

PEOPLE



IN THE NEWS

sity of Georgia, with a degree in forestry, was recently employed by the Commission and is stationed at the Treutlen County Unit. He is a member of the First Baptist Church in Thomaston. The forester previously worked with timber companies in Athens and Waycross.

CICADA SERENADE HEARD IN FORESTS

It's time for the 13-year cicada to swarm over Georgia's forests again with their pulsating whir. Why now? Because it's been 13 years since their last trip to the outside world from the darkness of their underground home.

Oftentimes, damage can be rather severe on individual trees in forest stands. Forest trees that are attacked frequently are various species of oaks. Fruit orchards can be damaged severely in some locations.

Terry Price, entomologist for the Georgia Forestry Commission, said the now widely publicized insect was mistakenly considered a locust by early American settlers because of its periodical appearance in great numbers.

Price explained that this peculiar insect spends 13 years in total darkness, feeding on the sap of tree roots. Then, it emerges to shed its skin and become adult. The adult cicada is now free from its subterranean confinement to fly around making its whirring serenade, mate, and lay eggs.

But that's the end of it," Price points out. "This activity lasts only a few weeks and the insect dies."

Despite its brief flurry in the outside world, Price said the cicada has the longest life span of any insect in the United States - maybe the longest in the world.

A two-inch cicada with two, red bulbous eyes and orange fringed wings looks like a creature not to be trifled with, but the cicada is a lethargic insect not even capable of stinging.

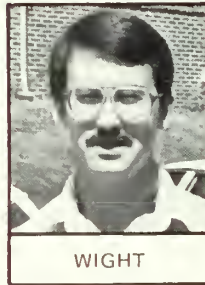
When the insects emerge from the ground, the females lay eggs on the twigs of forest and fruit trees by making a slit in the bark. Although some damage can result from too many slits, Price said, this is rare and cicadas are considered generally harmless to our forests.

The nymphs hatch in a few weeks and drop to the ground where they burrow into the soil and suck the juices of tree roots; and the 13-year cycle begins all over again.

"The last swarms of the 13-year cicada in Georgia occurred in 1972," Price said. "May and June are their months to swarm, and as usual, they're right on time."



estry Project, Stone Mountain. She has previously worked as assistant forester with a pulp and paper company. The forester is a member of Skyland United Methodist Church and is active in youth work...Forester WILLIAM L. (BILLY) WIGHT, JR., a native of Warner Robins and a graduate of Auburn University with a degree in forest management, came with the Commission recently and has been assigned to the McRae District. He served for a time as an intern at the Commission's Morgan Nursery. The new forester is a member of Evergreen Baptist Church, Warner Robins...Forester LANE RICHARD GARLAND, who has worked with timber and engineering companies in



WIGHT

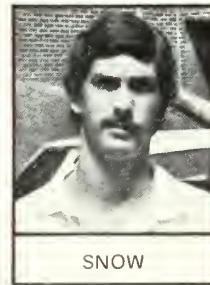


GARLAND

South Carolina and Virginia, came with the Commission recently and has been assigned to the Athens District. The forester, a native of Macon, is a graduate of Central High School and the University of Georgia. He served 11 years in the Army National Guard. Garland is married to the former Miss Betty Elaine Hubbard of Meadows of Dan, Va. They have three children and the family attends the Catholic Church...Forester JEREL (DENNIS) POPE, a native of Prattville, Alabama, came with the Commission May 1. He is a graduate of Auburn University, with a degree in forest management. The new forester, who has been assigned to the Statesboro District, is married to the



POPE



SNOW

former Miss Joy Turner of Prattville. The couple attend the Baptist Church...Forester BRYAN H. SNOW, a native of Thomaston and a graduate of the Univer-



OWENS



ALEXANDER

VERNON OWENS, formerly assistant ranger of the Candler-Evans-Tattnall Unit, has been named ranger of the Bulloch County Unit. A native of Evans County and a graduate of Claxton High School, he came with the Commission in 1981 as a patrolman. The ranger and his wife, Delores, have an infant daughter. He succeeds Ranger PAUL MOORE, who recently retired from the post...JAMES ALEXANDER, who came with the Commission as a patrolman in Talbot County in 1979 and two years later was named assistant ranger of the Harris-Muscogee-Talbot Unit, has been named district ranger of the Americus District. He was serving as ranger of the Taylor County Unit at the time of his promotion. A native of Carroll County, he is married to the former Miss Gisele Newsom of Wyoming. They have two young sons, Billy and Andy, and the family is active in First Baptist Church of



BUDD



THOMPSON

Americus...BERYL BUDD, who came with the Commission as a patrolman in the Coweta County Unit in 1981, has been named ranger of the Newton-Rockdale Unit. A native of Griffin, he is a graduate of Griffin High School and attended Abraham Baldwin Agricultural College. Ranger Budd succeeds JIMMY SMITH, who was recently named district ranger of the Gainesville District...Forester MELINDA CAY THOMPSON, a native of Atlanta and a graduate of the School of Forest Resources, University of Georgia, came with the Commission May 5 and has been assigned to the Urban For-



Forester Brian McDavid stands on deserted street corner of Juliette where New York crew completed filming movie. McDavid, who runs a forestry consulting business in the small community, coordinated area contacts for the film crew and worked as extra. Abandoned grist mill in background was a major site and influenced producers to film in Juliette.



"They really enjoyed it."

The movie, titled, *Monday, Tuesday, Wednesday*, is described by producers as an "action-suspense film" which follows the ordeal of a woman who finds her husband murdered and is isolated from the nearest town. The year is 1943 and the setting is "rural, backwoods America."

McDavid said the atmosphere of Juliette was so nearly perfect for the needs of the movie that when some film crew members saw the town of Juliette, they thought that it had been built as a set.

Director David Saperstein had to take only one look at Juliette and it's isolated wooded locale to decide on it. Saperstein adapted his script from the novel by Alabama writer Robert Houston. In a few days, Saperstein had transformed Juliette into the 1943 working mill town of Parrish, West Virginia.

The film stars Peter Weller and Kathy Baker. Both have performed in numerous television, stage and movie productions. Baker received an Obie Award for her role in Sam Shepherd's play, *Fool For Love*.

McDavid said the gigantic old mill - which figured prominently in the plot - was probably the most influential factor in having key scenes filmed in Juliette. Numerous rumors are circulating in the area that other production companies are interested in using the mill as a filming site.

"Scouts for the movie had been flying the Ocmulgee River in a helicopter looking for locations when they saw the old mill from the air," McDavid said. "After that, it wasn't long before I had a visit from some film people and we had everything arranged. These people worked fast and efficiently - they really knew what they were doing."

For a forestry consultant, working on the movie set was a drastic change. He described it as a "hurr up and wait" process that somehow tied up all the loose ends and wound up with quality results.

"But I enjoyed it," he emphasized, "and I would definitely do it all again."

McDavid's biggest interest in the film now is seeing how it turns out after being cut and edited. The film is scheduled to be released in the fall.

FORESTRY CONSULTANT CAUGHT UP IN MID GEORGIA MOVIE PRODUCTION

A Georgia forester has turned actor. Not really - but pretty close.

Brian McDavid, who runs his forestry consulting business out of Juliette, worked as an extra and coordinated contact efforts for a New York production company that filmed key scenes for an upcoming movie in this quaint Georgia town.

McDavid's business, Forestry Consultants of Georgia, Inc., provides services ranging from land management to timber tax consulting. His office, located in a rustic country store building, reflects a nostalgic atmosphere.

"The producers liked the office and used it for the sheriff's department in the movie," McDavid said. "In fact, they liked the whole town so well that they renovated everything for a 1940s look."

The Juliette forester's knowledge of the local area and residents made him a natural to assist in production efforts and contact work. McDavid was put on the film company's payroll for this contact

GEORGIA FORESTRY FEATURE PAGE

work as well as his daily duties as an extra. McDavid's business associates, Jim Wells and Benjy Griffith (who handle the real estate side of his business), also worked as extras in the film.

"Benjy even managed to get his wife and son in the movie," McDavid said.

TIME TO ORDER SEEDLINGS!

BEGINNING JULY 1, THE GEORGIA FORESTRY COMMISSION WILL BEGIN ACCEPTING ORDERS FOR TREE SEEDLINGS. MAKE YOUR REFORESTATION PLANS NOW AND ORDER EARLY TO BE ASSURED OF THE TREES YOU WILL NEED.

APPLICATION FOR NURSERY STOCK

ORDER NO. _____

NAME _____ PHONE _____
 ADDRESS _____
 CITY _____
 COUNTY _____ STATE _____ ZIP _____



MAIL APPLICATION TO:
 GEORGIA FORESTRY COMMISSION
 P. O. BOX 819
 MACON, GEORGIA 31298-4599

SHIP TO ADDRESS ABOVE OR:

NAME _____ PHONE _____
 ADDRESS _____
 CITY _____
 COUNTY _____ STATE _____ ZIP _____

DELIVERY DATE	COUNTY OF PLANTING	SPECIES	NUMBER OF SEEDLINGS	COST OF UNIT	TOTAL COST

TYPE OF OWNERSHIP (Check One)

- 1. Private persons, clubs, associations and private schools.
- 2. Private forest industry - lumbar manufacturers.
- 3. Private forest industry - pulp and paper.
- 4. Private forest industry - naval stores, plywood, etc.
- 5. Private other industry lands.
- 6. Town, county and public schools.
- 7. State and other public lands.
- 8. Federal government.
- 9. Other (Specify)

METHOD OF SHIPMENT

- 1. State truck to county forestry unit.
- 2. Applicant will pick up at nursery.
- 1. WALKER NURSERY
Reidsville, Ga.
- 2. MORGAN NURSERY.
Byron, Ga.

TRANSPORTATION CHARGE

TOTAL

ONLY PAID ORDERS
INSURE PRIORITY

I HEREBY CERTIFY THAT I DESIRE TO PURCHASE THE ABOVE NURSERY STOCK UNDER CONDITIONS PRINTED ON THE BACK OF THIS FORM.

PAYMENT

Amount Enclosed _____ Date _____ Signature _____

SECOND CLASS POSTAGE PAID
AT MACON, GEORGIA

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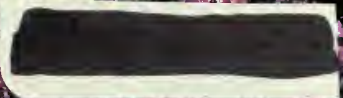


Georgia

FORESTRY

SEPTEMBER, 1985

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Georgia FORESTRY

SPS No. 217120

September, 1985 No. 3 Vol. 38

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Georgia Forestry is published quarterly by the Georgia Forestry Commission, Route 1, Box 5, Dry Branch, GA 31020. Second class postage paid at Macon, GA.



One conveyor moves chips into a storage area, while another conveys the material to the boiler section of the complex.

WOOD ENERGY SYSTEM OPERATIONAL AT HUGE CENTRAL STATE HOSPITAL

The 143-year-old Central State Hospital in Milledgeville has returned to wood as a heating fuel.

Georgia's newest major wood energy system is now operating at Central State Hospital, providing 85 percent of the steam required to heat and cool more than 250 buildings located on 1,300 acres.

The hospital, operated by the Department of Human Resources, provides patient care under a variety of medical and psychiatric programs. Established in 1842, the state facility down through the years has previously used oil, coal, wood, and natural gas system.

The Forestry Commission obtained \$2,500,000 from the 1982 General Assembly to fund the Central State project. Commission Director John Mixon said the new installation is a major addition in Georgia's increasing use of wood energy systems. The Commission has an established program promoting wood energy systems in Georgia.

State institutions now operating wood energy systems include five schools, three prisons, and two hospitals. Six major buildings of the Georgia Forestry Commission headquarters in Macon are heated by such a system.

Fred Allen, the Commission's chief of forest research and wood energy programs, said the new Milledgeville facility's wood energy system will result

in an estimated \$1.5 million annual savings.

"The new wood system will provide all but 15 percent of the hospital's energy needs," Allen pointed out. "This small remainder will be provided by natural gas as demand dictates."

Allen, who has coordinated installation of all the state's major wood burning facilities, said the Central State project replaced two of the hospital's four boilers with two 25,000 lb/hr wood fired boilers.

At full load, fuel consumption of these boilers is an estimated 4.75 tons/hour per boiler requiring 230 tons of wood chips per day. This consumption is required to sustain full load on both boilers.

According to specifications, the Central State system is designed to burn wood fuel, produce steam, remove ash, and release environmentally acceptable flue gas. The two remaining gas systems have been retained as backups.

Allen said the fuel handling system leading to the boiler plant is basically designed for simple maintenance and high efficiency. The first step in the system is weighing wood chips (with a moisture content less than 50 percent yielding a minimum 4,000 BTU per pound) on scales certifying appropriate weight. The second step is an unloading procedure that processes 60

(Continued on Page 15)

ON THE COVER

Miss Marion Ansleigh Riddle, the new Miss Georgia Forestry, poses amid the flowering shrubs of her attractive hometown of Montezuma. On Page 12 are less formal photos of pretty Miss Riddle as she relaxes at her home.

COMMISSION AIDS CALIFORNIA IN FIRE BATTLE

The Commission this year responded twice to appeals from other states for help in battling stubborn forest wildfires.

The first call came from neighboring Florida in May, when great fires were raging out of control in several sections of the state. The Commission's Forest Protection Department sent men and equipment south to aid in that emergency.

In July, the U. S. Forest Service appealed for help on the west coast, as fire swept across vast forests and grass in California.

With little notice to prepare for the trip westward, 20 volunteers were recruited from throughout the state and told to report to Macon Airport for a flight to Knoxville, Tenn. At the Knoxville Airport, they teamed up with other firefighters for the flight to the coast.

After two weeks on the scene, the major fires were subdued and the battle weary Commission personnel returned home.

Jack Long, Assistant Chief of the Protection Department, who coordinated the Commission's role in assisting California, said emergency request for Georgia firefighters came from the U.S. Forest Service office in Gainesville, Georgia. He said Commission personnel were assigned to fight fires in the vast Los Padres National Forest located in the Big Sur Region.

"The Georgia personnel were among 12,000 elite firefighters sent from all over the country to assist California," Long said. "Our Commission personnel worked 16 to 18 hours a day and slept only when and where they could."

According to Commission records, much of the burning terrain assigned to the Georgia crews is mountainous and required crew members to climb steep slopes and cut fire breaks where the bulldozers could not travel.

Firefighters compared the California fire fighting effort to a military campaign with reconnaissance, prearranged food supplies, and calculations of humidity and wind velocity. Long emphasized that all the Georgia firefighters were Commission volunteers.

Georgia Forestry personnel dispatched to the west coast were from units as far north as Whitfield County and as far south as Ware County.

Georgia Forestry personnel sent to the west coast included Mike McMullen, Monroe County; Steve Tankersley, Murray County; James Grygo, McDuffie-Warren Unit; Billy James, Waycross District; Carl Melear, Rome District; Bradley Ridley, Murray County; Thomas Blalock, Gordon County; Jimmy Gallman, Whitfield County; Kenneth Moss, Lumpkin County;

Mark Wiles, Elbert County; John David Nicholson, Spalding County; Randy Bingham, Monroe County; Steve Abbott, Columbia County; Lowell R. Cullison, Sumter County; Donald Bishop, Mitchell

County; Steve Campbell, Toombs County; Joseph A. Smith, Jr., Appling County; Steven P. Miller, Macon Headquarters; Larry W. Watson, Ware County; and William Garrett, Lumpkin County.



Forester Melear, left, points out fire area to District Forester Tom Joyner.

FIRE WAS NOT THE ONLY HAZARD

It wasn't the first time Forester Carl Melear of the Commission's Rome District had flown west to help fight the mountain infernos, but it was a trip he will long remember.

Melear was one of the Commission's volunteers who joined firefighters from 25 other states for a couple of weeks in July to help stamp out fires that ultimately burned over 375,000 acres of California grass and timber lands.

But the raging fire was not the only hazard facing the firefighters in the California mountains. "Poison oak was a major threat," Melear explained. "It was everywhere and some men had the poison on as much as 80 percent of their bodies and had to be sent home."

Melear and his fellow Georgians were miraculously spared that fate, but they did run into a problem involving scorpions. "Indians on the fire lines told us that a bite from these particular scorpions could be fatal and we ended up at night trying to rest on the ground in the middle of a dirt road, with one eye out for the scorpions, but we were so tired we finally went to sleep...the Indians were probably kidding, anyway."

The Forest Service personnel also warned the firefighters of another peril. "They said there were some marijuana fields in the area that could be booby trapped and we were told to look out for them, but we didn't run into that situation," Melear said.

The forester maintained communications with his wife, Faith, back home in Everett Springs, a small town about 15 miles north of Rome, but it wasn't easy. He had to walk about two miles to a phone booth at a country store and then wait in line for about an hour to make his call.

Melear said people at the store often "thanked us for coming west and helping battle the fires" and at one point, a group of local citizens applauded the firefighters as they passed by in a convoy, a gesture that was greatly appreciated by the Georgia volunteers.

STUDY SHOWS BENEFITS DERIVED FROM ASSISTANCE TO LANDOWNERS

The first national legislation establishing state and federal cooperative efforts to control wildfires and reduce destructive timber cutting practices was passed in 1924. Designated the Clarke-McNary Act, the legislation marked the beginning of numerous programs involving cooperative efforts of the U.S. Forest Service and state forestry agencies.

Today, technical assistance is provided from state and federal funds to produce seed and seedlings, perform non-federal forest planning, and protect private timberlands. These assistance programs also provide financial or technical assistance to private landowners, operators, and public agencies.

Most cooperative forestry programs have been created as a result of needs defined by forestry, agricultural, and conservation groups. The needs included some means to solve problems ranging from forest fires to insect damage.

Budget officials are requiring more and more that these programs not only be strongly supported by the public, but that such efforts be substantiated in terms of cost effectiveness.

A 59-page study, titled "An Economic Evaluation of Georgia Rural Forestry Assistance," has evaluated Georgia's Piedmont. The comparisons determined treatments and results for assisted and non-assisted landowners.

The 1985 study (Research Bulletin 322) was written by Frederick W. Cabbage, Thomas M. Skinner, and Christopher D. Risbrudt. It was published by The University of Georgia College of Agriculture Experiment Station.

The authors point out that while landowners, foresters and legislators generally believe forestry programs provide valuable services; few studies have documented the effects of RFA foresters serving in the field.

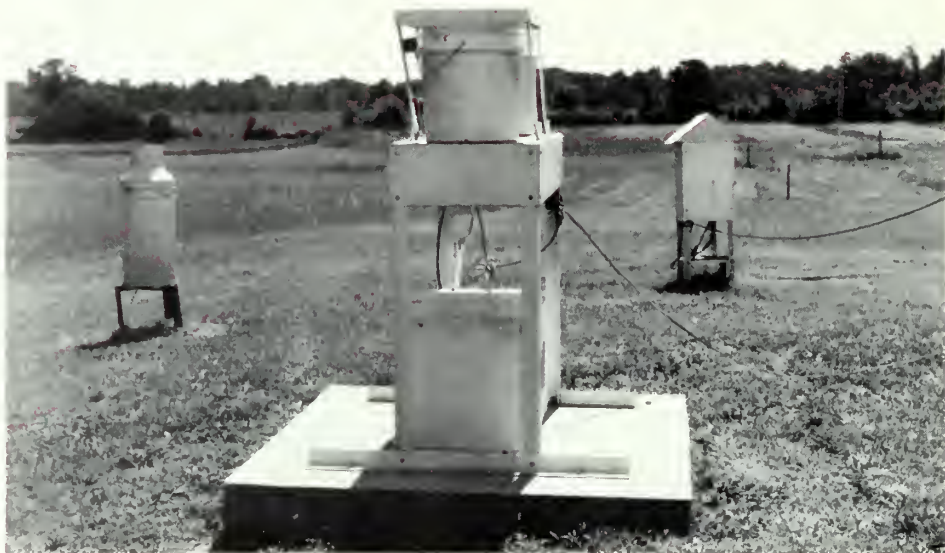
The purpose of the study was to first determine if different results existed for landowners receiving technical assistance and those not receiving assistance. These differences were then evaluated to determine program returns to the landowner, forestry organization, or society.

The comprehensive report concludes with a number of documented results. One such basic finding is that technical assistance provided by state foresters in the Georgia Piedmont area tends to produce favorable forest conditions and financial profits—40% more profits for those receiving assistance.

The report states "the RFA program seems efficient from private, social and

public view points. Federal dollars generated by the program more than pay for the federal share of RFA, and state income tax returns almost equal the costs of management plan preparation and timber marking."

The report states on the basis of its findings that such programs and service foresters help promote investments in forestry. Many cases reveal that RFA foresters promote forestry and demonstrate the value of advice. Since these



Components of a typical acid rain monitoring station are shown. The Commission is setting up a statewide network of similar systems.

ACID RAIN MONITORING BEGINS

The first of the Commission's network of acid rain monitoring stations is now operating in Dawson County near Dawsonville. Other stations will be located in the following areas, Ware County (Waycross), McDuffie County (Thomson), Clarke County (Athens), and Putnam County (Eatonton). All stations are expected to be operational within six weeks.

Fred Allen, the Commission's Chief of forest research, pointed out that similar units are operating in the state, but these units are located primarily in agricultural areas. He said the Commission's monitoring stations are located in carefully selected forest areas to provide research data on acid deposition in forest environments.

"Acid rain is a complicated problem," Allen pointed out, "numerous ecosystem factors can combine with acid deposition to cause damage or dieback in forest areas."

The recent forest dieback in the

service foresters are regulated to providing only a limited number of assistance days annually, this type of successful performance in the field also generates business for private consultants.

Another positive aspect the report considers is that state foresters frequently provide assistance for owners of small tracts, which fulfills a need consultants might find less appealing from a standpoint of financial profits.

In essence, the report concludes that state forestry assistance is an effective and cost efficient program that provides technical information on forest management while serving the national interest by ensuring a continuing timber supply from private forest lands.

Mount Mitchell, North Carolina, area caused much of the concern in Georgia over possible acid rain damage. However, Allen said there is no scientific evidence that any forest dieback in Georgia has been caused by acid rain.

"But there are negative possibilities," Allen said. "Forestry is Georgia's number one industry, so the Commission is going to maintain a thorough research program to protect the state's forests and economy."

Before November, the Commission is scheduled to participate in a joint research project with U. S. Forest Service concerning acid rain. The near term assessment study will cover Georgia, North Carolina, and South Carolina.

Research will concentrate on selected loblolly pine stands in the three states. Remeasurement of large stands of pines will be taken to determine any possible change in growth patterns over past years.

"MAYBE THREE OR FOUR MINUTES TO MAKE IT!"

"At one point I was convinced I was about to die," confessed Forest Patrolman Ronald Griner, a Vietnam veteran assigned to the Commission's Lowndes County Unit, "and I'm convinced that the boss saved my life."

"The boss" and reluctant hero in the drama is Ranger Billy Rowe, long time firefighter who modestly admitted that it was "a very tight spot to be in, but it's all in the day's work."

It hadn't rained in a month and fires were popping up all over the county. When the call came, Rowe believed it would be just another routine plowing job. Within minutes, Patrolman Griner was on the site and plowing a break into a seemingly dry swamp. The ranger was following on foot and dispatching other units by radio.

The tractor suddenly mired down in the soft earth and had to be winched out, but as Griner again started to move further into the low lying area, the two men heard a tremendous roar. Looking back, they discovered that the high wind had suddenly shifted and the fire had crossed their fire line. It was headed directly toward them.

The patrolman, who had been with the Commission only five months, said he was reluctant to leave his tractor. Although he had become stuck again, he said "I thought I could quickly winch it out of there and outrun the fire, but the boss said 'come on, we've got to go.'"

They abandoned the tractor and began searching for an escape route. The area turned out to be a discarded fish pond and peat bog with many years of accumulated debris to fuel the raging fire. - a fact that was not known when they entered the area. Some of it had been planted in pines in the fifties.

"The underbrush was so thick we finally had to get down on our hands and knees and crawl," Griner said. As they fought their way through a tangle of vines and stubborn brush, the terrain became lower and lower and the patrolman, who said he was a "country boy who grew up in the woods," realized they might find water if they kept their course. "That fire behind us sounded like a jet fighter plane," Griner said, "and

it made us do some pretty fast crawling." Time was running out. Ranger Rowe estimated they had "maybe three or four minutes to make it" when they came upon a small pond of water. It was in a cluster of gum trees and "that green vegetation and the water saved us."

Scratched, mud splattered and exhausted, Griner said he plunged into the water up to his waist and for the first time had time to consider how calm the ranger had remained throughout the ordeal. "I hate to admit it," he said, "but I was plenty scared...I was new on the job and I would have made the wrong move. The boss saved my life...I believed he saved both of us by staying calm..." Although he had experienced some anxious moments in Vietnam, the patrolman said the race against the wildfire topped them all.

Rowe was quick to point out that Griner had worked on at least a hundred fires during his brief time with the Commission and there was no lack of training. "It was just a very unusual situation we ran into," he said.

The ranger was in constant contact by radio with other units working the fire and one tractor operator made a rescue attempt, but was driven off by dense smoke.

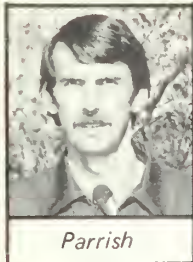
Ranger Rowe has been battling wildfires for 32 years, but he said he had never before known a fire to "change from one type fire to another so quickly." It was a relatively slow burning fire when they went in, but it suddenly turned to a raging inferno. "But after it passed through the swamp and hit some higher ground, the flames that were boiling above the tree tops calmed down to about six feet high...it was like a stallion changing into a tamed mule!"

The fire smoldered and flared up in spots for another three weeks before the county unit, along with the help of a rain that finally came, was able to declare it dead out.

One thing continues to puzzle Rowe and Griner. Although all that terrific heat passed over the tractor, only a plow tire, the battery and the seat were burned beyond repair. The tractor was back in operation 24 hours after the fire.



Patrolman Ronald Griner, left, and Ranger Billy Rowe check a Lowndes County Map to pinpoint location of an unusually vicious fire that could have cost them their lives.



Parrish



Brender

DEATH CLAIMS TWO FRIENDS OF COMMISSION

The Commission was saddened recently to learn of two deaths. One came to an aircraft pilot who once served with the Commission and the other was a retired U. S. Forest Service researcher who worked closely with GFC personnel.

Pilot Phillip A. Parrish, Jr., was flying a mission for the Georgia National Guard on July 13 when his plane crashed near Winder. Witnesses said he ejected from the aircraft before the crash, but his parachute failed to open.

Parrish had a degree in forestry from the University of Georgia and worked for the Commission as a pilot in the Forest Protection Department for five years. In recent years, he has flown charters and made flights for several corporations.

Funeral services were held at the Byron United Methodist Church. Survivors include his wife and two daughters.

Ernst V. Brender, who retired from the U. S. Forest Service in 1975, but remained active in working voluntarily in forestry projects, suffered a fatal heart attack June 18. His death came after a brief stay in a hospital.

Brender, who was inducted into the Georgia Foresters Hall of Fame in 1972, was nationally recognized as an outstanding authority on the culture of Piedmont loblolly pine in the United States. He headed research at Hitchiti Experimental Forest near Macon for more than 25 years and was author of more than 40 scientific papers and articles.

Funeral services were held at Snow Memorial Chapel in Macon.

CONFERENCE SERIES PLANNED TO BENEFIT FOREST LANDOWNERS

The Commission will co-sponsor a series of forest landowner conferences throughout the state during September. All landowners are invited to attend.

Each conference will feature experienced foresters speaking on such topics as management techniques, marketing methods, proper planting, and making a profit on timber.

Commission director John Mixon pointed out the vital need for landowners to attend these conferences.

"During the 1984-85 season, 433,000 acres of trees were planted in Georgia," Mixon said. "But 640,000 acres were harvested. It is essential that Georgia increase properly managed reforestation efforts to meet future demands and sustain our economic benefits."

Speakers for the series will include Dr. John Gunter, Cooperative Extension Service, on "Economics of Growing Timber;" Bob Lazenby, staff forester and reforestation specialist, Forestry Commission, on "Reforestation and Commission Services;" and Lynn Hooven, Chief of the Commission's Management Department, on "Management of Timber." A panel discussion on "How to Sell Timber" will follow.

The locations and dates of the conferences are: September 4-Ramada Inn, 1365 Gordon Highway (U. S. Hwy. 78), Augusta; September 11-Continuing Education Center Conference Room, Georgia Southern College, Statesboro; September 12-Georgia Forestry Commission, Research Auditorium, Macon; September 18-South Fulton Government Annex Building, Atlanta; September 19-Krannert Center, Main Ball Room, Berry College, Rome; September 25-Continuing Education Center Auditorium, Columbus College, Columbus; September 26-Exchange Club Dining Hall, Fairgrounds, Albany.

Similar conferences were held in recent years in Atlanta, Macon and



other cities, with a good attendance at each location. Landowners interviewed following those conferences said they learned better ways to plant, protect and harvest their woodlands.

Each session will begin at 1:30 p.m. and conclude with a question-answer session beginning at 4:15 p.m.

In addition to the Georgia Forestry Commission, other sponsors of the conferences include: Georgia Forestry Association, Georgia Extension Service, Georgia Farm Bureau, Forest Farmers Association, Georgia Soil and Water Conservation Committees, Consulting Foresters of Georgia, Soil Conservation Service, and U. S. Forest Service.

DISTRICT REFORESTATION SPECIALISTS ASSIGNED

The Georgia Forestry Commission has designated a specialist in each of its 12 districts to work closely with landowners and others in a continuing campaign to increase reforestation throughout the state. The foresters selected for the special assignment will work with county committees that were formed three years ago when the statewide reforestation effort was first introduced, as well as advise individual landowners in site preparation,

seedling purchasing, planting techniques

The reforestation foresters and the districts they represented are as follows: Grant Evans, Rome; Nathan McClure, Gainesville; John Merrill, Athens; Russell Pohl, Newnan; Jack Holt, Milledgeville; Frank Green, Washington; Phil Porter, Americus; Dessie Wynn, Tifton; Mike Ryfun, Camilla; Dennis Pope, Waycross; Archie McEuen, Waycross; and Harry Graham, McRae.

Georgia, the largest state east of the Mississippi River, is composed of 23.8 million acres of forests. The woodlands cover approximately two-thirds of the state.



Some of Hinton's volunteer firemen pose before their new truck



Roger Browning discusses features

COMMISSION FABRICATES 500th FIRE KNOCKER

The 500th fire knocker to be built by the Georgia Forestry Commission has been presented to the volunteer fire department of the Hinton Community in Pickens County.

To mark the production milestone, a group of volunteer firemen consisting of farmers, storekeepers and students, gathered at a little red fire house at

the crossroads settlement to view the new fire truck and participate in dedication ceremonies, followed by a demonstration of the equipment.

The fire knocker is a tanker fully equipped with pump, hoses, gauges and other equipment for use in rural and small town fire departments under the Rural Fire Defense Program.

The Georgia Forestry Commission began administering the federally subsidized program ten years ago when it built the first fire knocker for the Lake Cindy Fire Department in Henry County.

Since that time, more than \$1,917,220 have been spent for materials in the fabrication of the 500 units. More than 1,500,000 pounds of materials have been used in the manufacture of the truck tanks, walkways and other sections to complete the units. It is estimated that more than 2,000,000 man hours were required by welders, mechanics, painters and others to build the units. Some of the fire knockers were built in the Commission's central shop in Macon, while many were also fabricated in county unit shops around the state, with Commission personnel providing the skilled labor.

At the beginning of the program, truck chassis were obtained through military surplus, but in recent years many communities prefer to buy a truck and have the Commission outfit it with tank and equipment.

VOLUNTEERS UNITE FARM COMMUNITY

J. A. Townsend, a farmer in Pickens County's Hinton settlement, was a lad of 12 when a faulty flue set fire to the wood-shingled roof of his home.

"My Daddy saw it in time," he said, "and leaned a ladder against the house and me and my brothers and sister carried buckets of well water up the ladder to put it out." Townsend, an enthusiastic supporter of the newly organized volunteer fire department in his rural community, pointed out that "we were just lucky. Usually, when you had a fire in the country help was too far away and you just had to let a building burn down."

Jay Moss, storekeeper at the rural crossroads and former dairyman, had a large barn to burn to the ground in 1977. "Had hay and corn stored in it and a lot of equipment, including a hammer mill," he said, "and I didn't have any insurance on the property at that time."

Moss is confident the barn and its valuable contents could have been saved if the Hinton fire department had existed at that time.

Moss and others helped organize the department by calling areas residents together to ask their support. With only "word of mouth" publicity, about 70 people showed up for the first meeting.

Rick Baxter, Chief of the new department and a tireless organizer, said "48 people at the initial meeting signed up to take firefighting training." More than \$2,300 were pledged during the first week of organization and by April, the new fire house had been completed. An auction and barbecue brought in several thousand additional dollars, and when the new fire truck was delivered, the department was ready to begin operations debt-free.

In speaking to the assembled volunteers and demonstrating features of the fire truck, Roger Browning, Rural Fire Defense Specialist with the Forestry Commission, pointed out that a community fire department does more than offer fire protection. "It brings the people of a community together," Browning said.

Baxter, Townsend, Moss and others agree. The Hinton Community in the rolling hills nine miles from Jasper has founded a new spirit of friendship and cooperation and it revolves around the little red fire house.

Water drafted from nearby creek



COMMISSION SEEDLING CROP BEST IN RECENT YEARS

Although millions of seedlings have been sold for the forthcoming planting season, a good supply of slash and loblolly pine is still available at the state nurseries, according to Johnny Branan, Chief of the Commission's Reforestation Department.

He emphasized, however, that landowners who have not yet placed their orders "should not wait too much longer." He said orders "pick up rapidly as we get nearer planting time."

Branan said most of the minor species grown in the nurseries have been sold

out, but the various pine species - the great bulk of trees produced for Georgia landowners, are plentiful at this time.

The reforestation chief said "the seedling crop this season is the best I've seen in recent years." It is also one of the largest crops ever grown by the state nurseries. Branan said approximately 132 million trees will be harvested this season.

He said production at the Shirley Nursery, the Commission's newest facility for growing trees to help meet landowner demands, will be 60 million trees this year. This is the second year trees have been grown on the new 257-acre nursery near Reidsville.

Branan said the huge nursery is capable of producing 160 million trees if all acreage were utilized, but he explained that only about one-third of the land should be planted in seedlings on a rotation basis. He said most of the remaining acreage is in cover crops.

Trees are also produced at Page and Walker Nurseries, actually a part of the Shirley Complex, in the Reidsville area, and at Morgan Nursery near Byron.

Pine seedlings will be lifted and shipped after the first heavy frost, or about December 1, and hardwood trees will be harvested and shipped at the beginning of the new year.



Top photo, data transcriber processes seedling orders. Above, young seedlings at Morgan Nursery approaching harvest stage.

INSECT REPORT

Georgia's 1985 summer has been a highly active season for insects, with bark beetle activity reaching epidemic proportions in some counties, according to Terry Price, Commission entomologist.

Price said counties in the fall line area are hardest hit by beetle activity. These counties include Stewart, Chatham, Upson, Crawford, Bibb, Jones, Putnam, and Baldwin.

"We expect this beetle activity to worsen during the year and peak next year," Price said. "The Commission is now conducting its third statewide aerial survey and will release findings during September."

The aerial survey reports will be compiled on a county basis and individual landowners will be notified if bark beetle activity requires salvage as the most effective means of controlling insects. Landowners are urged to inspect their woodlands for insect activity and report any activity to their local Commission unit.

RARE OCCURENCE

Price said a hail storm causing severe damage has resulted in 400 acres of Virginia and shortleaf pines in Stephens County becoming infested with round-headed wood borers. He said the infestation of these insects requires that the entire 400 acres be salvaged to prevent further damage.

"This is the first recorded incident in Georgia of wood borers attacking such a large acreage of trees," Price said. He explained that this incident is highly unusual because wood borers usually require damage by other insects - such as bark beetles - before they can infest a tree.

"However," Price said, "in this case, the hail damaged the trees to such an extent that the wood borers were able to infest this large stand." He added that when wood borers infest such a large stand of trees, the only solution is salvage. If the trees are not salvaged, a more serious situation involving bark beetle infestation is inevitable.

MINOR THREAT

In other insect activity, Price said pine tip moths have appeared in several areas of the state. He urges landowners to inspect young seedlings periodically, since these moths usually infest trees one to five years old.

"Pine tip moths generally do not cause mortality," Price pointed out, "but they can become a serious problem if they are not controlled."



This scene illustrates the type of destruction that can result from stubborn fusiform rust. Thanks to intensive research, the killer is being brought under control.

RUST RESISTANT SEEDLINGS AVAILABLE

A new day has dawned in the Commission's continuing program to reduce the heavy losses fusiform rust is inflicting on forests in the state.

Director John Mixon announced the availability of fusiform rust resistant loblolly and slash pine seedlings in the state nurseries for the 1985-86 planting season.

The program, under the direction of Drs. Harry Powers and John Kraus of the Southeastern Forest Experiment Station (USDA Forest Service), produced enough seed this year for about 300,000 seedlings. About two-thirds are loblolly, and one-third are slash pine. Eventually, production from the program's seed orchards will be enough to grow 12 to 15 million seedlings a year.

The program's seedlings have demonstrated their resistance in greenhouse tests to very high concentrations of spores of the rust fungus. Under these severe conditions, the loblolly seedlings had 40 percent fewer rust infections than other genetically improved seedlings, and the slash had 50 percent less.

In discussing the resistant planting stock, Director Mixon said, "These resistant seedlings should make it possible to plant each species where it does best. In recent years, we've often discriminated against slash pine in some areas because of high rust hazard. The distribution of these seedlings—a few now and many more in future years—starts a new phase in our program to greatly reduce fusiform rust in our forests. Until now, the disease has been gaining on us. Now we're going to start gaining on it."

In high rust hazard areas, use of the resistant stock could make the difference between a successful plantation carried to rotation age and a failure. In field plantings, seed from many of the trees in the resistance orchard have grown very well. After five years, they have much less rust, and are as tall or taller than other genetically improved seedlings.

Because relatively few rust-resistant seedlings are available this year, first priority will be given to orders from counties where rust hazard is very high. High hazard counties for slash pine are Henry, Jefferson, Marion, Pike, Schley, Spalding, Sumter, Troup, Washington and Wilkinson. High hazard counties for loblolly are Bleckley, Brooks, Burke, Dooly, Houston, Jefferson, Johnson, Laurens, Macon, Pulaski, Thomas, Twiggs, Washington and Wilkinson.

In addition to normal field plantings by forest landowners, several extensive test areas will be established. These will compare the performance of the new rust-resistant seedlings with that of other genetically improved stock, and will be made in areas where the rust hazard is extremely high. The researchers emphasize that the resistant seedlings are not immune to fusiform rust. There are no varieties, strains, or selections of loblolly or slash pine that are completely immune to the disease, but these new pines are the most resistant yet tested.





Harper



Preston



Westmoreland



Hooven



Swindell



Wells

PROMOTIONS ANNOUNCED AS KEY FIGURES RETIRE

Several promotions were announced at the Commission's central offices in Macon recently, following the retirement of two key officials.

William Cash Harper, Assistant to the Director, retired last month to end a 35-year career with the Commission, and Druid N. Preston, Chief of the Forest Management Department, retired this week to his 30-year tenure with the agency.

David Westmoreland, Chief of the Forest Protection department for the past three years, has been named to the Commission's number two position of Deputy Director to succeed Harper. The protection post vacated by Westmoreland has been filled by Wesley Wells, formerly a field supervisor. Henry Swindell has been named to the supervisor position.

The forest management post vacated by Preston has been filled by Lynn Hooven, formerly assistant chief of the department.

Harper, a resident of Macon and a native of Vernon, Alabama, came with the Commission in July, 1950, as a forest ranger in the Statesboro District and was soon promoted to District Forester of that district, where he served until he was named Assistant to the Director in 1977.

A graduate of the School of Forest Resources, University of Georgia, Harper is married to the former Miss Dorothy Porter of Taylors Creek. They have a daughter, Penny. The retiring official was feted at a dinner party at the Terrace Inn in Milledgeville.

Preston, a native of Marion County, came with the Commission as a ranger of the Newton County Unit in 1955 and later served as Assistant District Forester in Newnan. He served as District Forester in Rome for five years and following promotions, became Chief of Forest Management in 1973.

Preston, a graduate of the University of Georgia, is married to the former Miss Carol Adams and they have two sons, Druid and David. The family resides in Macon.

A retirement dinner honoring Preston was given by Commission friends and others.

Director John Mixon praised both men for their many years of dedicated service to the Commission and the people of Georgia.

Westmoreland, a native of Newnan and a graduate of Auburn University, with a degree in forestry, came with the Commission in 1967 as a project forester in the Americus District. He served as area forester, district forester, assistant chief of administration and field supervisor, before being named Chief of Forest Protection in 1983.

The new Deputy Director is married to the former Miss Doris Pender and they have two sons, Scott and Blake. The family resides in Perry, where they are active in the Presbyterian Church. Westmoreland is a member of the Society of American Foresters and the Georgia Forestry Association.

Wells, a native of Commerce, came with the Commission as a forest technician in the Washington District in July, 1966. In the years that followed, he served as a management forester, area forester and utilization forester in the Washington and Gainesville Districts and in the Macon Office. He was named Associate Chief, Forest Protection Department, in 1982, and Field Supervisor in 1983.

A graduate of the University of Georgia with a BS Degree in Forestry, the new Chief of Forest Protection is a member of the Society of American Foresters and the Georgia Forestry

Association.

Wells is married to the former Miss Beverly Dailey of Commerce and they have two sons, Tommy and Ken. They live in Gray and attend Elam Baptist Church, where Wells has served as deacon and in other capacities.

Hooven, a native of Trenton, New Jersey, began his career with the Commission as a forest technician in the Newnan District in the summer of 1969. He was named Macon District Forester in 1978, but was transferred to the Central Office in Macon to become Associate Chief of Forest Management when the Macon District was merged into the Milledgeville District.

Hooven earned a degree in forestry at the University of Georgia and has served two years in the U. S. Army. The new head of the Forest Management Department and his wife, Melinda, a native of Clarksville, have two children, Laura and James. The family lives in Macon and attends Ingleside Baptist Church.

Swindell began his employment with the Commission as a reforestation assistant in June, 1958. He served as assistant district forester and area forester in Statesboro and in 1972 became Griffin District Forester. He was named Associate Chief of Forest Protection in 1983.

A native of Ludowici, Swindell is a graduate of the University of Georgia, where he earned a BSF Degree. He was salutatorian of his class. He served a year in the U. S. Army and in the National Guard.

He has held all elective offices of the Macon Jaycees and has served as vice president, treasurer and president elect of the Macon Kiwanis Club. He is a member of the Society of American Foresters.

Swindell and his wife, the former Miss Stella Maddox of Morgan County, live in Macon and they are affiliated with the Baptist Church.

In announcing the four promotions, Director Mixon said all have distinguished themselves in the positions they have held in the Commission and they will be an even greater asset to the organization now that they have assumed larger responsibilities.

Leaf Curl Observed

Several species of shade trees in Georgia have suffered leaf curl and dieback throughout the state. The most commonly effected species include elm, oak, maple, and sycamore.

The symptoms of this disease are leaves turning brown on the edges and curling inward. Although the Commission is monitoring the problem, it is usually not fatal and trees generally recover with sufficient rainfall.

FORESTRY EVENTS SET AT FESTIVAL

The annual Yellow Daisy Festival to be held at Stone Mountain on September 6, 7, and 8, will feature a variety of competitive forestry events.

The festival, which celebrates the annual blooming of the Confederate Yellow Daisy, will hold the forestry events on Saturday and Sunday (September 7 and 8) from 2:00 p. m. to 4:00 p. m. Melinda Thompson, a forester with the Georgia Forestry Commission's Stone Mountain Unit, will coordinate and judge the forestry competition. The Commission has sponsored forestry events in the festival for more than a decade.

Forester Thompson said plaques will be awarded to winners in each competition category. The Saturday events include: axe throw, cross cut, cigar fire fighting, (and greased pole climb for competitors 12 years of age and younger).

Other festival activities include a standard flower show, arts and crafts, clogging, bluegrass music, Captain Dave and Greg Picciano of Atlanta's WSB radio will be masters of ceremony for the festival.



Wildfires catch fish, too.



Fish die after wildfires, because the fire destroys the ground cover, and the streams and rivers become filled with suffocating silt and ash. So don't let a fire be the one that got away. Remember, only you can prevent forest fires.



A Public Service of This Magazine & The Advertising Council



There were some rather glum expressions on the faces pictured above and below but when Dale Murphy slammed a dramatic homerun moments later in the bottom of the ninth to win the game, the crowd was on its feet and cheering wildly—a joyous climax to the second annual Georgia Forestry Night at the Atlanta-Fulton County Stadium!

Fans with forestry interest and their families from all sections of the state were on hand for the gala occasion, which featured pre-game activities devoted to forestry. Miss Georgia Forestry rode a float around the stadium track and Smokey Bear greeted the youthful fans among the more than 23,000 in attendance. Miss Marion Ansleigh of Montezuma is Miss Georgia Forestry and Patrolman Randy Stockwell of the Commission's Stone Mountain office played Smokey.

Carol Layton of the Commission's Administration Department and Ann Cason of the U. S. Forest Service, Atlanta, were presented awards at the stadium for outstanding ticket sales and other promotional activities for the event. The presentations were made by Garland Nelson, Chief of Forest Administration.



MISS GEORGIA FORESTRY CROWN CAPTURED BY RICHMOND ENTRY

Miss Kathy Usry, daughter of Mr. and Mrs. Pet Usry of Augusta, is the reigning Miss Georgia Forestry.

The 20-year-old pageant winner will be a junior this fall at Augusta College. She jogs several miles each morning, likes to cook deserts, conducts a puppet program for children at Burns Memorial Methodist Church in her neighborhood and is a loyal Atlanta Braves fan.

Miss Usry competed with young ladies who had won pageants on the county level in other sections of the state. The state finals were held during the annual convention of the Georgia Forestry Association on Jekyll Island.

The new Miss Georgia Forestry received her crown from the retiring queen, Miss Kathy Rice, also a resident of Augusta.

The pageant winner each year represents forestry and forest-related industries throughout the state in promotional events, parades, fairs, conventions and other activities.

Thus far, Miss Usry has appeared in the Atlanta July 4 parade and was featured in pre-game activities at the Atlanta-Fulton County Stadium during Georgia Forestry Night.

She said she likes to spend some time in the kitchen "especially if I am prepar-

ing some kind of desert." She makes her own puppets for the childrens program and creates her own scripts.

Miss Georgia Forestry has three brothers, Steven, Wesley and Wayne.



Miss Georgia Forestry poses with her trophy and red roses minutes after she was crowned during the pageant on Jekyll Island. In photos below, she plays some of her favorite pop hits of the day and stirs ingredients for a cake. For exercise, she jogs several miles with an uncle during an early morning hour.



MARIA SWINSON MISS GUM SPIRITS

Miss Maria Swinson, representing Ware County, captured the title of Miss Gum Spirits of Turpentine in the Miss Georgia Forestry Pageant this year.

A graduate of Southwood High School in Waycross, Miss Swinson participated in various school activities. She was a cheerleader throughout high school and served as co-captain of the cheerleading team her junior year, and captain of the team during her senior year.

Miss Swinson was also president of the student council her senior year. She plans to attend Valdosta State College in the fall and major in business.

Maria is the daughter of Mr. and Mrs. John Swinson of Waycross.

FORESTRY RELATED COURSES SCHEDULED

A short course on the use of micro-computers in forestry will be held at The University Of Georgia Center for Continuing Education October 16-17.

The course will introduce fundamental components of microcomputers and discuss the use and potential use in a variety of forest and resource management applications.

The course will be of benefit to practicing foresters, forestry consultants, and resource managers with interest in quantitative problem solving. Topics will include an introduction to microprocessors and microcomputer systems, general applications of microcomputers, application of microcomputers in forestry, land management and business related applications.

A short course on the Essentials of Forestry Investment Analysis will be held at the Center for Continuing Education October 23-25.

The course will introduce the analytical techniques for handling long-term investments, decision criteria for choosing among investment alternatives, valuation of land and timber at intermediate stages in the life of the forest and the application of decision criteria with adjustments for inflation and real price appreciation.

The course also explores methods for budgeting forestry investment to maximize scarce capital resources.

This course is intended for practicing foresters, forestry consultants, and resource managers with interests in analyzing forestry investments.

A workshop entitled "Aerial Photo Interpretation and Application" will be held at the University of Georgia Center for Continuing Education on November 27-29 for practicing foresters.

Enrollment will be limited to 25 and topics to be covered include an overview of Photo Interpretation and Remote Sensing, The Geometry and Scale of Aerial Photos, Practical Exercises with Aerial Photos, Mapping and Timber Cruising from Aerial Photos and other aspects.

Other courses planned include a conference on the Use of Herbicides in Site Preparation and Release of Coniferous Forests on December 4-5.

The conference is designed to present a "state-of-the-art" use of herbicides in southern pine forests.

A Basic Industrial Hydraulics workshop will be held at the University Center January 22-25, 1985. The 3½-day course has been developed to provide participants with skills in basic hydraulics and system trouble-shooting.

The workshop is for people who are



THE LATE JEROME CLUTTER

GEORGIA PROFESSOR IS POSTHUMOUSLY ENTERED INTO HALL

Jerome L. Clutter has been posthumously named to the Georgia Foresters Hall of Fame.

The high honor came at the recent annual meeting of the Georgia Chapter, Society of American Foresters.

Clutter, professor of Forest Biometrics at the School of Forest Resources, University of Georgia, died Nov. 21, 1983, at age 49.

Writing in the April issue of the Journal of Forestry, James Bethune, Connecticut, pointed out that Clutter "provided much of the methodology that makes modern, quantitatively based techniques an integral part of present-day forestry. His variable-density yield tables were a quantum jump from former, percent-of-normal-stocking based methods. Diameter distribution yield tables, which he conceived and developed, greatly increased management's decision-making abilities."

Computer simulations and optimization techniques developed by Clutter and his associates are said to be now in use on more than two million acres of managed forests in North America, Australia and New Zealand.

responsible for specifying, repairing, trouble-shooting and maintaining industrial hydraulics systems (mobile or stationary).

For further information on any of the above courses contact Dr. Leonard A. Hampton, Room 237, Georgia Center for Continuing Education, University of Georgia, Athens, Georgia 30602 or phone 404-542-3063 or Andy Little, Conference Coordinator, 404-542-1585.

PUBLICATIONS

Directory of Consulting Foresters, 1984, is now off the press and is available from the Society of American Foresters, 5400 Grosvenor Lane, Bethesda, Maryland 20814. Cost is \$7.50



Selected Native Shade Trees, a Georgia Forestry Commission publication recently revised, provides information for homeowners in the state's Piedmont and Upper Piedmont areas. The publication provides information on growth rates, shape, average height, flower and other data on the various species. It also contains illustrated instructions on bare root and balled planting, pruning and fertilization. For a free copy, contact any Commission office in the Piedmont area or write to the Commission's Education Department, P. O. Box 819, Macon, Ga. 31298-4599.

FOREST LANDOWNERS ATTEND CONFERENCES

Four Forest Landowner Assistance Conferences have been held in Georgia cities in recent weeks and the landowners, including many "absentee owners" who live in urban areas but have holdings in rural sections of the state, have benefited from the sessions.

The conferences, which concentrated on recommended forestry practices to increase production, taxation relating to timber growing, and sources of financial and technical aid, were held in Atlanta, Augusta, Macon and Gainesville. Plans are now being made to offer the conferences to other cities.

Co-sponsors of the events include the Commission, Georgia Forestry Association, Extension Service, Southern Forest Institute, and several other forest oriented agencies and organizations.

SHIRLEY NURSERY DEDICATED

(continued from pg. 11)

tree is now produced in the millions at the Commission's four nurseries each year to help perpetuate Georgia's 24.8 million acres of forests.

A native of Bowersville, Shirley earned a degree in forestry from the University of Georgia in 1936. During World War II, he served as a captain in the U. S. Army's Corps of Engineers, with duty in Africa and Europe.

Shirley and his wife, Mary Virginia, reside in Macon. They have two sons, Ray, Jr., a chemical engineer, and Rudy, a medical doctor, and five grandchildren.



Elisha Payne cranks up his water-powered workshop, located at his mountain home near Blairsville. He built the workshop from the ground up, using mostly junked mechanical parts and scrap lumber. A water wheel, turned by water from a nearby creek, powers a generator and other equipment.

WOODWORKER USES WATER POWER

Elisha Payne has been a woodworker most of his life. He's 85-years-old now, and one of his earliest memories is sitting on his mother's knee so he could work the bellows in his father's shop. "I was just a toddler," Payne said, "but they tell me I used to cry to go to the shop." He leaned forward in his chair and spit a stream of tobacco juice off the porch of his North Georgia mountain home. Then he leaned back again, recalling that when he was ten-years-old, he was already tempering and sharpening plowshares.

Although he has no formal education, Payne shows symptoms of mechanical genius. Next to his home, near Blairsville, is a water-powered workshop and one-man sawmill. Payne built it all, mostly from mechanical and wooden discards.

"He can make most anything he sets his mind to," said his 92-year-old wife, Dolly.

One thing Payne set his mind to build was the two-story wooden house where he and his wife live. He completed the house in 1918, shortly after they were married. He hand-cut and hand-planed every segment of wood in the house. He also crafted all the furniture, much of which is still in the house.

Although a woodworker at heart, Payne farmed to support his family of six children. But he always returned to woodworking for extra money and self satisfaction.

When he was "around 30-years-old," Payne had an accident that would have finished the woodworking of many an individual. He was squirrel hunting and slipped off a log. The 16-gauge shotgun he was carrying went off, blowing away four fingers on one hand and bursting his eardrum.

"But it didn't slow him down," his wife remembers, "he went right back to the shop."

The Payne farm is located at the base of Payne's Mountain, named after his ancestors. Family solidarity is reflected by numerous Paynes living near the mountain. The area still retains a remote and cloistered atmosphere; and Elisha Payne remembers well when the only way out of his hollow to the outside world was by foot or on horseback.

"When I got here," Payne said, looking into the distance "this place was just like the mountain. Nothing but oaks and maples."

Through the years, a lot of the oaks and maples seem to have found their way into Payne's shop, where he has sustained a stubborn reluctance to use anything "store-bought" that he could make.

Walking through his shop, he picked up an expertly crafted draw knife. "This would cost you about sixteen dollars in a store," he said with amusement. "But I'm not about to buy one. I'll go to the shop and make one."

The walls and benches of his shop are laden with Payne's hand-made tools and crafts. Pieces of scrap metal have been shaped into a variety of wood-cutting tools, wrenches and drill bits. Piles of seemingly mechanical junk and wood scraps have been transformed into an array of tools and utensils.

The 85-year-old woodworker uses a cane to help him walk and when he occasionally drops it, all he has to do is tell his trusty dog, Blacky. The dog promptly picks it up, leaps into the air, and places the cane in Payne's hand.

Although he has made "a little bit of everything" from wood, Payne's favorite projects these days are hand-crafted spoons and rolling pins. He does the crafting and his wife does the sanding.

A spoon that takes two hours to make is priced at only \$2. But Payne is just as likely to give it away as to sell it.

"Friends are worth all the money you can rake and scrape," he said.

Payne is a religious man, crediting his talent to Divinity. "People say I can make most anything I want," He said. "But it's the Lord doing it, not me. It always has been."

With any project, Payne starts with basic tools and what most people would consider useless junk. Then he begins to "figure."

His water-powered workshop and one-man sawmill are results of "figuring." He dug a 400-yard channel from a nearby creek so water could turn an eight-foot, wooden water wheel. Next, Payne pulled the drive shaft from an abandoned truck and connected it to the water wheel. This drive shaft turns a differential (from an ancient tractor) attached to the transmission of a 50-year-old Chevrolet truck. A little more figuring provided locations for a series of belts that turn a grinding stone, sander, and an old car generator.

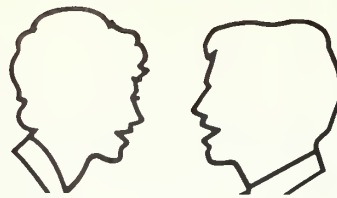
Payne's philosophy of self-sufficiency and independence have not gone unnoticed. A Union County High School class and the Union County Historical Society joined efforts and filmed a documentary on Payne and his wife. The film was one of four documentaries made to record the area's disappearing lifestyles and historical qualities.

"Payne's response to all this recent attention is conservative. "I always said, never throw anything away. You might make something out of it one day."



PEOPLE

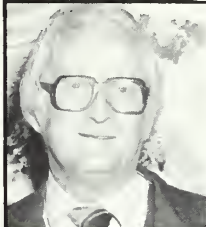
IN THE NEWS



JAMES ALEXANDER, who came with the Commission as patrolman in Talbot County in 1979 and later was named assistant ranger of the Harris-Muscogee-Talbot Unit, in recent months was promoted to district ranger of the Americus District. In July of this year, he became assistant to Garland Nelson, Chief of Forest Administration. James and his wife have two young sons and the family is active in the Baptist Church...ELEY FRAZER, III, President of the Albany-based F&W Forestry Services, Inc., was



Alexander



Frazer

awarded the prestigious Wise Owl Award at the annual convention of the Georgia Forestry Association. The award was presented by William F. Torrey, Jr., President of the Association...Interstate Resources, Inc. has announced the appointment of CHARLES W. TOWNSEND to the newly established position of vice president of marketing for the firm's linerboard producing subsidiary. He assumes overall responsibility for the domestic and export linerboard sales for Interstate Paper Corporation of Riceboro,

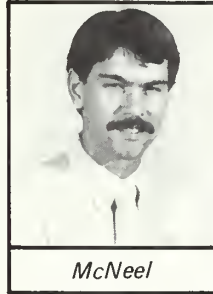


Townsend



Lazenby

Georgia...Forester ROBERT LAZENBY, who came with the Commission as a forest technician in 1971 and served in several positions, including district forester, before resigning to enter into a consultant partnership, recently returned to the Commission and has been assigned to the Management Department as a reforestation specialist. A native of Chattanooga, Tenn., Lazenby and his wife, Claudia, have two children. They are members of the Methodist Church...The forest resources department of the Georgia Extension Service expanded recently to include a timber harvesting specialist, JOE MCNEEL, and a woods products specialist, JULIAN BECKWITH. McNeel is stationed at the Rural Development Center in Tifton, responsible for educational programs in timber harvesting and the biennial Timber Harvesting Exposition. Beckwith, who is located in Athens at the University of Georgia, will supply county extension agents with wood products information on the latest developments in their operation...WILLIAM J. MARTIN has joined the F&W Forestry Services, Inc., as an associate real estate broker to



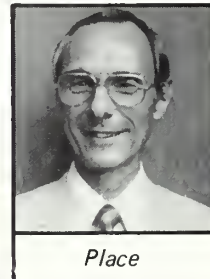
McNeel



Beckwith



Martin



Place

head the Albany based firm's real estate services. A native of Dawson, he graduated from Georgia Southwestern College in 1974 with a degree in business administration. He has operated his own real estate company and has been involved in other businesses in recent years...Forester CHARLES B. PLACE, JR. has been named Urban Forester for the Macon Metropolitan area and maintains an office at the Bibb County Unit. Place is a native of Brooklyn, N.Y., came with the Commission in 1956 in the Rome District. He transferred to the Macon Office in 1962 to serve in several capacities in the Forest Education Department...KIM D. CODER has joined the University of Georgia staff as an assistant professor/extension forester in the Extension Forest Resources Department. Coder comes to UGA from Iowa State University, where he completed his master's degree in 1981 and a doctorate this year, both in biology.

GEORGIA CITIES URGED TO SEEK TREE TITLE

Your town can become a TREE CITY USA!

The National Arbor Day Foundation, in cooperation with the Georgia Forestry Commission and the U. S. Forest Service, is urging more cities in this state to become an official TREE CITY USA.

Presently, Columbus, Avondale Estates and Marietta hold that distinction, and other municipalities have expressed interest in qualifying for the title.

TREE CITY USA has been designated to recognize those communities that are effectively managing their tree resources. It is geared to encourage the implementation of a local tree management program based on standards approved by the National Association of State Foresters.

Public Law 92-288 of 1972 gives the state foresters authority and responsibility for providing technical services for the "protection, improvement and establishment of trees and shrubs in urban areas, communities and open spaces."

A quick check with the mayor's office in your city will tell you whether your community is meeting the standards for eligibility.

For further information on TREE CITY USA, contact any office of the Georgia Forestry Commission.

WOOD ENERGY

(Continued from Page 2)

tons per hour.

Wood chips of appropriate size pass through a disc screen, while oversized chips are rejected to a 250 h.p. Hog which can process 30 tons per hour. All fuel is then transferred to a 7,200 square-foot storage area with 1,700 tons (seven-day) capacity.

Following the storage process, wood fuel is reclaimed by a screw type reclaimer and transferred to the Central State 25,000 lbs/hr boilers.

Allen said Central State's adaption to wood energy is a vital step in the state's increasing awareness of the value of such systems. Commission records show an estimated 13.1 million tons of roundwood, chips and residues are being used annually for fuel in Georgia. Further statistics show wood energy in Georgia saves users \$494.7 million annually while creating an additional benefit of \$44.1 million in economic activity.

"These statistics on savings are based on users ranging from industry to homeowners," Allen said. "The \$44.1 million increase in economic activity is the result of wood fuel being produced within the state rather than use of natural gas and fuel oil that have to be imported."



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Georgia Forestry is published quarterly by the Georgia Forestry Commission, Route 1, Box 85, Dry Branch, GA 31020. Second class postage paid at Macon, GA.

CITY LOSES 4000 TREES YEARLY



GROUP LAUNCHES CAMPAIGN TO PLANT TREE ALONG DOWNTOWN ATLANTA STREETS

Atlanta may be a city in a forest, but its downtown is a concrete jungle. So say the founders of Trees Atlanta, a civic group committed to making the central city green.

At a recent fundraising party, the organization announced plans to raise \$384,000 to plant 168 trees along downtown streets over the next three years. Funds for the project are being solicited from corporations and developers with downtown interests, and eventually, from the public, according to Marcia Bansley, executive director of Trees Atlanta.

Ms. Bansley said she expects her initial challenge to be cultivating a heightened awareness about the needs for trees downtown. "People have gotten so used to seeing empty streets dominated by concrete, glass, and asphalt that they don't see the drabness downtown," she said.

City Forester Jay Lowery has estimated that Atlanta loses 4,000 trees yearly from its parks and streets. Approximately 2,000 trees are planted by the city annually, making the need for a support organization such as Trees Atlanta obvious, says Betsy Baker, commissioner of Atlanta's Department of Parks, Recreation and Cultural Affairs, and one of Trees Atlanta's board members.

Hardy trees such as willow oaks and Bradford pears will be emphasized in the master plans donated by three Atlanta landscape architecture firms. Money is designated in the project's budget for cast iron grates to protect the tree's roots, regular maintenance for three years, and tree replacement when necessary.

Trees Atlanta plans to concentrate on other downtown streets once the first efforts are completed. Will there ever be peach trees on Peachtree (a downtown Atlanta street)? "No," Ms. Bansley said with a laugh. "They wouldn't be able to handle the pollution."

(Excerpted from *The Atlanta Journal*)

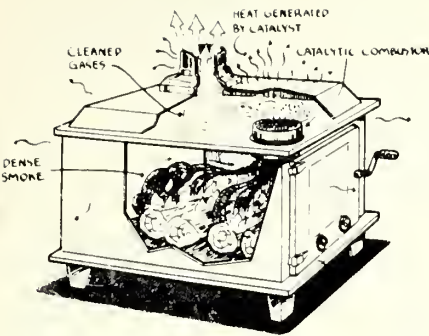


ON THE COVER

A wintry sunset provides a dramatic backdrop for one of the Georgia Forestry Commission's many sentinels that guard our forests across the state. This tower is just off U.S. Highway 129, between Madison and Athens.

WOOD SMOKE NOT CONSIDERED SERIOUS PROBLEM IN GEORGIA...

BUT CATALYTIC COMBUSTOR COULD BECOME STANDARD STOVE EQUIPMENT IN THE FUTURE



The use of wood for heating American homes has more than doubled since the 1970 oil embargoes and resulting price increases. Energy experts predict this renewable resource will continue to be a major energy source for the future.

Technological advances are being developed and refined to enable the increasing use of wood to continue while maintaining high quality environmental standards. Until recent years, home heating from wood stoves and fireplaces created no significant environmental problems. Increasing use has changed the situation in parts of the United States, but Georgia does not appear to be impacted at this time.

POLLUTION ALERTS

Towns in Colorado, Montana and Oregon have experienced air pollution alerts caused by smoke from fireplaces and wood stoves. During these alerts, the skies over some of the nation's most scenic areas were obscured by smoke. Such incidents prompted some states and local governments to establish guidelines and standards to aid consumers in purchasing stoves that reduce pollution.

Although Georgians burn a tremendous amount of wood for heating, the state has not experienced pollution problems for a number of reasons. Tommy Loggins, the Commission's associate chief of forest research and wood energy, points out that geographical structure, atmospheric conditions, and population density can combine in varying degrees to create pollution problems from wood burning.

Pollution danger from wood smoke comes from carbon monoxide, organic gases, and small particles.

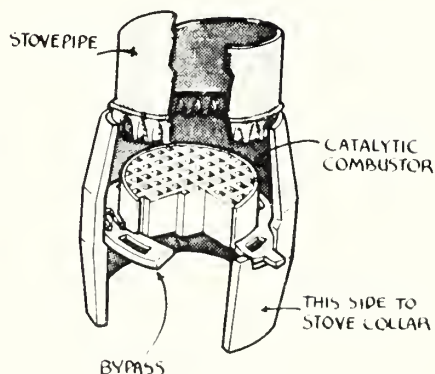
TECHNOLOGY APPLIED

Some stoves are now being sold with catalytic combustors. Loggins said these devices are highly effective and could be standard equipment on all wood stoves in the future. How far in the future, depends on the increased use of wood as an alternative energy source and technologi-

cal advance in the continued development of combustors. Current statistics indicate an increase in the use of wood for fuel for Georgia.

"Actually, there are two methods being used to solve the problem," Loggins said, "the catalytic combustor and the baffled-type stove. Both methods are efficient, but the combustors seem to be the more frequently used method for now."

Both methods ignite wood smoke and burn the pollutants before they can be released into the atmosphere. The combustor is a honeycomb-type metal mesh containing certain metals (such as platinum and palladium) which when subjected to wood smoke cause the smoke to increase in temperature and ignite as it passes through the mesh. Some stoves are now being sold with built-in catalytic combustors. Other combustors are sold separately and can be fitted to the stove.



The baffled-type stove is an air-tight burner. It is the built-in baffle plates that create the turbulence and increased temperatures that cause the smoke to ignite.

"The basic difference is that the catalytic combustor uses certain types of heated metals to ignite the smoke, while the baffled-type stove is a more mechanical method of burning the smoke," Loggins said.

Loggins points out that there are two major benefits for the stove owner using the catalytic combustor - more heat derived from the wood burned and a large decrease in creosote accumulation. "Of course, more efficient burning means the stove owner saves money by using less wood for the same amount of heat," Loggins said. "But probably the most significant benefit is that the decrease in creosote accumulation greatly reduces the chances of a chimney fire." He added that some insurance companies now consider reduced fire risks an important factor when issuing policies.

Loggins pointed out that other things should be considered in relation to smoke emissions. He said the way stoves and fireplaces are used make a difference in smoke emissions. For example, air dried woods provide the most heat and the least pollution when burned with sufficient air. Pine (which is plentiful in Georgia) is an excellent source of heat if properly dried and burned. However, garbage, coal, and treated wood should never be burned in a wood stove.

FOR GEORGIA STOVE BUYERS

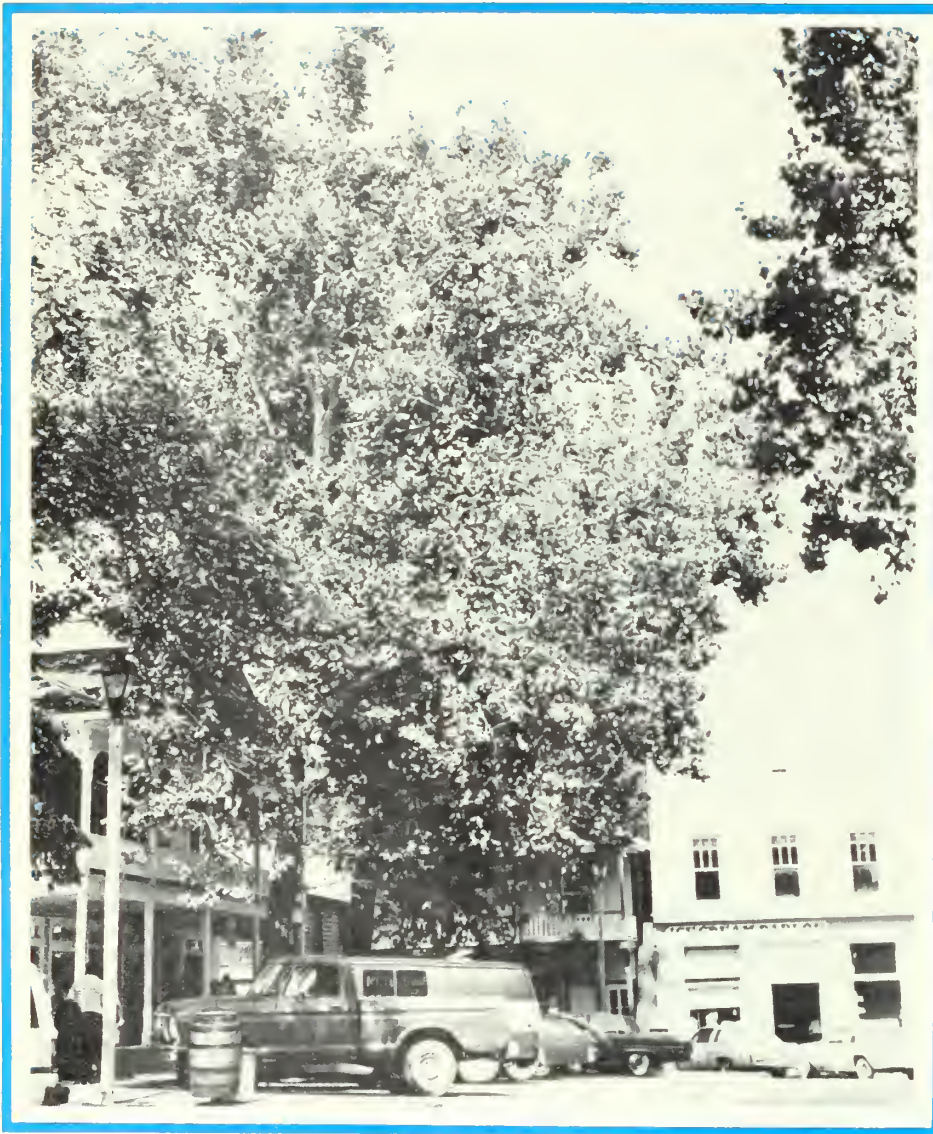
Loggins, who has assisted in design and installation of some of Georgia's major wood heating systems, said heating a home requires the same considerations as heating a large institution - determine what area needs to be heated and select the stove size accordingly.

The homeowner should shop around for the stove that best suits his individual needs. A major factor to consider is that Georgia's winters are relatively mild and the cold is sporadic, so it's best not to get a stove that's too big for the house.

"And, of course, we think the use of a catalytic combustor could be a good idea for many users," Loggins said. "If the homeowner operates a combustor equipped wood stove according to the manufacturer's instructions, the unit will not only pay for itself in dollars, but the owner will get more heat for less work, from a more efficient, cleaner-burning stove."

CITIZENS' CONCERN SAVES TREES

HISTORIC TOWN TURNS TO COMMISSION FOR TREE INVENTORY AND RECOMMENDATIONS



Two years ago several dogwood trees planted back in the 1920's in the heart of the scenic North Georgia mountain town of Dahlonega were cut by city employees, thus setting off a furor.

This sort of reaction might seem extreme to some, but Dahlonega people are emotional about their trees, concerned about their environment, and aware of their town's historical significance.

Twenty years before the forty-niners stampeded to California for gold, a deer hunter kicked up a gold nugget near Dahlonega and triggered the nation's first major gold rush. Dahlonega became a boomtown with thousands of miners

and a branch mint, which by 1861 had received more than \$7 million in gold.

Today, Dahlonega still retains a secluded atmosphere with mountain ranges rolling away from it in all directions. Even the Forestry Commission's county unit office, located on scenic Crown Mountain, looks more like a place to spend a nice weekend than a professional fire fighting unit.

Dahlonega's year-round attraction is a 150-year old courthouse containing a gold museum. Quaint antique and gift shops surround the area.

To clarify points in the mounting controversy, Mike Pendleton, editor of the Dahlonega Nugget, wrote a personal

column pointing out the city council had discussed the cutting of the dogwoods at a regular meeting, but "unfortunately, that item had to be cut from the City Council article appearing in that week's Nugget."

After initial emotional reactions had calmed, it was generally accepted that cutting the trees was necessary to repair a damaged sidewalk. Roots from the dogwoods had broken the sidewalk and protruding segments were considered hazardous.

Communications were restored but the concerns expressed in the citizens' petition were not resolved. Dahlonega resident Isabella Lynn said, "I was out of town when the dogwoods were cut and was not a member of the citizens group that presented the petition. I became involved when it appeared to me the city was not being responsive to the concerns expressed about future loss of trees. I kept the subject of "Trees" before the City Council during the citizen comment portion of council meetings."

Almost a year after the trees were cut the City Council established the Advisory Committee on City Trees and Lynn was appointed chairman.

TREE INVENTORY

Considering complications and long-range potentials, the committee decided to make a comprehensive effort to protect Dahlonega's prized trees. The committee turned to the Forestry Commission for advice on performing "a 100 percent street tree inventory of prioritized streets within the city limits."

The request was turned over to Sharon Dolliver, a senior forester with the Commission's state headquarters management department. Dolliver said the Commission was able to respond to the request because additional assistance was available from intern foresters. She formed a team which inventoried 254 trees along Dahlonega's main thoroughfares and around the city square.

Chairman Lynn summed up the inventory: "It tells what it is, where it is, and what it needs."

After the inventory was completed, Dolliver compiled a report including observations and recommendations.

A basic observation is that "most of the city's trees are in poor condition due to advanced age and restricted growing areas." Almost all the trees were designat-

Down town oaks and pecan trees were marked for "immediate" attention because of numerous dead branches and the need to have crowns balanced with restricted root zones. Human safety, as well as healthy trees, is a major concern of the recommendations.

The report recommends city employees be trained for pruning duties and minor tree repair work.

"The responsibility rests with the city, so city employees are the logical choice," Dolliver said. "Once the correct techniques of pruning and repair are learned, it's a simple matter to carry them out."

The inventory also revealed that many more of the city's dogwoods will join the five relatives that started the controversy, if certain preventive steps are not taken. The report states "most of Dahlonega's dogwoods are in a declining condition which is the result of trunk damage caused by lawn mowers and weed eaters."

Insects were also found to be a threat to the dogwoods. "We recommend all

At left, a hardwood tree provides a shady corner for the courthouse square in Dahlonega, one of Georgia's most scenic and historic small towns. Below, a tree on the town square that was improperly pruned before recommendations were made by a professional forester.

dogwoods be sprayed at least once a year with Lindane to control dogwood borers," Dolliver said.

The Commission report also recommends planting trees in many areas. The sections to be planted first depend on priorities of the advisory committee.

Dolliver said that even with Dahlonega's intense interest and planning for a tree program, it will take years to catch up on what needs to be done.

"However," she added, "We feel that by placing priority on trees along major thoroughfares, the city can start to see progress in a few years."

Dolliver emphasized that the Commission served in an advisory capacity and the inventory is only the beginning. "Any successful tree program must be backed by funding and responsible personnel," she said.

RESPONSE

One of the major recommendations of the Commission report is the hiring of a professional arborist, for designated jobs.

"This recommendation and a number of others have been submitted to the city council and are being considered on the basis of expenses," Chariman Lynn said. "The mayor and council indicate they are very interested in preserving the natural beauty of Dahlonega. I believe we are now working toward the same goals and will soon see positive results."

GEORGIA FORESTRY GROUP STRESSES TAX OPPOSITION

The executive director of the 4,000-member Georgia Forestry Association has declared that the organization "is strongly opposed to provisions in the President's tax plan that would change the present tax treatment of private and industrial timber investments."

Speaking at a recent meeting of private landowners in Macon, Glenn Anthony called President Reagan's plan to eliminate capital gains treatment for timber and the requirement to capitalize management and interest expenses on timberland "devastating" to Georgia's \$8.6 billion per year forest industry.

"Forestry grew up in Georgia with certain tax incentives in place that encouraged landowners to plant trees", said Anthony. "Those incentives are the right to claim capital gains treatment for timber income and the right to deduct annually from your income taxes all expenses, including interest expenses, incurred on your timberland. Today, more than ever, we need those incentives to insure that trees are planted on lands that are lying idle or have been harvested."

Anthony said there has never been so much competition for the investor's dollar. "Without tax incentives, how many people are going to tie up their hard-earned money for 20, 30 or 40 years with no return and having to pay taxes on regular income at the end?" he asked.

The GFA Director said Georgia would be particularly hard-hit by the disincentives due to the fact that "we are presently harvesting about 10 percent more timber in the state that we are growing annually." This growth, versus drain gap, would widen dramatically if the President's plan were to be enacted, he said.

"This would certainly undo all the work that has been done by ourselves, the Georgia Forestry Commission and other forestry organizations trying to get landowners who harvest timber to reforest their land," he added.

Anthony went on to explain that forest-based industries depend heavily on privately owned timberland for a wood supply, and pointed out that 70 percent of Georgia's woodlands are privately owned.

The Georgia Forestry Association's board of directors has adopted a resolution opposing the President's tax plan as it relates to the treatment of timber and has mailed copies of it to all Georgia members of the U. S. House of Representatives and the U. S. Senate. Anthony urged that all Georgians who have an interest in the health of forestry should contact their congressman and to let them know of their opposition.



BETTER UTILIZATION OF GEORGIA'S SOFT HARDWOOD STUDIED

Better utilization of Georgia's hardwood trees by industry could result in the state leading the Southeast in the manufacture of structural panels, according to a study by Georgia Tech's Economic Development Laboratory.

The conclusion is based on the potential use of hardwoods for producing structural panels from oriented strand board (OSB), which can be used as a substitute for plywood in many instances. OSB can be made from lower grade trees than those required to make plywood, and it is cheaper than plywood.

The name is derived from the manufacturing process which involves gluing strands of wood together in oriented patterns.

Georgia now leads the South in volume of available soft hardwood timber (such as poplar and sweetgum) that is especially suitable for making OSB. Structural OSB panels have obtained an increased share of the building market -- going from three percent in 1978 to a forecasted 15 percent next year.

T. I. Chiang, who wrote the Georgia Tech's "Economics of Oriented Strand Board Production in Georgia" report, said that in the midst of a slack housing market and resulting slow demand for building materials, the increased demand for OSB during the past decade is an "industry phenomenon." Major reasons for this market increase are OSB's similarity to plywood and lower price.

According to the research, the ideal OSB plant would make an estimated \$3 million to \$5 million net profit per year.

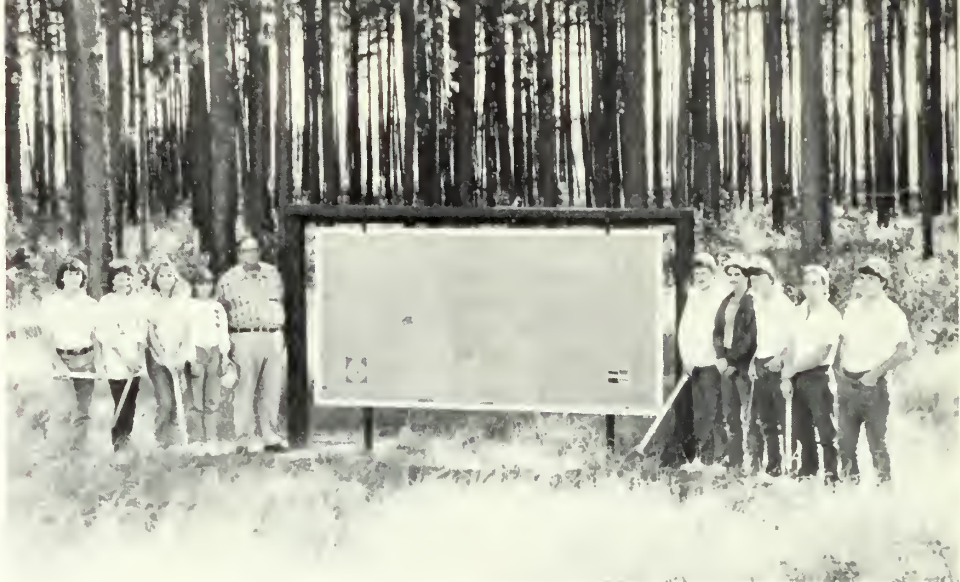
Commission statistics show Georgia has an abundance of hardwoods suitable for OSB production. Approximately half of the state's 24 million acres of forest land grows hardwoods. As the research report indicates, potential benefits from hardwood use for OSB production could prove to be a vital economic opportunity for Georgia.

The report is the first in a series. Additional studies will consider adaption of Finnish technologies for producing laminated veneer lumber, specialty hardwood plywood, and gypsum flakeboard.

HARVESTING UNDERWAY ON ONE OF BEST SEEDLING CROPS IN YEARS

Harvesting of "one of the prettiest crops in many years" is now in full swing at the Commission nurseries, according to Director John Mixon.

Mixon said all trees in the state nurseries have been sold, but the Commission has purchased trees from other sources and is continuing to fill orders from Georgia landowners.



Students and teacher proudly pose at their prize-winning school forest at Crisp County High in Cordele. From left to right are Mark Walking, Melessia Wade, Wendy Howard, Keela Hausler, Tom Carden, instructor, Kevin Parker, Marrion Greene, Jeff Butterworth, Jamie Register and John Butterworth.

CRISP COUNTY SCHOOL FOREST RANKS NEAR TOP FOR 30 YEARS

Vo-Ag Director Tom Carden has been at it for 30 years and he pretty well knows which students will volunteer for his forestry class when the new year begins each fall at Crisp County High School in Cordele.

Down through the years they have been the ones that have had a genuine interest in planting and caring for trees, a fact that is reflected in the FFA Chapter's excellent record in field day competition.

"For the past 30 years," Carden said, "we have captured first place a number of times and we have always been in the top five." The chapter competes with more than 50 other schools.

The school maintains a picturesque ten-acre forest of towering pines adjacent to the campus. The prize winning plot is divided into quarter-acre segments and one is harvested each year.

"Our boys and girls - there are 16 this year - plant trees, control hardwood, mark trees for thinning, cruise, inspect for diseases and insects," said the instructor, "and that's not all. They have plenty of classroom work to do."

Carden said the Crisp County school

takes top honor year after year because the students put together impressive notebooks that detail the many activities involved in working in the school forest and observations made on numerous field trips. "Our students can back up every accomplishment listed in those books," Carden pointed out. "I challenge the students and they really work at it."

Meantime, Forest Ranger Donnie Cravey of the Commission's Crisp-Dooly County Unit, said his personnel aid the chapter in a control burn at the forest each year.

Most of the students that volunteer are from the rural area of the county, but "I have some from town, too," Carden said, "and surprisingly they sometime turn out to be the most enthusiastic in the program."

All of his students gain a lifetime appreciation of the forests, of course, but some have gone further. Tom Carden is especially proud of several former students who have gone on to earn a degree in forestry at the University of Georgia and other schools during the three decades of his teaching career.

"Our trees this season are the very finest," Mixon said, "and we're pleased that so many landowners are planting this year."

The director cautioned seedling buyers, however, to be "extremely careful" in handling the trees. Although they are carefully packaged before leaving the nurseries, he said landowners in some

instances have let the plants lie exposed to sun and wind before putting them in the ground.

"Treat them gently, about like you would treat a tomato plant," he emphasized. "We want all planters to have the highest possible survivability," he said, "and that means proper handling all the way from nursery to the field."

RECENT INNOVATIONS ENHANCE YELLOW POPLAR IN MARKETPLACE

Recent developments in the processing and manufacturing of yellow poplar as a construction lumber is earning the species a more favorable place in the building materials market.

Sawing and drying techniques were described at a recent seminar in Statesville, NC which make the production and sale of dimension lumber from this forest species a viable option for many sawmills, according to Paul Butts, Commission utilization forester.

"Poplar has historically been used on a local basis for framing homes and other buildings, said Butts. "However, it has not been produced and marketed through regional markets for building products."

He said greatly increased inventories of poplar sawtimber, along with reduction of its use in some traditional furniture markets, have stimulated interest in its use for building. In addition, Aspen, a soft hardwood similar to poplar, has been successfully marketed for framing in the northern states.

Sawmills using traditional sawing patterns may experience problems with poplar when tree growth stresses cause boards to warp as they are cut from a log, the forester pointed out, but this warping tendency can be eliminated by sawing cants through a gang saw, or by live sawing logs into flitches. The flitches, or un-edged boards, are dried first and then ripped into dimension lumber. Both

Standing Poplar Sawtimber in Georgia
(Million Board Feet)

Year	Total	Small Sawtimber	Large Sawtimber
1953	1,220	529	691
1961	1,615	817	798
1972	2,975	1,260	1,715
1982	4,524	1,710	2,814



flitches and gang sawed lumber can be either kiln dried at high temperature or air dried. It is recommended that lumber dried in hi-temp kilns be equalized before removal from the kiln. Lumber manufactured by these techniques remains straight.

Butts said poplar does not compete with southern yellow pine in strength, hardness, or weight but it does compete very well with spruce, pine and fir from the northern states and Canada and with hemlock and fir from the western states. It is stronger, heavier, and has better rail holding capacity than those two species groups. It also resists splitting when nailed, and does not develop splinters which make handling difficult.

Both the Southern Pine Inspection Bureau and Timber Products Inspection Service provide grading services for the species. Yellow poplar lumber that has been inspected and graded by an approved lumber grading authority is approved by the Farmers Home Administration, Federal Housing Administration, and Georgia state building codes.



PUBLICATIONS

Can one solitary person of unimpressive background and meager means turn a mean and barren land into a lush Eden? Elzeard Bouffier did!

He faithfully planted 100 acorns daily and over the years transformed a far reaching, desolate countryside into a beautifully forested and prosperous region.

The Man Who Planted Trees is a slim volume by French author, Jean Giono. He tells of Bouffier's dogged devotion to leave his world much better than he found it. The inspiring story, illustrated with wood engravings by Michael McCurdy, would make an excellent Christmas gift for friends interested in forestry and conservation. The cost is \$13.50 and is available from Chelsea Green Publishing Company, Chelsea, Vermont 05038.



Competition for Land in the American South, by Dr. Robert G. Healy, examines comprehensively how land is used in the South today and how competing demands for land are likely to shape the region's future. The three-year study, which involved extensive travel throughout the region, scores of interviews, and a thorough review of the literature, presents data on current land uses—crop agriculture, forestry, animal agriculture, and human settlement. It analyzes demand and technological trends for each. Cost is \$17.00 and can be ordered from Lydia Anderson, Publications Department YY, The Conservation Foundation, 1255 Twenty-third Street, N.W., Washington, D.C. 20037.



Arbor Day in Georgia, a brochure listing several suggested classroom programs and tree planting ceremonies for various grades in the public schools, is now available. Write the Forest Education Department, Georgia Forestry Commission, P. O. Box 819, Macon, Georgia 31298-4599, or pick up a copy at one of the Commission's district or county offices. There is no charge.



CANADA

TOO MUCH OF HER LUMBER COMPETING WITH GEORGIA PINE

The increasing negative influence of Canadian lumber imports on the U. S. lumber market has resulted in a reversal of Georgia Pacific's previous position of neutrality concerning the controversial issue.

Stan Dennison, Georgia Pacific's executive vice president - building products, stated in testimony before the International Trade Commission that Georgia Pacific "can no longer remain neutral - even though a reduction of Canadian imports could prove costly to Georgia Pacific. These imports have reached levels that are causing liquidation of our U. S. industry." Dennison's testimony pointed out that Georgia Pacific's neutrality was maintained because of the cor-

poration's activities as a manufacturer and importer.

Georgia Pacific's reversal on the issue is especially significant because the corporation is not only one of the largest manufacturers of American lumber, but also one of the largest importers of Canadian lumber. According to corporate records, Georgia Pacific purchased last year approximately 1.5 billion board feet of Canadian lumber at a cost of nearly 400 million dollars.

"We have no objection to Canadian lumber being imported into this country," Dennison told the Trade Commission, "It's good lumber, as our own lumber is, but the situation is unfair. Free trade is fair trade...we think something

should be done to restore fair play to the American industry."

Dennison is also chairman of the Coalition for Fair Lumber Imports, an organization with headquarters in Washington, D. C., that is comprised of major trade associations and companies representing 70 percent of the total U. S. lumber production. Although the Coalition continues to encourage resolution of the problem through government-to-government talks, the basic attitude of the organization is that it "is willing to take any appropriate action - whether legislative or administrative - that would restore fair competition between the two countries."

The U. S. problem over the imports is the result of Canada's economic and



governmental practices. More than 90 percent of Canadian lumber production comes from federal or provincial government land. The provincial governments use methods of selling and appraisal that result in little or no cost of stumpage to the Canadian producer.

"In effect, the provinces give the timber to the manufacturers there," Dennison said in a quote from his company's newsletter. "By providing their industry with virtually free raw materials, the Canadian governments are allowing the industry to penetrate markets in which the Canadians could not compete if they had to pay a reasonable price for timber."

In 1975, Canadian lumber imports accounted for only approximately 19 percent of the U. S. markets. The percentage rose to more than 32 percent for 1984 and current trends indicate that the increase will continue during 1985.

OVERLY GENEROUS

In his testimony, Dennison pointed out that "today, low-cost Canadian imports account close to one-third of all softwood lumber consumed in this country. That's overdoing the generosity of the American market."

Dennison pointed out the seriousness of the situation with one example: Georgia Pacific closed a major mill in Arkansas because it was unable to realize sufficient prices to yield adequate profit. "It is rather staggering to close a Southern pine mill in Arkansas, while softwood from British Columbia is thriving in the same market."

The Georgia Pacific executive predicts that if lumber imports continue to come into the U. S. at the current rate, the U. S. stumpage price will be depressed to such an extent that millions of private tree farmers will stop planting because they will be unable to get a fair return on their money.

Dennison concluded his testimony to the International Trade Commission with this statement: "We respectfully ask that you examine the facts of this situation and the destruction that is occurring in our domestic lumber market - or there will be few American lumber producers left to compete in world markets."

ANOTHER PERSPECTIVE

Leon Brown is associate director of the Georgia Forestry Association and editor of the organization's TOPS magazine. The purpose of the Association is to promote forestry in Georgia. Members include forest industries, timberland own-

ers, and friends of forestry.

From the standpoint of protecting and promoting Georgia's forestry interests, Brown has been involved in the Canadian issue since its inception.

"Georgia Pacific's policy reversal is a major step forward in resolving the issue of Canadian lumber imports," Brown said. "This should create unity where



Dennison



Brown

there has been division and indecision."

Brown said the issue has frequently been considered as "a little man's struggle" characterized by small forestry-related businesses occasionally going out of business as a result of the imports.

"But this is not the case and I believe people are going to see this now," Brown said. "This is the number one problem facing lumber producers today. Some states have had entire towns (lumber supported) turned into ghost towns by these Canadian imports."

The TOPS editor pointed out that while Georgia produces more timber products than any state except Oregon, more than half of all lumber now being used by the state's builders is coming from Canada. Brown cites two main reasons for this increasing influx of lumber into the Georgia market. Canadian lumber is cheaper than Southern yellow pine, and subcontractors prefer to work with it because it is softer and nails can be driven with less effort.

"Builders say S.P.F. (Canadian spruce/pine/fir) is easier to work with and won't warp," Brown said. "Part of their claim is true, but the number three S.P.F. being brought into Georgia and nailed up in houses doesn't have much more strength than balsa wood."

Brown also said that Southern yellow pine will warp - if it is not kept dry (after it has been dried and graded). "And it's true S.P.F. is less likely to warp if it gets wet - it just cracks and splits," he said. "But since it's out of sight in a house, it usually goes unnoticed."

Brown said there is no getting around the fact that Southern yellow pine is much stronger than the cheaper grade of S.P.F. But he feels the public is not aware of this fact, and are often unaware of what type lumber is being used to construct houses they are buying for a lifetime.

"The American home buying public is not stupid," Brown said. "If provided with the facts, they will dictate to the builder what kind of material is used to build their homes. We need a public awareness campaign to present these facts."

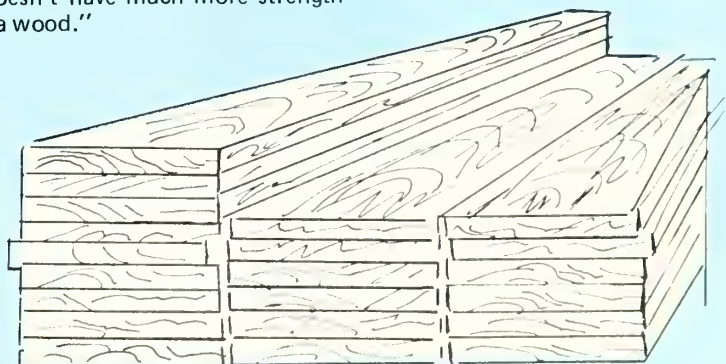
SOLUTION

Brown feels the problem should be approached from several angles. He said another way to combat the cheaper grades of Canadian lumber would be a uniform building code prohibiting the use of certain grades of lumber for loan bearing purposes.

Cobb County, an Atlanta suburb, already has such a code. The result of the code is that Southern yellow pine is now the mainstay of that county's building industry.

"This type of code works," Brown said. "Because, after all, it is only the cheaper number three grades of S.P.F. that we are having a problem with. The better grades of Canadian lumber are just as expensive as Southern yellow pine."

But Brown believes there is one basic solution to the problem that all other approaches should be based on. "A duty should be placed on Canadian lumber that is equal to Canadian subsidies," Brown said. "This would establish an economic environment where we could compete on a fair basis. That's all we want."



site preparation for reforestation can yield more than a prime crop of valuable trees. For Charles Gremillion, management forester for the Newnan District, such sites have been the source of one of the finest private arrowhead collections in the United States.

Over the past 20 years, Gremillion has collected 8,000 arrowheads, ranging in age from 100 to 10,000 years old. His detailed filing system catalogs each piece in relation to site location and historical period. More than 100 books occupy his library for identification.

"But it's just a hobby to me," said Gremillion gesturing toward glass cases of carefully aligned arrowheads on his office wall. "I've never bought or sold a piece, and really don't think much about the monetary value, although I do have some valuable pieces."

It would hardly be possible to place a monetary value on a collection of this type that has been cataloged for 20 years, according to Sylvia Flowers, superintendent staff assistant for the Ocmulgee National Monument in Macon. The federally owned Ocmulgee area is a unique 683-acre site covering the cultural evolution of Indians since the Ice Age - 12,000 years ago.

"What this collector is doing - especially the extensive cataloging - will be of great value to future generations," Flowers said. "The University of Georgia now has a similar cataloging system and we are urging all collectors to keep records and share them with the university."

Meanwhile, Gremillion continues to hunt, meticulously identify, and catalog his finds. Although his collection has pieces from North Carolina, Tennessee and Louisiana, Gremillion estimates that 80 percent came from Georgia sites.

The hunting grounds for arrowheads are usually site preparation areas that Gremillion encounters as part of his forestry job. On weekends, he returns to the sites and searches the area.

"You can't do it while you're working," Gremillion points out, "because looking for arrowheads requires total concentration. I guess there's a mile of walking averaged for every arrowhead I find. There are a lot of days I'll walk 15 or 20 miles."

When Gremillion describes what hunting arrowheads is like, it becomes clear why it's difficult. First, he says, the site has to be found, often by sighting a minute shaving that only an

SITE PREPARATION RESULTS IN MANY ARROWHEAD FINDS

expert observer will recognize as residue from an arrowhead being formed. Then, the arrowheads must be found - and this is harder than it might seem to someone who hasn't tried it.

"A lot of the arrowheads blend in with the soil," Gremillion stated, "Being able to see them is just something acquired with practice."

Gremillion says bright sunshine creates a glare on the stones, so the best times to hunt arrowheads are cloudy, overcast days. He remembers some of his most successful days were in pouring rain as he made his way through soggy preparation sites wearing a poncho and hip boots.

Rain washes away the soil and makes the arrowheads glisten," Gremillion said. After several arrowheads have been found and identified, he knows the approximate size of the site.

"The older the arrowheads, the smaller the site usually is," Gremillion said. "Sometimes no larger than the average room in a house."

He explained that it was not until relatively recent history that Indians organized into tribes. Ancient Indians usually traveled in small family units, remaining at one campsite only a few days until the game supply was exhausted.

But after so many years of experience, Gremillion can often determine a campsite just by looking at it. An elevated area near water always has potential.

Over the years, the Newnan forester has come to be considered somewhat of an expert on his hobby. He has spoken on the subject to numerous civic organizations, schools, and on television programs.

One thing he has noticed is that civilization seems to be encroaching even on arrowhead hunting. He recalls one day, years ago in Louisiana, when he found 70 arrowheads. Now, he considers 20 to 30 a good day.

"But there's still plenty around," he said, referring to state records. He said Florida records show that more than 10,000 arrowheads over 10,000 years old have been found, while neighboring Georgia and Alabama have recorded only around 1800 each in this category.

"And there should be just as many in Georgia as in Florida," he said.

So Gremillion keeps roaming the forest site preparation areas - and he keeps looking.

Charles Gremillion, management forester for the Newnan District, displays several cases of his arrowhead collection. The 8,000-piece cataloged collection, acquired over 20 years of searching forest site preparation areas, contains some arrowheads 10,000 years old. Gremillion estimates 80 percent of his collection was found in Georgia.



UNIVERSITY PLANS SITE PREP STUDY, OTHER WORKSHOPS

A conference entitled The Use of Herbicides in Site Preparation and Release of Coniferous Forests will be held at The University of Georgia Center for Continuing Education December 12-13.

It is designed to present a "state-of-the-art" use of herbicides for site preparation and release of southern pine forests. Foresters, land managers, technicians, and others concerned with the application of herbicides for site preparation and conifer release will benefit greatly by attending the course, according to the planners.

Major topics to be discussed include forest vegetation control, formulations, aerial applications, ground applications, factors affecting herbicide effectiveness, herbaceous weed control, chemical use and public relations, and available forest herbicides.

Methods of application, effectiveness on various sites, costs per acre, safety and certification will also be discussed by 19 instructors, including representatives of major chemical manufacturers.

If you are a forest land manager, consultant, service forester, accountant, attorney, or any other professional who works with private, non-industrial forest landowners pertaining to tax and estate planning, you need to know about two other workshops, Timber and the Federal Income Tax and Estate Planning and Forestry. These workshops are scheduled at The University of Georgia, Center for Continuing Education, February 18-20, 1986. The workshops are designed to provide participants with a working knowledge of the tax aspects of timber resource management.

SEMINAR PLANNED

The second annual Southeastern Forester Landowner Seminar will be held February 22 at the Georgia Pacific Center in downtown Atlanta.

The one-day seminar will begin at 9:00 a.m. with registration and the general session will begin an hour later. Topics for discussion will include tree farming, timber taxation, timber marketing strategies, forest management assistance, stand establishment, sales contracts, cruises and appraisals, life after the harvest, integrating timber and wildlife and women and their woodlands.

For further information, contact Lynn Hooven, Chief of Forest Management, Georgia Forestry Commission, Macon, or John Gunter, Head, Extension Forest Resources Department, University of Georgia, Athens.



H. E. Ruark, right, installs three new members of the Georgia Foresters Hall of Fame. Others are, left to right, T.W. Earle, Jr., Augusta, accepting on behalf of his father, T.W. Earle, Sr.; J. Walter Myers, Jr., Atlanta; and Claud Brown, Athens.

THREE NAMED TO GEORGIA FORESTERS HALL OF FAME

Three prominent foresters were installed into the Georgia Foresters Hall of Fame by the Georgia Division Society of American Foresters at the recent annual meeting held in Athens.

Those named by H. E. Ruark, chairman of the Hall of Fame Committee, were Dr. Claud Brown, T. W. Earle, Sr. and J. Walter Myers, Jr.

Brown, a Georgia native, is a University of Georgia graduate where he obtained both a BS and Master's degree in Forestry, followed by a Ph.D from Harvard in Biology.

An active SAF member over the years and a member of the faculty of the University of Georgia, he has authored or co-authored over 100 research papers in referred journals. In addition, he authored five books on physiology, genetics and tissue culture of woody plants. He traveled extensively for Georgia forest-based industries in Canada, England, Portugal, Spain, France, Switzerland, Brazil, South Africa, New Zealand, Australia, Malaysia and Japan. He also served as advisor and consultant to the Georgia Forestry Commission in genetics and tree improvement activities.

T. W. Earle, Sr., who passed away in 1982, was the second recipient honored. He was a New York native, a graduate of Syracuse University with a BSF degree. He worked with St. Regis Paper Company and St. Lawrence Paper Company Ltd in Canada, followed by a stint with the North Carolina Paper Company in Plymouth, N.C.

In 1945 he became president and director of woodlands for Gair Wood-

lands. Later he was vice president of woodlands for Continental Can Company.

Earle served as president of the Forest Farmers Association, the American Pulpwood Association and the Southern Pulpwood Conservation Association.

Among his career accomplishments were the advancement of site preparation and planting programs which led to the philosophy of even aged management of industrial lands. He played a key role in the organization and development of the South's tree improvement program.

Also installed was J. Walter Myers, Jr., of Atlanta. A native of Louisiana and a graduate of LSU with a degree in forestry, he worked for the U. S. Forest Service and the Louisiana Forestry Commission. During World War II, he rose to the rank of Major. For 31 years following the war, he served as executive vice president of the Forest Farmers Association.

He has participated in over 125 congressional hearings, as well as executive conferences on forestry matters.

Myers was instrumental in gaining recognition for equitable forest and estate taxation, retention of capital gains treatment for timber, forest incentive programs and equitable clean air and water acts with sound and reasonable regulations.

He has been a member of SAF since 1947 and was elected a Fellow in 1979. He served as treasurer, vice chairman and chairman of the Southeastern Section SAF and was later elected to the SAF Council. He is currently a candidate for president-elect of the Society.



Richard Brantley, 16, of Johnson County is the winner of the third annual F & W Young Forester of the Year Award and \$500 college scholarship. The award was presented at the state 4-H Congress by Bruce Hinson, right, manager of F & W Forestry Services, Inc.'s Swainsboro office. Dr. Tom Rodgers, center, state 4-H leader, was also on hand for the presentation. The award was established three years ago to encourage young people to pursue careers in forestry. Brantley, a junior at Johnson County High School, was also the state 4-H winner in forestry competition.

BEETLE ACTIVITY SEEN IN 43 COUNTIES

The outbreak of southern pine beetle activity is currently confined to 43 counties, with heaviest infestation seen in Stewart, Chattahoochee, Webster, Baldwin, Jones, Bibb, Putnam, Clay and Jasper Counties, according to Commission Entomologist Terry Price.

In reporting findings of the most recent aerial survey made by the Commission, Price said "Georgia is fortunate at this time to have a reasonably low number of trees affected by the beetle." He cited East Texas and Louisiana as experiencing "one of the worst outbreaks ever."

Louisiana has salvaged over 225 million board feet of beetle damaged timber and officials feel this is only half of the timber killed by the insect this year, Price said.

He said Georgia landowners should continue to be alert to any changes in their forests and if signs of beetle activity are spotted, the Commission or a consultant forester should be notified immediately.

Southern pine beetle outbreaks have been recorded in Georgia as early as the late 1700's. Accurate records, however, were not kept until the turn of the century. In recent years, the Commission has conducted at least three statewide aerial surveys annually to spot damage in its early stages. Landowners have been salvaging damaged timber since January and more than 2,137,000 board feet and 31,404 cords of wood have been cut

and marketed.

The entomologist pointed out that many stands suffer beetle damage because landowners do not manage their forests wisely. "The southern pine beetle is particularly destructive in overstocked stands of low vigor," he said. "The insect has the potential to increase rapidly in weakened or old trees and that destruction can range from a few trees to several hundred acres."

He urged the landowner to consult a professional forester - either with the Commission or in private practice - to determine the best management practices to follow if he feels his forests are susceptible to beetle attack.

Although warning signs have been published many times, Price said they should continue to be emphasized. "Trees that are attacked during wet weather or winter months may remain green longer, but in the spring and summer, pine needles will turn yellow in the early stages and then become reddish brown," he pointed out.

The entomologist also said it is very important that landowners "not be scared or pressured into the premature cutting of unaffected stands or trees not identified as those in a buffer zone. "The main thing is to keep a close watch on your woodlands, and if signs of activity are spotted, call for help from the professionals."

SMOKEY'S IMAGE IS STILL STRONG AFTER 40 YEARS

Smokey Bear has endured for over 40 years and if indeed "Life Begins at Forty," the widely recognized animal symbol of strength and vigilance will be around for a long time.

The Georgia Forestry Commission, as well as other state forestry organizations and the U. S. Forest Service, use the friendly bear in the never-ending campaign to promote the prevention of forest fires.

A recent report showed that the 1984 media support for Smokey was more than \$43,500,000. Smokey messages were printed in 2,400 newspapers and 820,000 Smokey public service spots were aired on radio stations.

Smokey messages entered American households nearly 860,000,000 times through television announcements. More than 3,000,000 people visited Smokey's living symbol at the National Zoo in Washington, D.C. during the year.

Smokey has his own zip code and receives several hundred letters every day.

In a recent survey based on a random sample of men, women and children over ten years of age, 98 percent could correctly complete the phrase, "Remember, Only You _____."

Many Smokey Bear items have been developed and others are in the works. Current items include candy, key chains, litterbags, pens, coloring books, rulers, new design plush dolls, T-shirts, jogging outfits and many others. Current licensees have been authorized to produce additional items, including childrens back packs with a plush head of Smokey on the outside, tote bags, paperweights, Christmas ornaments, insulated coffee mugs and embroidered baseball caps. On the horizon are flashlights and cookie cutters in the shape of Smokey.

The 1985 public service advertisement "Criminal" has won the Gold Medal Award from the International Festival of Television and Film of New York and as directors of television stations around the country learn of this prestigious award, it is expected the spot promoting fire prevention will be assured of considerably more playing time.



NATIONAL FORESTS LAND MANAGEMENT CHANGES PLANNED

Which cutting methods should be used to harvest timber on the National Forests?

Should additional wilderness areas be recommended for Georgia?

To what extent should off-road vehicles be allowed on National Forests?

These are just three of the issues addressed in the U. S. Forest Service's recently released Land Management Plan.

Chattahoochee-Oconee Forest Supervisor Pat Thomas said the plan will bring about several significant changes in the way the National Forests are being managed. "Although this Land Management Plan will probably not completely please all interested groups, I sincerely believe that it presents a well balanced and reasonable approach for managing these valued National Forest lands and will best serve the majority of citizens over the long run," he said.

Released for public review, the plan describes how the Chattahoochee and Oconee Forests will be managed over the next 10 to 15 years.

The Forest Service began the planning process back in 1979 with the goal of identifying and resolving many diverse issues. Since that time, over 2,500 people have worked with the Forest Service to develop the final version of the plan.

To receive a copy of the final Land Management Plan contact: Forest Supervisor's Office, 508 Oak Street, NW, Gainesville, GA 30501.



Although Georgia has 200 sawmills, the small independent operator is rapidly disappearing from the scene. The necessity for plants to be large and highly productive by using the latest in computerized equipment is shunting the small sawmill further into the background.

There are, however, a few holdouts. The above mill, nestled in a scenic valley near Dahlonega, is owned by Boyd Cantrell. He operates the mill with a couple of helpers.

Farmers in the area bring in a load of pine or hardwood and Cantrell cuts it to their specifications and the rough lumber is then delivered to the owner. Slabs accumulate at the end of a conveyor chain and are given to people who need it for firewood, but some has to be burned when demand is slow.

Cantrell's little mill is capable of turning out three thousand board feet a day when the machinery is working well and conditions are ideal.

GERMAN COMPANY TO UTILIZE NEWNAN AREA HARDWOOD

A German-owned company which uses hardwood to manufacture a number of specialized items has purchased an industrial site in Newnan and plans to construct a plant there in the near future.

"The State of Georgia was an easy choice for us, though we did visit other states," said Herbert Doynow, Vice President, Marketing, for the company. "The diligent efforts of Jim Ewing were certainly a contributing factor," he added.

Forester Ewing is an employee of the Forestry Commission but has been detached to the Department of Industry and Trade to aid in a campaign to interest more investors to locate wood using plants in Georgia, especially in the hardwood producing sections of the state where those species are not being utilized.

Georgia Lt. Gov. Zell Miller and Ewing joined the Newnan-Coweta Chamber of Commerce in welcoming representatives of Werzalit Of America, Inc., the city's first occupants of the Newnan Industrial Park on Farmer Industrial Boulevard.

During a luncheon at the Newnan

Country Club, Miller welcomed Werzalit owners Mr. and Mr. J. Frieder Werz, Jr. and other executives of the company. He said it is one of 139 German-owned companies now located in Georgia.

The lieutenant governor said that Georgia is one of the most aggressive and fastest growing states in the country, with almost one million people moving here in the past 10 years. He said there are now about 950 international businesses located in Georgia, and that 10 years ago there were only about 100.

The state budget, according to Miller, is three times what it was a decade ago, yet Georgia has not increased taxes during that time. He said Georgia is one of only two states that can make that claim.

He noted that the number one industry in Georgia is the forestry industry, which earns \$8.6 million each year.

Commission and other officials working to lure new industry into forest-rich Georgia said the state's abundance of hardwood was an important factor in

the company's decision to locate in Newnan.

In addition to the "enormous inventory of trees," Doynow said the "excellent highway systems, the Hartsfield International Airport, the huge, close by Atlanta infrastructure, the various other business incentives...all played a part in our selection process."

The company produces a compressed wood and resin material used in making weather-proof outdoor table tops, internal molded furniture parts, casket lids, ceiling tiles, basketball backboards, outdoor grill shelves, high-chair trays, molded pallets and special packaging materials.

Werzalit also sells a line of architectural materials for indoor and outdoor construction which it will begin marketing on the North American continent this year.

The production of all Werzalit products begins with the shredding of full trees, followed by the addition of a resin mix and then finished in patented molding steps.

RESEARCH CONTINUES ON DIRECT SEEDING

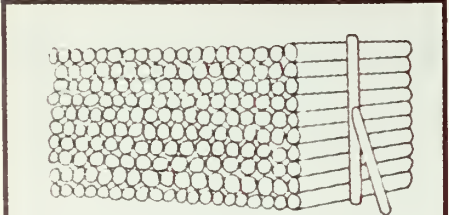
The Commission this fall and winter is continuing research to find improved methods for Georgia landowners to reforest their land by the direct seeding method.

Although most landowners reforest by planting seedlings, direct seeding is an alternate for those who are seeking the less costly way of establishing a stand under certain conditions.

"We have made some progress in the use of the Swedish-built scarifier," said Commission Director John Mixon, "but that success has been limited." He said the Commission has now developed a three hitch plow that plants seed in uniform rows, but "this equipment is in the experimental stage and we are doing further study on it."

Mixon said the Commission is providing quality seed to landowners who prefer the direct seeding method, with some of the free seed coming from forest industries. He advised a landowner who needs seed, or wants detailed information or assistance in correctly sowing tree seed, to contact any office of the Commission.

"We are interested in greatly expanding reforestation in our state and this is just another way of establishing additional stands," Mixon said.



What is the yield of one cord of wood? That's a stack of wood four by four by eight feet, or 80 cubic feet of solid wood.

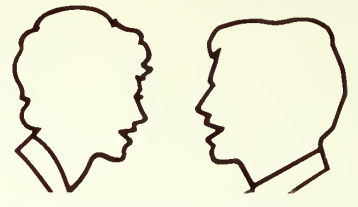
- One cord could be converted into:
- 460,000 personal checks, or
 - 100,000 IRS 1040 forms, or
 - 4,000 one gallon milk cartons, or
 - 4.4 million commemorative-size postage stamps, or
 - 942 one-pound books, or
 - 30 Boston rockers, or
 - 7.5 million toothpicks, or
 - 12 dining room tables

Building an average 1800 square-foot home uses 10,000 board feet of lumber -- equivalent to 20 cords.

Some 20 percent of a cord of wood might be bark, but bark, wastewood, and pulping liquors provide more than half of the U.S. forest products industry's energy needs. Bark is also a source of many chemicals and is used for mulches and soil conditioners.

PEOPLE

IN THE NEWS



Forester GREGORY T. FINDLEY, a native of Athens and a graduate of the School of Forest Resources, University of Georgia, came with the Commission in September and has been assigned to the Camilla District. He previously worked with a produce company in College Park, and was married in November to the former Miss Tawna Lambert of College Park. The couple presently live in Albany... PHILLIP M. DOUGHERTY and LAWRNECE A. MORRIS recently joined the faculty of the School of Forest Resources, University of Georgia. Dougherty earned his BS in Wildlife Science and a MS degree in Forestry from Texas A&M University and a Ph.D. in Physiological Ecology from the University of Missouri. He has about eight years experience with forest industry in the Pacific Northwest and Midwest. He will teach courses in silviculture and his research will concern



Barfield



Dixon

unit. A native of Worth County, he came with the Commission in 1983. The new ranger is married to the former Miss Lila Sams of Worth County and they have one daughter, Staci. They are active in the First Baptist Church of Americus. He replaces Wayne Barfield, who was recently promoted to Americus District Ranger. CHARLES L. HENSON, who came with the Commission in 1966 and served as forest patrolman in the Quitman-Stewart-Webster Unit, was recently named to head the tri-county unit as forest ranger. The new ranger and his wife, the former Miss Carline McIntyre of Florida, have three children. Henson, a native of Columbus, is a member of the Methodist Church and the Lumpkin Lions Club. He replaced Ranger James I. Lane, who recently retired...JAMES W. LEE, JR., who came with the Commission in 1969, has been named district ranger in the Waycross District. Although born in Alabama, he grew up in Ware County and attended high school in that city. He had served as ranger of the Ware-Pierce County Unit since 1982. The new district ranger is married to the former Miss Sue Johnson of Baxley and they have three children... WAYNE BARFIELD, former ranger of the Sumter County Unit, has been named district ranger of the Americus District. A native of Americus, Barfield attended Americus High School, served four years in the Air Force and came with the Commission in 1974. He and his wife, Betty, who passed away recently, had three children. The family is active in the First Assembly of God Church in Americus... JOE DIXON, formerly a patrolman in the Montgomery-Treutlen-Wheeler County Unit, has been named ranger of the Laurens County Unit. He came with the Commission in 1973. A native of Alamo, Dixon is married to the former Miss Donna Spires of Wheeler County and they have two children. The new ranger is a member of the Farm Bureau and the National Arbor Day Foundation. The



Findley



Paramore

pine plantation silviculture. Morris is a soil scientist with degrees from the University of Maine (BS, Forestry), Syracuse (MS, Forest Soils), and the University of Florida (Ph.D., Soil Science). For the past three years he served as principal scientist for a cooperative research program evaluating the effects of intensive forest management on the long-term productivity of pine plantations. He will teach courses in forest soils and continue his research work in site productivity and nutrient cycling...RANDAL PARAMORE, formerly a forest patrolman in the Sumter County Unit, has been named ranger of the



Henson



Lee

Church...ANSLEIGH RIDDLE, the current Miss Georgia Forestry, was named first runner-up in the recent Miss Agriculture pageant. Miss Riddle is the daughter of Mrs. Carlotta Riddle and the late Harold Riddle of Montezuma. Winner in the agricultural contest was Miss Kathy Calhoun, who had previously captured the Miss Georgia Peanut queen title. Twelve other girls competed in the contest...JAMES IVY LANE, a ranger in the Washington District, recently retired. He came with the Commission in 1955. A native of Lumpkin, he is a graduate of Stewart County High School. He married the former Mary Ann Gilbert. They have three children...JOHN D. NICHOLSON, a forester with the Newnan District Office, has been transferred to the Macon Office.



Riddle



Lane

ter of Mrs. Carlotta Riddle and the late Harold Riddle of Montezuma. Winner in the agricultural contest was Miss Kathy Calhoun, who had previously captured the Miss Georgia Peanut queen title. Twelve other girls competed in the contest...JAMES IVY LANE, a ranger in the Washington District, recently retired. He came with the Commission in 1955. A native of Lumpkin, he is a graduate of Stewart County High School. He married the former Mary Ann Gilbert. They have three children...JOHN D. NICHOLSON, a forester with the Newnan District Office, has been transferred to the Macon Office.



Reeves



REEVES, DEATON, WETHERINGTON HONORED

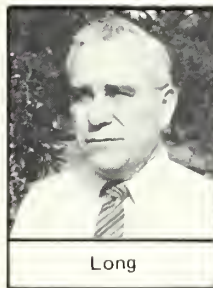
Governor Joe Frank Harris in 1983 established special awards to recognize state employees who have shown superior performance, with selection criteria based on job performance, devotion to duty, cooperativeness and safety/heroism.

Commission personnel who received the Governor's Award in impressive ceremonies at the state capitol this year were Julian D. Reeves, Atlanta, Personnel Officer; Louie F. Deaton, College Park, Senior Forester; and Leonard Lawrence Wetherington, Colquitt County, Forest Patrolman.

The awards were presented by the governor at the second celebration of State Employees Recognition Day.

Reeves, a native of Palmetto, Georgia, received his forestry degree from the University of Georgia. He was recognized for his many years of guidance and interpretation of State Merit System and Commission policies. Reeves, who now lives in Atlanta, joined the Commission in 1954.

Protection Department. He joined the Commission in 1972 as a patrolman. A native of Thomaston, Nicholson is a graduate of R. E. Lee High School. He has a forestry degree from the University of Georgia. Nicholson is married to the former Linda Sue Brese. They have one child, Susan Kathleen...JACK G LONG of the Macon Office, has assumed new duties as assistant department head of the Forest Protection Department. A native of Jacksonville, Florida, Long is a graduate of Athens High School. He has a degree in forestry from the University of Georgia. Long joined the Commission in

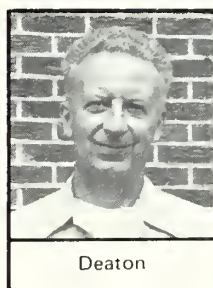


Long

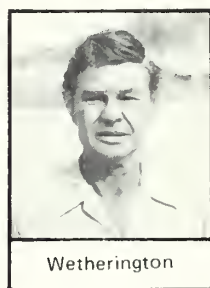


Nicholson

1959 as a ranger with the Upson County Unit. He is married to the former Yvonne Bell. They have two children, Audrey and Alan.



Deaton



Wetherington

Deaton, a native of Atlanta, came with the Commission in 1958. One of the first urban foresters in the Southern United States, Deaton began his urban duties in the early 1960s in Atlanta. The area's rapid growth created many challenges in the environmental field. Deaton was cited for his numerous efforts and accomplishments in maintaining a high quality environment and promoting public awareness concerning this need.

Wetherington, who was employed by the Commission in 1962, was cited for the degree of excellence he displayed in performing his duties as a forest patrolman. Among his numerous recognized efforts was the rebuilding of two burned tractors which saved the Commission approximately \$40,000. During the same season he rebuilt the tractors, Wetherington helped fight many wildfires and attended to other regular duties. A native of Adel, Wetherington now lives in Coolidge.



Melear



Joyner

JOYNER RETIRES, MELEAR NAMED TO DISTRICT POST

Tom Joyner, who had been with the Commission for 22 years, recently resigned his position as Rome District Forester and Carl M. Melear has been named to the post.

As forester of the Northwest Georgia district, Melear will supervise Commission activities in 15 counties, comprising more than 2,270,000 acres of forests.

The new district forester came with the Commission in 1974 and after a period of training in the McRae District, he was assigned to the old Griffin District. He later transferred to the Rome District.

Melear is a graduate of the School of Forest Resources, University of Georgia, and served six years in the Air Force Reserve. He is married to the former Miss Faith Haley of Canton and they make their home in Everett Springs.

The forester was one of the Commission's volunteers who joined other firefighters from 25 other states in July to fly to the West Coast to help subdue fires that ultimately burned more than 375,000 acres of forest and grass lands in California.

A farewell dinner honoring the retiring Joyner was given by co-workers and other friends.

Forestry was his second career. He retired from the Navy in 1957 as Chief Petty Officer after 20 years of service. He attended the School of Forest Resources, University of Georgia, and after graduation served as assistant forester at Berry College in Rome.

Joyner, a native of Rome, came with the Commission in 1963 as a forester in the Rome District. He is married to the former Miss Grayce Inez Andrews and they have two daughters.

The Rome District was awarded the "best district in the Commission" by the Georgia Forestry Association at that organization's annual convention this summer on Jekyll Island.

District Forester Melear intends to hold on to that reputation.



Merry  hristmas

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District Two
Route 11, Box 37
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Consulting Arborist Arnie Day examines an Augusta laurel oak for insurance appraisal. Pending Day's appraisal, Lloyds of London has agreed to insure the impressive oak, which measures more than three feet in diameter and is over 100 years old.

TREE INSURANCE

VETERAN ARBORIST LEADING THE WAY

Insuring a single tree for \$25,000 will become commonplace in the near future, predicts an Augusta consulting arborist whose elite ranking in his profession makes him only one of three in Georgia.

Arborist Arnie Day, who has operated his business in Augusta for the past 25 years, currently has two trees under his care that Lloyds of London has agreed to insure pending his evaluation of the trees. Day says he expects both trees will be insured for between \$14,000 and \$20,000 each.

Day's prediction of insuring trees becoming a trend stems from his personal experience with a rapidly escalating interest on the subject among homeowners and developers. He believes increasing awareness of environmental problems and a new appreciation of our natural resources spurred the initial interest.

"During the past few years, I've seen a lot of interest in insuring trees," Day said. "But there have been problems because

of a lack of specific guidelines. Insurance companies were reluctant to do it and potential customers didn't know how to go about it."

Now, however, Day believes that when the Lloyds of London arrangement is finalized, it will be a major breakthrough and establish a trend.

Day should know; he has been in one form or another of the tree business for 40 years. He started off planting seedlings for the state of Wisconsin when he was 12 years old. Day said that to gain the "certified" job title of consulting arborist, an arborist must be accepted for membership by the American Society of Consulting Arborists. All members must be voted on and approved by the society's board of directors following an extensive investigation. The investigation includes a series of determining factors ranging from community recognition to personal expertise.

(Continued on Page 10)

Georgia Forestry is published quarterly by the Georgia Forestry Commission, Route 1, Box 85, Dry Branch, GA 31020. Second class postage paid at Marietta, GA.

ON THE COVER - Great forests blanket the rugged mountains of North Georgia to provide one of the state's most spectacular views. More than 27,279,400 acres of forests statewide are under the protection of the Georgia Forestry Commission.

SERIOUS BEETLE PROBLEM SEEN

Pine beetles are currently attacking Georgia timberlands in multiplying numbers that could reach proportions of the 1979 epidemic which killed more than \$25 million worth of the state's timber.

Commission Entomologist Terry Price urges all landowners to inspect for pine beetle activity and report any infestation to the Commission headquarters or local forestry unit.

Price bases the concern over beetle activity on aerial surveys revealing "a disturbing population increase of beetles in at least 40 counties." Counties showing the largest buildup include Baldwin, Jones, Jasper, Putnam, Monroe, Upson, Stewart, Chattahoochee, Crawford, Troup, Lamar, Cherokee, Clay, Camden, Greene, Wilkes, Oglethorpe, and Morgan.

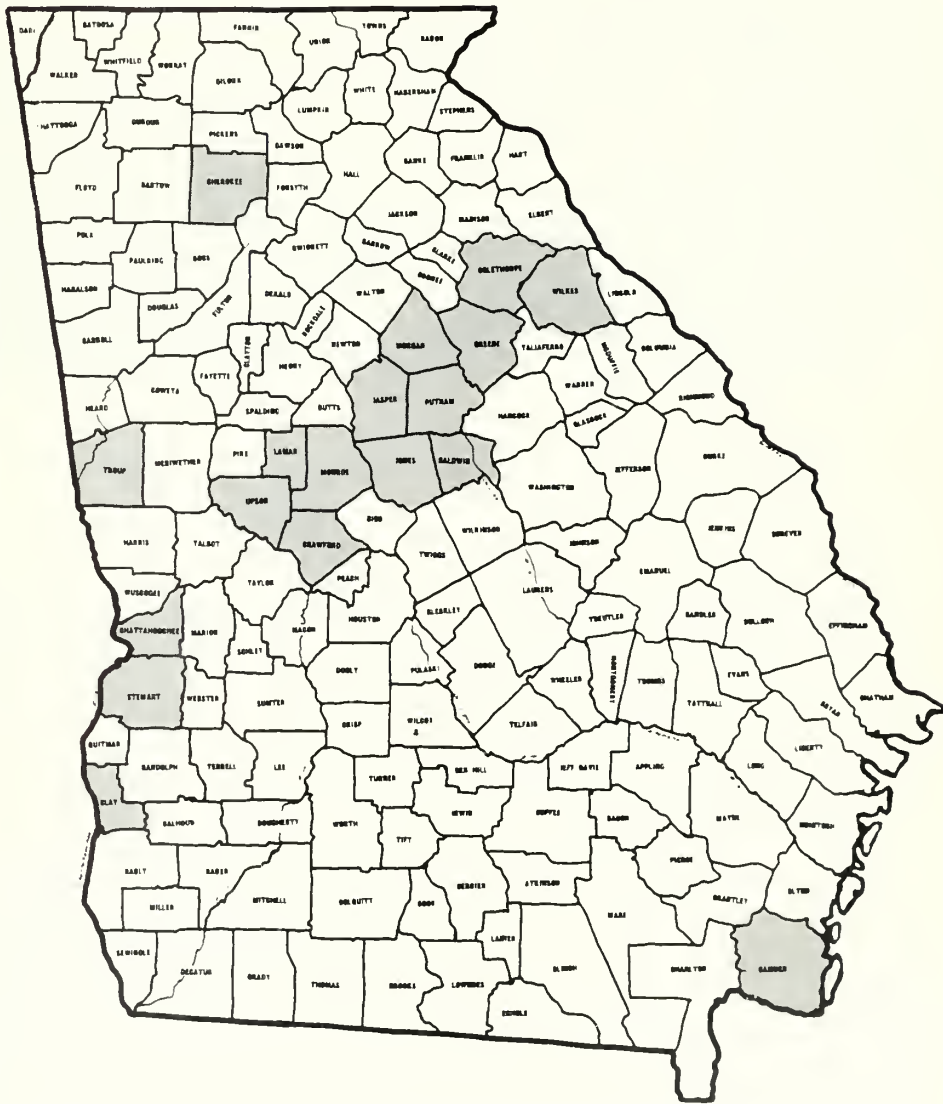
"It could happen again," said Price referring to the 1979 outbreak and the subsequent financial losses. "We need to monitor this situation carefully and take appropriate action."

According to current survey information, Price said the activity is expected to reach an epidemic stage before the end of this year. However, he added that appropriate actions could prevent the heavy financial losses experienced in 1979. Such actions already in progress include an aggressive campaign launched by the Commission, Georgia Forestry Association, and forestry related industries to salvage as much infested wood as possible. Price said landowners are being urged to take the initiative on their own and salvage wood as soon as possible.

A complete aerial survey of the hard hit Georgia counties will be conducted again in late March. Other counties throughout the state will also be closely monitored.

Forester Joe Bennett of Augusta's Federal Paperboard Company heads a committee formed by the Georgia Forestry Association to monitor beetle activity and work with landowners in controlling the insects and salvaging timber.

When landowners salvage beetle infested timber, Price said, it is also necessary for them to cut green, uninfested trees surrounding those that are dead or dying so a "buffer zone" will be created to stop the advancing insects.



Shaded counties are the ones found to be most infested during the last aerial survey.

The Southern pine beetle is a small, reddish-brown or black insect approximately three-sixteenths of an inch long. Adult beetles bore through bark and construct galleries in the inner bark where eggs are laid. Price said attacking beetles girdle the trees. In addition, wood-staining fungi invade the trees and hasten their death by clogging the water-conducting tissues.

Trees killed by the beetles range from small clusters of a few trees to stands covering many acres.

Trees attacked by the beetles in spring turn yellow or straw colored over the entire crown within two to three weeks after infestation, then a final reddish-brown color develops. Trees attacked in winter may remain greener longer than three weeks.



The commission this year is using highway billboards as an additional means of bringing the forest fire prevention message before the public. This billboard, with brilliant colors, has been posted in Houston, Jones, Monroe, Baldwin, Putnam, Spalding, Liberty, McIntosh, Polk, Floyd and Haralson Counties and is scheduled

to be posted in Burke, Richmond, Appling, Jefferson and Ware Counties in March. The sign is contracted to be posted for one month and some of the sign companies are providing free space when available.

SUMMER ENVIRONMENTAL STUDIES ANNOUNCED

Two summer environmental education institutes, in which the commission is involved have been announced by the Georgia Environmental Education Council.

The 19th Annual Environmental Education Institute will be held June 9-27 at Mercer University in Macon. Five quarter hours of graduate/undergraduate credit through the university is offered. Admission to the sponsoring college is required.

Dr. John Shepherd, director of the Mercer Institute, coordinates specialists from state, federal and private agencies to instruct various topics concerning environmental awareness.

Forestry, geology, recreation, fish and wildlife ecology, air and water quality, soils and human ecology are explored.

Classes begin at 9:00 a.m. and end at 5:00 p.m. with optional evening sessions. The college will charge the prevailing tuition rate. Tuition includes travel and materials. Lodging is available at the university. To apply, contact Dr. John Shepherd, Biology Department, College of Liberal Arts, Mercer University, Macon, Georgia 31207 or telephone 912/744-2705.

The 15th Annual PATE Institute (People and Their Environment) will be held August 10-15 at Franklin Roosevelt State Park. The institute is a five-day learning experience held at a small developed group camp at the park. Offered are five staff development units (SDUs) of credit

through the State Department of Education.

Dr. Philip Greear, institute director, will be joined by an all-volunteer staff from state, federal and private agencies.

Cost is \$75.00, which includes a

\$35.00 registration deposit. Meals, lodging and materials are provided.

To apply, contact Pat Canakaris, 311 Glenwood Avenue, SE, Atlanta, Georgia 30312 or telephone 440/588-0893 (evening).



A trio of Georgia students and two consultant foresters of the state's Vocational Agriculture Department pose for photographers at the national FFA Convention in Kansas City, MO., after the three youths captured second place in national field day competition. Left to right are students Chris Bishop, Louisville; Adam Henderson, Clinch County; Jeff McNair, Harlem; and Don Register and Malcolm (Chick) Dillard, Voc-Ag foresters. Students from all states competed in general forestry knowledge, tree identification, timber cruising, map reading and other related skills.

Augusta has been recertified as a TREE CITY USA by the National Arbor Day Foundation. Mayor Charles DeVaney and numerous city dignitaries participated in a special Arbor Day ceremony in Pendleton King Park to honor the occasion.

The Pendleton King Park TREE CITY USA event was held in conjunction with the dedication of a local arboretum. A plaque and flag designating Augusta's TREE CITY USA recertification was presented to the city. Mayor DeVaney said the city was honored by the recertification. He added the flag and plaque would be prominently displayed for public viewing.

Tammy Johnson, the commission's urban forester for the Richmond County area, acted as a liaison between the Arbor Day Foundation and the city of Augusta in connection with the recertification. She pointed out that state forestry agencies, as well as the U. S. Forest Service, work with cities involved with the TREE CITY program.

The Richmond County urban forester said that to become a TREE CITY USA, a community must meet four standards: form a legally constituted tree board or department; a community tree ordinance; a comprehensive community forestry program supported by a minimum of \$1 per capita; and an Arbor Day proclamation and public tree planting ceremony.

"The TREE CITY program is becoming very popular for a number of reasons," Johnson pointed out, "The program encourages citizen participation; and urban forestry programs can be run with limited tax expenses. Also, a good urban forestry program is an investment in a city's economic welfare." She added that a community, town, or city of any size may participate.

"When a city is awarded TREE CITY USA status, it creates a new public awareness in taking care of the city's trees and in planting more trees," Johnson emphasized. "The TREE CITY program also works closely with other beautification and civic improvement projects."

TREE CITY USA is designed to recognize communities effectively managing their tree resources. It is also geared to encourage a management program based on the program's standards through the professional leadership of participating state foresters of the National Association of State Foresters.

Public Law 92-288 of 1972 gives state foresters authority and responsibility for providing technical services for the "protection, improvement and establishment of trees and shrubs in urban areas, communities and open spaces."

Communities can obtain applications from the Education and Fire Prevention Department of the Georgia Forestry Commission or by writing the National Arbor Day Foundation, 100 Arbor Avenue, Nebraska City, NE 68410.



At right, Mrs. Jack Sells and Dade County Forest Ranger Andy Newby discuss TREE CITY USA and Arbor Day plans for Trenton. Below, a shaded street in the business district of Augusta is typical of the many tree-lined avenues in that city which has been recertified as a TREE CITY USA.



Historic Savannah on Georgia's coast and the little city of Trenton in the mountainous Northwestern corner of the state have been added to the growing number of communities that have qualified to become a TREE CITY USA.

Columbus, Augusta and Marietta have been re-certified for the distinction and the cities of Washington, and Peachtree City also are flying the TREE CITY USA flag.

Some of the cities held the TREE CITY ceremony in conjunction with the annual Arbor Day in Georgia observance.

In Trenton, Mrs. Jack Sells, chairman of the project to have her city declared a TREE CITY by the National Arbor Day Foundation, was highly praised at two tree planting ceremonies during the day and credited for outstanding work in the beautification of the community.

Dade County Ranger Andy Newby, who was presented a plaque for 26 years of outstanding service to the city and county, said the TREE CITY honor would have never come to Trenton if it had not been for the devotion and hard work of Mrs. Sell. "She has always been willing to work hard for beautification and conservation and we honor her for it," the ranger said.

The commemorative Arbor Day and TREE CITY celebrations were held at the Davis Elementary and Middle School and later at the Northwest Georgia High School. A proclamation for the special day was declared by Mayor Gene Carter and Commissioner Larry Moore. The late Jerry (Buck) Page, Dade County's first forest ranger, was eulogized during the ceremony.



A motion picture film produced by the Georgia Forestry Commission has won the National Arbor Day Foundation Media Award.

The film, Trees and Cities Living Together, concerns citizens in a small Georgia city working together to enhance the beauty of their community through an effective tree management program. It is a guideline for other cities interested in becoming a TREE CITY USA.

The award will be presented at a banquet April 26 in Nebraska City, Nebraska, home of the National Arbor Day Foundation. The foundation will honor 35 award winners from 21 states, the District of Columbia, and Canada.

THE EAGER BEAVER

The beaver (*Castor canadensis*) is well known as one of nature's most industrious creatures that provide impoundments of backwater habitat for various wildlife and fish. But, in contrast to their benefits, beavers have also established a reputation in Georgia as an expensive nuisance by flooding woodlands and causing millions of dollars worth of timber loss.

Beavers are strict vegetarians that feed on twigs, leaves, stems and the cambium layer of trees. In the Southeast, they prefer sweetgum, willow, cottonwood, yellow poplar and maple. They also feed on pine, but seem to prefer other species. While feeding, beavers often kill trees by girdling - gnawing through the bark to eat the cambium layer separating the bark and wood. Although they kill some trees while feeding, the large scale damage caused by beavers is the result of flooding - which cuts off the oxygen supply by smothering the roots.

A commission survey between 1967 and 1975 indicates that approximately 45 million dollars worth of Georgia timber was damaged during the ten year period by beaver activity. Although no statewide damage survey has been done since 1975, the beaver population has undoubtedly increased over the past ten years, said Commission Entomologist Terry Price, who helped compile the 1975 study.

Increasing beaver population means more damage to timberlands. A primary reason for the increase in beavers is a decrease in trapping.

TRAPPING DECREASED

Chris Plott, whose Plott Hide and Fur Company in Griffin is the state's largest buyer of furs, said the decrease in beaver trapping stems from a depressed market for their pelts. He points out that beaver pelts, which once brought \$40 each, now range between \$2 and \$18 with an average price of \$10. Records show annual totals of beavers trapped in Georgia over the past ten years range from 10,474 during the 80-81 season to 966 for the 83-84 season.

The third generation owner of his family's fur business, Plott is considered an authority in his field and has served as an expert witness in court trials involving fur and hide issues. He now sees indications that the market for beaver pelts may be changing.

"For the past 15 years, the fashion trend in this country and in Europe has been long-haired furs," said Plott explaining the depressed beaver market. "These long-haired furs include foxes, coyotes, cats and raccoons. But there seems to be a current turn to flatter, sleeker garments - which would include beavers, muskrats and otters. So we may see a resurgence in the demand for beavers that will drive the price up."

Plott said such an increase would be



FORESTRY'S CONTINUING NUISANCE

good news for trappers and landowners. "We hear constantly from landowners all over the state about the beaver problem, but trappers can't afford to concentrate on beavers unless it's worth their time and effort. And trapping is the only way to get rid of them."

Landowners throughout the state echo Plott's views. In the current depressed market, when landowners seek the services of a professional trapper to get rid of beavers, the trapper will usually catch

beavers only if allowed to trap other animals with more valuable pelts. There are any number of reasons why landowners may agree to this, or there simply may not be enough potential for trapping other animals to be worth the trapper's time.

In any case, many landowners are coping with the beaver problem as best they can - which often translates into much effort with little relief. Commission records show methods ranging from dynamiting dams to loosing hungry alligators in the vicinity have been tried with little lasting success.

An adult beaver usually weighs approximately 35 to 40 pounds and is capable of moving large logs anywhere he wants them. This ability, combined with the beaver's engineering skills and insatiable industriousness, enables him to build almost impregnable dams and lodges. Therefore, dynamiting provides only superficial relief because the beavers immediately rebuild their dams at night (they know the risk of being shot during the day), or move onto another area and build another dam.

GATOR EXPERIMENT

Alligators imported into beaver ponds also offer ineffective results. Alligators simply do not seem capable of catching enough beavers to make any difference, and they apparently lose interest in trying and frequently leave the area.

One noteworthy case of alligator failure to control beaver population occurred in Limestone County, Alabama. In 1980, the county declared war on beavers by turning loose 48 Louisiana alligators in a beaver infested area. In time, however, County Commissioner Gerald Barksdale remarked, "I believe the beavers have whipped the gators, because I see all sorts of beaver evidence but no gators."

Fred Allen, the commission's chief of forest research, said systematic trapping over a two year period (two consecutive





Photo opposite page: A forester examines a well constructed beaver dam and finds a path used by the animals to cross over the obstruction. At left, fur dealer Chris Plott of Griffin shows some beaver pelts purchased from Georgia trappers. With demand for pelts in a slump and prices low, he said many trappers have given up on beavers, thus causing the population to show a considerable increase.

homes are built to near fortress capacity and they are highly capable of eluding predators and man. The two-week-two-year trapping is absolutely necessary to eliminate or control beavers; the first year the adults are caught and the second year the younger generation is caught."

Allen said the beaver problem can be managed by trapping the population and manipulating the animal's environment. Following the two-week-two-year trapping program, manipulation of the animal's environment is needed.

Although decreased trapping is a major factor in the beaver's comeback in Georgia, the state's increasing reversion of croplands to forestlands has also played a major role by creating an expanding habitat. Beavers are now found in virtually every county in Georgia.

"This brings up another aspect of the problem," Allen said. "Beavers are capable of backing up water anywhere they can build a dam, but the potential for timber loss is much greater in geographically flat areas - like many areas in the Piedmont and South Georgia."

In essence, the beaver is a paradox to man and wildlife. Beaver dams provide backwater habitat for a variety of mammals and waterfowl (including the once nearly extinct wood duck); and landowners often lease their beaver ponds to hunters. Conversely, beavers also flood woodlands and kill timber - making previous forestlands unsuitable for certain wildlife and causing the landowner monetary loss.

The answer to the problem is control. Take advantage of the benefits the beaver offers, but control the population when and where it is necessary.

"A forest is not a mere collection of individual trees, just as a city is not a mere collection of unrelated men and women. A forest, like a city, is a complex community with a life of its own. It has a soil and an atmosphere of its own, chemically and physically different from any other, with plants and shrubs as well as trees which are peculiar to it. It has a resident population of insects and higher animals entirely distinct from the outside. Most important of all, the members of the forest live in an exact and intricate system of competition and mutual assistance, of help or harm, which extends to all the inhabitants of this complicated city of trees."

EARLY REPORT SHOWS DECLINE IN FOREST FIRES

The forest fire situation in Georgia for the first two months this year is "a vast improvement over occurrences we experienced during January and February of last year," said Wesley Wells, chief of the Commission's Forest Protection Department.

He said records show that during the two-month period of 1985 a total of 4,188 fires burned 23,928 acres, while the commission this year subdued 2,568 wildfires that burned approximately 10,180 acres during the comparable period.

"Weather has made the big difference," declared Wells. "Last year, we had a very severe winter that killed vegetation early and that provided fuel that brought about a major fire situation." He said that in comparison the very mild winter weather this year has been a major factor "in cutting our fires almost in half."

The protection chief said enough rain at about the right frequency has kept fire danger low in most of Central and South Georgia. "North Georgia, however, is a different story," Wells said. "That region has had some dry weather and a considerable number of fires are breaking out in those counties."

He said most of the fires are occurring in the commission's 15-county Rome District.

Wells said it is "much too early to predict the kind of fire year we will have in 1986, but we're grateful for the way it has started."

The protection chief said the major reason for wildfire continues to be careless debris burning and landowners burning off their fields. He cautioned all citizens to be especially careful with outdoor fire as spring and the season of high winds approach.

weeks for two consecutive years - during trapping season) is the only way to eliminate or control beavers. In 1981, Allen coauthored a research study ("Southern Beaver Control") with professional trap-

**APPROXIMATELY
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GEORGIA TIMBER
WAS DAMAGED
BY BEAVERS IN
A TEN YEAR
PERIOD**

per and wildlife biologist James Kenneth Forbus.

"Beavers are not easy animals to control," said Allen, emphasizing that their

—Gifford Pinchot



A commission forester advises a landowner on the correct method of planting seedlings.

FEDERAL PROGRAM WILL ACCELERATE REFORESTATION

Many Georgia landowners this month are finding a solution to their problems of badly erodible land by joining a new federally sponsored program that shares the cost of establishing trees on such marginal acreage.

Actually, the Conservation Reserve Program calls for the planting of trees or grasses on "highly erodible farmland that must have been tilled to produce an annual crop during any two years in the period of 1981 to 1985."

John Mixon, Director of the Georgia Forestry Commission, said the landowner has the option to plant trees or grass on qualifying land, but "we sincerely hope he will choose trees." The director pointed out that the landowner will be paid an annual rental fee on his land for a period of ten years and at the end of that contract, the trees will belong to the owner to manage at his discretion.

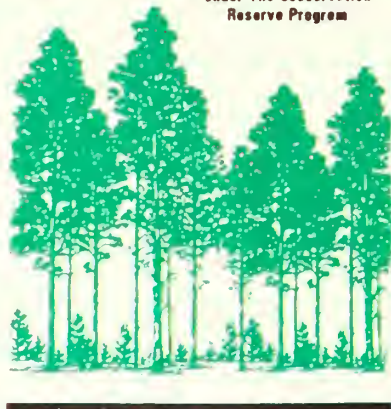
"At the end of the contract period," he said, "the trees will have had a good start on becoming a valuable timber stand, certainly a bonus for the landowner." He also maintained that in many instances it would be less expensive to establish trees than grasses.

Whether grasses or trees, the cover crop cannot be harvested during the course of the contract.

It is estimated that trees will be planted nationwide on four to five million acres under the program, with the majority planted in the South. "It is believed that as much as 75 percent of the planting will be in the South," Mixon said, "and this means, of course, that Georgia will figure prominently in this very important program."

TREE PLANTING

In Georgia
Under The Conservation
Reserve Program



This booklet on the new CRP is available free to landowners. Ask your local forest ranger for a copy.

The overall program, including lands to be planted in trees and areas to be planted in grasses, may go as high as 45 million acres during the life of the program, according to the U. S. Department of Agriculture. Roughly one-eighth is expected to be planted in trees. The planting will extend through the 1990 crop year.

Sign up period for the 1986 program is being held March 3-14 at county ASCS offices throughout the state. Personnel of the Georgia Forestry Commission are at the offices to answer questions concerning planting procedures, seedling availability and other forestry related matters for those desiring to plant trees. A second period is scheduled for early summer for the 1987 crop year and specific dates will be announced as soon as they are disclos-

ed by the federal government.

Mixon said commission foresters and forest rangers have been urging landowners to sign up for the program as it "has been initiated at a very significant time - a time when we are waging a massive reforestation campaign to try to close the gap between timber that we are harvesting and trees that we are planting."

The SCS personnel will assist farmers in determining preliminary eligibility of the land for the program. Forestry personnel will assist applicants with questions relating to tree planting.

It has been pointed out that tree planting under the program will supplement other planting programs and will not replace them. FIP (Forestry Incentives Program) can be used to reforest lands that are not eligible for the Conservation Reserve Program.

In comparing the program's potential of 5 million acres to major planting projects of the past, officials said the CCC (Civilian Conservation Corps) in the depression era of 1935-39 planted 1.4 million acres and the Soil Bank in 1957-61 resulted in the planting of 2 million acres.

To meet the expected increase in the demand for tree seedlings, Mixon said the commission nurseries have already started gearing up for a significant increase in production for the 1986-87 planting season.

A booklet detailing all aspects of the tree planting portion of the Conservation Reserve Program has been published jointly by the Georgia Forestry Commission and the Cooperative Extension Service and is available at all forestry offices and county extension offices.

ARBOR DAY

Impressive ceremonies were held across the state in observance of Arbor Day in Georgia—a day in which school children recited poems and planted trees on school yards and mayors, county commissioners and other officials joined private citizens in planting memorial trees in parks and on other public property.

It is believed to have been the most extensive statewide celebration of the special day since it was inaugurated in 1941 by act of the General Assembly.

In Athens, students at Gaines Elementary School celebrated the tenth anniversary of the planting of a row of attractive maples. The trees were planted during the nation's bicentennial observance.

Macon Mayor George Israel and other city and county officials joined in ceremonies in which a tree in Third Street Park was dedicated to C.A. (Red) O'Neal, retired parks superintendent.

A group of Fulton County students were led through a forest blindfolded to raise awareness of the texture of native trees as part of the Arbor Day observance.

A tree was planted on the picturesque town square in Dahlonega to further enhance one of the state's most scenic communities.

The day was marked in Atlanta by a thousand green and white balloons, free tree seedlings and a program on the grounds of the state capitol. Remarks were made by Mayor Andrew Young and Forester Louie Deaton presented a \$50 award to the winner of an Arbor Day essay contest.

Personnel at the Georgia Forestry Center near Macon gathered for a brief tree planting ceremony in the center's Nature Trail and Memorial Forest and a Japanese maple was planted in Marietta at rites attended by Mayor Vicki Chastain, school children and others.

The Georgia Forestry Commission produced brochures and posters for schools and other material for general distribution. Personnel also worked closely with the Georgia Nurserymen's Association, newspapers and other media in the promotion of Arbor Day.



Top photo: Teacher Diane Foster, left; Dr. Maxine Easom, principal; and students Yon-Joo Kim, Tito Pickering and Treana Nash of the Gaines Elementary School, Athens, stand before a maple planted ten years ago on Arbor Day. Middle photo: Left to right at Dahlonega ceremony are Patrolman Kenneth Moss and Ranger Marvin Martin of the Georgia Forestry Commission; City Councilman Jack Sisk, Mayor Haines Hill, City Manager Emory Stephens, Street Superintendent Leon Moss and Mayor Pro Tem Jim Walden. Bottom photo: Officials pose at tree dedication at a downtown Macon park. Left to right are Bibb Commission Chairman Emory Green, Carolyn Crayton, executive director, Clean Community, Beautification and Energy Commission; John Mixon, director, Georgia Forestry Commission; and C. A. O'Neal, retired parks superintendent.

TREE INSURANCE

(Continued from Page 2)

There are less than 300 members of the Society of Consulting Arborists in the U. S. and Canada. Only three members from Georgia have been accepted.

The duties of a consulting arborist can relate to numerous forestry related activities. However, Day concentrates on the specialty of preserving trees - usually ornamental trees in an urban setting. His work takes him throughout Georgia and South Carolina (S.C. has no certified consulting arborists). He frequently takes courses and attends seminars that may be anywhere in the world; a recently completed course was held at the University of Sussex in England.

So, from Day's vantage point of experience and acceptance by the elite of his profession, he has the advantage of possibly being able to predict a national trend such as insuring trees. He works with homeowners, developers, and Commission urban forestry personnel on a wide range of situations. He also writes appraisals of trees for homeowners to turn into the Internal Revenue Service.

VALUABLE OAKS

The two Augusta trees that Lloyds of London has agreed to insure are impressive oaks. This could be just another symptom of Augusta's concern for trees (the city has been certified as a 1986 "TREE CITY USA" by the National Arbor Day Foundation); but Day has also seen this interest reflected from many areas of Georgia and the U. S.

"That's why I think this is going to be a national trend," Day said. "Once a breakthrough is made, it's just a matter of time."

Both of Augusta's candidates for Lloyds of London insurance are Day's patients. They receive regular examinations and whatever care is necessary for their well being. He also advises their owners on any necessary care they should provide in his absence.

The two oaks are over 70 feet tall and more than 100 years old. Both wear lightning rods and assorted cables. Day administered the cables for support and to sustain an upward, billowing appearance. "This is the way a tree should look," said Day standing under one of the huge oaks, looking up into the branches and spreading his arms in the shape of a tree.

One of the trees is a water oak that Augusta developer Rick Rogers decided to insure when he started preparing for a subdivision. Rogers called in "the doctor" (Arnie Day) to give the tree "a physical" for possible insurance coverage. Rogers said Day agreed with him on the tree being a natural treasure definitely worth insuring.

After the "physical", Day gave the oak
(Continued on Page 12)



Judges had to view 450 posters in the annual Smokey Bear/Woodsy Owl Poster Contest sponsored by the Garden Club of Georgia and the Forestry Commission to select winners in six categories. Left to right are Patrolman Donald Bennett of the Commission, Mrs. Bennie L. Ricks, District Membership Chairman; Mrs. Bernard W. Bridges, State Conservation Chairman; Mrs. Dianne Boniford of the Commission; and Mrs. James W. Phillips, State Contest Chairman. The garden club officials are from Moultrie and the GFC personnel are from the Colquitt County Unit. Contest winners will be announced at the Garden Club annual meet in April.



Five young foresters recently hired by the commission visit the state headquarters at the Georgia Forestry Center in Macon for a day of orientation. Tom Hall, artist in the Education and Fire Prevention Department, shows some of the steps taken in creating a publication. Left to right are James Johnson of Clemson, S.C., assigned to the Athens District; Ken Masten, Toccoa, Americus District; Robert Farris, Atlanta, Newnan District; John Colberg, Lynn Haven, Fla., Macon; and Darrell Busch, Wheaton, Md., Stone Mountain.



a nail in, it's easier for the nail to pull out. There won't be any of those problems with our facilities. These cabins will be here when this generation is long gone."

Herndon also pointed out that every tongue-and-groove joint in the pine logs is separately insulated. Each cabin is heated and cooled, has double decker bunks, fold down tables, picnic tables, and outside hookups for electrical grills.

And all this is located in a scenic stand of Southern yellow pine, right off busy Interstate 75.



Fred Herndon, co-owner and manager of the Forsyth Campground, points to insulated tongue-and-groove joint in one of 14 log cabins at his facility. The picturesque cabins are designed to offer travelers an alternative to tents and motels.

Log cabins at Forsyth campground reflect possible new national trend for traveling campers. These cozy units, nestled in a natural setting off I-75, are constructed entirely of Southern yellow pine. KOA has launched a nationwide program of building log cabins at selected sites. The Forsyth KOA KAMPGROUND currently has more cabins than any of its counterparts in the nation.

CAMPGROUND TESTS CABINS

An internationally known campground company is going all-out and all-wood by offering traveling campers a new option in the form of log cabins - and the firm's Forsyth, Georgia site has more cabins to offer than any other location in the nation.

Fred Herndon, manager and co-owner of the Forsyth KOA Kampground, said his facility has 14 cabins (and two bath-houses) which rent for \$12.50 per night to two people.

Herndon explained that the log cabins are a national test program. Previously, KOA offered only camping sites for tents and recreational vehicles. Now, these sturdy cabins offer travelers another choice.

"We believe the cabins will be very successful," Herndon said. "It's a log cabin in a natural setting, so it's still like roughing it - but roughing it somewhere between a motel and a tent. No television. No telephone."

KOA (which also has camping areas in Canada, Mexico, Europe and Australia) chose only select sites for its national all-wood venture. Herndon said executives from national headquarters in Billings, Montana visited his franchise and encouraged him to build cabins because of the ideal location. Herndon's Forsyth campground is located on I-75 between Atlanta and Macon. The cabins are clearly visible from the busy interstate highway.

"There are a lot of our company's facilities located near interstate highways," Herndon said, "but there are not many located so you can see them from the interstate."

Herndon thought the cabins were a good idea so he decided to "go all out" by building 14 units, which turned out to be one more than any other of the company's campgrounds in the U. S. "It's our off season," Herndon said, "but I can already see signs that this program is going to be a big success. Everything has just turned out real well all the way around."

One aspect of the program that Herndon is most pleased with is the use of Southern yellow pine in building the cabins. "All cabins east of the Mississippi are built entirely from Southern yellow pine," Herndon said.

Jim Barna Company, a Tennessee company specializing in custom built log homes, designed the cabins and furnished all Southern yellow pine lumber for construction.

Herndon, who is also a builder and supervised construction of the Forsyth cabins, said Southern yellow pine was selected because of its strength, durability, and aesthetic blend with the natural appearance of the landscape.

"A lot of builders use imported lumber because it's easier to drive a nail in," Herndon said. "But if it's easier to drive



Young visitors inspect machinery during previous Expo.

HARVESTING EXPO PLANNED FOR APRIL

About 50 exhibitors already have signed up for space among the static equipment displays and woods demonstrations planned at the Timber Harvesting Expo-Southeast, according to Forester Joe McNeel of the University of Georgia Extension Service.

McNeel expects attendance at the 1986 show, set for April 23-24 in Tifton, to at least equal, and possible surpass, the crowd of 1,500 at the 1984 Expo.

The show, held every two years, will be at the Rural Development Center on Interstate 75 in Tifton. The equipment demonstrations will be just north of Tifton in a young slash pine plantation leased by Buckeye Cellulose Corp.

The show attracts loggers, timber dealers, sawmillers and other representatives of the forest products industry from throughout the Southeast.

Participants during the first day can move between the equipment displays and professional improvement workshops. The workshops will cover issues, productivity improvement without increasing costs, chain saw maintenance, hydraulics trouble-shooting and logging costs analysis. A catfish fry and entertainment will end the day. The action moves to the woods April 24 for a full day of equipment demonstrations.

A registration fee of \$10 covers all Expo activities. For additional information, contact Joe McNeel, Georgia Extension Service Harvesting Specialist, P. O. Box 1209, Tifton, Ga. 31793, or phone 912/386-3418.

MILL CONSTRUCTION WELL UNDERWAY IN EFFINGHAM COUNTY

Construction on a \$500-million Fort Howard Paper Company tissue mill in Effingham County is now well underway with the first paper machine expected to begin operation in early 1987.

The new plant is located approximately four miles from Rincon and ten miles from the county seat of Springfield. The decision to establish the mill in Effingham County followed months of speculation concerning whether the facility would be built in Georgia or South Carolina.

Initial capacity of the mill with the first paper machine in operation is expected to be 380 tpd (tons of paper per day). A second machine is scheduled to begin operation in 1988. By mid-1992, the company plans to be operating four machines and employing approximately 1,000 people.

The mill will use 100 percent waste-paper to produce towel, tissue and napkin products. Completion of the first stage converting and shipping facilities is expected to be completed by late summer of this year.

Employees for the mill are expected to be drawn from Effingham and numerous surrounding Georgia counties, as well as areas of nearby South Carolina.

Economic impact of the plant is already being felt in Effingham County as sites for new housing developments are being planned.

TREE INSURANCE

(Continued from Page 10)

shots of high nutrient fertilizer and went to work on the red tape of getting it insured.

The other tree is a laurel oak owned by the Southern Eye Clinic. From the base of the tree, the distant skyline of downtown Augusta can be seen. This oak received similar injections, sealants in critical areas, cable supports, and lighting rods. Day says the tree is now in excellent health and ready for appraisal.

NEW OUTLOOK

"A few years ago, both trees would have probably been cut down because they would have been considered in the way of progress, or because they needed treatment to stay healthy," Day said. "But things are changing, in Georgia and all over the country."

Day said the United States has not shown the past concern for ornamental trees that most European countries have exerted for many years.

"Even before World War II," Day said,

"in many European countries the law required that no tree be cut down unless another tree was planted to replace it."

Day pointed out, however, that Georgia has been much more progressive in urban forestry than other sections of the country. The record supports Day's view of Georgia. In 1967, the Commission's current Director, John Mixon, was appointed head of the Forestry Commission's first urban forestry program - also the first of its type in the nation. Based in Atlanta, the new service handled everything from ornamental species to trees on rural tracts owned by city dwellers. Mixon expanded the program and it now includes urban foresters in every major city in Georgia. Today, states throughout the nation have similar urban forestry programs.

Although Day believes concern for the environment created initial interest in insuring trees, he now sees "good business and prestige" as influencing aspects.

"For homeowners, it can be a matter of practicality and economics," Day said. "Insured trees can dramatically increase the value of homes. And trees in general can increase a homeowner's property as much as 20 percent." He added that many people will buy a house that appeals to them less, if they like trees on the property - and potential buyers often pass on an appealing house that lacks trees on the property.

With developers, Day points out, the same reasoning applies; plus insured trees lend an air of prestige to a development. "If an advertising developer points out that he is serious enough to insure trees, it can't help but add class to his development," Day said.

MECHANICS OF INSURING A TREE

Although Day considers the business of insuring trees to be in its embryonic stage, he points out that the basics for evaluation have been established by the International Society of Arboriculture. Guideline factors include: location, condition, species, rarity, potential for continuing good health, and number of trees on a given area.

"What it boils down to," Day said, "is what the tree is to be insured against. This can create any number of variables according to the situation. But that's part of my job - to decipher it all."

Day believes the practice of insuring trees will usher in a new era of appreciation for trees in urban and home settings.

"What we need is more public awareness," Day said. "More education. Much like the programs the Commission is carrying out."

It's obvious that the Augusta arborist thinks good things are on the way and he's very pleased with it. He sums it up like this: "There's nothing more satisfying to me than to go on a piece of property and preserve a tree that might be bulldozed."

Georgia landowners selling timber: Don't make a 30-year mistake in 30 minutes.

That's exactly what can happen unless timber sales are handled by professionals and appropriate contract procedures are followed. Most landowners sell timber only once or twice in a lifetime, while buyers purchase timber every day.

Although timber can be sold earlier, the optimum age for harvesting and selling pine in Georgia is 30 to 40 years. The actual transaction of selling the timber may take 30 minutes or less!

The landowner is at a definite disadvantage selling timber. However, qualified assistance is available, but the landowner must take advantage of it to benefit.

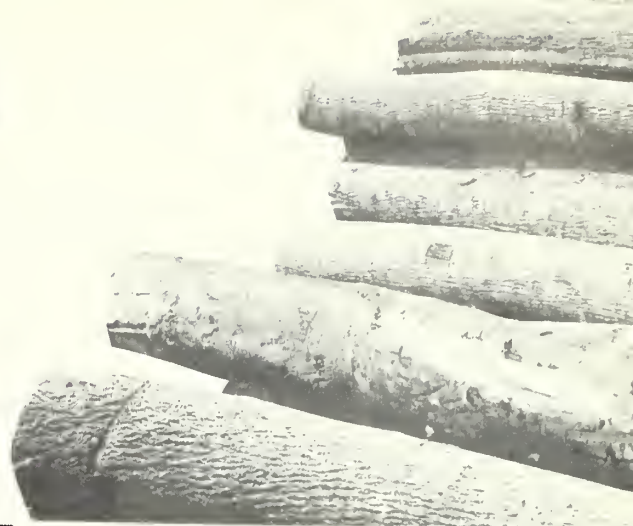
A recent study by Fred Cabbage, an assistant professor with the University of Georgia's School of Forest Resources, reveals that landowners receiving professional assistance in selling timber obtained an average of 58 percent greater return than those who sell without such assistance. The study also showed other plus factors resulting from the service of professionals. These positive fringe benefits for the landowner include having more pine timber and more seedlings left after the harvest (in contrast with landowners who had received no professional assistance.)

The two main sources of such assistance are the Commission and consulting foresters operating in the private sector. Being a state agency, the Commission has an established policy on how many days foresters are allowed to work with a landowner. In numerous cases, this time limit fulfills the needs of the landowner. Also, Commission foresters are not allowed to participate in timber sales.

In timber sales, Commission services are required to be general, while private consultants may be specific.

Only a properly written contract tailored to the needs of the buyer and

BEFORE YOU SELL...



seller can protect both parties in a timber sale. Verbal agreements should never be relied upon because of possible misunderstanding and misinterpretation.

Many buyers have their own contracts. However, the buyer's contract may not protect the seller; so the landowner's best approach is usually to negotiate a contract with the seller through a lawyer, who makes certain the contract is binding as agreed upon by both parties. In this situation, the courts will interpret any misunderstandings based on the contract.

Certain items are usually essential to any timber sale contract. These essentials include the specification of parties involved to protect the buyer from any third party with claims against the property. The contract should also specify state laws applying to the terms (especially if out-of-state buyers and absentee landowners are involved).

Another essential is how the trees to be cut will be identified (paint, size, species, etc. may be involved). Also, a description of the land may be provided by a warranty deed or plat book.

The contract should also include how much the buyer will pay, when he will pay, and how he will pay (down payment, periodic payments, total amount).

Careful consideration should also be given to a fixed termination date for cutting. After this date, all rights to uncut timber would revert back to the seller. If a termination date is not included, the buyer may be able to legally cut timber indefinitely. The seller should also be certain that he is protected from liability for injury, death and property damage that might be caused by the buyer by logging operations during the term of the contract.

The seller should also be sure that he is not responsible for worker's compensation and unemployment insurance. This is accomplished by stating in the contract that the buyer is an independent contractor and not an employee of the seller.

There is always the possibility of the buyer or seller dying before the sale is completed. To cover this situation, the contract should be made binding on heirs, executors or successors of both parties so the sale can still go through in the event of a death.

The contract should be signed by both parties and witnessed by at least two impartial observers. Modifications should also be signed and witnessed. The seller should request a performance bond be posted by the buyer before cutting begins; the bond provides insurance against unusual damage or cutting of trees not covered in the contract.

There are a number of other possible provisions that might include hunting restrictions, fire damage, repair of fence damage, dry weather, stump height restrictions, etc.

In essence, the contents of a timber sale contract should be based on the situation and needs of the seller with legalities and contract wording determined by a lawyer.

WHAT IS THE VALUE OF A SINGLE TREE?

Areas of the world that have suffered from a depletion of trees and lack of reforestation are painfully aware - and appreciative - of the value of trees.

Professor T. M. Das of India's University of Calcutta reflects this appreciation in his evaluation of a single tree. The university professor evaluates a single tree as being worth \$193,250. The value is based on the tree living for 50 years.

Das breaks down his evaluation like this: Over a 50 year period, a single tree will generate \$31,250 worth of oxygen, provide \$62,000 worth of air-pollution control, increase soil fertility and prevent erosion for a combined total of \$31,250, recycle enough water to be valued at \$37,500, and provide homes for wildlife worth \$31,250. This financial breakdown does not include the value of fruits, lumber, enhancement of property value, or the natural beauty provided by trees.

Considering this evaluation in relation to Georgia's massive reforestation program and more than 23 million acres of forest land, a veritable gold mine exists all over the state. But, realistically, no monetary value can be placed on the factors Professor Das has evaluated; they are the priceless and life sustaining forces of our environment.



HIGH ACHIEVERS PRESENTED AWARDS

The Outstanding District Tree Farm Chairmen Award went to Craig Earnest of Hiwassee Land Company, Calhoun, and Charles Wisekal of Buckeye Cellulose Corporation, Oglethorpe, at the recent statewide meeting of the Georgia Tree Farm Program.

The award of Outstanding District Tree Farm Inspector/Superior Inspector was presented to Sam T. Rigdon of Georgia Kraft Company, Buena Vista.

Superior Inspectors Awards were presented to those who earned the most points in recruiting new members and re-inspecting current Tree Farm members. They included:

John Dickinson, Willard Fell, Gerald Green, John D. Greer, William C. Lamp, Phillip D. Porter, Stephen C. Smith, Hubert A. Strickland and Will J. Royal, all of the Georgia Forestry Commission; Donald J. Esteve, self employed consultant; Dan Frailey, Steve Lewis and James H. Redding, Union Camp Corporation; Sam T. Rigdon, Georgia Kraft Company; and John W. Rutland, Continental Forest Industries.

Master Inspectors, those who earned at least 35 points, included:

Ed Banks, James L. Castleman, Jack Holt, Jerry Marsh, Carl W. Melear, Russell Pohl, Dennis Pope and Winston West, all of the Georgia Forestry Commission; William C. Baisden, Gary Brocius, Stephen C. Browne, and Charles "Ed" Withrow, Union Camp Corporation; Bill Liscinski, self-employed consultant; W.R. Johnson, retired; Mark Meagher, consultant; Curtis Campbell, Georgia Kraft

Company; Dan Coppage, Hercules, Inc., Terry Hamsley, Extension Service; Steve Pickard, Southland Timber Company; John R. Walker, Brunswick Pulp Land Company; and Russel D. Weber, F & W Forestry Services.

The awards were presented by H. L. Neal and Henry Swindell, field supervisors of the Forestry Commission.

Hard hats were also presented for outstanding achievement in 1985. The top award - a gold hat - went to James McGurn of Hercules, Inc., Folkston. Silver hats were presented to Jerry Marsh, Georgia Forestry Commission, Statesboro, and Sam Rigdon, Georgia Kraft, Buena Vista.

Bronze hats went to John G. Rawls, consultant, Macon; Will J. Royal, Mac Coleman, John Greer and Carl Melear, all of Georgia Forestry Commission; and Dan Frailey and Steve Lewis, both of Union Camp Corporation.

Don Smith of Southern Forest Institute, Atlanta, presented award plaques to Bob Lazenby and Wesley Wells, both of the Forestry Commission. Faye Carr of the commission was presented a certificate of appreciation by Smith.

Charlie Wisekal, newly elected chairman, presided at the meeting and workshop. He succeeded Jim Meadows, Brunswick Pulp, in the post.

The Tree Farm Program promotes and encourages the wise use and management of large and small forests for a multitude of benefits, including timber, wildlife habitat, scenic and other recreation values, and watershed stabilization.

He said persons planning to attend should contact the Holiday Inn for reservations, phone 912/994-5691. Rates are \$37.00 per night for either single or double occupancy.

Registration fee for the course is \$30.00, which includes all training material, as well as two buffet lunches.

Reservations should be received by April 1 by Hooven at the Commission's headquarters in Macon (Box 819, Macon, Ga. 31298-4599) or phone 912/744-3241.

HERBICIDES TRAINING COURSE SLATED

A training course entitled Ground Application of Forest Herbicides will be held May 20-23 at the Holiday Inn in Forsyth for vendors, consultants, extension specialists, contact supervisors and others seeking up to date knowledge on the safe methods of applying chemicals.

The three-day training is sponsored by the Georgia Forestry Commission and the Southern Forest Experiment Station, U. S. Forest Service.

Lynn Hooven, Chief of the Commission's Forest Management Department, said "a distinguished group of presenters has agreed to present with state-of-the-art information on this important subject."

FEDERAL COST-SHARE HIKE ANNOUNCED FOR CONSERVATION PLAN

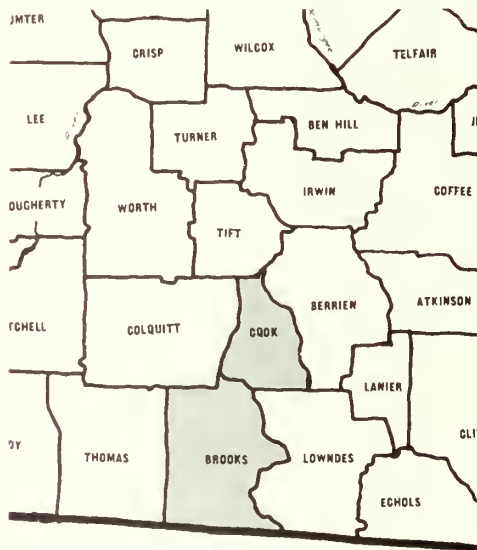
The US Department of Agriculture recently announced the Naval Stores Conservation Program for 1986 and officials of the American Turpentine Farmers Association said there are some increases in the benefits.

The cost-share rate for initial use of the new plastic or aluminum cup has been increased from 35 cents to 37 cents and the increase in use of plastic or aluminum apron-gutter is from 8 cents to 12 cents.

There were also some changes in the diameter cupping practices.

In addressing association members at the annual meetings at Alma and Soperton, ATFA President Jim L. Gillis, Jr., said he is convinced after conferring with processing and marketing officials that "the survival of our industry depends on our ability to consistently produce quality gum which will result in WW and WG grades of rosin."

He also told the producers that there seems to be a continuing decline in the demand for lower grades. Most of the programs at the two meetings focused on ways to improve the quality of gum.

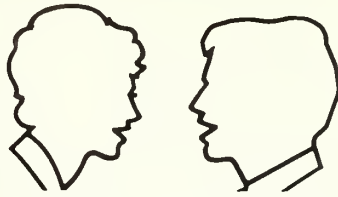


COMBINED COUNTIES FORM SEPERATE UNITS

Effective April 1, the Commission's Brooks-Cook Forestry Unit will be split into two separate units.

Ranger John Mainor, who has supervised the two-county unit for several years, will head the Cook County Unit. John Barrett, presently a patrolman in Thomas County, will serve as ranger of the Brooks County Unit.

PEOPLE



IN THE NEWS

Director JOHN MIXON recently announced the formation of a new department in the Georgia Forestry Commission to be known as the Education and Fire Prevention Department. The new department, to have offices in the Nation-



Bennett



Lazenby

al Tree Seed Laboratory building on the grounds of the Georgia Forestry Center, will be headed by ROBERT LAZENBY and "will work on a daily basis with the Forest Protection Department to reduce the number of wildfires we are having each year," Mixon said. Meantime, the director said HOWARD BENNETT, who headed the Forest Education Department, will now serve as Public Relations and Information Programs Manager. He will direct commission writers in preparing news releases, magazine articles, edit the commission magazine and newsletter, and work closely with graphics personnel in preparing copy for the production of brochures and other material. Lazenby, who came with the commission in 1971, has served in several capacities, including



Thompson



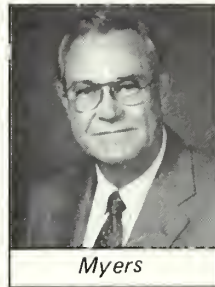
Everson

district forester in the Gainesville District and reforestation specialist in the Management Department. In the expanded department he will also be in charge of audio visual activities...LARRY THOMPSON, who came with the Commission in 1970 as a forest technician and more recently served as a staff forester in the Management Department, has been named Associate Chief of that department. Thompson, who earned a degree in forestry at the University of Georgia, is a native of Macon. He is married to the former Miss Warrenne Rackley and

they have two children, Traci and Russell. ...JEFF EVERSON, a native of Calhoun County, is now serving as forest ranger of the Lee County Unit. The new ranger, who graduated from Calhoun County High School and earned an associate degree in forest technology at Abraham Baldwin Agricultural College, is married to the former Miss Ellen Gowan of Blakely and they have one young son, Frank...MARSHALL THOMAS, who headed the F&W Forestry Service, Savannah office, for the past three years, has been named manager of the company's Statesboro office which will serve areas of

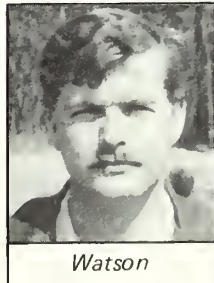


Thomas



Myers

Georgia and South Carolina under a branch office reorganization plan. Thomas joined the consulting firm in 1978 following his graduation from the University of Florida, where he earned a BS Degree in forestry...J. WALTER MYERS, JR. of Atlanta was recently elected vice president (president-elect) of the 20,000-member Society of American Foresters. He will automatically become president in 1987. Myers, who served 31 years as executive vice president of Forest Farmers Association, is currently president of Walter Myers & Associates, Inc., of Atlanta, a forestry affairs consulting firm...LARRY WATSON, former-



Watson



Herrin

ly a patrolman in the Ware County Unit, has been named ranger of that post. A native of Lakeland, he graduated from Lakeland High School and attended Abraham Baldwin Agricultural College for almost two years. The ranger is married to the former Miss Bonny Lynn Faulkner and they have a daughter,

Jackie. They are members of First United Methodist Church of Waycross. Watson replaces Jimmy Lee, who was recently named district ranger...TERRY HERRIN has been named ranger of the Pierce County Unit. He served as assistant ranger of the unit from 1980 until the county office was recently made into a separate unit. It was previously the Pierce-Ware Unit. Herrin, a native of Patterson, is a graduate of Patterson High School and

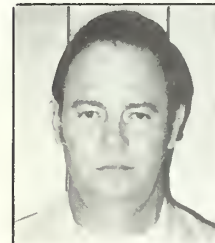


Milby



Jeffers

a Vietnam veteran. He is married to the former Miss Mary Nell Walker of Patterson and they have two sons, Eric and Clay...LEE MILBY has been appointed management forester for Lamar, Pike, and Spalding Counties. A native of Meansville, Milby previously served 11 years with the South Carolina Forestry Commission. A graduate of Pike County High School, he received a BS in forestry from the University of Georgia. Milby resides in Meansville with his wife, Denise, and son, Jesse...GARY R. JEFFERS has been promoted to forest ranger of the Catoosa County Unit. He joined the Commission in 1979 as a forest patrolman in Whitfield County. A native of Winona, TN, Jeffers is affiliated with the Baptist Church and served as a volunteer and first aid instructor with the American Red Cross. A Vietnam veteran, Jeffers received



Ray



Dickinson

two Bronze Stars...RUSSELL RAY has been promoted to ranger of the Cherokee County Unit. A native of Blue Ridge, he came with the Commission in 1962 as assistant patrolman. Ray is married to the former Miss Catherine T. Wehunt. The Rays have two children, Michael, 20, and Marshall, 12...JOHN S. DICKINSON, forester with the Athens District, has retired from the Commission after more than 30 years of service. A native of Monroe, he graduated from Monroe High School and received a degree in forestry from the University of Georgia. Dickinson served in the U.S. Air Force from 1950-54. A Baptist, he is married to the former Sara Standard of Harkinsville. They have two children, Dawn and John Roy.



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Bags of quality rosin on the yards of the FRP Company in Baxley await shipment to domestic and foreign markets.

BAXLEY PLANT LEADS COUNTRY IN GUM NAVAL STORES PRODUCTS

It's known simply as the FRP Company, but if you're a native of Baxley, Georgia you know that the letters stand for Filtered Rosin Products.

But what is not well known, however, by townspeople and others is the international importance of this plant in Baxley that is a mainstay in a dwindling and highly specialized industry that is peculiar to Georgia and the South.

In fact, the three remaining plants that continue to process crude gum are located in this state. The FRP Company is the largest and the Union Camp Corporation's plant and the Shelton Naval Stores plant, both in Valdosta, round out the trio that currently accepts raw gum from producers in the great pine belt of South Georgia and some areas of neighboring Florida.

High quality rosin, turpentine and resins are produced by the FRP Company and sold across the United States and in Europe, the Orient and South America. A great volume of the company's resins go into the manufacture of printing inks; the ink used in this publication was probably based on material from the Baxley plant, which provides 75 percent of the country's gum naval stores products.

Rosin is sold in 50 and 100 pound

bags and 517-pound metal drums. Volume buyers have it shipped from the plant in 22-ton highway tankers and railway tank cars of 80,000-pound capacity.

Turpentine is sold in bulk to canneries that package the product and distribute it to hardware and paint stores and other wholesale and retail outlets across the country.

It is interesting to note that the company's rosin also is used by restaurant chefs, musicians and baseball players.

Orders are filled for about 50 restaurants around the country that proudly feature "rosin baked potatoes" on their menu. Gourmet cooks claim that the unpeeled spud baked in molten rosin retains a true potato flavor.

Violinists the world over have found no favorable substitute for rosin for their bows and the Atlanta Braves each season order a bag of FRP rosin to aid players in getting a better grip on the bat.

James E. Feltham, president of the company, said a major market for the rosin, however, is manufacturers of anti-fouling paint used on the hull of ships. A combination of the American-produced rosin, which has properties not found in other rosins, and copper oxide is used in the paint to prevent barnacles from form-

Georgia Forestry is published quarterly by the Georgia Forestry Commission, Route 1, Box 181, Dry Branch, GA 31020. Second class postage paid at Macon, GA. POSTMASTER: Send address changes to Georgia Forestry Commission, Route 1, Box 181, Dry Branch, GA 31020.

ON THE COVER — Healthy young pines flourish up and down rolling hills in Floyd County near Rome. They are representative of thousands of acres planted in trees across the state as the result of the commission's continuing reforestation campaign.

ing and living on the bottom camps. Rosin also is used in solder flux.

Feltham said the American product "has unique chemical and physical properties not found in foreign sources and, of course, it sells at a premium."

But despite the superiority of the rosin that is produced from Georgia's pines, the industry in this country is facing extremely stiff foreign competition. "China has become our biggest competitor," Feltham said. "Labor is a major factor when a naval stores worker in that country earns only \$400 a year and in this country we pay the prevailing minimum wage or more."

If no wage differential existed, however, there would continue to be a labor problem, the company president explained. "It's long hours, it's hot and it's dirty work out there in the woods gathering gum and the old, experienced workers have mostly died out and the young workers are not too interested in that kind of labor."

Feltham's company began operations in 1940, a year that saw a sharp decline in the direct-fired stills that dotted the pine-lands. Today, those on-site stills are existent only as museum pieces and producers sell their crude gum directly to the FRP Company and the other two modern processors.

"We buy on a competitive market from about 300 gum producers that are mostly in Georgia," Feltham said. He pointed out that most are concentrated in a wide band of forests that extend from Soperton to Homerville. Individual producers bring their gum to the nearest buying platform established by the company and highway tankers are sent out to pick up the raw material when there is sufficient accumulation.

Incoming raw gum from the pine forests is deposited into four huge concrete vats according to grade determined by a highly skilled inspector. A workman with an electrically powered bucket lifts the gum into a carrier that moves the material to the processing section of the plant. In the other photo, James E. Feltham, president of the FRP Company, goes over a production report as Claude E. Bird, vice president, looks on. The company produces 75 percent of the nation's gum naval stores products.

The company president, a native of Alabama and a graduate of Georgia Tech, said the plant is currently producing 10,000 barrels of rosin annually, but has a capacity of 100,000 barrels. But despite the decline in demand, the competition from China and other foreign countries, and the problems with labor, Feltham said his company continues to export from the Port of Savannah and some of his foreign customers drop by his plant when in this country to tour the facilities

(continued on pg. 14)



SELLING SHADE TREES

BEWARE OF SHADY DEALS

Homeowners desiring to sell shade trees on their property will probably find the trees are not marketable - regardless of the value the species might have for commercial purposes. It is possible to sell a shade tree for lumber, just not probable.

For instance, black walnut is a common shade tree and one of the most valuable trees in North America. Since early colonial times, black walnut has been prized in the making of furniture because of the wood's unique dark color and finishing characteristics. High quality black walnut trees growing on woodlots bring high prices. However, the same tree growing on the lawn of a suburban home may be worthless for commercial purposes. There are a number of reasons why timber buyers are not interested in such trees. First of all there are economic considerations of harvesting. Commercial timber buyers are set up for large scale timber harvesting. The equipment used in harvesting may exceed \$50,000 in cost; so this expensive equipment and the labor cost cannot be profitably concentrated on one or a few shade trees when larger quantities can be harvested in commercial forest situations. Then there is the question of quality. Shade trees are usually grown in the open, so they branch profusely and leave only the short trunk for lumber. Also, shade trees are often improperly pruned and have been damaged by lawnmowers, cars, etc. Anywhere a tree has been damaged, it is subject to decay which lowers the lumber value. If these drawbacks are not enough to prevent selling a shade tree, there are more. For example, just cutting down a shade tree can be difficult. Potential for damaging powerlines, buildings, septic tanks, driveways, etc., must be considered. Heavy equipment may also cut deep ruts in a carefully cultivated lawn, even when the ground is dry.



Finally, there is the deterrent of possible damage to sawmill equipment. Shade trees are frequently used for clothes lines, tree houses and fence posts, and may have any number of nails and other metal objects attached that are obscured from view as the tree grows. Without special equipment, it is almost impossible to detect such objects inside a tree trunk; but if these objects are struck by a large headsaw used in modern sawmills, the result can be expensive damage. The entire saw can be destroyed and cost over \$1,000 to replace.

Even if only a few saw teeth are damaged by striking a small nail or wire, the cost can run \$100 or more when mill downtime is included. If the shade tree is processed in a veneer mill and a slicing knife is destroyed, the damage cost may again exceed \$1,000. What all this boils down to is that it is usually not worth the bother or risk for a buyer to purchase a shade tree for lumber.

However, in spite of the drawbacks, homeowners occasionally sell shade trees for commercial lumber. When this happens, it is not only a case of let the buyer beware - but also let the seller beware. The seller should remember that considering product value alone, shade trees are never

worth as much as commercial forest trees; the seller should determine exactly how much he is to receive and collect the entire amount before the tree is cut. If the seller wants the tree top removed from his property, this must also be determined before the tree is cut (this is not usually part of commercial timber harvesting). Finally, the seller should be certain that the people

working on his property are insured. The insurance should cover any property damage, and liability if anyone is hurt during the cutting operation. However, all things considered, a shade tree is probably more valuable as just what it is - a shade tree. No monetary value can really be placed on a tree that is identified with home.



TREE FARM HONOR GOES TO STRIPLING



Back in the fall of 1983, prominent Mitchell County landowner C. M. Stripling told a group of area farmers that timber growing is "the closest thing to a gold mine we have in South Georgia."

Stripling, who was president of the Georgia Farm Bureau chapter in his county at the time, said in his prepared speech that he had carefully recorded some personal experiences in timber farming since 1956 for his wife and children "so they would know what has been going on on our farm and why I want to start an accelerated program."

His accelerated program is now well underway and for his progressive management of forestry, the wise multiple use of his land and his influence on others who grow timber and practice conservation, the Georgia Forestry Association has named Stripling Georgia Tree Farmer of the Year.

The Stripling farm home is in a picturesque and secluded setting about six miles west of Camilla on State Highway 36. Well-tended pine forests surround three sides of the home site and other family-owned tracts are nearby.

Nominated for the award by Staff Forester William Lamp of the Georgia Forestry Commission, Camilla District, Stripling is considered a pioneer in reforestation in Southwest Georgia. He planted his original 300 acres of pine by hand more than a quarter of a century ago.

Lamp said the tree farmer is an enthusiastic member of the Mitchell County Reforestation Committee, a group formed under the Forestry Commission's county-by-county campaign to bolster tree planting across the state. He presents figures from the records of his own operation to prove to groups that tree growing can be a very profitable enterprise.

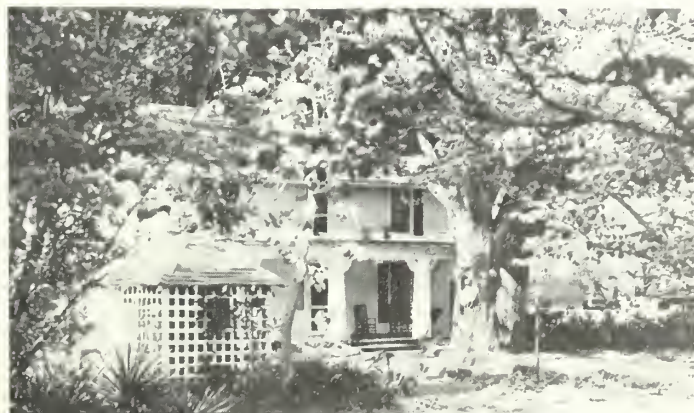
Stripling has appeared before Congress in Washington along with other farmers at hearings aimed at improving the depressed farm situation and worked tirelessly in support of Senator Sam Nunn's bill in 1984 to reinstitute a long-term conservation program.

The tree farmer was only 19 years old when he assumed ownership of the farm that belonged to his stepfather. He emphasized, however, that he had not actually inherited a farm, but had indeed "inherited a bank note." In addition to row cropping that first year, he set out ten acres of pine seedlings with a dibble and caused some skeptics to wonder why he would want to waste his time and energy.

If those doubters returned to the Stripling property today they would find that that ten-acre tract has mushroomed into 800 acres of valuable pine that have undergone thinning, control burning, replanting and fertilization in some areas.

In nominating the prominent tree grower for the award, Forester Lamp said "Mr. Stripling is very supportive of any group action that works for the betterment of agriculture and the farming situation. He follows current events in agriculture closely and speaks out publicly, through letters to newspapers, landowner meetings, and any other type of public forum that offers an opportunity for his contribution."

Both the agricultural and business community of Mitchell County - and those counties that surround Mitchell - agree that all who farm and grow trees have had opportunity to benefit from the wise counsel of C. M. Stripling, Georgia's 1986 Tree Farmer of the Year.



ictured: Stripling examines fast growing pines, stands at his farm sign, poses with his wife, the home place.



STATE FORESTRY FIELD DAY

They came in school buses from Gilmer, Lumpkin, Bleckley, Worth, Echols, Clinch, Early, Oconee, Putnam, Harris, Paulding, Pierce and Charlton Counties. They came from high schools in Louisville, Perry, Harlem, Swainsboro and Cairo. They were the "cream of the crop." They represented FFA students who had captured first and second place honors in forestry skills competition in regional meets around the state.

They came to the Georgia Forestry Center near Macon for the forestry field day state finals and the team representing Echols County was declared top winner after competing with some 180 other boys and girls in tree identification, tree planting, insect and disease identification, and measurement, timber estimation and other skills. Clinch and Pierce County schools tied for second place.

The students are shown listening to an opening address, competing in the various skills, watching a water drop staged by the commission and lining up for a fish fry at the conclusion of the contest.

Members of the winning Echols County High School team, shown in the above photo are, front row, left to right: Chris McCain, Billy Rowe, Mitch Lehman, Jim Culpepper and Tim Hughes. Back row: Lynn Hughes, advisor; Joey Walker, Charles Wetherington, Gary Boyd, Mike Coggins, JoJo Crosby and Ken Corbett.



HUNDREDS ENTER CONSERVATION RESERVE PROGRAM

SECOND SIGN-UP ACREAGE TOPS 51,000 ACRES

The second nationwide sign up sessions for a federal program encouraging landowners to plant trees and grasses on certain marginal lands has resulted in 51,101 Georgia acres being tentatively designated for planting trees.

Commission Director John Mixon said the program, stemming from a recently enacted Congressional bill, is aimed at utilizing farmland that is highly subject to erosion. Mixon called the program "vital to the state and national economy" and said it could launch the largest single tree planting project in Georgia history.

The initial sign up, held earlier this year, resulted in 32,881 acres of Georgia land being approved for planting trees. This Georgia total accounted for 30 percent of the acreage allotted nationwide.

"Georgia is the nation's leader in reforestation efforts," Mixon said. "And this response to the federal program emphasizes Georgia's role as a national leader."

The Commission director said that although landowners have the option of planting trees or grasses, over 90 percent of Georgia landowners signing up for the program elected to plant trees.

The Conservation Reserve Program is administered by the Agricultural Stabilization and Conservation Service. The ASCS is in charge of the contracting and bid process. However, during sign up sessions, the Commission provides technical assistance for the tree planting segment of the federal program.

According to program guidelines, cooperative efforts will be coordinated by forestry organizations, state government, and various county and local groups. Planting expense will be shared equally by landowners with the federal government. After a 10-year contract has been fulfilled, a period in which the government will pay rent annually, the trees will belong to the landowner.

Mixon explained that the Commission's role of technical assistance is provided in cooperation with the U. S. Forest Service. Commission personnel will inspect and certify planting sites, assist in plans for planting, monitor plantings, and make follow-up maintenance inspections. The program will extend through the 1990 crop year and may include as many as 40 to 45 million acres nationwide.

Qualified landowners will make the decision whether to plant trees or grass. However, Mixon points out that "trees are generally less costly to establish and maintain than grass...and trees provide greater enhancement of the land." The Commission director also emphasized

that since 75 percent of the planting will be in the South, Georgia will have a very influential role in the program.

The third sign up session for landowners is tentatively scheduled for late summer or early fall of 1986. Exact dates will be announced later.

This program already shows definite indications that the response of Georgia landowners will "go a long way in our continuing effort to close the gap between trees planted and trees harvested

in our state," Mixon said. "We're very proud of the response of Georgia landowners."

Mixon said the state is relying on another big turnout of Georgia landowners for the next sign up. "If landowners will study the provisions and benefits of the program, I believe they will respond."

For complete information on eligibility and benefits of the program, landowners should contact the nearest office of the Georgia Forestry Commission.



HELP US KEEP OUR WOODS SAFE AND CLEAN, PLEASE

Reproduction of prize-winning poster

GEORGIA STUDENT'S POSTER WINS TOP PRIZE IN NATIONAL CONTEST

A 15-year-old Central High School student in Newnan is a national winner in the 1986 Environmental Poster Contest.

Announcement of the award to Jamie McPherson, son of Mr. and Mrs. Charles E. McPherson of 1410 Roscoe Road, Newnan, was made at the recent 57th annual convention of the National Council of Garden Clubs in Chicago.

The annual contest is sponsored by the Garden Clubs of Georgia, the Georgia Forestry Commission and the U. S. Forest Service. Mrs. James W. Phillips of Moultrie, State Contest Chairman for the Georgia clubs, said 450 posters were entered statewide this year and "We are extremely proud that we had a national winner."

Jamie was winner in the 9th to 12th grade category.

"Jamie is an honor student in art at Central High School," his mother said. "We are very proud of him." She said her son enjoys the outdoors and wanted to enter the contest by creating the Smokey Bear-Woodsy Owl poster that promotes a safe, clean forest.

Mrs. McPherson said Jamie plans to enter Georgia Tech following graduation from high school to study architecture.



This oak fringed park between Bay Street and Savannah's waterfront River Street is as much a part of the city to this generation as the nearby Atlantic Ocean, but studies by the city's Park and Tree Commission reveals that these landmark trees will be among the first to go if preventive measures are not taken soon.

SAVANNAH'S MAJESTIC LIVE OAKS

CAN A HISTORIC CITY SAVE ITS BEAUTIFUL TREES?

Savannah has always had a serious rapport with trees. Shortly after James Oglethorpe landed his sailing vessel in 1733 on the river bank of what was to become Savannah, one of his prominent crew members established a ruling that no tree in the Colony of Georgia could be cut without his personal permission.

The crew member, Noble Jones, was Oglethorpe's right-hand-man and had the influence to make the ruling stick. Jones may have been the continent's first urban forester before the environment or the term existed.

The concern for trees continued and the Savannah Park and Tree Commission was established in 1896. Today, Dr. Don Gardner is the sixth director of the organization. Dr. Gardner, a plant pathologist who received his Ph.D. from Ohio State University, said the goals of the organization remain basically the same... "to maintain, improve, and sustain the excellent health, safe condition, and aesthetic beauty of all trees within the city of Savannah."

Dr. Gardner points out that Savannah's rapport with trees has not diminish-

ed throughout the city's history. As an example, he cites a plan in the late 1970's to widen one of the city's main thoroughfares and remove a number of live oaks. Opposition formed and a small group chained themselves to the live oaks when chain saws threatened the trees. The media took notice and the gesture received wide publicity.

"These people might be considered tree fanatics or tree advocates, depending on your point of view," Gardner said. "But the result of the publicity was a revision of construction plans. Those 200 live oaks are still standing and will be preserved during construction of the new roadway."

Although these live oaks were saved from the chain saw, 90 percent of Savannah's 11,000 live oaks could now vanish under mounting pressure of an accumulation of negative urban influences.

Gardner, who came to Savannah in 1983 as director of the Park and Tree Commission, says he likes live oaks. "That's one of the main reasons I took this job," he said. "Live oaks are the perfect urban tree, and Savannah's 22 percent live oak population represents the

largest group of any species in the city."

Gardner makes an impressive list of why the live oak is a perfect urban companion. "They have small leaves that don't clog sewers,...highly resistant to disease,...tough and resilient,...roots follow underground concrete surfaces rather than breaking up through sidewalks and streets,...high salt tolerance for a coastal city,...green leaves year-round for shade and beauty,...acorns propagate easily,...provides plentiful food for urban wildlife,...requires relatively little care."

"And even in death, the live oak is still compatible with urban surroundings," Gardner said. "When a live oak dies, there's no immediate breaking off of heavy limbs to injure persons or property. It's at least three years before the tree even begins to shed twigs; so there's ample time to remove it."

But Gardner points out that although the live oak is perfect for an urban setting, it is not immune to the laws of nature or the accumulation of negative urban influences now being brought to a head in Savannah.

"First of all, we're dealing mainly with

an even-age urban forest," Gardner explained. "Ninety percent of Savannah's live oaks were planted 60 to 75 years ago by the Park and Tree Commission. So many of these trees are reaching the end of their life span in an urban environment, if they do not receive the proper care."

Gardner said that although a live oak will live 200 years in a natural forest, urban stress factors can cut the life expectancy drastically. The urban tree is subjected to a maze of negative factors including air pollution, lack of irrigation, disruption of root systems, vandalism, traffic abuse, restriction of root space, no natural fertilizer from shed leaves, construction projects, sewer lines, neglect, and improper pruning.

"So 90 percent of Savannah's live oaks are reaching the end of the line unless they get proper care," Gardner emphasizes. "However, with proper care, we could extend the lifespan up to 30 years, and regulate the loss to a gradual process combined with replanting."

Gardner's statistics show street trees to be in the most dire need of attention. Live oaks located in parks and squares, where irrigation and other care has been more prevalent, have fared generally better. However, the street oaks - cramped for root space and lacking irrigation, have reached a critical point; unless adequate root space, irrigation, and proper pruning are provided, many of these trees will die within the next few years.

"And once these street oaks in Savannah are gone," Gardner said, "neither this generation or the next will see anything like them in this city."

He added that neglect is another factor. "The neglect has not been deliber-

ate," Gardner said, "nevertheless, it exists and has taken a serious toll." Gardner emphasizes that proper and regular pruning is the most vital factor in promoting a long and healthy life for an urban tree. He said pruning and other care for the oaks has often been neglected because of "emergency" tasks required of the Park and Tree Commission.

Gardner said the organization has frequently operated in the past as a crisis oriented organization and a seemingly benign lack of routine maintenance could now prove fatal to the majority of Savannah's live oaks. "Since this 90 percent of

ed and dies. There is no cure. The answer is protection against injury causing open wounds.

To compound the problem being suffered by the live oaks even more, Savannah has 66 species of trees that require care and concern in varying degrees. Savannah's main tree species occur in the following percentages: live oak 22%, sweet gum, 18%, palmetto 11%, crape-myrtle 11%, dogwood 8%, magnolia 6%, sugarberry 4%, sycamore 3%, laurel oak 3%, holly 2%, and elm 2%. The remaining species, occurring in percentages of less than 2%, range from chinaberry to

"Ninety per cent of Savannah's live oaks are reaching the end unless they get proper care."

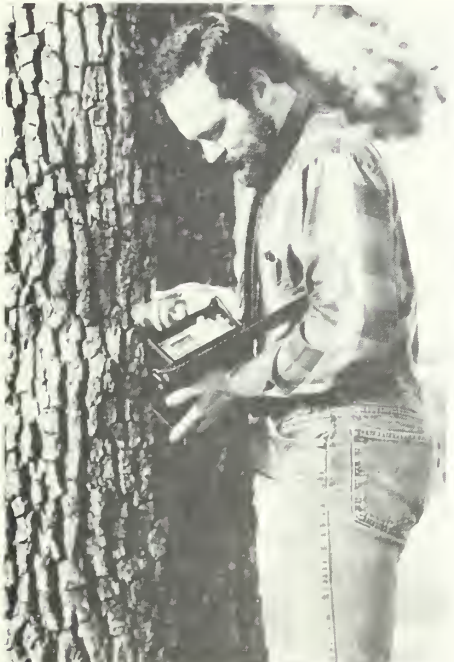
the oaks are an even-age urban forest," Gardner said, "It's hitting us all at one time."

HEART ROT

The live oaks, still withstanding the negative pressures of urban existence, are also being attacked by disease. Gardner said heart rot (*Fomes igniarius*) is a major problem. This disease is spread through spores and infects a tree through open wounds (open wounds are common among urban trees). Once a live oak has this disease, the tree is gradually weaken-

Australian palm. The key factor in these percentages - as it relates to the live oak situation - is the sweet gum population, which at 18% is the second largest tree population in the city.

"There are approximately 5,500 sweet gum trees in Savannah," Gardner said. "If I could, I would put them on a preemptive removal schedule and remove 1/15 of the population each year." Although Gardner is a tree lover who considers his profession to be a "sort of general MD for trees," his love for trees obviously does not extend to sweet gums. The reason is pragmatic; the Park and Tree Com-



Dr. Don Gardner, director of the Savannah Park and Tree Commission, examines live oak with a Shigometer.



This Savannah sugarberry tree could no longer hold on in restricted root space. Although this species does not usually cause problems, it is an example of what the city is striving to prevent from happening in large numbers with other trees.

mission spends 26% of it's time dealing with damage and other problems caused by sweet gums. Gardner explains that sweet gum limbs (unlike live oak limbs) break and fall with no warning; the limbs are alive, green and often heavy enough to cause considerable damage to anything underneath. Also, Gardner says sweet gum roots (unlike live oak roots) tend to push up and break sidewalks and streets. He stated approximately \$750,000 in sidewalk damage has been done in Savannah by trees; and the predominant amount of this damage has been caused by sweet gums.

Gardner says he has an "uncomfortable" file on sweet gum limbs falling and causing damage to cars. "Mostly to cars," he said, "so far we've been lucky with houses and no people have been hurt." He added that Savannah's sweet gum population is also an even-age forest that has reached an age when the size of falling limbs is most hazardous.

Gardner's primary dislike for the sweet gum stems from the time consuming work they create. "Time that could be spent preserving and prolonging the infinitely more compatible live oak," he emphasized.

Gardner is the first to recognize the complications involved in Savannah's live oak problem. "Basically, I can say this," Gardner emphasized, "we can maintain and preserve many of the beautiful live oaks for as much as 30 years with appropriate resources."

This majestic live oak, shading Savannah's river front, is typical of thousands of other such trees in the city now endangered by an accumulation of negative, urban factors. Ninety percent of the city's live oak population is threatened.

By "appropriate resources" Gardner is referring not only to monetary funds, but public understanding and support of the problem and what needs to be done.

"I realize that there are more important problems in Savannah than live oak trees," Gardner said. "But these trees are inherent to the character of the city, and when considered in perspective, they are highly significant."

Indeed, the live oaks are significant to the character of Savannah, a city which experienced \$183 million in tourist trade last year. A major tourist attraction is the city's one-square-mile historic district (the largest historic district of any city in the United States). The squares and streets of this district are lined with majestic live oaks. James Oglethorpe's six original squares, and the 18 others that followed his 1733 landing, became a unique showcase for live oaks and surrounding architecture. Oglethorpe laid the square's grid in a rarely found gridwork that some historians believe is patterned after military designs of ancient Rome.

Savannah's annual St. Patrick's Day Parade winds through these scenic, oak

shrouded squares. The city's St. Patrick's Day celebration is second only to New York City. This year's celebration brought an estimated 300,000 visitors to Savannah for festivities that went on for three days.

Gardner sees all these activities stemming from the character of the city - of which the live oaks are an integral part. "I believe two of the basic things attracting visitors to Savannah are to experience the historical atmosphere and see our beautiful architecture," he said. "I don't like to imagine the negative impact on these interwoven attractions if the live oaks were gone."

But once, Gardner said he experienced to an extent what it would be like. During one of the most severe winters of the past several years, extreme cold defoliated Savannah's oaks.

"I have never seen cold defoliate live oaks before," Gardner said. "And it was an eerie feeling to drive through this city - made green by live oaks the year round - and look out at the bleak change."

THREATENING RECORD

Dr. Gardner's statistics show that Savannah removed 347 urban trees in 1983, 607 trees in 1984, and 933 trees in 1985. Approximately 25 percent of the total 1,787 trees removed were live oaks.

Gardner said that action must take the form of public recognition and understanding of the problem, increased resources for the Park and Tree Commission, and adequate funds to do the job.

"We expect to encounter obstacles," Gardner said. "But with public support, the problems can be ironed out and we can save these trees and regulate inevitable losses so the character of the city can be preserved."

Gardner knows that when Savannah residents realize the character of their city is threatened, they'll do something about it. He recalls that the Savannah Historic Foundation was formed in 1955 after the city's historic City Market was torn down to make way for a parking garage. Since the foundation was formed, renovation and historic preservation have become vital traits of the city.

Gardner is relying on similar reactions when the public understands the serious threat to the city's live oaks. "An underlying problem is that most people seem to think that these trees have always been there - so they'll always be here," Gardner said. "That's why we appreciate the educational programs of the Georgia Forestry Commission; these programs educate the public in a variety of ways and are invaluable to us at a critical time

(continued on pg. 14)



WINDSOR SPRINGS PLANTATION

Planted in 1873, this Loblolly Pine Plantation may very well be the oldest of its kind in the nation.



Wayne Nuite, manager of Windsor Springs, and Tammy Johnson, Commission urban forester for Augusta, show giant girth of loblolly pine located on Nuite property near Windsor Plantation.

When Adam Johnston planted three acres of loblolly pines near the Savannah River in 1873, he had no idea that Georgia would plant more than 70 million of these valuable trees annually as part of a reforestation program that has established an \$8.6 billion industry for the state. He also had no indication that his three-acre planting would be regarded as a historic event establishing the oldest loblolly plantation in Georgia.

However, like many Georgians today, Johnston planted pines to rebuild and beautify his family farm. The house Johnston lived in - and many of the pines he planted in rows - are still standing. The pine plantation is also sprinkled with planted oaks. Little change has occurred since the pines were planted to alter the course of nature on this property located nine miles from Augusta, just off Tobacco Road.

Many prominent Confederate soldiers and Southern gentlemen have lived in this plantation house. General W. H. T. Walker and his brother, General Valentine Walker, were both residents. The plantation house was the home of General W. H. T. Walker when he was killed during the Battle of Atlanta. Other prominent residents included Freeman Walker, the first Mayor of Augusta; and Colonel Paul Fitzsimmons of South Carolina.

In 1860, Anne A. Johnston inherited the property from her aunt, Mrs. Zemula Walker, widow of General Valentine Walker. The Johnstons held on to the farm throughout the Civil War. Although the years after the Civil War were depressing ones, the Johnstons showed optimism and foresight in rebuilding their farm. They were especially interested in growing things - especially loblolly pines; this interest led them to establish a sort of three-acre forestry monument that has created interest for generations.

But the 1940s owner, George M. Clarke, decided not to cut any trees. He felt a kinship with the old plantation trees that is sustained today by his daughter, Ella Clarke Nuite. Now 82 years old, Mrs. Nuite lives in the plantation house. The two-story house seems to have maintained much of the sturdiness that sustained it through the Civil War. There are 10 rooms and each room has a fireplace. Giant shrubs and trees obscure the view of nearby Tobacco Road, where cars constantly whiz by, unaware that vintage history is preserved a short distance away.

Although the Clarkes had lived on the plantation since 1903, George Clarke did not buy the plantation and surrounding property until 1920. When his daughter, Ella, attended the University of Georgia as a home economics major, she met Charles Nuite, a forestry major. The two married and Charles Nuite became Georgia's first district forester. He served under Burley M. Lufburrow, the Commission's first director (1925-34).

Although Charles was stationed in Waycross with 25 southern counties designated for his protection, the Nuites held on to the Tobacco Road plantation. Nuite's main duties involved educating the public concerning the value of the newly formed commission and signing up landowners for a type of forest protection service.

"Landowners paid three cents an acre and the state put up three cents an acre in matching funds," Mrs. Nuite remembers. She added there was no indication at the time that the reforestation efforts at the Augusta plantation would mushroom throughout Georgia to establish the state's booming number one industry.

The Nuites later moved to South Carolina, where Charles continued his work as a forester. Although much of his job involved harvesting trees, none of the plantation trees near

Augusta were cut. Later, when the Nuites returned to the plantation, the trees remained uncut.

Today, Mrs. Nuite described it this way: "We came to love these trees more and more. We decided never to cut them."

Through the years, it could have been a financial temptation to harvest the plantation trees, but the family's established "spring water business" provided security for the trees.

Windsor Springs is located on the fringe of the plantation. Only three acres are the actual plantation, but the Nuite property totals approximately 100 acres. Much of the Nuite land has the look of a primeval forest, with undergrowth and overgrowth winding through giant trees. The trees surrounding Windsor Springs are so large that some seem to be mutations. One huge pine now leans dangerously toward the spring area, seemingly too large to remain standing any longer. Not far away, a giant sweet gum tree towers over the spring area like a sentinel.

Mrs. Nuite attributes the size and good health of the spring area trees to roots nourished by the waters of Windsor Springs. Many residents of the Augusta area are on the "Windsor Springs water route" and receive regular refills in 25 gallon jugs. There are numerous stories concerning miraculous cures resulting from drinking the water; and many well-known people throughout the years have used the water.



Mrs. Clarke Nuite, owner of the plantation, looks up at one of the pines planted in 1873.

The trees surrounding Windsor Springs are so large that some seem to be mutations. One pine leans dangerously toward the spring, seemingly too large to stand.

President Taft took 50 casks of the water abroad when he negotiated terms for the Panama Canal.

At 82 years old, Mrs. Nuite is a walking testimonial for the spring water. Her movements are quick and agile, and her skin has an unusually healthy tone. Most people - if they are fortunate enough to reach her age - are on some sort of restricted diet. Not Mrs. Nuite. "I eat anything I want, anytime I want, anywhere I want," she said.

"I know this water is good for anything that uses it," she said looking up a tall pine near the spring. "I've used it for drinking water most of my life," she said. "Even when I was going to the University of Georgia, my father used to send drinking water to me."

The size of the spring trees and Mrs. Nuite's obvious health supports her theories. Until three years ago, Mrs. Nuite worked at the spring. She bottled 25 gallon jugs of water, loaded them in a station wagon, and delivered them to customers. Her grandson, Wayne, now takes care of the water business. Wayne is quick to point out that the trees around the spring diminish in size according to their distance from the spring.

FUTURE PROSPECTS

But now the springs and the plantation are threatened. The Nuite property is like a natural oasis in the midst of urban conglomeration. All along Tobacco Road, civilization is pushing in. Shopping centers. Apartments. Power lines. Houses. Roadways. And now, a proposed sewer route threatens the purity of the springs. "Civilization is encroaching on us," Mrs. Nuite says. But I am going to keep this property like it is - in spite of it all." So far, Mrs. Nuite has maintained

the atmosphere of the plantation and turned down more than a few tempting real estate offers in the process.

This is the same Tobacco Road that Erskine Caldwell made world famous - or infamous - in his controversial novel. Mrs. Nuite is not an admirer of the tale which depicted Tobacco Road residents as a blend of wretched poverty and questionable morals. She calls the novel "just fiction written to sell. Erskine Caldwell didn't come on our side of Tobacco Road. Even then, we had three historical homes in the area."

But regardless of the varying opinions of the Caldwell novel, one thing is for certain; the Tobacco Road of Erskine Caldwell's day is gone forever. One of the few surviving remnants of that time is the Windsor Springs Plantation and surrounding Nuite land.

There are different views among the Nuite family on how to best preserve this rare glimpse of forestry history and the natural atmosphere of the area. However, they are all in agreement on the desire to preserve it.

EDITOR'S NOTE: The June 1948 issue of "American Forests" printed an article on a one-acre stand of loblolly pine planted in Maryland during 1877. The article suggests that this is "probably the oldest plantation of loblolly pine in America." The Windsor Springs Plantation was planted four years before the Maryland stand. That creates a question. Is the Windsor Springs Plantation the oldest loblolly plantation in the United States?



This year, 38 young ladies who were victorious in county pageants across the state will gather on Jekyll Island June 15-16 to vie for the Miss Georgia Forestry crown.

The event is held annually in conjunction with the convention of the Georgia Forestry Association, the organization that sponsors the various county contests and state finals. Publicity is provided by the Education and Fire Prevention Department, Georgia Forestry Commission.

The contestant chosen for the Miss Georgia Forestry title for the year will represent the commission, the association, and forest industries in the promotion of forestry. She will appear in parades, attend festivals and make appearances at other forestry-related events.

While on the island, the young ladies will attend a banquet, a special luncheon and other events planned for them by the association.

The judges will interview the girls individually and on stage they will wear sports attire, later changing into evening gowns for the final judging.

The contests held on the local level are sponsored by merchants organizations, civic clubs, garden clubs, forest industries and other groups. The commission considers the pageants each year one of the agency's best means of spotlighting forestry in the local communities.



Tammy Manders
Barrow County



Sheri Jordan
Carroll County



Tina Durham
Crisp/Dooly County



Vanessa Ross
Fannin County



Miranda J. Herrington
Greene County



Donna Stubbs
Glynn County



Cindy Sherwood
Henry County



Kathy Finch
Jackson County



Teresa Fulton
Macon County



Ruth Bond
Madison County



Terri Turner
Montgomery County



Shelley Martin
Oconee County



Stephanie Clark
Pierce County



Kelly Ann Baxter
Richmond County



Jenny Hickok
Newton/Rockdale



Camille Lesuer
Sumter County



Hope Harris
Taylor County



Leslie McLean
Telfair County



Suzette Meeks
Treutlen County



Diana Aspinwall
Wayne County



Kim Tatum
Ware County



Jody Price
Wheeler County

FRP COMPANY

(continued from pg. 3)

and renew purchasing agreements.

Feltham and Claude E. Bird, vice president, also travel abroad to visit established customers, seek new customers and in some instances, study their competitors.

While conducting an interesting tour of the plant at Baxley for GEORGIA FORESTRY, Feltham paused at one point to observe an employee critically examining the color of a small block of rosin. "He's determining the grade by the hue of amber," he said. "A light hue is preferred, as it brings a better price. In fact, color can affect the price by as much as two to three cents a pound."

A standard system of grading by color was established some years ago by the U. S. Department of Agriculture and is now used around the world. The choice grade is designated WW, or Water White followed by WG (Window Glass), N (Nancy), and M (Mary). To assure a cleaner, less dense coloration, the company encourages producers to keep the crude gum as pure and free of trash as possible. A well managed harvesting operation benefits both the seller and the buyer.

After the molten rosin is processed from the crude gum, it is funneled into special multi-layered bags or metal drums and becomes rock-hard. It also hardens after it is pumped into highway tankers and railroad tank cars for shipment and



Feltham stands near drums of rosin that are ready for shipment.

must be liquefied by steam for removal upon reaching its destination.

The FRP Company used natural gas for years but now wood chips, sawdust and other forest wastes are automatically fed into a giant furnace to manufacture an abundance of steam for the plant.

The concentrated distillation at one large facility has not only eliminated the small, troublesome "still" in the woods and greatly benefitted the individual producer, but it has removed a once serious forest wildfire threat.

Research down through the years has greatly improved the techniques of extracting gum from the pines of Georgia and methods of converting this valuable

annual crop into quality products in demand at home and abroad.

Although a historian in the naval stores claims that a production peak was reached in 1908 and 1909 and a marked decline started in 1938, the industry has held steady in recent years and today plays a significant role in Georgia's healthy economy.

As the FRP Company nears its half century in the business, James E. Feltham and Claude E. Bird and their employees will continue to provide a ready market for hundreds of gum producers. They will strive for an even greater percentage of the gum to produce that sparkling light amber grade of rosin called Water White.

SAVANNAH LIVE OAKS

(continued from pg. 10)

like this. At this stage, public education is really the key factor, and the wheels are already in motion from a number of sources."

In the midst of Savannah's live oak crisis, the city was named a Tree City USA by the National Arbor Day Foundation. In view of the problems, this honor may seem a paradox, but the facts more than support the certification. In spite of the problems, Savannah remains a beautiful city of trees; and few cities in the nation have launched a more intensive program to save, improve and enhance urban trees.

In spite of all problems with the live oaks, Gardner said, the problem can be coped with very well. "It's really just a matter of knowledge and simple mathematics," he said. "In fact, if we don't cope with it properly, more money will be required and more trees will be lost than if we just let it lie."

"We now have the knowledge; we know exactly what to do," Gardner continued. "More has been learned about trees - especially urban trees - in the past 30 years than in all past history combined." Gardner attributes most of this new

knowledge to Dr. Alex Shigo, a retired USDA Forest Service plant pathologist.

"Dr. Shigo is no ivory tower theoretician," Gardner said. "He has personally dissected - with a chain saw - more than 50,000 trees on seven continents." (Dr. Shigo was present at Savannah's Tree City USA ceremony.)

So the knowledge is available, but the bottom line is what Dr. Gardner calls "simple logic governed by mathematics." He said the Savannah Park and Tree Commission needs \$25 per-tree-per-year to maintain and preserve the city's endangered live oaks.

Although this may seem a large sum, Gardner points out that an intensive inventory has valued Savannah's trees (in the historic district alone) at \$8 million. Value is determined by nationally accepted guidelines established by the Council of Tree and Landscape Appraisers.

Also, when the \$25-per-tree maintenance and preservation cost is compared with the current \$550-per-tree removal and replanting cost for the average live oak, the logic becomes even more apparent.

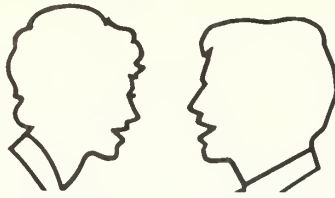
"Only \$25 per live oak, spread out

over an extended period of time, would be relatively mild compared to doing nothing and having a great number of live oaks die during a short span of time and have to be removed and replanted for \$550 each."



Gardner gathers up several folders, walks outside the cottage where his office is located and locks the door. He is the last to leave. The sun is setting, reflecting a glow from the green live oaks lining the street. The buildings are old; seafaring pirates once walked these streets. Seagulls riding high on a coastal wind screech above the live oaks. The smell of ocean salt is in the air. There is a rare, cloistered quality here, flavored by time, enhanced by preservation. Gardner leans against one of the giant live oaks and looks down the oak lined street. "Savannah is really a paradise for trees," he says. "But even when living in paradise, only so much insult can be tolerated."

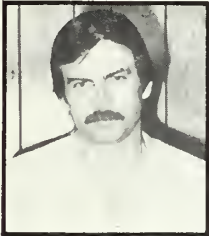
PEOPLE



IN THE NEWS



GREEN



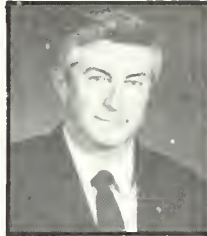
POHL

FRANK GREEN, a forester educated at the University of Georgia, recently assumed the position of Reforestation Specialist in the Management Department at the Macon office. A native of Lawrenceville, Green is married to the former Miss Laura Smith of McRae. The couple is active in the Methodist Church...RUSS POHL who holds a Masters Degree in Forest Genetics/Tree Improvement from Auburn University, was recently promoted to Senior Forester and transferred to the Reforestation Staff at the Macon office. Originally from Illinois, Pohl and his wife, Candace, reside in Riverdale with their two children, Alysson, three, and Jeremy,

forester/ranger. Educated at West Virginia University, Busch has a Bachelor of Science Degree in Forest Resources Management. Busch and his wife, Miriam, live in Lawrenceville and are members of



BUSCH



WARREN

the Church of Jesus Christ of the Latter Day Saints...JOE WARREN is Sumter County's new pilot. A native of Virginia, Warren lives in Americus with his wife, JoAnn, and daughter, Lynda, one, and son, Joe, 14. They attend the Catholic Church.

FALL CONFERENCE SLATED AT CENTER

A fall conference on Forest Management Plan Preparation has been scheduled at The University of Georgia Center for Continuing Education.

The course, to be held September 23-25, will cover the component parts of a forest management plan, to include Management Recommendations, Forest Protection, Administration and Evaluation, and the Role of Microcomputers in Management Plan Preparation.

Additional information can be obtained by contacting Dr. Leonard A. Hampton, Room 237 Georgia Center, The University of Georgia, Athens, GA 30602 or by phone 404/542-3063 or Mr. Andy Little, Conference Facilitator, Room 251 Georgia Center, The University of Georgia, Athens, GA 30602 - phone 404/542-1585.



BARRETT



JOHNSON

seven months. Pohl transferred from the Newnan District where he had been a forester for three years...The new Brooks County ranger is JOHN BARRETT, recently promoted from forest patrolman. Barrett transferred from the Camilla District and now lives in Thomasville with his wife, Karen. The Barretts have two children, Keri, eight, and Heather, six. The family attends the First Presbyterian Church...The Athens District welcomes JAMES JOHNSON to their staff. Johnson, a forester educated at Clemson University, holds a Bachelor of Science Degree in Forest Management. A native of Atlanta, Johnson now lives in Monroe and attends the Presbyterian church...DARRELL BUSCH, a native of Vallejo, California, is Stone Mountain's newest



BEETLE UPDATE

The Southern pine beetle is continuing an upward trend in some portions of the state, according to Commission Entomologist Terry Price.

An aerial survey conducted in April revealed over 1800 individual spots, ranging in size from 10 to 10,000 trees. Approximately 60 counties are reporting activity. Nine of these are epidemic. An epidemic county is one having more than one multi-beetle spot per 1,000 acres of pine.

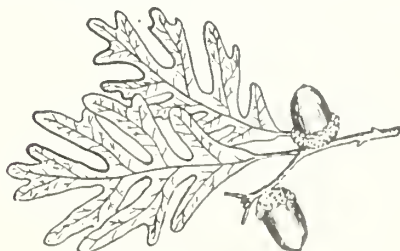
The entomologist listed the counties now in the epidemic stage as Clarke, Madison, Morgan, Newton, Oconee, Oglethorpe, Butts, Baldwin and Lincoln.

Price said salvage has been good in most areas of the state where infestations have occurred. Over 65,000 cords of wood have been salvaged.

The outbreak is expected to increase dramatically during the summer of 1986. Although populations have declined in numerous areas, news reports coming to commission headquarters indicate increasing numbers in many areas. Coastal populations are very active. Camden and Charlton counties are experiencing isolated outbreaks in old growth longleaf and loblolly.

Price said five control zones have been organized statewide. Each zone is represented by a committee made up of industrial and state foresters. Landowners are being contacted by these committee members after each aerial survey to offer salvaging assistance.

Price said landowners should call their local Forestry Commission office for more details on the control of the insect. The next aerial survey is scheduled for June 16-July 1; all counties will be covered and landowners will be notified as soon as possible if spots are found on their property.



Think it over...

...and the decision becomes clear!

IF YOU'RE A GEORGIA LANDOWNER, IT TAKES VERY LITTLE REASONING TO CONCLUDE THAT IDLE ACRES AND MARGINAL CROPLANDS ON YOUR PROPERTY CAN BE CONVERTED INTO PROFITABLE FORESTS. IF PROFESSIONAL ASSISTANCE IS NEEDED, CONTACT THE LOCAL OFFICE OF THE GEORGIA FORESTRY COMMISSION OR A FORESTRY CONSULTANT IN YOUR AREA.

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Sept. 1986 No. 3 Vol. 39

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Urban Forestry
6835 Memorial Drive
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Georgia Forestry is published quarterly by the Georgia Forestry Commission, Route 1, Box 181, Dry Branch, GA 31020. Second class postage paid at Macon, GA. POSTMASTER: Send address changes to Georgia Forestry Commission, Route 1, Box 181, Dry Branch, GA 31020.

THE WHITE HOUSE

WASHINGTON

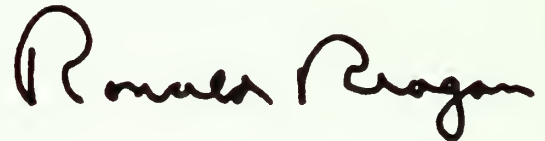
Dear Mr. Hitchcock:

As you are in a better position than most to know, in 1985 the United States was struck by the worst wildfire season in more than half a century. Devastating fires raged through nearly three million acres of our forests and rangelands, but the fire agencies of the Departments of the Interior and of Agriculture, and of State Foresters, dealt with the severe problems presented to them. Thanks to their coordination and, especially, to the courage and tirelessness of the fire fighters, our citizens, their properties, and valuable resources were spared extensive destruction.

I am proud to congratulate you and your membership on this magnificent team effort. You have my personal commendation, and the deep appreciation of the American public.

Keep up your fine work. God bless you.

Sincerely,



Mr. Raymond B. Hitchcock
President
National Association of State Foresters
Hall of States
444 North Capitol Street
Washington, D.C. 20001

ON THE COVER - Kathy Laurie Finch, named Miss Jackson County Forestry in a local pageant, went on to capture the Miss Georgia Forestry crown at the state finals on Jekyll Island. See story on page 13.



Patrolman Randy Sockwell replaces a shingle on the roof of the commission's Urban Forestry headquarters at Stone Mountain. The roof of chemically treated pine shingles is one of several unique features of the building which is visited frequently by builders and others interested in innovative uses of wood. The structure is built on a treated all-wood foundation. The building is one of several new commission offices that are roofed with shingles manufactured from Georgia pine.

YELLOW PINE COMPETES FOR SHINGLE MARKET

When the heart pine disappeared from the forests, Georgians thought they'd seen the end of the resin-soaked wood shingles used by their forefathers. Builders turned to the insect and rot-resistant Western red cedar, found in the Northwestern states and Canada, as a replacement.

But pine shingles are showing up on Georgia Forestry Commission roofs all over Georgia, not heart pine but pressure-treated yellow pine. "The pine has been pressure-treated with chromated copper arsenate" said Tommy Loggins, The commission's Associate Chief of Research. "Research shows that the pressure-treated pine shingles are as durable as those of cedar which last a quarter of a century more. But up until now, Southern yellow pine couldn't compete economically against the cedar because the chemical treatment raised the cost above that of the cedar."

The possibility of using Southern yellow pine as an alternate wood for making shingles has been recognized for years by the commission, because the United States is running out of Western red cedar forests. The shortage

of cedar is making this country more and more dependent upon Canada, a country that grows one-sixth of the world's commercial cedar.

In the first protective action taken against Canadian wood product imports, the United States imposed a stiff import tariff (in effect as of June 6) on Canadian cedar shingles and shakes entering this country over the next five years. The U. S. Timber Industry claims the Canadian wood products are selling in America at artificially low prices because they are subsidized by the provincial governments that own the forests.

Two years ago, the commission purchased a modern shingle machine to demonstrate the manufacture of shingles from yellow pine and thus re-introduce another product from the species. Although wood shingles are considered a "Luxury Item" and the cost is about double the price of asphalt shingles, builders favor the wood shingles because they compliment the rustic architectural styles which are so popular today.

"Our biggest obstacle is making the architects and builders aware of this product as an alternative to red cedar shingles," said Loggins. "Pressure-treat-

ed pine is recognized by the National Fire Protection Agency as being fire retardant. An advantage is that it is grown locally, but cedar must be transported at a very high cost from the northwestern United States and Canada. Pine shingles are available and are now equal to the cedar shingles in price as well as quality."

Although no Georgia mills are currently producing pine shingles, Loggins feels it would be an ideal sideline operation for an existing mill to incorporate into its business. "The pressure-treatment equipment is readily available and accessible," Loggins said, "and the mills already have personnel on hand who could handle the shipping. With the tariff bringing the price of the imported cedar shingles and shakes up to nearly match Southern yellow pine, the time is right to give Canada a little competition."

EDITORS NOTE: Building contractors, materials manufacturers and others are invited to contact the commission's Forest Research Department for further information.

Lightning kills or damages many of Georgia's trees, including prized shade trees on residential lawns and those deep in the forests, but the full extent of the damage occurs when the bolt of electricity sets off a woods fire.

During the most recent fiscal year, more than 378 forest wildfires were caused by lightning in the state, burning more than 3,357 acres.

The worst problem was in the Waycross District of Southeastern Georgia where lightning caused 132 wildfires, far more than in any other area of the state. Incredibly, over 150 fires were started by lightning in the same district in July of this year alone, amounting to roughly 70 percent of its total fires. Strikes without rainfall are mainly responsible for the increase in lightning related wildfires.

It is advisable to remove shattered limbs and hanging bark and splinters soon after lightning hits the tree, but full treatment should be put off until the next season because the severity of damage is not immediately observable. It may be several months before the weakened tree tissues die.

Because lightning bolts usually generate temperatures around 50,000 degrees Fahrenheit, they instantly rob trees of their water. If the current reaches the ground, it dries out the surrounding soil and roots as well.

The best treatment for a tree after a lightning strike is immediate and intense watering. The soil under the tree's crown should be watered until it is moist to a depth of five or six inches. Periodic waterings should continue to keep the soil moist.

Spraying tree wounds with insecticides is also of great importance for the health of all trees in the area. The southern pine beetle, for example, often attacks fresh wounds caused by lightning.

Tree wound coverings may help in the tree's recovery. In some instances, parafin wax and bark combinations are effective. Though not universally agreed upon, some tree experts believe that tree wound paints are beneficial.

If the strike occurs in early summer, the homeowner should inject a liquid fertilizer into the root feeding area of the tree. Two to four pounds of fertilizer should be applied for each inch of the tree diameter, measured at four and one half feet above ground. However, if the tree is less than six inches in diameter, it should receive half the amount, followed with a complete food application the following spring.

Lightning not only affects the tree it strikes, but also the surrounding trees. Small trees nearby may die, and larger ones may show leaf scorch or dead branches on the side facing the spot of the strike.



LIGHTNING CAUSES MAJOR DAMAGE TO STATE'S FORESTS

Lightning rods may protect valuable or large trees, but they are quite costly and difficult to set up. If installed improperly, lightning rods can do more harm than good.

Because lightning is so unpredictable, there is nothing that can be done to completely protect trees. However, if a tree is hit, it may still be saved if given a fighting chance.

In the Waycross District, the number of lightning-caused fires in July totaled more than all that were recorded in the past fiscal year.

GYPSY MOTHS "VERY CLOSE TO GEORGIA"

The gypsy moth that has already ravaged many Northern forests is now beginning to invade Georgia and other states of the deep South. At least, advanced scouts have arrived.

In the past few years, the moth has made one of its quickest migrations. Maryland has been overrun by the pest, and now they are spreading forcefully into eastern Virginia. Outbreaks have also been detected in Arkansas, North Carolina and Tennessee. Even California and several communities in the midwest are now host to the unwelcomed invader.

The moth is spread mainly by vacationers from infested areas. Egg masses, moths and caterpillars hitch rides on campers, motor homes and other vehicles. They often find new homes in campgrounds, picnic areas and other wooded sections.

Terry Price, entomologist of the Georgia Forestry Commission, said the moths are now "very close to Georgia." In Tennessee, 45,000 acres of forests were treated with insecticides last year. The commission has trapped male moths in Georgia since 1972, however, no colonies of the species have been found. The traps are coated with a sticky, female scented substance.

In the caterpillar stage, the pest strips trees of their leaves. A multitude of them can seriously damage thousands of acres in several days. Each caterpillar eats about a square foot of foliage per day, slowing tree growth. If a tree is attacked several years in succession, it may die. On the average, 20 percent of the affected trees die.

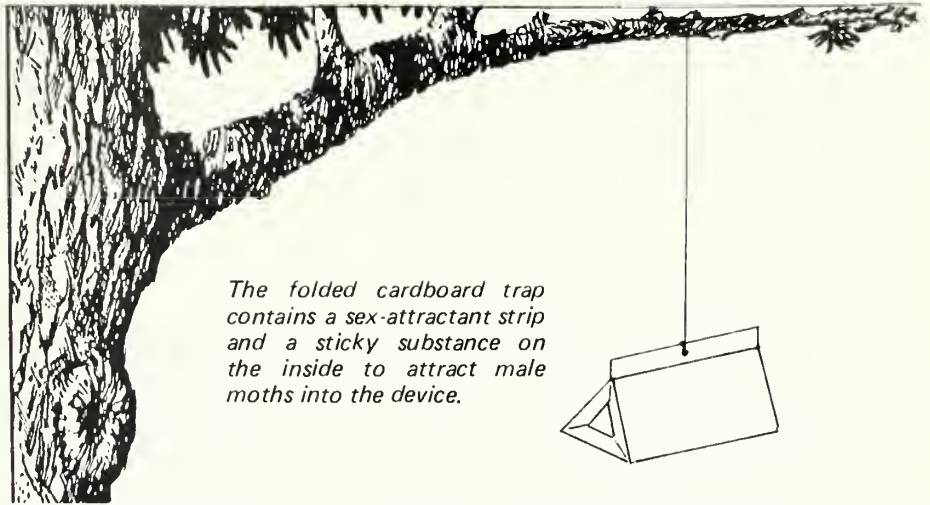
Millions of acres of Northeastern forests have been damaged, with New York, Pennsylvania, and Maryland suffering the greatest losses.

While the moth presents no threat to pine trees, oak leaves are its favorite meal. Oaks are very important in the South as shade trees and a favorite wood for furniture, flooring and other products.

The moth was imported into Massachusetts in 1869 for the purpose of crossing it with silk worms for the production of silk. However, many escaped from the experimental laboratory and in a few years they had well established themselves in many New England states.

Gypsy moths are in an egg form during the winter, but in the spring they become larvae. Defoliating trees for ten weeks, they grow into adult caterpillars, then change into pupae for a couple of weeks before coming forth as moths in middle to late summer.

The moths become a frustrating problem for people in Northern states where they swarm over houses and yards and



The folded cardboard trap contains a sex-attractant strip and a sticky substance on the inside to attract male moths into the device.

fall into swimming pools. In Pennsylvania, automobile wrecks have been blamed on roads that have become slick with caterpillars.

A practical solution to the gypsy moth problem has not yet been found as some communities prohibit widespread use of the insecticides that would kill the pest.

Research is still being done on the application of bacteria, virus or predator insects.

The best way to prevent serious damage is to maintain a healthy forest, according to Price. The old, weak or diseased trees are usually the ones that die, he said.

BEETLE UPDATE



The Southern pine beetle has been observed over a 68-county area of Georgia and 23 counties in the state have been listed as epidemic.

In the last statewide fly-over by commission pilots, 4,551 spots of infection were sighted.

Terry Price, commission entomologist, said the extreme heat this summer has temporarily slowed the spread of the insects, but an increase in spot sizes is expected in September.

"The insects have a low fat content during the summer months and do not have enough stored energy to aggressively compete with the high temperatures. This doesn't mean that they are not breeding and feeding, it simply means they are not flying too far from the trees they emerged from," Price said.

Salvage is still the best control and landowners should keep in touch with the Georgia Forestry Commission to stay abreast of the wood markets, he said. "Shortwood producers are few and far between, therefore, salvaging small spots is almost an impossibility. However, landowners are being urged by our foresters to allow salvage

crews to block out up to 20 acres to make it feasible for a longwood operator to move in and take the beetle wood," Price explained.

Records show that 101,710 cords of beetle-damaged pulpwood and 3,997,196 board feet of sawtimber have been salvaged in Georgia since June of this year.

The commission will continue to aid landowners in conducting "cut and leave" practices throughout the critically affected counties. It is a method that has been effective in the past and offers a control alternative if salvage is not possible or feasible.

Counties that have been declared epidemic - those having more than one multi-tree spot per 1,000 acres of loblolly or shortleaf pine - include Clarke, Elbert, Greene, Jackson, Madison, Morgan, Newton, Oconee, Oglethorpe, Rockdale, Butts, Lamar, Upson, Baldwin, Bibb, Jasper, Monroe, Lincoln, Taliaferro, Stewart, Clay, Early and Houston.

Oglethorpe, with 380 spots, had the worst infestation in the state, according to aerial spotter records.



GROWING MUSHROOMS

ANOTHER FORESTRY-RELATED INDUSTRY

The large, brown, meaty, and mouth-watering Shiitake mushroom, which has been grown and loved in the Orient for many years, is very new on the American market, but is gaining popularity fast. American tree farmers are realizing the benefits of producing them in small, previously unused woodlots, and many restaurants in this country are beginning to serve them.

Some Georgia landowners have expressed an interest in cultivating the fungi.

The Shiitake is noted for growing on hardwood logs. The white and red oaks seem to bring the highest yield and produce mushrooms with the best taste.

Recently, Georgia was considered by the Elix Corporation as a possible location for a Shiitake farm, which could have bought oak logs from within the state. Study on growing the mushroom in this state has been underway for several years.

In 1982, the firm decided to settle in Virginia, but found that the Shiitake would not grow well during the winter months, according to Mark Titus, the Corporation's Vice-President.

"We were looking toward the deep South to produce mushrooms in the winter," he continued, "when a very reliable greenhouse strain was developed." Greenhouse cultivation has permitted Elix to produce Shiitakes year round in Virginia, where they buy inexpensive spare logs from local paper companies.

Titus also pointed out that Elix sells its produce in most major cities in America and Canada, along with some dried mushroom shipments to Europe. Japan has also inquired about the purchase of Shiitakes from the firm.

The Orientals have a large demand for the mushroom, but they must buy the costly oak logs on which to produce it from American tree farmers. In Japan, where the Shiitake is a \$2 billion per year industry, the average person eats five times more of it than the average American's consumption of white mushrooms.

Georgia's weather is too warm for Shiitakes in the summertime, but would be just right in the spring and fall, Titus says. Possibilities still exist in Georgia for Shiitake farming, as well as the sale

of oak logs to the Orient.

After numerous experiments, Les Kodger, a Shiitake grower in Virginia, has found that the plants grow most effectively on four to six inch diameter logs cut into four foot segments. The thicker logs can last four or five years, whereas thinner logs produce a great quantity, but have a shorter lifespan.

After the log is cut, it must cure for three to four weeks before it is treated with fungus. When it is ready, inoculation begins. Ten to 15 holes are drilled in the log, then fungus covered plugs are inserted into them. Then the logs must be stacked on racks and stored for three to four months in a shady area near a water source. The mushroom mycelium will grow throughout the log and will appear at the cut ends as a white growth.

To induce sprouting, the stacked log rack must be pushed over. Then the logs must be soaked with water by immersion or sprinkling for 24 hours. Kodger claims that this year's dry weather has made it difficult to keep his logs moist.

Finally, the logs are restacked on the racks and the mushrooms sprout. Though logs are only inoculated once, they must be pushed over and soaked every three months. Shiitakes will sprout every year from April to November.

Kodger has been growing Shiitakes for two years. After attending several conferences and traveling across the country to research the plant, he decided to grow them for supplemental income. Since then, he has devoted the bulk of his time to his 13,000 log operation. He hopes to harvest several thousand pounds of mushrooms this year.

Shiitakes are more expensive than white mushrooms, but they last longer. Growers claim that their product is meatier than the whites, and is worth the price for the taste alone. "When you consider the work of preparing the logs, harvesting, packaging, shipping and marketing," Kodger says, "you earn every penny you make. Determination and the grace of God will get you by in this business," he continued.

The Shiitake grower must keep a close watch on the progress of his logs. He must beware of insects, low humidity, and a certain fungus which attacks black oaks. Observing productivity can also show him what changes to make. Experimentation with different types and sizes of logs and different strains of mushroom fungus can help to increase production. Kodger explains that different strains work best in different climates.

Shiitakes are very nutritious, and are especially high in protein. Furthermore, Japanese studies have found that eating Shiitakes reduces cholesterol buildup in the body. More recently, they have determined that extract from the mushroom reduces cancerous tissue in laboratory animals.

Kodger said there is a large local market for fresh and dried mushrooms and that he is having a difficult time meeting the demand. The huge response of the local restaurants has made it easy to sell his produce without having to ship it to the large cities.

He has also found a growing demand for spawn fungus, specially designed mushroom log drills and other equipment.

Other farmers in Virginia now have small but profitable operations of 1000 to 2000 logs. Larger growers have sprouted in North Carolina and in Pennsylvania, where experiments are being conducted with indoor cultivation on sawdust bags.

Presently, the Kodger's are trying to increase the output of the family business to keep pace with demand. As his product becomes more accessible to the public, Kodger explains, the white mushroom producers will suffer. He is looking for Shiitake to become a household word within the next five years. With the increasing supply and demand on the American market, and the potential of Shiitake exports to the Orient, his prediction may become reality.

Mushroom production could eventually become another profitable enterprise to add to the long list of forest-related industries in Georgia.

Photos on opposite page, top to bottom: A brown covering in the hole indicates spawn has provided its function as the catalyst to introduce shiitake into the oak log. Plugged logs are stacked with first layer on blocks of wood or stone until they reach a workable height for the individual grower. Area becomes a series of "pig pen" structures. Bottom scene is growth produced on a bag of sawdust under indoor conditions.



NORRIS AND MALM NAMED TO TREE FARM POSITIONS

Thomas F. Norris, assistant to the operations manager, Union Camp Corporation, Savannah, has been named the 1987 Georgia State Tree Farm Chairman to succeed Charlie A. Wisekal.

Norris, a native of Martinburg, West Virginia and a former member of the Board of Directors, Georgia Forestry Association, will assume the office January 1, 1987.

A graduate of the School of Forest Resources, University of Georgia, Norris is immediate past president of the Savannah Area Forestry Club and a member of the Society of American Foresters.

The new chairman is married to the former Miss Linda Barnes and they have one son, Sam. The family attends the Wilmington Island Methodist Church in Savannah, where they reside.

Meanwhile, Richard L. Malm, also of Union Camp Corporation and a resident of Savannah, has been named Reforestation Committee Chairman, Georgia Forestry Association. He will assume the office effective July 1 of next year.

He is regional manager, Savannah Woodlands, for his company and at one time served as a forest economist with the Peace Corps in West Africa. He earned forestry degrees from West Virginia University, (BSF), University of New Hampshire, (MSF), and the University of North Florida, (MBA).

Malm, a native of Long Island, New York, is a member of the Georgia, Florida and South Carolina Forestry Associations, Society of American Foresters and the Savannah Area Forestry Club. He is married to the former Miss Patricia A. Cox of Massapequa Park, New York, and they have three children, Michael, Elizabeth and Matthew. The family attends St. Francis of the Islands Episcopal Church.

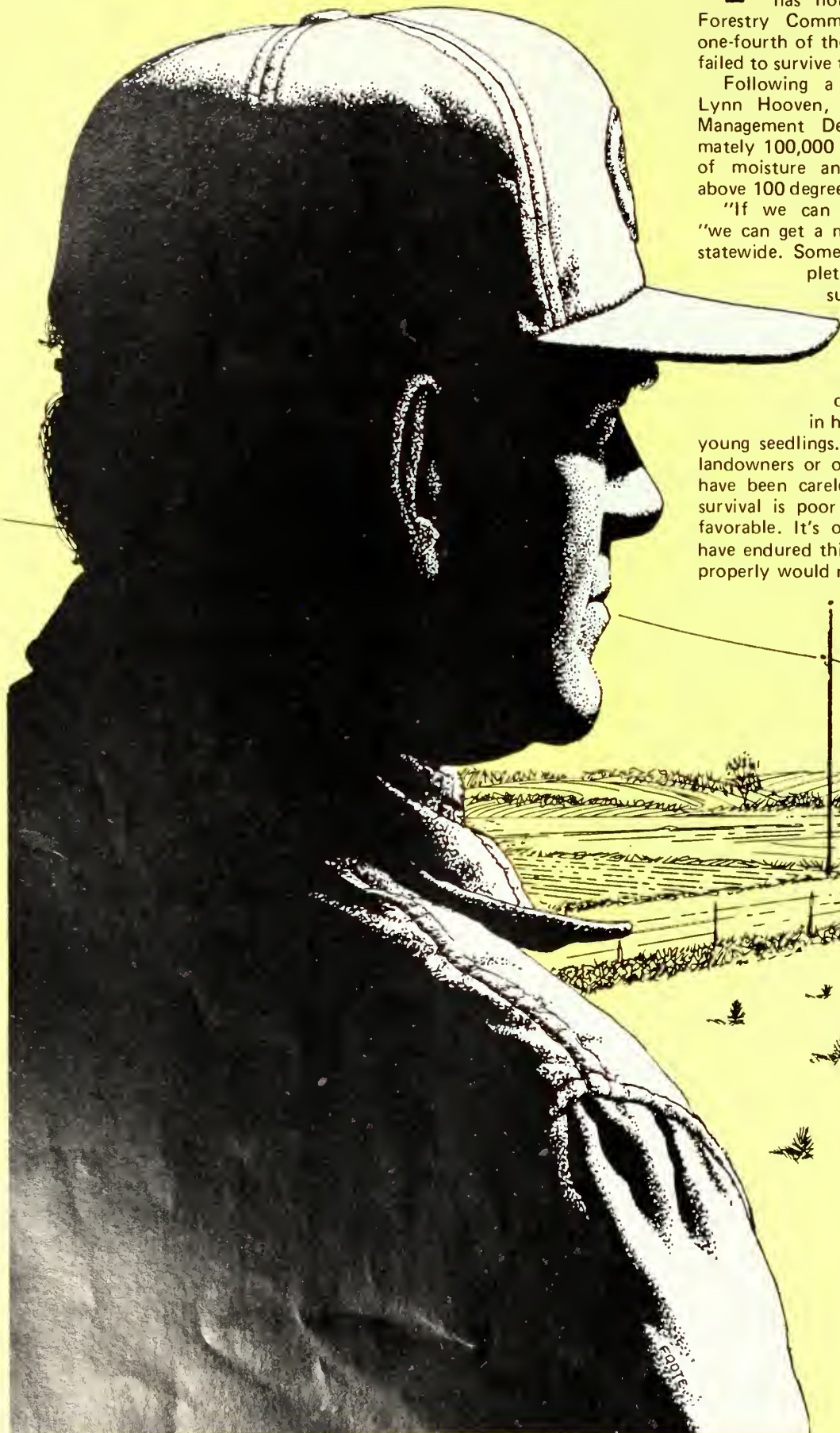
SEPTEMBER LANDOWNER CONFERENCES SCHEDULED

A series of forest landowner conferences scheduled for September by the Georgia Forestry Commission and three other organizations will include discussions on a wide range of forest topics to benefit both the rural and city residents who own woodlands.

A conference will be held at Albany Junior College in Albany on September 9, with Eley Frazier III serving as moderator. The second conference will be at Cracker Williams Recreation Center, Jesup, on September 10, with Bill Miller, Sr. as moderator. A conference will be held at Holiday Inn in Milledgeville on September 16, with William C. Humphries as moderator. An Athens conference, to be held at Finchum Phoenix on September 23, will be moderated by Owen Perry. Sydney Kinne III will moderate the conference at Berry College in Rome on September 24.

All conferences will begin at 1:15 P. M. Discussions will include timber management, production, tax laws, Southern pine beetle, life after the sale, and other topics.

Cooperating with the commission in sponsoring the conferences will be the Georgia Forestry Association, Cooperative Extension Service, and the Forest Farmers Association. Detailed information on the series is available from any of the sponsors.



The full extent of damages brought about by the record-breaking drought that seared fields and forests across Georgia this year has not been tabulated, but the Georgia Forestry Commission has determined that about one-fourth of the young seedlings planted last winter failed to survive the extreme heat.

Following a statewide survey in late August, Lynn Hooven, chief of the commission's Forest Management Department, reported that approximately 100,000 acres of seedlings were killed by lack of moisture and temperatures that often soared above 100 degrees.

"If we can get sufficient rain," Hooven said, "we can get a more accurate picture of the damage statewide. Some fields of seedlings have been completely wiped out, while others somehow survived the heat and lack of moisture.

We've seen quite a number of fields where survival has been scattered."

Hooven said a greater number of trees might have survived the drought if proper care had been taken in handling, transporting and planting the young seedlings. "We have found instances in which landowners or others who do the planting for them have been careless in their reforestation effort and survival is poor even when weather conditions are favorable. It's obvious that during the drought we have endured this year, seedlings that are not handled properly would naturally have no chance of survival."

THE GREAT DROUGHT OF 1986

As a result of the commission's continuing reforestation campaign, more than 420,000 acres of trees were planted last fall and winter. "With the drought canceling a fourth of this planting," Hooven continued, "we are encouraging landowners to replant this acreage." He said many have agreed to replant.

Meantime, the firefighting crews of the commission have seen more activity this summer than in any previous year.

Wesley Wells, chief of the Forest Protection Department, said more than 1,200 fires occurred in July, a considerable outbreak when compared to the less than 200 that occur in a normal July. A substantial decrease was seen in August, however, as a result of scattered showers, he said.

VEGETATION PARCHED

Wells explained that vegetation that normally retains moisture during the summer months and resists fire has been very dry this year. It feeds a fire as if it were frost-killed underbrush that is present in the fall.

The protection chief also pointed out that the temperature of fires during a heat wave often reach 180 degrees and "that's enough to kill even mature trees." In the winter and early spring the traditional fire season-temperatures are much lower and fire in the forests does not kill all growth, he said.

The drought also dried up many streams and swamp areas that normally serve as natural firebreaks. Commission personnel annually plow approximately 17,000 miles of firebreaks, however, and this precautionary measure has helped firefighters keep damage to a minimum during the summer months. The average fire is being held to less than five acres, records show.

Paul Butts, utilization forester at the commission's state headquarters in Macon, said the drought has made it possible for loggers to "get into the woods every day in the week." He said the activity, however, has brought about an abundance of logs at the mills and has actually depressed the market.

Johnny Branan, chief of the commission's Reforestation Department, said the seedling crop at state nurseries has not been affected by the heat wave, as the beds are irrigated during every growing season. He said, however, that "we can certainly expect a higher demand for seedlings this year, as landowners will want to replant trees killed by the drought...we anticipate a shortage of seedlings."

Ken Bailey, staff forester who heads the Urban Forestry Units, said his office at Stone Mountain received from 150 to 200 calls daily from residents of the Atlanta Metro areas who are concerned over dead or dying lawn trees.

Many of the trees were already under

stress because of overcrowding, beetles, root rot, adjacent construction and other causes and the drought hastened their death, according to Bailey. Trees in areas of rock outcroppings die more readily than others, he said, as they are growing on a shallow layer of soil.

Bailey predicted damages from the drought will be felt for at least the next two years. "Trees store carbohydrates for food in roots and trunk and the small growth this year has limited the storage space for that food...because they haven't been able to store or produce the food, many trees will die next spring when they try to regenerate new buds and leaves," he said.

Urban Forester Louie Deaton said 35 trees died in the South Atlanta area which he serves. He said trees close to concrete paving have suffered from the drought and many of the weakened trees are being killed by beetles. He said established young trees have a better chance of survival because they require less water. Deaton foresees "a lot of available firewood in the next few years" as a result of the death of mature trees this summer and those that will die in the months to come.

WATER TRANSPORTED

Don Freyer, coordinator of the Rural Fire Defense Program, said some tankers and other equipment on loan to rural fire departments might have to be used to help battle forest fires if the drought situation worsens. Presently, some equipment is being used to transport water to areas where wells have gone dry and some commission trucks are being used to haul hay to farmers in several sections of the state.

High temperatures in July and August curtailed the spread of the Southern pine beetle, according to Entomologist Terry Price, but he said cooler weather will definitely bring about increased

activity of the insect. The beetle outbreak is currently listed in the epidemic category in 23 counties.

Ed Ruark, a director of the Georgia Christmas Tree Growers Association, said almost all growers have lost newly planted stock and the drought has killed some trees that were two and three years old. He said white pine, Virginia pine and red cedar have been hit by the extreme heat and lack of moisture on his farm near Bostwick. He said growers are finding that the drought is preventing the trees from replenishing and many will not have the new growth to provide a good appearance for the Christmas market.

Ruark said, however, that there will be enough quality trees this winter to compete with trees shipped in from the Northern states. He said some sections of the state have had sufficient rains to produce a good crop.

WILDLIFE SUFFERED

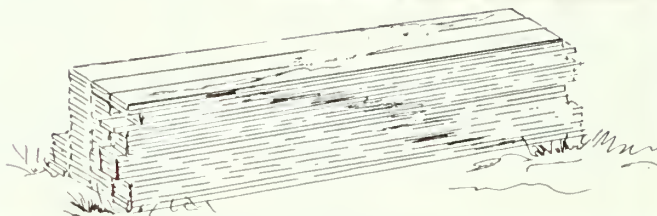
The lack of rain and intense heat in the woodlands has also had a drastic effect on wildlife. Dick Whittington of the Georgia Game and Fish Department said fruits, nuts and acorns are falling prematurely and many animals will be faced with a food shortage this winter. He said wildlife may already be in a weakened condition because of a poorer quality of vegetation this summer.

Whittington said there will be a poor quail hatch this summer as the long periods of low humidity dries out the membrane in quail eggs. He said reptiles and fur bearing animals are relocating to larger bodies of water as small streams and ponds dry up.

Foresters, farmers, financiers and others directly involved in assessing the cost of the great drought of 1986 agree that it will take years to fully realize its impact.



Church officials admire the richness of yellow pine in their recently completed church. Left to right are Felton Denney, pointing to the ceiling that was installed by members, the Rev. Larry Pearson, standing at the custom built pulpit, and Chester Gibson, examining a section of wainscoting.



YELLOW PINE: Its Beauty Re-Discovered

When 66 Carroll Countians decided to band together and form a new church, they re-discovered the beauty of wood in church architecture while using a 100-year-old sanctuary as a temporary meeting place.

The charter group was so intrigued with the ancient edifice and its beautiful natural pine interior that it was unanimously decided that the church they were to build would feature plenty of rich yellow pine.

Today, Rocky Mount Baptist Church is an attractive, gleaming white structure surrounded by a pine forest that borders a scenic, six-acre recreational lake. The interior features approximately 5,500 feet of exposed yellow pine. The material, all consisting of one-by-four tongue and groove stock, is used in the ceiling, as a wainscoting and even in the hand-crafted pulpit.

Chester Gibson, a member of the faculty of West Georgia College and a charter member of the new church, explained that although the lumber went through a planer at the mill, each piece was carefully sanded by members of the congregation before it was used. He said about 80 percent of construction work on the church was carried out by members.

Felton Denney, another charter member of the new church some six miles south of Carrollton, pointed out that the type material they used is not found in lumber yards. He said they had to find a mill that still makes tongue and groove lumber. Denney, who is also a member of the board of directors of the Georgia Forestry Commission, naturally took a keen interest in the use of pine and advocates a wider use of native wood for durability and beauty in other new buildings.

The Rev. Larry Pearson, minister of the young church, said he is especially impressed with the craftsmanship that

went into the pulpit. Made entirely of pine by Carl North, a member who works in antiques and furniture finishing, the handsome rostrum was constructed with wooden pegs instead of nails.

Denney said there was one drawback in using the exposed lumber so extensively in the interior of the church. The material was not uniformly manufactured and it was not clean.

Blue chalk marks and oil stains from mill machinery were found on practically every piece, he said, and "every piece had to be sanded before we could use it." One member arrived at the construction site at four o'clock in the morning to begin sanding so the carpenter work could continue uninterrupted during the day, according to one of the group.

Denney said he would like to see more pine used in construction in Georgia, especially in buildings where it could be exposed to reveal its beauty in grain and color. He calls, however, for two changes: a uniformly manufactured product with careful attention to tolerances and a clean, packaged product that would not have to be "refinished" by the builder.

If these reforms were made, he feels architects and building contractors would take a greater interest in using native pine. He also urges research that would lead to more lamination of pine, especially high quality pine that would be backed by a lower grade plywood to create paneling.

The congregation is proud of the 9½ acres of forest and lake donated by a member for the church site and grounds, but the solid pine ceiling inspired by a church down the road that was built a century ago is what draws the attention and admiration of many visitors.

HARVEST BY HELICOPTER



A NEW WAY OF LOGGING

Tollison Lumber Company of Perry has completed an expensive and hazardous six-month helicopter logging operation that produced some of the highest quality hardwood to be found in the state.

The operation, located 15 miles south of Macon, produced 100,000 board feet a day from designated areas of a 11,000-acre tract. Yellow poplar and blackgum were the main species harvested. Some high quality cypress was also included.

Steve Carter, who directed the operation for Tollison, said most of the hardwood will go to specialty markets. "Eighty percent of our hardwood goes to the North Carolina furniture market," Carter pointed out.

Tollison contracted with Rocky Mountain Helicopters, Inc. to log the remote area. The helicopter organization, with headquarters in Provo, Utah, carries on logging operations nationwide. Although highly skilled in logging, the firm also specializes in numerous operations including building ski lifts. The corporation has 90 helicopters and a matching staff of pilots and ground crews.

The usual helicopter logging operation crew includes one project manager, three pilots, three mechanics, one woods boss, and two landing crew workers.

Brian Brennan, a pilot with the Rocky Mountain crew, accepts the danger of the job as routine. "If you don't scare yourself once or twice a day, you're not doing your job," he said.

A Vietnam veteran with 11,000 hours of helicopter flying time, Brennan pointed out that a number of aerial maneuvers used in helicopter logging are complicated and dangerous. One such maneuver is called the "Wanachee Snatch." Brennan said eleven people have been killed attempting to perfect the technique.

The 36-year-old Brennan flies a Bell 214B-1 helicopter capable of lifting 8,000 pounds. The lift cables range from 150 to 300 feet in length. It is not difficult to imagine the potential problems and danger of an 8,000 pound oblong load swinging 300 feet beneath a flying helicopter.

The ground crew on the Tollison operation worked from a large, cleared area of swamp. The helicopter sweeps back and forth out of the swamp with one or a cluster of logs swinging from a steel cable. The aircraft swings over the cleared area and drops the logs with in-

credible accuracy in a designated drop zone - all the while maintaining radio contact with the ground crew. The helicopter then hovers as Mark Looman, 21-year-old woods boss from Oregon, runs out under the deafening noise and blast of wind created by the helicopter. He catches a giant, electronic hook swinging near the ground, uses his body weight to stop the swing, then quickly attaches a fresh coiled cable.

The helicopter turns backwards and disappears over the treeline into the swamp as Looman and a co-worker quickly coil the dropped cable so the process can be repeated again in a matter of minutes. Another ground crew, deep in the swamp, will perform a similar process while attaching logs to the helicopter. As soon as the logs are dropped, a large transporter scuttles across the clearing, picks up the logs, and then takes them to a loading dock where they are cut in various lengths.

The work is fast-paced and hazardous. However, when running, catching the swinging hook, and deftly flipping the cable into place, Looman makes this manual labor look like an art form. He realizes the danger of his job, but doesn't dwell on it. He considers his job less dangerous than those of the helicopter crew and says he has "close calls only about every other day."

The entire operation is efficient and goes like clockwork.

Tollison's Steve Carter said the extremely high quality of the hardwood harvested made it possible to use such an operation profitably. He said building roads into the remote swamp areas and using conventional methods of logging would be too time consuming and costly.

"Using the helicopter was the only practical and profitable method," Carter said. "Actually, it would be difficult and impractical to log certain areas of this swamp any other way."

The big log dangling from the end of the cable in this photo represents thousands of pounds of hardwood. The aerial logging team contends that snaking the logs out of the big swamp by helicopter is the only practical way to harvest the timber.



VALUE OF STATE'S HARDWOODS CONVEYED AT GRADING SEMINAR

"There's an all-too-common misconception that forestry in Georgia concentrates on the elimination of hardwoods so pines can grow," commented Utilization Forester Paul Butts, during a recent hardwood grading seminar.

Butts explained that low-quality competing hardwoods are eliminated on pine sites, but high quality hardwood sites are carefully managed. He said the commission encourages the growth of high quality hardwood stands and is making a sustained effort to attract hardwood industry to Georgia.

"The fact is," Butts said, "from a practical viewpoint, low quality hardwoods are used primarily for fuel and industrial products; so their value is often minimal to the landowner. But high quality hardwoods are highly valued by specialty markets."

Butts emphasized that when commission foresters apply their hardwood grading skills it is an important step in letting the public know that forestry in Georgia is vitally concerned with the cultivation of high quality hardwood.

The hardwood grading seminar, attended by 70 commission foresters from throughout the state, was conducted by Butts and Karen Kenna of the U. S. Forest Service.

Butts said the most significant consideration in buying and selling hardwood

logs and timber is the grade of the wood. He said accurate grading is vital in relation to high quality hardwoods because the lumber is intended to be used for furniture parts, flooring, and other high quality wood products.

The seminar included an introduction to lumber grades and pointed out how log grades are developed from them.

"Grade one logs will yield 60 percent or more of number one common and better grade lumber," Butts said. "Grade two logs will yield 40 percent; and grade three logs will yield 20 percent."

The course emphasized the use of hardwood tree grades that have been developed from lumber and log grades to determine the value of standing timber. Tree grades consider size, soundness, straightness, and bark characteristics.

The seminar concluded with a field trip to a prime-quality hardwood site where a class was held in tree grading and defect identification. All 70 foresters participated in individual evaluation of marked trees.

Butts described the course as "highly successful on a technical level." He also said the long term impact of foresters using hardwood grading skills throughout the state should create a positive public relations impression. "We need this sort of impression in relation to hardwoods," he said.



The new Miss Gum Spirits of Turpentine poses with James L. Gillis, Jr., president of the American Turpentine Farmers Cooperative, shortly after she was selected for the crown.

KARA BOATRIGHT WINNER OF GUM SPIRITS CROWN

Kara Boatright of Bacon County was crowned Miss Gum Spirits of Turpentine in the recent Miss Georgia Forestry Pageant on Jekyll Island.

The young lady was one of 38 contestants representing Georgia counties in the competition for the Miss Georgia Forestry title. Each year, girls representing the 17 turpentine-producing counties among the entrants are also eligible for the Miss Gum Spirits of Turpentine honor.

Miss Boatright graduated from Bacon County High School, where she was involved in various activities. She participated for three years as a cheerleader and a class officer, and was a member of Junior Superlative and the school's Annual Staff. She was also nominated for Who's Who Among American High School Students. In addition, Miss Boatright enjoys aerobics, cross stitching and "meeting people."

She plans to attend a college in the area to study dental hygiene.

Kara, the daughter of Mr. and Mrs. Edsel Boatright of Alma, will represent the American Turpentine Farmers Association during the year and will be featured on the large wall calendar of the association.

Miss Boatright was crowned by the retiring Miss Gum Spirits, Sharon McNeil, also of Bacon County.

The contestant selected for the honor each year works with the cooperative in promoting products from the important naval stores industry.



Some forestry commission personnel are given a refresher course in hardwood grading under the direction of Utilization Forester Paul Butts.

MISS GEORGIA FORESTRY

A pretty 19-year-old mountain climber - the first in the history of the annual pageant - has been crowned Miss Georgia Forestry for 1986. Kathy Laurie Finch of Commerce was selected from a field of 38 young ladies who had won elimination pageants in their home counties. Miss Finch, who represented Jackson County, was selected for the title and crowned at the state finals held in conjunction with the recent annual convention of the Georgia Forestry Association on Jekyll Island.

In addition to mountain climbing, the statuesque brunette excels in tennis, basketball, swimming and other vigorous sports. "Mountain climbing is something some of us do at North Georgia College, "and I also enjoy repelling." Repelling is descending from the height of a mountain by means of a taunt rope, according to the college junior. She said she also enjoys reading, cooking and cross stitching.

Actually, the victory on Jekyll Island was her fourth win in beauty and talent contests. She was crowned Junior Miss of Jackson County while in high school and later won the Miss Jackson County title. She captured first place to become Miss Echo and was featured in the school yearbook.

The new Miss Georgia Forestry, who was crowned by the retiring title holder, Miss Ansleigh Riddle of Montezuma, is a member of Kappa Delta Sorority at the college in Dahlonega and also serves as a resident assistant.

When home in Commerce for the summer, she is active in the local United Methodist Church and jokingly declares she serves as "cook and maid for my three brothers." She said it is "because of my brothers that I learned to love sports."

Kathy rode on the Georgia Forestry Commission float in the July 4th parade in Atlanta and will participate in other parades, festivals, fairs and other events in which forestry will be promoted.

Placing second in the annual pageant was Susan Gowen, daughter of Mr. and Mrs. Gary Gowen of Folkston. She is a graduate of Charlton High School and is now attending Georgia Southern College in Statesboro.

Runners up were Torri Turner, daughter of Dr. and Mrs. Clayton Turner of Glennville, and Kim Tatum, daughter of Mr. and Mrs. Toomer Tatum of Waycross.

Home for the summer from college, the new Miss Georgia Forestry spends some time in the kitchen to help prepare family meals, but she would rather spend more time with a good book. She said there are always "plenty of books around the house," as both her parents, Mr. and Mrs. Aubrey Finch, are educators.



RUARK NAMED TO HALL OF FAME

Begun as a relief program during the 30's, the Civilian Conservation Core established working camps all over the country in an effort to bring jobs and hope to a depressed nation. To a young man from Bostwick, working at a CCC camp only meant bringing in extra money to help support the family's



Ruark

North Georgia farm. He had no way of knowing that some 50 years later he would look back at that temporary job and say "that's where it all started...the beginning of my career in forestry."

Ed Ruark, newest inductee to Georgia Foresters' Hall of Fame, recalled that the advice of a University of Georgia professor influenced his decision to study forest resources. "I worked in the nursery," Ruark remembers. "My boss had a degree in horticulture, but he encouraged me to study forestry."

After graduation and a four-year-tour in World War II, Ruark's career in forestry began in a North Carolina saw mill. "My father hurt himself chasing a loose cow back on the farm in Bostwick...so I came back to Georgia." On his return, Ruark was appointed Chief of Fire Control for the Georgia Forestry Commission for five years.

Although Ruark left the commission to work for Owens-Illinois in Florida, his work at the commission set the precedent for his rise to the highest honor bestowed on a forester in Georgia.

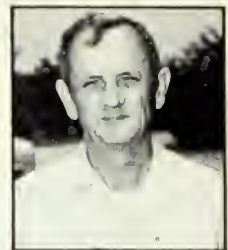
In 1959, Ruark was appointed director of Georgia Forest Research Council, where he coordinated and initiated all of the forest research in Georgia conducted by state, federal and private agencies. After his retirement in 1978, the GFRC became a part of the commis-

Although Ruark feels the Hall of Fame is the "greatest thing that ever happened," he is no stranger to awards and recognition. An active member of SAF for 40 years, Ruark has held many offices and committee posts on the local, state, and section levels. In 1978 the Southeastern Section of the SAF honored him with their research contribution award. In 1966, the Secretary of Agriculture appointed Ruark to the Cooperative Forest Research Advisory Committee of the U. S. Department of Agriculture for two consecutive terms.

After such a celebrated career, one would expect the 'retired' forester to relax and enjoy peaceful living. "In the 70's, Kaye and I bought some land in Bostwick with retirement in mind," said Ruark. "We began a small Christmas tree farm called Jack's Creek." Now the small farm has grown into one of the most respected and productive farms in Georgia.



Millians



Womack

W.D. MILLIANS, who has been with the Commission 34 years, has retired. He holds a degree in forestry from the University of Georgia and he started as an assistant district forester in Newnan, and retired as a District Forester in Milledgeville. Millians is a native of Franklin and has a wife, Betty, two sons, Ricky, and Mike, and four grandchildren. A retirement party was held in his honor August 29 at the Milledge-



Finch



Harcrow

ville Country Club...COY WOMACK of Davisboro has recently retired from his position as district ranger in the Milledgeville District. He began working for the Commission 34 years ago as a patrolman and also served four years in the Navy. Womack and his wife have three children, Bobby, Wayne, and Donna, and four grandchildren...Ranger JACK FINCH has retired after 31 years of service with the Commission. He started as a patrolman and was promoted to ranger in 1976. He spent two years in the army before working for the Commission. In his hometown of Sylvania, Finch attends the Methodist

STATE'S LARGEST DRILL CONDUCTED

A Commission coordinated mock disaster drill-the largest ever staged in Georgia-was recently executed in Carroll County and involved virtually every emergency vehicle in the area and approximately 200 people.

Bill Woodyard, a commission district ranger stationed in Newnan and chief coordinator for the drill, spent six months planning and setting up the complex exercise. The purpose of the massive drill was to coordinate efforts of all emergency personnel in the event of an actual disaster.

The simulated disaster area covered more than 1,000 forest acres and included a large forest fire, house fires, arson fires, auto wrecks, numerous injuries, and a helicopter crash.

To maintain an atmosphere of reality, none of the emergency personnel were informed of the drill date until the morning it was executed. Expert make-up artists made up numerous simulated victims with lacerations, compound fractures, etc. Drill units simulated the emergency personnel on the handling and treatment of these victims as well as all other phases of the exercise.

Commission Director John W. Mixon said Carroll County was a valuable drill site because of large areas of open forest land and a large rural population that could be threatened by a major forest fire. Mixon explained that forest fire emergencies experienced by other states emphasize the urgent need for Georgia to be ready for such situations.

Ranger Woodyard said a major reason for the success of the drill was the cooperation of area residents - especially those on the actual 1,000-acre drill site. "Many of the site residents participated as volunteers. We simply could not have had such a successful drill without this sort of cooperation."

Other agencies involved in the drill included the Carroll County Fire Department, Sheriff's Office, and Civil Defense; the Carrollton City Police and Fire Department, the Georgia Department of Human Resources, Georgia State Patrol, the American Red Cross, West Georgia College Police Department, West Georgia Emergency Medical Service, Georgia Baptist Medical Center Life Flights, Georgia Kraft Co., and the Tanner Medical Centers



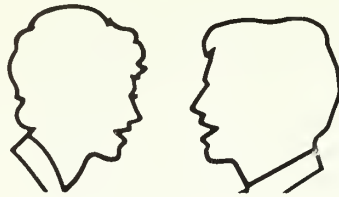
McWhorter



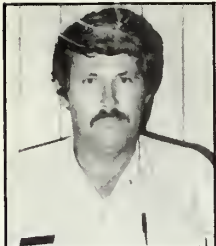
Watkins

Church with his wife, Shirley, and son Wendell...JOHN HARCROW, former ranger of Heard/Troup County and graduate of Berry College, retired in August. In 1955, after two years in the army, he joined the Commission as a patrolman. Harcrow, a native of Heard, has a wife, Wanda, and five children, Merrell, Doyle, Dennis, Riley, and Kim. He also has 12 grandchildren...A native of Rochelle, SHELTON McWHORTER retired last

PEOPLE



IN THE NEWS



Belflower

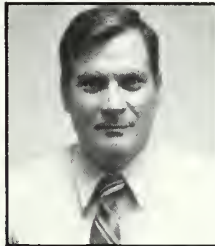


Johnson

month after 32 years of service to the Commission. Hired as a patrolman, and retired as Wilcox County ranger, he also served almost two years in the army. McWhorter and his wife, Mildred, have five children, Terry, Larry, Carol, Jon, and Beverly, and two grandchildren...HAROLD WATKINS recently retired from his position as Twiggs/Wilkinson County ranger. A commission employee for 32 years, Watkins lives in Wilkinson County with his wife, Shirley, and has two sons Thomas, and Victor, and four grandchildren. They



Thigpen



Wells

are active in the Methodist Church...WAYNE BELFLOWER, former superintendent of Morgan Nursery, has assumed the head position at the Page-Walker-Shirley Complex. A graduate of Middle Georgia College, Belflower spent four years in the Marine Corps and is currently in his 17th year with the Commission. He lives with his wife Mattie, and children, Tony, Kim, Nikki, and Joy, in Cochran, where they attend the Baptist Church...Belflower has been replaced by



Allen



Degler

CHARLES JOHNSON, who joined the Commission in 1979 and who was pre-

viously the assistant superintendent at the Morgan Nursery. Johnson lives in Macon County with his wife Debra and four-year-old daughter Tabatha. They are members of the First Baptist Church there...DENNY THIGPEN, who holds Associate degrees in forestry technology and wildlife technology from Abraham Baldwin Agricultural College, has been promoted to forestry technician at the Walker Nursery. He came to the Commission one year ago as a Liberty County patrolman and lives with his wife, Sheila,



Black



Perry

in Reidsville. They attend the Baptist Church...Forester JOHN WELLS is on loan to the Department of Industry and Trade in Atlanta. In his second year with the Commission, Wells holds a bachelors degree in forestry and a Masters in Forest Economics, both from the University of Tennessee. He has also spent 14 years in the Army Reserve, and is currently a captain. Wells is a member of Fairview Methodist Church south of Atlanta...RONALD ALLEN, a graduate of the University

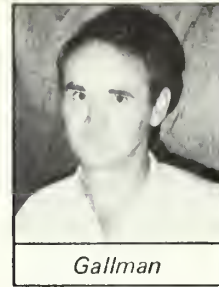


Toole



Brewton

of Missouri School of Forestry, is now serving as the District Four Forester, moving up from his position as Meriwether County ranger. This Missouri native lives with his wife, Donna, and stepdaughter, Heather. They are active in the Baptist Church...Taking his place as Meriwether County ranger is GARY DEGLER, originally from Reading, Pennsylvania. Educated in environmental studies, Degler is in his fourth year with the Commission...The Sixth District welcomes CATHY LYNN BLACK as its



Gallman



Gray

newest forester. Originally from Maryland, she was educated at Clemson University, and has worked as an urban forester in Richmond County. Black and her husband, Sonny, are members of the Methodist Church...MARGARET PERRY of Forest Administration in Macon, has been promoted from Accounting Technician to serve as Payroll Supervisor. She was educated at the Georgia/Alabama Business School of Commerce and has three children and three grandchildren. She attends the Baptist Church in Macon...Also in Forest Administration, TERESA (TERRI) TOOLE was promoted from Clerk Principal to Property and Supply Supervisor as of July. A Bibb County native, Toole is in her 15th year with the Commission and is active in the Baptist Church with her 10

year-old daughter, Heather...BENJAMIN BREWTON, a Video/Audio Specialist was transferred as of March from the Research Department to the Education Department in Macon.

This native of Claxton is a member of Vineville Baptist Church...JIMMY GALLMAN, a former patrolman of Pickens and Whitfield Counties, was recently promoted to Whitfield forest ranger. Gallman, who has worked with the Commission eight years, and his wife, Paulette, have a son, Jimmy...STEVE GRAY is now serving as forest ranger of the Douglas-South Fulton Unit, following a promotion from Carroll County patrolman, a job which he has held since he joined the Commission five years ago. A native of Carrollton, he has a five year-old son, Jimmy Jr. ...WILBUR HELMS has been promoted to the Wilcox County forest ranger position. A native of that county, he formerly served as a forest patrolman. He has worked with the commission for 32 years. Helms and his wife, Vernice, have two sons, Michael, and Jeffrey.



Helms





DO IT FOR HIM!

You will not see all his tomorrows, but you can be assured that the trees you plant and protect today will enhance his future. What better way to help provide financial security for your children when they reach adulthood in an uncertain world! The Georgia Forestry Commission this year is growing more than 176 million seedlings. If you're a landowner, a portion of those young, healthy trees are for you. Pick up an order form at any commission or ASCA office. Plant for yourself. Plant for your children.



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Georgia Forestry is published quarterly by the Georgia Forestry Commission, Route 1, Box 181, Dry Branch, GA 31020. Second class postage paid at Macon, GA. POSTMASTER: Send address changes to Georgia Forestry Commission, Route 1, Box 181, Dry Branch, GA 31020.



BUILDING IN A FOREST

DON'T LET DANGER LURK BEHIND SYLVAN BEAUTY

A suburban or rural home nestled in a scenic forest is often considered the ideal setting for a beautiful residence.

It's the dream of many families to have a home surrounded by an ever-changing forest; to enjoy its freshness in the spring, its blazing hues of autumn, and its serenity in the leafless winter.

But that dream can turn into a nightmare!

Last year, stubborn wildfires in neighboring Florida raced through expensive residential subdivisions that were built on heavily wooded land. There was a staggering loss of property because the homeowners had taken no precaution against a threat that is always present when woodlands are dry and the wind is high.

The Commission's Forest Protection Department fears a structural fire situation might occur during the current season. There is also a growing concern among other firefighting agencies - mainly city and county fire departments - that the tendency in recent years for developers to build homes in thickly wooded areas will result in serious problems if fire strikes under certain weather conditions.

According to the 1985 Southeastern Area Fire Summary, fires in Georgia and twelve other southern states destroyed or damaged more than 700 homes.

A report by the Southeastern States Forest Fire Compact Commission cites confusing road systems, burned road signs, bad communications among fire protection agencies, vacant forested lots and extreme drought and fuel conditions as problems in subdivision fire control.

SAFETY MEASURES

On the other hand, green lawns, clean yards, broken tree crown closure, sprinkler systems, brush clearance around the house, and active fire defense by residents are recommended measures for suburban and rural fire prevention. The report also notes that frame houses, single houses in wooded areas, and houses on flat land are especially susceptible to destruction by wildfire.

To reduce wildfire loss, developers are encouraged to work with the fire suppression organizations in local areas to develop plans for wildfire protection.

They are also advised to create fuel breaks, to thin out dense forests and to eliminate crown closure around each structure. Grasses and shrubbery which do not burn as easily should be planted around structures, and dead fuels left over from construction should be dispo-

ON THE COVER

Few scenes in Georgia are as beautiful as the riot of color that comes to an autumn forest along a country lane. This spectacular photograph courtesy of Barry Nehr, U. S. Forest Service, Atlanta.



to help protect their home. They should close openings such as windows, doors and vents, as well as window shutters, drapes and blinds. Flammable items should be brought indoors and moved away from windows and sprinklers and hoses should be taken to the roof. Vehicles should be parked in the garage and facing the evacuation route.

Though houses in some instances can be spared if the residents remain to fight the fire, sometimes evacuation is absolutely necessary. Availability of water, type of roof, proximity of vegetative fuels, presence of firefighters, equipment and access to safe areas must all be considered in this decision. If there is any doubt, the safest and wisest choice is evacuation.

DAMAGE INCREASING

Although these fire hazards and safety tips have been available for some time, the damage from woodland home fires in the South increases every year. Homeowners, developers, local governments and others are either ignorant of the threat or indifferent to the problem. Many feel that living or vacationing in the natural environment is worth the risk involved, and that a wildfire will probably never effect them.

Fire prevention experts agree that safe and beautiful homes in natural settings can be achieved, but that day will not come until building architects, landscape architects and builders, as well as homeowners themselves, come to realize the great danger in constructing in dense forests and abide by the several safety rules that would protect them from forest wildfire.

ed of with a prescribed burn wherever possible.

It is up to the residents to maintain fuel breaks and to keep roofs, yards and nearby trees clear of dead foliage, as some fires spread from garden litter to the house. They must also be sure to store firewood and flammable materials at least 50 feet from all structures.

For further protection, roofs, exterior walls, decks, balconies, fences and out-buildings should be constructed with fire resistant materials. During a wildfire, most houses are ignited by burning embers falling on the roof. Automatic roof sprinklers are too unreliable to take the place of fire resistant material. Other recommended structural materials are underground power supply systems, metal skirting for mobile homes and spark-proof screening for roof and floor holes.

CLEAR ROAD SIGNS

Concerning public facilities, the report stresses the importance of building high grade wide roads so that fire suppression equipment can reach every lot. Road signs are another great problem in forested areas. Clear road markings should be made of fire-resistant materials.

Roadside vegetation should be cleared back at least ten feet and land should be dedicated for a fire station in each large residential development. The public water system must be able to supply adequate volume and pressure for a minimum duration fire flow of two hours. An abundance of fire hydrants and water supplies, such as pools, lakes or ponds, also help to control wildfires.

Every woodland home should have fire

emergency plans which include: escape routes, firesafe sanctuaries, normal and emergency communications, evacuation sites and delegated duties for each family member. During hazardous fire weather, residents should rely on television and radio for fire danger alerts. For minimum emergency firefighting, every house should be equipped with ladders, sprinklers, fire extinguishers, buckets, shovels, water pumps and two or more exterior faucets and garden hoses.

In case of an approaching wildfire, residents must make certain preparations

PERRY NAMED PERSONNEL DIRECTOR



Randall C. Perry, formerly Personnel Manager III in the Commission's Atlanta office, has been named Personnel Director to fill the post recently vacated by the death of Julian Reeves.

Perry, a native of Laurens County and a graduate of the School of Forest Resources, University of Georgia, came with the Commission in 1972 in the old Griffin District and later served as forester in the Burke County unit before his promotion to the Atlanta office in 1983.

The personnel director and his wife, the former Miss Kathy Potts of Commerce, have two children, Jason 12, and Jill, 5.

The family resides in Grayson, an Atlanta suburb.



At left: J. T. Daughtery, center, and son, Gene, check conveyor as Charles Daughtery brings up another load of sawdust. Below: Cook County Forest Ranger John Mainor and Gene Daughtery inspect thoroughly cured tobacco leaves.

CURING WITH SAWDUST

Farmers in the tobacco belt of South Georgia have used wood, coal, propane and diesel to cure their leaf each season, but none of those fuels have been more economical or readily accessible as that used by J. T. Daughtery and sons of Cook County.

On the Daughtery farm near Adel, plain old sawdust is being used to generate heat to turn green tobacco leaves to golden brown.

Daughtery, a 50 year veteran in the business of growing and processing tobacco, has seen the curing process come full circle in depending on the forest as a fuel source. Abandoned, old-fashioned barns throughout the belt are reminders of the early days when wood was used exclusively and now a by-product from the lumber mills has found its place in modern-day curing.

In the Daughtery operation, sawdust is blown into a furnace to heat a boiler that sends hot water circulating through a network of large pipes in the four barns. The temperature is first set at 110 degrees fahrenheit to color the tobacco and then raised to 180 degrees to dry the leaf.

Daughtery and sons, Gene and Charles, bought the system about eight years ago from a manufacturer in Moultrie. They said it had some mechanical flaws, but in making many changes through a trial and error procedure, the apparatus now functions smoothly.

"We started out feeding the furnace with an auger," Daughtery said, "but we soon learned that the system would become clogged and we went to a vacuum cleaner for inspiration by blowing the sawdust into the furnace."

A "rotational cage" is used at the front of the furnace to sift and separate any clogging debris that might be in the

sawdust and cause problems.

The savings in fuel costs Daughtery and his sons are realizing is impressive. When four tons of sawdust at \$50.00 will provide the same amount of heat derived from a 300-gallon tank of diesel at \$180.00, it is easy to understand why they spent considerable time and money in experimenting and modifying a strange, virtually untried system to make it perform satisfactorily.

"Now our electric bill is a lot higher than our fuel bill," the father said. Electricity is used to power a water pump, a conveyor motor and four large fans in the tobacco barns.

The sawdust is hauled from a sawmill in Alapaha and stored in a shed that has a capacity of 120 tons. That's almost enough to last during the six-weeks curing season.

Actually, the system being used on the Cook County tobacco farm has been tried on at least one other farm in Georgia on an experimental basis. In that instance, wood chips were used and several operational problems were encountered.

In recalling his half century in the business, Daughtery spoke of the times when he fired "woodpecker barns" with stove wood, logs, and any debris from the forests that would burn. Unlike the constant heat that is maintained by thermostat in his present-day barns, heat in the earlier days were poorly regulated and keeping a fire was a hard, time consuming chore.

Today, he said very little labor is required and exact temperatures are automatically kept around the clock.

During the 1986 season, more than 60,000 pounds of tobacco passed through the barns on the Daughtery farm and every leaf was cured by heat from the big boiler fueled by sawdust - a material that for generations was considered a waste product and was burned day and night out on the edge of the mill yard.



THE GREAT SWAMP TIMBER HARVEST

REMNANTS OF A LEGENDARY ENGINEERING FEAT TELL THE STORY

BY AMY BEAN

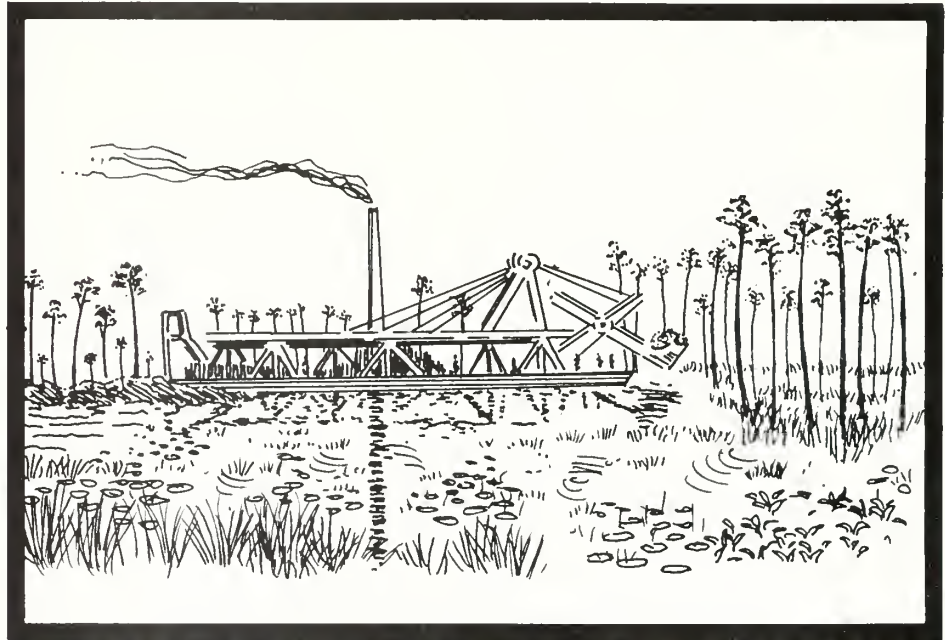
Out of place in the primeval landscape, jagged bits and pieces of railroad piling jutting out of the murky water are the only remnants of the past left to hint at civilization's brief liason with the Okefenokee Swamp. Gazing out at the wilderness, it's hard to imagine that the forests, thick with fauna and wildlife, were once home to hundreds of lumbermen who less than 60 years ago cleared nearly 90 percent of the swamp, leaving only the timber stands that were not economically feasible to cut. For more than half a century, man tried to tame the "land of the trembling earth." Some of the lumber companies found success, others met with bankruptcy.

JACKSON'S FOLLY

Although logging companies were cutting timber from the swamp before 1890, none captured the attention of the public quite like the Suwanee Canal Company. Started by Captain Harry Jackson, a lawyer from Atlanta, the Suwanee Canal Company planned to harvest the lumber from the swamp while at the same time draining the waterways and reclaiming fertile farm land. With much ado, Jackson proposed to boost the economy of the surrounding counties of Ware, Clinch and Charlton, by spending millions in carrying out his project. In reality the Suwanee Canal Company was grossly underfinanced and its personnel unexperienced in logging operations.

According to Robert Izlar and Chris Trowell, authors of "Jackson's Folly: The Suwanee Canal Company in the Okefenokee Swamp," the company was doomed to fail from the start because of lack of money and expertise. Another strike against Jackson's Folly: The personnel had little or no knowledge about the swamp itself. The co-authors wrote "...there is no evidence that the company ever conducted a systematic swamp-wide timber cruise prior to 1893, and cruises thereafter were superficial." (See editor's note.)

Jackson's plan was to build a canal and channel the water into the St. Mary's River. Because of his lack of planning, he had no way of knowing that the Okefenokee Swamp is shaped much like a saucer and sits on a coastal plain. A ridge borders the plain on the east causing the swamp to drain southwest toward the Suwanee River. Only a small percentage



An illustration in the Atlanta Constitution in 1893 was captioned "The Dredge at Work in the Okefenokee."

of the swamp's waters flow to the St. Mary's. After completing only 13 miles of the canal, at the rate of three miles a year, Jackson called a halt to that part of his project. It was estimated that it would take 300 miles of canal to drain the swamp.

When Jackson died suddenly in 1895, his father was elected company president. A former general in the Confederate Army, Henry Jackson sold the company's swamp holdings to the Okefenokee Trust in 1897. It seems both Jacksons were inadequate in marketing their cypress as the company had over five million feet of timber left in the mill at the time of the sale.

Despite its failure, Suwanee Canal Company's methods of logging is claimed to be one of the forerunners of industrial cypress logging. Using steamboat skidders and pullboat methods from 1895 to 1897, the company towed the lumber from the swamp to Camp Cornelia, its mill in Folkston. Unfortunately, transporting the timber was expensive and probably the extra cost helped speed up the company's downfall.

All that remains in the Okefenokee as evidence that the Suwanee Canal Company ever existed is the canal itself. Although the Swampers, a small clan of people who farmed in the swamp as early as 1850, dubbed the company Jackson's

Folly, they thought the canal was an excellent fishing hole. For even now, low water levels cause fish to gather in the canal.

At the turn of the century, a Philidelphian took an interest in the South Georgia wetland and bought the Okefenokee Trust's holdings in the swamp for roughly 68 cents an acre or a total of \$175,000. Charles Hebard, with the help of his sons, Charles and Daniel, founded the Hebard Lumber Company.

A TOWN IN THE HEART OF THE OKEFENOKEE

Based only on the amount of timber brought out of the swamp - over a billion board feet - one would be correct in surmizing that the Hebard Lumber Company was a successful venture. But that success was not easily obtained. The Hebards spent eight years buying additional acreage in the swamp, cruising timber, laying railroad tracks, incorporating two additional companies, building a mill, and hiring logging crews before the first board from the swamp was sawed in the winter of 1910.

Unlike the Jacksons, the Hebards decided not to change the basic nature of the swamp and concentrated mainly on harvesting cypress and transporting the logs to Hebardville, by way of train, to

their mill for processing. Many, including writers Trowell and Izlar, feel this was the key to their success. "...the Hebard Lumber Company did not repeat the Suwannee Canal Company's mistakes," they wrote. "...the Hebards intended only to log the swamp, not develop it."

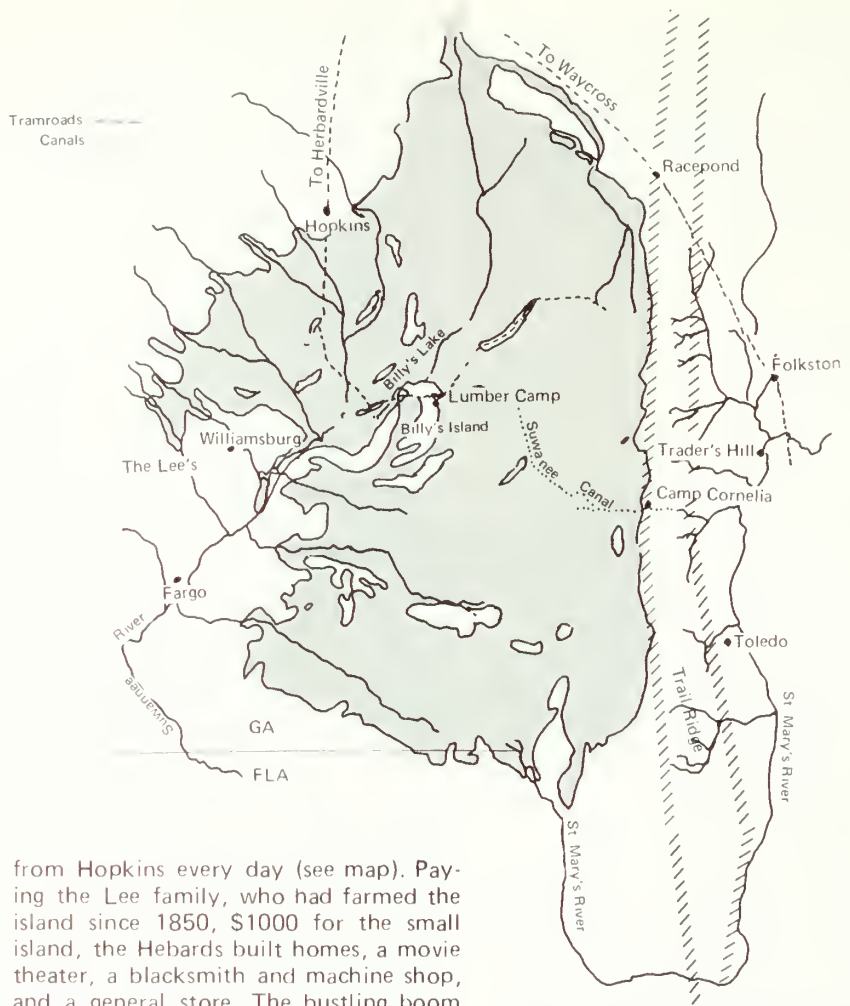
Although the Hebards hired John Hopkins, a lawyer and civil engineer, to cruise the timber in the swamp, the Georgia native stayed with the company as superintendent and helped stake out railroad tracks in the swamp. The stopping point of the Waycross and Southern Railroad, a subsidiary company of the Hebard Lumber Company, is named after the talented employee (see map). At Hopkins, "dummy engines," pulling smaller trains would bring in the lumber from all over the swamp. Here the engine would be swapped for a regular locomotive and transported the 36 miles to Herbardville.

As the crews laid track they found that the Okefenokee was appropriately named. Pilings, made of pine and cypress, were driven 12 to 20 feet in the ground before they found a solid base. In some areas a permanent track built on pilings was not possible so temporary tram roads were laid. Izlar explained that in one area they sank 60 feet of piling into a hole before deciding to crib the track until they reached firmer ground. Unlike the main line which had tracks anywhere from four to six feet above the water, the temporary spur lines were sometimes completely underwater, but trains still traveled over them.

The Hebard's logging technique was unusual but very efficient. After an area was cruised, usually an area called a skidder set which measured about 600 feet square, a crew would come in to deaden the trees. Girdling crews went out three or more months ahead of the loggers. Cutting a four inch line into the cambium, the sap was allowed to drain and the tree eventually died.

After the pile drivers laid out cribbing track to the area, the sawyers and skidder crews arrived to cut and transport the logs. Wrote Izlar, "A spar tree 60 feet tall was selected near the middle of the set... various cables were run from the spar tree to tail trees 1000 feet away. In this way, the entire set could be covered. A choker was attached to a trolley that ran on these long cables. The overhead skidder, which was steam operated, provided the power to pick up the logs. The trolley would be swung out to the logs, where the men would set the chokers on the logs. The overhead skidder would then pick up the logs, transport them back to the deck and load them onto the flat cars."

As the crews went further into the swamp cutting timber, the Hebards determined it would be easier to build a permanent lumber camp on Billy's Island, where they transported the crews by train



from Hopkins every day (see map). Paying the Lee family, who had farmed the island since 1850, \$1000 for the small island, the Hebards built homes, a movie theater, a blacksmith and machine shop, and a general store. The bustling boom town had a population of over 600 during it's heyday.

As the timber crews moved deeper into the swamp, the easily obtained stands became more scarce until the Hebards decided to cease logging opera-

The Lee's watched the lumber town grow into a bustling community and then dwindled into obscurity.

tions in 1927. Virgin cypress stands were left untouched in the swamp mainly because the cost of harvesting the trees would exceed the amount of profit to be gained. The Hebardville mill continued operations for several years until all of the lumber had been sold.

BILLY'S ISLAND REVISITED

Following a trail of klinkers, mineral residue left by coal burning trains, the

Okefenokee guide draws a verbal picture of Billy's Island Lumber Camp as it was in the 20's. "You'd think this loblolly stand has been here for hundreds of years," says William Cribbs, "but you know that can't be true, because the trees are growing where the railroad tracks used to be."

Pointing to a row of oaks, Cribbs comments, "This was the main street through town. These people lived a great life right here in the middle of the swamp. They had money to spend, nice houses...they definitely weren't living in hardship."

A rusted car frame, yards of cable, and two boilers interrupt the otherwise pristine forest scene. The Hebards gave the lumbermen their island homes and they were transported intact out of the swamp on rail cars. What was left behind - railroad pilings and other wooden buildings - were burned down during the fires that swept through the swamp during the 40's and 50's.

Leaving the island, the Valdosta State College Biology Professor pauses at the small graveyard, "My father's uncle is buried here. My grandmother was Creasia Lee." The Lees watched the lumber town grow into a bustling community and then dwindle into obscurity with the calm acceptance common in those who have to wrest a living from the soil. But eventually they too were forced to leave the

swamp. In 1938 the Hebards sold their Okefenokee Swamp holdings to the U. S. Government for \$1.50 an acre or almost \$400,000.

Although the swamp suffered the ravages of nature and man, the "land of the trembling earth" continues to renew itself. Acclaimed as being one of the last true wildernesses on the North American Continent, one can visit the Okefenokee and walk among cypress and pine trees that witnessed the birth of our nation, since the Hebards did not completely clear cut the swamp.

"Actually we owe a debt to the Hebards," said Cribbs. "If they hadn't taken the trees out, the government would have never bought the land." He pauses, chuckles to himself, and glances fondly around at the primitive, but haunting beauty of the swamp. "Up 'til then, everyone thought the land was worthless."

Editors Note:

Several documents, interviews and books, invaluable to the author's research, deserve special recognition: "The Hebard Lumber Company--Logging Operations in the Okefenokee Swamp," Robert Izlar's special thesis written for the University of Georgia School of Forest Resources; "Jackson's Folly; The Suwanee Canal Company in the Okefenokee Swamp," written by Chris Trowell and Robert Izlar; "Okefenokee Folk," by Francis Harper; and Dr. William Cribbs, who granted an interview, provided a guided tour of Billy's Island.

Trees, underbrush and wildlife reclaimed the great swamp that once echoed the lumberman's axe and saws and the puffing of steam locomotives as they hauled out the virgin timber.



DEATH CLAIMS JULIAN REEVES

Co-workers and other friends from around the state were saddened recently to learn of the death of Julian Reeves, veteran forester who helped shape the Georgia Forestry Commission during more than three decades of distinguished service.

A native of Palmetto, he earned a Bachelor of Science Degree and a Master of Science Degree from the School of Forest Resources, University of Georgia. He served as district forester, assistant chief of forest management, deputy director and coordinator of forest programs and for 22 years as personnel officer, the title he held at the time of his death.

He was a member of the Society of American Foresters, Lions Club, Kiwanis Club, International Personnel Association, Metro Atlanta Personnel Association, chairman of the Board of Directors of the State Employees Credit Union and had an affiliation with several other organizations.

Julian died in an Atlanta hospital September 18 following a brief illness and funeral services were held in Fairburn. Survivors include his wife, Virley, of Fairburn, and a sister, Evelyn Mauldin, and a brother, Clifford Reeves, both of Rico.

WORKSHOPS PLANNED

Two workshops, Timber and the Federal Income Tax and Estate Planning and Forestry, are scheduled at The University of Georgia Center for Continuing Education, Feb. 17-19.

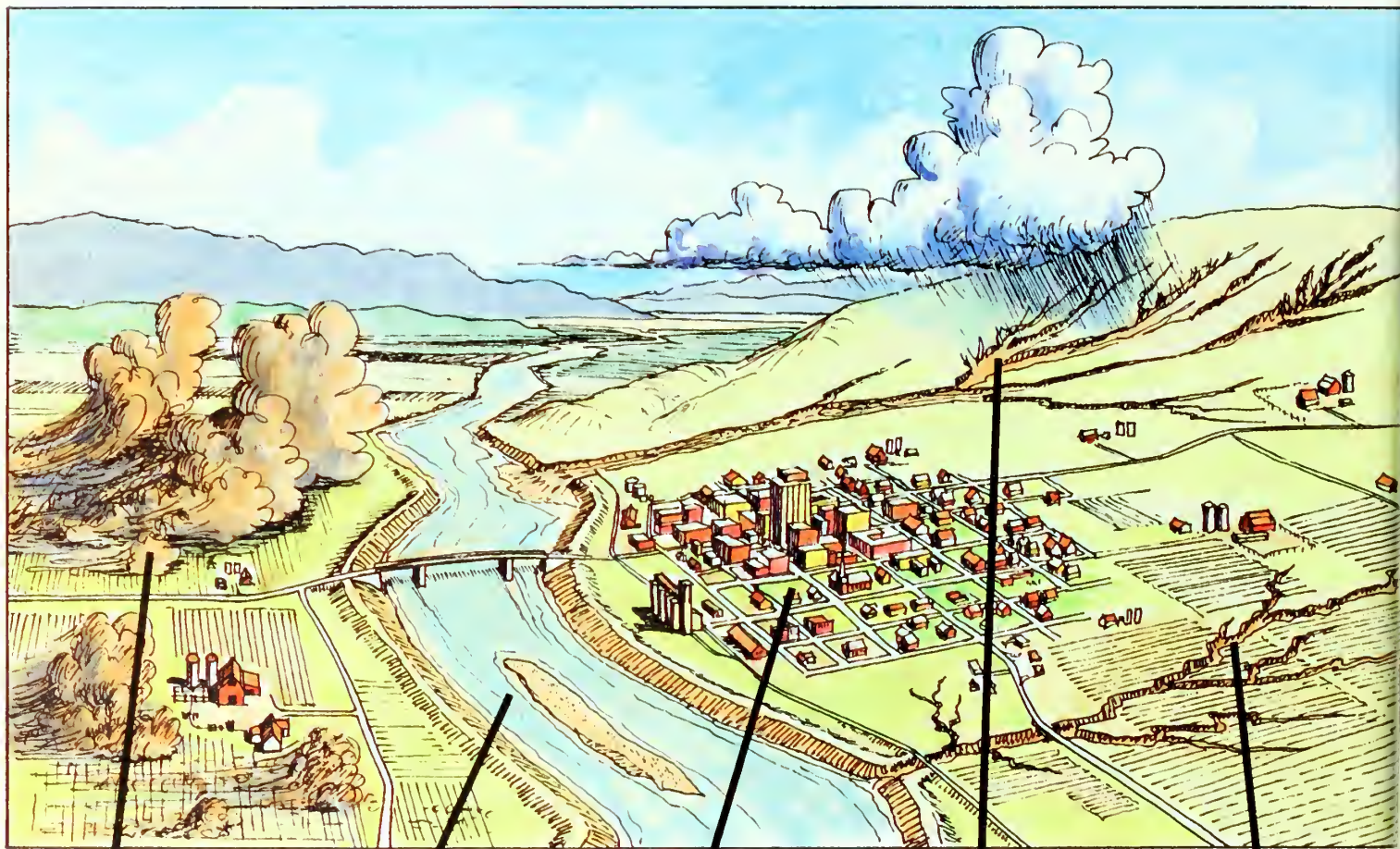
For further information contact Dr. Leonard A. Hampton, phone 404/542-3063, Athens.

Conservation Trees Ma

Trees are such a commonplace part of our environment that it's easy to overlook their vital roles in making our communities and rural areas more livable, pleasant places. In addition to adding natural beauty to a landscape, trees perform many important conservation functions.

Without Trees:

A treeless landscape is barren, seemingly devoid of life—a landscape without the familiarity and natural ambience normally provided by our leafy tree companions. But it's also a landscape with resources that are left vulnerable to the forces of wind and weather.



BLOWING SOIL

Without trees to break its force, the wind finds the exposed topsoil easy pickings. If blowing continues unabated, wind erosion produces giant, gritty clouds of dust that steadily dim America's precious heritage.

SILTY, FLOOD-PRONE RIVERS

Silt from eroded hillsides and farms can choke a stream, killing fish and destroying wildlife habitat. Silt deposited on the river bottom raises the bed of the river, making it more likely to overflow its banks. Stream channelization and levee construction to control flooding destroys stream bank trees, turning the river into an unattractive environment.

SUN-BAKED CITIES

Without shade trees to help cool homes, yards and buildings, streets and parking lots soak up the sun's heat and raise the temperature significantly. Air-conditioning costs soar in the summer, and home heating costs rise in the winter. With temperatures more extreme outside, people stay indoors and the community becomes a less lively and inviting environment for human activities.

RAPID RUNOFF

If deprived of their protective cover of trees, hillsides are easily eroded and less able to absorb and retain rainfall. In addition to destroying the natural balance and ecosystem of the hillside, erosion can threaten the quality of the soil and water of areas downslope.

GULLIED FARMLAND

Once the soil is freed from the protective grip of tree roots, gullies can eat their way into pastures and fields, destroying their usability for agricultural purposes and reducing land values.

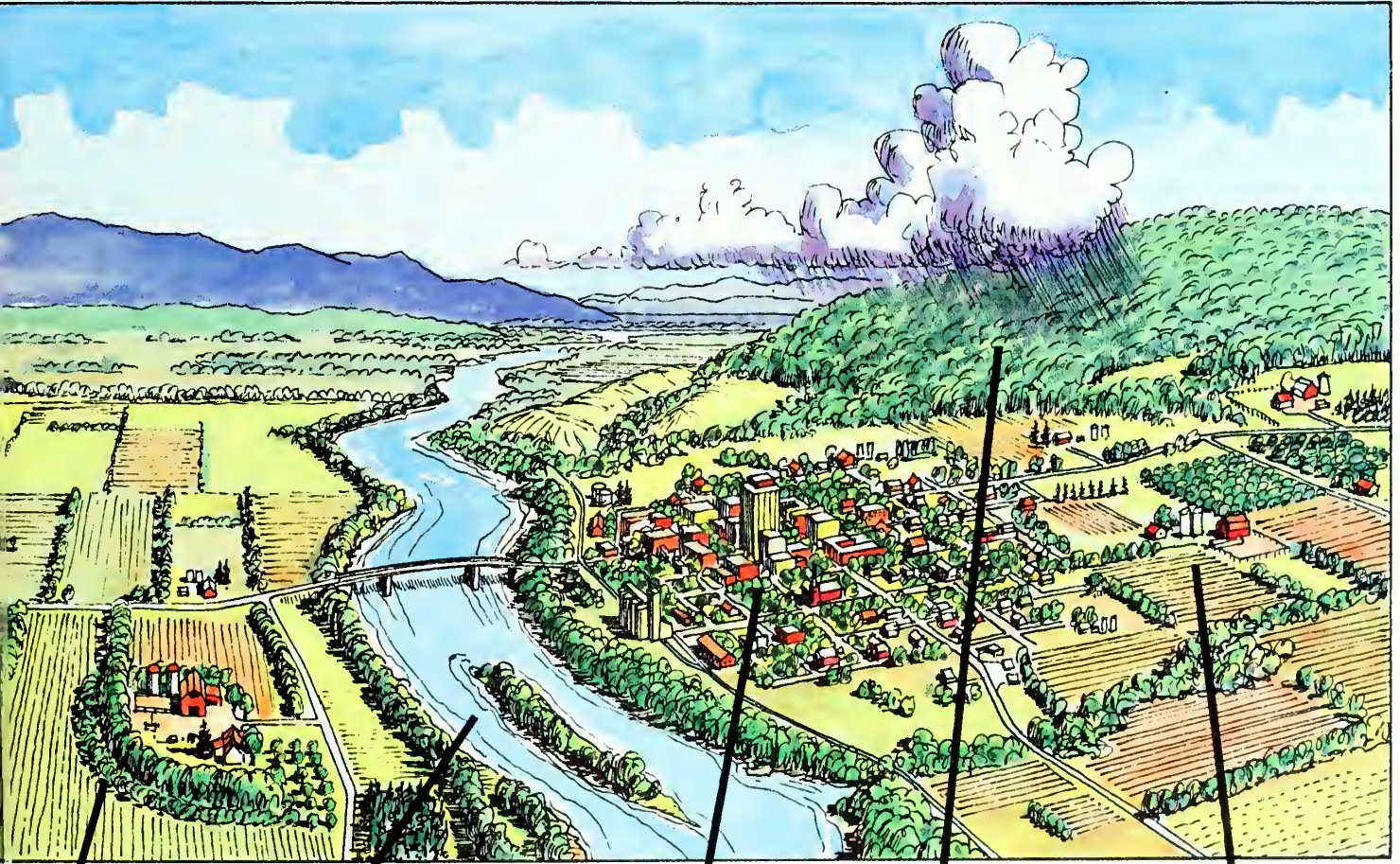
Make the Difference



The National Arbor Day Foundation's Conservation Trees program encourages Americans to plant, manage and preserve trees to conserve soil, energy, water and wildlife.

With Trees:

Leafy, tree-filled landscapes have a beauty that is practical as well. Whether natural or planted, trees provide protection from sun and wind, hold the soil and improve its permeability — as well as providing a living beauty that changes with the seasons.



WINDBELTS AND BREAKS

Agricultural land in shelterbelts planted around farmsteads and trees provides maximum protection from the erosive power and chilling effects of wind. In addition, a well-planned windbreak or shelterbelt can be a source of sawtimber.

NATURAL STREAMS

Stream bank trees are a key part of a natural river environment, reducing flooding by slowing water flowing into streams and rivers after heavy rains. In addition to their role in minimizing bank erosion, trees provide nests and shelter for a wide variety of birds and wildlife — as well as making a more pleasing riverscape.

SHADED STREETS AND HOMES

Providing sun-dappled shade from leafy canopies, urban trees beautify streets, homes and parks. They also help improve air quality by the oxygen they produce, as well as helping reduce noise and mitigate summer temperatures. Urban trees also attract songbirds and create natural elements in the city environment.

FORESTED SLOPES

Along with protecting hillsides from erosion, trees are critical in maintaining soil moisture and underground water supplies. Instead of falling directly on the unprotected ground, rainfall is first deflected by the tree leaves and branches and allowed to percolate slowly into the soil below.

PRODUCTIVE FARMLAND

Protected from the dissection of gully erosion, farmlands with trees are productive as well as pleasant to behold. Stream courses, steep slopes and other normally unproductive lands can, when planted with trees, provide farmers with supplemental income from orchards, Christmas tree plots, or woodlots.

ANOTHER FARMER TURNS TO TREES

Forestry opened the door; Conservation Reserve Program paved the way

BY HOWARD BENNETT

This will be Lamont Giddens' last year of row-cropping. He is finally giving up on trying to make a decent profit growing soybeans, corn, peanuts and hay on some very stubborn acreage on his Bleckley County farm near Cochran.

But Giddens, who owns about 220 acres, is not giving up on his land. "Couldn't do that," he said. "I grew up on a farm and that's where I'll stay." He will now stay on as a tree farmer.

The drought that has virtually seared the life out of many Georgia farms was not a factor. His decision was made before the rains ceased.

When Giddens concluded that conventional farming on his particular soil would probably always bring about lean financial returns, he began working for Southern Bell. During his 17 years with the telephone company, he has enjoyed a career as a cable repair technician, all the while living on the land and continuing to seek ways to improve it.

Trees ultimately provided the way.

"When I looked hard enough," Giddens said, "forestry opened a door for me." He said he "asked for and got valuable help from the Georgia Forestry Commission. I began attending landowner conferences, tax forums, and workshops sponsored by the Commission. I started reading material on silviculture and studying research papers. It was fascinating and I gradually learned a great deal about growing trees."

Commission Forester Gregory Long agreed that the landowner has become "quite knowledgeable in forestry and is one of the most enthusiastic advocates of forest management in my district."

Six years ago, Giddens planted 10 acres of loblolly pine, followed by five acres of slash pine. He later planted six acres of white oak and three acres of poplar. Much of the planting was by hand and he said his wife, Julie, was "out there helping me every time." In fact, his wife accompanies him to conferences and other events on forestry and shares his keen interest in trees.

Today, planted stock and natural stands on the property total about 120 acres and the landowner is converting an additional 87 acres to trees by taking advantage of the new Conservation Reserve Program. During the first and second sign-up periods in the federally-financed program that shares establishment costs and then pays annual rent on the land for ten years, Giddens received approval to plant pines on an eroding field of sandy loam that has struggled for years to support soybeans and peanuts.

In the initial sign-up, his bid of \$20.00 per acre received approval on 51 acres and in his second time to apply for the

"It's hard to convince people to turn away from the way they are farming, even if it's on eroding land."

program, a bid of \$25.00 per acre was accepted. Actually, the 36-acre tract of low-productive cropland was planted in pine seedlings last winter and the remaining acreage will be planted this winter.

Giddens estimates that 37,000 seedlings at a cost of \$814.00 will be required to plant the 51 acres and the cost of planting will run \$1,785.00. Some expenses will be incurred in site preparation, but the government will pick up half the entire cost of establishing the cover. Although landowners have the option of planting trees or grasses under the program, the vast majority in Georgia have chosen to plant trees.

The check for \$1,920.00 that he will receive annually for the next decade "will pay my taxes on the land," Giddens reasoned, "but the big difference it will make will be the conservation of the land."

"Mr. Giddens is big on conservation," explained Forester Long, "he means what he says."

Giddens said "I know I'm on the right road...planting trees on worn out land is the way to go." He also plants for wildlife, clears edges and maintains two scenic ponds. The tree farmer enjoys hunting deer, turkey and quail on his land, but he said "there is a lot of comfort in just walking through the woods."

In recalling his youth on the family farm some four miles down the road from where he now lives, he said "there was a time when the soil we farmed was as black as your shoes, but that same rich land became poor because, like everybody else, we 'cottoned' it to death."

Giddens has become such an ardent believer in conservation, especially in forestry as a means of restoring the land, that he encourages others to consider the many long range benefits of reforestation. "But it's hard to convince people to turn away from the way they are farming, even if it's on eroding land," he said. "Too many people are looking for what they



At left: Forester Gregory Long and Farmer Lamont Giddens inspect an eroded field where pine trees will be planted this winter under the Conservation Reserve Program. Opposite page: The two observe a stand of rapidly growing pines that Giddens proudly shows visitors at his Bleckley County farm.

AFTER THE DROUGHT

WHEN AND HOW TO WATER

BY ROB MASON

As one good ol' boy said, "Facts is facts, you can lie about 'em, you can deny 'em, but they go right on bein' facts." And in the north half of Georgia, it's a fact there has been a dry spell like there never was since they started keeping records.

People tell us it takes roughly three hours for water to soak into our red Georgia clay to a depth of one-fourth inch. That's right; 12 hours to move one inch vertically! With most of the roots 8 to 20 inches down, you'd have to have a pond under every tree. Trouble is most tree roots need oxygen to stay healthy and there's not enough in standing water to make even a small brook trout happy. So that means not only do we have to water, it's a matter of both how long and how much. A diplomat would say, "It all depends on certain factors." Since most trees are more definite than most diplomats, the factors can be reduced to six: soil type, season, slope, site, species and suitability.

As we've noted, if there's a lot of clay, the water will go in slower and come out slower. The sandier the soil the less time to get water down to the roots that supply the tree between water-

Species determines the size and number of the cells that carry the water to the top. The "Plumbing System" is the right size...

ings. Experiment a little; ideally there should be no water pooled on the surface 24 hours after watering ends.

Seasons make a big difference. The botanists say, all things equal, water produces "soft" growth which is more easily damaged by cold. So, by not watering as much in late fall, we allow the trees to "harden" for winter.

Slope helps decide if a tree gets sun all day or only part of it. The more sun, the more water needed to cool the leaves through evaporation.

Site goes along with slope since it is the tree's location in relation to its surroundings. Site differs because it takes into account objects like houses, walls, pavement, ponds, rock outcroppings or other trees.

Species of tree is a major factor because that determines the size and number of the cells that carry the water to the top. The "plumbing system" is the right size to supply the water demands of the leaves under normal conditions. A dogwood normally grows in the shade of bigger trees so if it's planted out by itself in full sunlight the top leaves may shrivel in late summer. If it gets little or no additional water and the sunlight gets hotter each day, the leaves turn color and fall off because the plumbing can't supply enough water to meet the demands of those leaves.

Suitability combines the other five factors. You can plant a banana tree in jungle soil, keep it in a tropical climate all year, position it to get the right amount of sun, protect it from being too crowded and water it like a cactus week after week. You might or might not get bananas before it dies, but it wouldn't die ahead of its time if it was suitably watered like a banana tree instead of a cactus.

We have no control over the weather but we can control how often and how much watering a tree gets. It's a matter of how much it is worth to have the tree.

Georgia Forestry/December 1986/11



can make now, this season...they don't want to plan for something that pays off down the road."

In his diversification as a tree farmer, Giddens has not overlooked the value of natural regeneration. A generous crop of longleaf pines are sprouting along a high ridge on his property and volunteer trees are growing vigorously in other sections of his woodlands.

"I like to experiment," Giddens said. "When a new research paper comes out, I read it carefully and try to apply it to my forestry effort...I can see that research in forestry is really making a big difference in Georgia."

The tree farmer admits that his conversion to trees has not always gone smoothly. "When I planted my first ten acres of loblolly," he said, "I got my first taste of tip moth, but the Commission forester helped me over that problem." A good network of firebreaks has reduced the risk of fire, but the record breaking drought that took its toll across the state continues to be a problem. He knows he will have to replant some seedlings because of the severe drought.

Giddens doesn't remember the exact day he decided to turn all his acreage over to trees, but the revelation probably came on one of those long, weary Saturdays when he traded his telephone maintenance van for a tractor and again bounced over rough, unyielding slopes that would never properly nurture soybeans or peanuts or corn.

Perhaps he looked across a valley and studied the green timberline and knew there was a better way.



50 YEARS!

A GREAT NATIONAL FOREST CELEBRATES A HALF CENTURY OF PROGRESS IN TRANSFORMING A RAVISHED NORTH GEORGIA LANDSCAPE INTO A SCENIC MULTI-USE WOODLAND



Wanton destruction marked the path of loggers before the land became part of a natural forest and it required many years to completely heal the devastated land. In the other historical photograph, workmen gather chestnut bark for the extraction of tannic acid, which was used in tanning leather.

The scenic 750,000-acre Chattahoochee National Forest in North Georgia, birthplace of two rivers, recreational haven for two million people each year, and an area with an annual timber harvest that produces enough lumber to build 1,500 homes, this year is celebrating its 50th anniversary.

To mark the event, six days during the summer were set aside for a historic symposium and to bring several dignitaries together to speak on topics ranging from forestry and wood production to tourism and trade.

The section of the state that now forms the national forest was populated by the Cherokee and Creek Indians when the first colonists arrived and they initially learned to live in harmony with the new settlers. When gold was discovered, however, the natives were driven off the land to reservations in Oklahoma and their land was given away in lotteries.

The railroads, built by large landowners who acquired their holdings by paying as little as one dollar per acre, began penetrating the North Georgia mountains in the 1880's. The goal was to cut the virgin timber, sell the land and move on to other locations.

They logged the land not only for timber, but for the bark of chestnut, chestnut oak, and hemlock for the extraction

of tannic acid, which was used in tanning leather.

As logging and farming moved into the area, forest wildfires began to take a frightful toll. Sparks from wood-burning locomotives and fires set by farmers clearing their land caused many of the fires that raced across the mountains. The loss of valuable timber resources began to change, however, after Congress passed the Weeks Law which authorized the land purchases for the national forest.

To those attending the 50th anniversary festivities, it must have been hard to imagine the Chattahoochee as it was in the early 1900's, a virtual eyesore. "When the Chattahoochee was proclaimed as a National Forest back in 1936, much of the land was largely logged-over, unproductive forests or abandoned and eroded farmlands where private landowners saw little hope in managing the land for profit," said Forest Supervisor Pat Thomas.

After the government began gathering and buying tracts of land in the northern area of the state and the Chattahoochee was proclaimed a national forest, Forest Service personnel wrote management plans for forest resources, stressing reforestation. The Civilian Conservation Corps put the plans into action by planting trees, controlling tree diseases and insects, laying communication lines,

doing erosion control work and building fire towers, roads, ranger stations and recreation areas.

Bill Stevens, chairman of the Brasstown Bald Interpretive Association, said the anniversary celebration served as a reminder to all Georgians of the importance of the forest and its contribution to the quality of all lives. "Within this forest are the creeks, branches, and streams that supply the majority of surface water for our state. While the forest is important for its beauty and recreational value, we should never forget that the very future of this state depends on this irreplaceable watershed," he said.

The highlight of the week was the dedication of a log cabin - the new interpretive center - to the former Ninth District Congressman Phil Landrum. Over 800 guests hiked the highest mountain in Georgia, Brasstown Bald, to attend the impressive ceremony.

After years of neglect and abuse, land now known as the Chattahoochee National Forest has made an amazing comeback. Where once the land was barren and scarred, it is now rich in an abundance of wildlife, recreational opportunities, and valuable timber.

A half century of stewardship of the Chattahoochee's natural resources has left a legacy that will be enjoyed for generations to come.



Elaine Jones



Sandra Taylor

WOMEN BECOME RANGERS

This Fall, the Georgia Forestry Commission, for the first time in its history, promoted two women to the position of ranger. Elaine Jones was assigned to the Grady County Forestry Unit while Sandra Taylor will assume her duties at the Barrow-Jackson Forestry Unit.

Jones, an Albany native, says she grew up knowing she would pursue a career with the Commission. "I grew up with the Forestry Commission... My father, J. K. Jones, who is now

retired, was a ranger and superintendent of the Herty Tree Nursery and, of course, I learned a lot from him."

Taylor, originally from Cartersville, claims that while she realizes the difficulties of 'being a female in a man's world,' she's not allowing those problems to affect her job. "I don't think of myself as being one of the first women rangers," she said. "I'm just a new ranger anticipating the start of the fire season."

(continued on page 15)



State Representative Pete Phillips, left, is presented a plaque by John Mixon on behalf of the Alumni Association, School of Forest Resources, University of Georgia. He was cited for his "outstanding contributions to advance the school toward its goal of excellence." Mixon, director of the Georgia Forestry Commission, serves as president of the Alumni Association.



Over thirty million people can't be wrong—live Christmas trees are still an American tradition. Every December more than 800,000 Georgians bring home evergreens to decorate for the Yuletide season. Many of the species bought here in Georgia are grown locally.

According to Staff Forester Ken Bailey of the Urban Forestry Department, Christmas tree production in the South has dramatically increased in recent years and Georgia is no exception. "The number of producers has been increasing at the rate of 20 percent, or about 30 growers per year," said Bailey. "We now have about 500 growers in the state and around seven million trees planted."

Many of the growers have turned to the enterprise as an alternative to traditional crops. Because of the longer growing season and more favorable climate, a well developed tree can be grown in less time in Georgia than in Northern states. In this state, trees can be cut the day of shipping; the northern farmer, however, must cut his trees far in advance of shipping dates because of frequent deep snows and extremely cold weather.

As more and more Georgia growers realized the market potential for Christmas trees, the demands for seedlings have also increased. According to Johnny Branan, the Commission's Chief of Reforestation, over 806,000 Virginia pine seedlings were sold from the state nurseries this year.

Because of its excellent shape, limb strength, and ability to hold up well in use, the Virginia pine is gaining popularity with the Georgia consumer. The species grows well in all areas of the state and makes up over 75 percent of total production. The cedar-cypress type grows well in the warmer climates of Middle and South Georgia.



Ranger Wayne Meadows, left, and Patrolman Neil Hinegardner discuss an intricate section of a cabinet.

RANGER IS EXPERT WOODWORKER

Builds cabinets, other fixtures for the Commission

What do you do for relaxation after you've been shot, suffered third degree burns, had your leg half cut off by a chainsaw, and been the victim of two heart attacks.

Wayne Meadows, a 25-year Commission veteran and ranger for the Columbia County Unit, builds cabinets. This may sound like a bad joke, but it's true. All these things happened to Wayne Meadows, who builds cabinets and numerous other types of wooden fixtures for Commission offices throughout the state.

When he was growing up, his uncle mistook him for a prowler and shot through a window. Wayne was hit and not expected to live. However, he recovered and suffered no ill effects, although the 25 caliber bullet is still lodged in his liver. The only time he notices it is in cold, damp weather, when he "can feel the path the bullet traveled."

Then, while fighting a fire for the Commission, his tractor stalled and he suffered second and third degree burns, but he recovered quickly and was back on the job. Not long after the burns, he was involved in a chainsaw accident that almost severed his right leg. More than 150 stitches were required to repair the leg; but Wayne recovered again and moves like the accident never happened. Finally, he suffered two heart attacks, recovered from all of them and is still going strong.

The positive side of all this is that no one would know by looking at him that any of these unfortunate situations had occurred. His job and hobbies keep him active, and he looks like he spends his spare time working out in a health spa.

"Some people say I have nine lives," Meadows said. "The only thing that really bothers me is the heart condition. The doctor said not to lift heavy weights any

more; other than that, I do pretty much what I want."

After so many unpleasant experiences, anybody deserves a little relaxation. Meadows finds it in cabinet making, which has become a major part of his job and his favorite hobby.

COMMISSION SHOP

In 1979, Meadows started a cabinet making operation for the Commission that grew to serve more than 100 units throughout the state. Three years ago, he hired Neal Hinegardner as a patrolman and a right-hand-man assistant in the cabinet shop. Hinegardner, a retired Army electronics specialist, has all the complementary talents needed for the expanding cabinet making operation.

"Up until about a year ago, our shop was the only Commission cabinet making facility in the state," Meadows said. "Now, another has just started in another county unit, and it will be a big help."

Cabinet making is not easy. It requires skill and artistic talent. Although he has no formal training, Meadows estimates an apprenticeship should last for at least two years. He started in high school by concentrating on shop and mechanical drawing courses. Later, he polished his skills with two years of engineering and drafting courses at Augusta Tech.

"It's not something you learn, and then that's the end of it," Meadows said. "I am constantly learning something new."

Meadows agrees with the theory that certain artistic talents can be genetically inherited. Both his father and grandfather were talented woodworkers, and he considers many of his woodworking talents to parallel their abilities. He points

out that, like a sculptor or painter, a talented cabinet maker will evolve a "definite style" that makes his work recognizable.

"It's reached the point now where a lot of people will come up to me and say, 'I saw some of your work over at so-and-so,'" Meadows said. "This really makes you feel good, because that's what being an artist and a craftsman is all about. The work will live on long after he's gone."

Meadows said a good example involving a cabinet maker is Charles Ingles, the character portrayed by Michael Landon on the popular television series "Little House On The Prairie." Ingles became a famous cabinet maker and his woodwork is now considered art.

Like a first class suit of clothes, quality cabinets are tailored to their environment and intended purpose. Meadows operates Commission cabinet making as a custom-fit, custom-style procedure.

When an order is received, he will go to the location and take measurements. The design will then be drawn according to the intended use and environment.

Back at the shop, exact measurements for the cabinets are made and preliminary sketches are drawn. The sketches and designs are then redrawn and cut out for fitting. Designs may be anything from abstracts to wildlife scenes. Hinegardner likes to draw from his imagination. Meadows prefers to use models. Their talents complement each other. Stages of the work are often painstaking and delicate, but the results are worth it. Finally, the cabinets are transported to the origin of the order and installed. The initial fitting measurements now prove to be critical. Any mistake can destroy many hours of painstaking work and design. "But that's cabinet making," Meadows said. "You have to like it to keep on doing it."

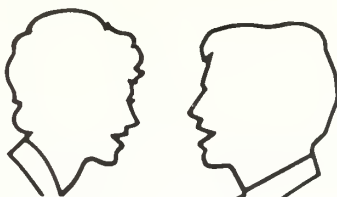
RETIREMENT PLANS

Meadows likes it and intends to keep it up when he retires. With 25 years in with the Commission, he doesn't have many years before retirement. He plans to open up a combination woodworking and gift shop where everything from cedar chests to gun cabinets to painted curios will be sold. He even has an old South Georgia tobacco barn picked out for dismantling and reassembling to house the gift shop. Meadows says his wife, Joyce, has become very interested in woodworking and assists in making the various articles and running the shop.

Meadows thinks it will all be very relaxing. But considering some of the things Meadows has experienced, going over Niagara Falls in a barrel would be relaxing.

PEOPLE

IN THE NEWS



Ranger MAURICE BARNHILL, Grady County Unit, retired October 1 to end a 34-year career with the Commission. He was transferred to the county in 1965 from Seminole County, where he also



BARNHILL

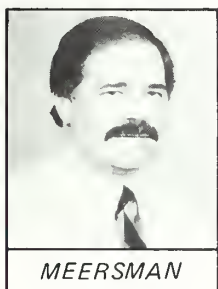


BARGER

served as ranger. A luncheon was held in Cairo by fellow employees, relatives and other friends to honor him for his many contributions. He is succeeded in the post by Ranger Elaine Jones...DEAN BARGER, vice president for finance and administration, Interstate Paper Corpora-



BRANT



MEERSMAN

tion, Riceboro, has been appointed resident manager and THOMAS A. MEERSMAN has been named vice president for manufacturing at the company's linerboard mill...BENNIE BRANT has been named district forester for the Milledgeville District. Hired in 1958 as a forest ranger trainee in the Lowndes County Forestry Unit, Brant is a graduate of the University of Georgia School of Forest Resources. He is married to the former Miss Lori McBride of Sylvania and they have one son, Ray. The couple attend the First United Methodist Church



CHAMBERS



McELROY

in Milledgeville. ROBERT G. CHAMBERS, head of the Timberland Trust for the First National Bank of Atlanta, was recently promoted to vice president. A professional forester, Chambers is responsible for the bank's trust with more than 29,000 acres of timberland in three states. Chambers and his wife, Glenda, and their two children live



BRYANT



KARRFALT

in Woodstock...LYNN McELROY, who came with the Commission in 1973 as a tower operator and later became ranger of the Coweta County Unit, has been named District Ranger of the Newnan District. He is married to the former Miss Betty Jean Taylor and they have three children...RANDY BRYANT, a Meriwether County native who came with the Commission in 1983 in the Coweta County Unit, has been named ranger of the unit to succeed Lynn McElroy. Randy is married to the former Miss Ruby Hightower of Luthersville. They make their home in Newnan...ROBERT



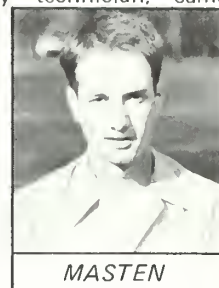
PONTZER



SEABOLT

KARRFALT, formerly serving as Seed Processing Specialist at the National Tree Seed Laboratory at the Georgia Forestry Center in Macon, has been promoted to Director of the facility...Karrfalt, a native of Erie, Pa., earned a Master of Forest Science Degree from Penn State University. The new director and his wife, Verna, and three-year-old daughter live in Macon and attend Faith Lutheran Church in Warner Robins. Karrfalt succeeds Dr. Earl Belcher, who recently retired. STEPHEN J. PONTZER, a 4-H

Club member from Clarke County, has received the fourth annual F&W Young Forester of the Year Award. The student was presented a \$500 scholarship from F&W Forestry Services, which sponsors the competition...GREGORY SEABOLT, forestry technician, came with the Commission recently to work at the Morgan Nursery. He lives in Warner Robins with his parents, Mr. and Mrs. George Seabolt. He earned his degree in technology at ABAC in Tifton...KENNETH MASTEN, who attended Young Harris College and later transferred to UGA, where he earned a degree in forestry, has been assigned to the Americus District Office. A native of Toccoa, he formerly served as ranger of the Marion County Unit. He is married to the former Miss Debra Carter of Waycross.



MASTEN

(continued from page 13)

Taylor will be living in Barrow County; she replaced Billy Roland who transferred to Colquitt County. Jones assumed the duties of veteran Ranger Maurice Barnhill, who is retiring from the post after 34-years of service with the Commission.

Jones supervises three patrolmen and two tower operators and her unit is charged with the protection of the county's 185,000 acres of forests.

She came with the Commission in 1982 as a temporary fire tower operator and later became a forest patrolman in her home county. "When I went out alone on my first fire," she confessed, "I was really scared. My knees were knocking on the way, but after I unloaded my tractor from the transport and began plowing the fire line, I calmed down. When I was able to radio a signal 8 (fire out), it was a good feeling."

In assuming the supervisory role, the new ranger said "I'll miss my equipment at first, but I know there will be plenty of chances to use it again." Forest patrolmen are generally the firefighters in a unit, but the ranger often joins in to help subdue a stubborn blaze.

Taylor came with the Commission in 1980 as a patrolman and was promoted to assistant forest ranger four years later. As ranger, she supervises three patrolmen and a tower operator. The unit protects 90,000 acres of forests in Barrow County and 180,000 acres in Jackson County.

Several females have been employed as patrolmen during the past few years with fire fighting as their principal duty.

Season's Greetings



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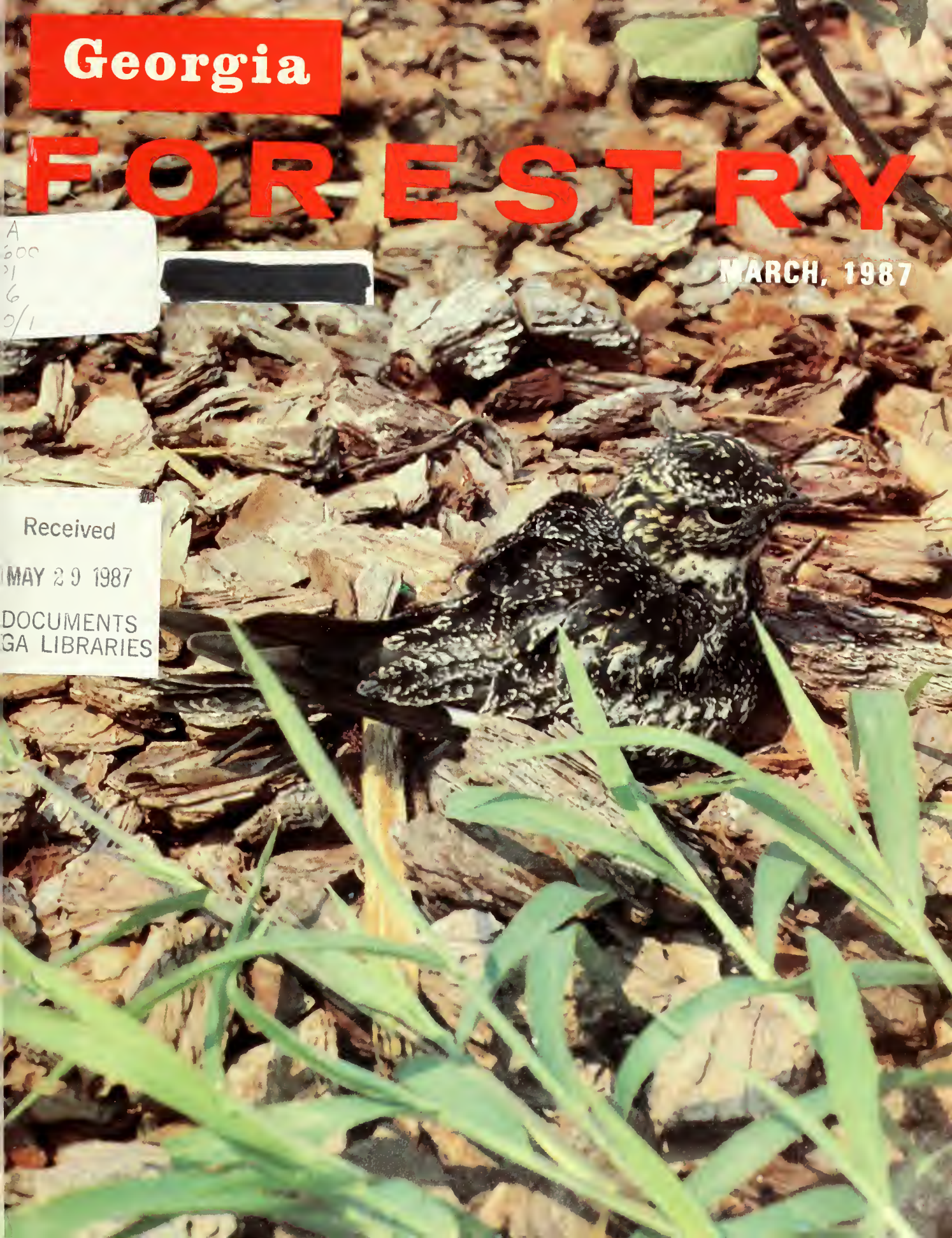
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6835 Memorial Drive
Stone Mountain, GA 30083

Georgia Forestry is published quarterly by the Georgia Forestry Commission, Route 1, Box 181 Dry Branch, GA 31020 Second class postage paid at Macon, GA. POSTMASTER Send address changes to Georgia Forestry Commission, Route 1, Box 181 Dry Branch, GA 31020

SCHOLARSHIP FUND ANNOUNCED

Members of the Georgia Tree Farm System have announced the establishment of a college scholarship fund to aid students seeking higher education in a field of their choice.

To be eligible for the scholarship, a person must be the legal dependent of a Georgia member of the American Tree Farm System and meet other

requirements outlined on the organization's application form.

The program is funded through contributions made by individual Tree Farmers in Georgia and the sponsorship of the Citizens and Southern Banks of Georgia, Trust Forestry Division.

Officials of the 3,506-member organization said the number of scholarships provided will depend upon funds available. The amount of the scholarship will be \$500 for one academic year.

For application or further information, contact your local Tree Farm secretary, the Education and Fire Prevention Department, Georgia Forestry Commission, Box 819, Macon, Ga. 31298, or the Georgia Forestry Association, 40 Marietta St., Suite 1020, Atlanta, Ga. 30303.

FIELD DAYS PLANNED

Dates for the annual FFA Forestry Field Days have been announced by Don Register and Malcolm Dillard, consultant foresters with the Georgia Department of Education who work with the high school chapters across the state.

Field Day for the Louisville area chapters will be held March 24 and the Vidalia meet is set for March 25.

Others include Broadhurst, April 2; Cordele, April 7; Adel and Athens, April 14; Blakely, April 16; Fairburn, April 21; and Chatsworth, April 23.

Register said the state finals for the field day competition will again be held at the Georgia Forestry Center in Macon. It has been scheduled for May 6.

The regional field days are sponsored by several forest industries and the statewide event is sponsored by the Trust Company Banks of Georgia.

The field day competition includes tree planting, timber scaling, tree and insect identification, land measurement and several other skills.

NAMING OF NEW CHIEF

The naming of F. Dale Robertson as Chief of the U. S. Forest Service is a plus for forest conservation interests, according to Scott Wallinger, President of the American Forestry Association. "The fact that a career forester can still rise to the top job in the Forest Service is critical to maintaining the high morale and capability in that agency," Wallinger said.

Robertson is an Arkansas native, whose 26-year career as a forester has included posts in Texas, Oklahoma and Oregon as well as Washington, DC. He succeeds Max Peterson.

CITIZENS REMINDED OF GEORGIA LAW RELATING TO OUTSIDE BURN

With Georgia entering another fire season, the Commission reminds all residents that the Notification to Burn Law is now in effect in every county in the state. Basically, the law requires that notification of intention to burn woods, marshes and other combustible materials must be given to your local forestry unit. The notice may be given to the county forest ranger or any other employee of the unit.

The initial Georgia burn/notification law, enacted in 1956, was for many years an optional law. The statute was in effect only in Georgia counties where two successive grand juries recommended it. However, Governor George Busbee signed the statute

into a statewide law in 1981.

The law is beneficial in several ways. For example, it enables Commission fire fighting personnel to operate more efficiently by knowing when and where a burn will take place. The law also saves the taxpayers considerable revenue; it is costly to the state's taxpayers when Commission personnel rush heavy equipment to the scene of a fire, only to discover that a landowner is burning off a field, or a housewife is burning trash and all precautions have been implemented.

The Commission maintains a sophisticated weather forecast system. Current weather information determines whether conditions are favorable for burning.

ON THE COVER

A nighthawk finds Georgia pine bark an ideal material for nesting.
PHOTO BY: William Edwards.



Personnel at the Commission nurseries carefully pack and seal special bags to keep seedlings fresh until time for re-planting. Full instructions concerning transporting, storing and planting are printed on the bags. Shown here is a landowner's truck being loaded at the Morgan Memorial Nursery near Byron.

unit offices than they intend to plant within a working week. If inclement weather delays planting, he further suggested they seek permission to use a nearby deer cooler as an ideal place for temporary storage.

DORMANCY ASSURED

In a move to provide a more sturdy plant, personnel at the state nurseries this season made sure all seedlings received at least 200 hours of dormancy before being lifted and packaged for shipment.

Dr. James Rowan, retired forest scientist of the U. S. Forest Service who has been retained by the Commission to study nursery production and seedling distribution and planting problems, advised vendors and landowners to protect the plants from the elements as much as possible.

He said a bundle of seedlings "can reach a temperature of 118 degrees, so don't delay after they are loaded on your truck...keep them shaded and don't even stop for a cup of coffee on the way back home." The consultant said when the temperature reaches 82 degrees within a package of trees, "the seedlings think it is time for them to start growing."

Dr. Rowan said newly cultivated fields present too many air pockets in the soil and recommend that landowners delay planting until a substantial rain has settled the ground. He said it is a new recommendation this season that all seedlings be planted two inches deeper in the field than they were growing when lifted at the nursery.

HERBICIDE USAGE

In a discussion on herbicides, Staff Forester Walker Rivers declared that "it is difficult to completely eliminate plant competition, but tremendous root systems of the grasses and weeds compete for the water and nutrients that are vital to the health of the young pine tree." But he cautioned that the use of herbicides by anyone other than a skilled person might mean the "wrong chemical during the wrong weather, in the wrong season and on the wrong soil."

In pointing out advantages, the forester said herbicides can bring about site preparation at a lower cost than can be achieved by mechanical means "and you don't lose that inch of top soil that is scraped away by the bulldozer."

The speakers stressed the continuation of seeking better ways to grow, transport, store and plant forest tree seedlings and urged vendors, landowners and other interested persons to visit any office of the Georgia Forestry Commission for literature pertaining to the handling and planting of seedlings or to confer with a professional forester on the subject.

WORKSHOPS PROVIDE VALUABLE INFORMATION FOR TREE PLANTERS

"After you pick up your seedlings, don't even stop for a cup of coffee on the way back home."

"Plant seedlings two inches deeper than they were growing in the nursery."

"Don't plant in freshly plowed ground. Wait for a settling rain so most of the air pockets will be eliminated."

These and other timely remarks were heard by tree planting vendors, landowners and others at a recent series of workshops sponsored in several cities across the state by the Forestry Commission.

Frank Green, a reforestation specialist speaking in the aftermath of the great 1986 drought that killed approximately 100,000 acres of young pines in Georgia, reminded the gatherings that weather is always an important factor, "but the way seedlings are transported, stored, handled and planted" largely determine their rate of survivability.

"Unfortunately, some people believe that if you put a pine tree under a rock, it will still grow," said Green, "and I have known some to stack bundles of seedlings like cord wood, or store them too close to diesel oil." He said people would never consider "pouring gasoline on tomato plants, but when pine seedlings are around diesel, they're doing about the same thing."

Green said he has also known landowners to place seedlings in a tub of water to keep the roots moist, but then put the tub in the hot sun where they would virtually cook.

The forester said reforestation specialists in each of the Commission's 12 districts are now visiting landowners to provide any assistance needed in the proper planting of seedlings. He said the foresters are also attempting to learn more about practices that would increase survivability.

Some of the problems have been traced to plantings made during very frigid weather, he said. "When the weather is below freezing, the plants are naturally brittle and damage is done each time they are handled." He said the Commission is recommending that planting be suspended when the thermometer dips below 33 degrees.

In order to keep plants fresh and roots moist, Green suggested that landowners not pick up more seedlings at the Commission nurseries or county



TIM HUGHES



TONY WALLER



STEPHEN TINSLEY

GEORGIANS TAKE NATIONAL FFA FORESTRY PRIZE

Lynn Hughes, voc-ag instructor at Echols County High School at Statenville, is proud of the many plaques and certificates of honor that line his office walls, but his proudest moment came when it was announced that his son, Tim, and two other Georgia students had won first place in national competition.

Tim said he knew competition would be very keen in the annual FFA National Convention and he started studying and working at home and at the school's 10-acre forest during the summer to prepare for the tough tests in Kansas City.

He had placed first in one of the events at the Field Day state finals at Macon last year - an achievement that added another plaque to his father's office wall - and that and other awards he had won led friends to believe he could make it on the national scene.

Tim's father and advisor pointed out that the student, who grew up on a farm in a county which has 92 percent of its land in pine trees, became active in FFA in Junior High School to learn more about the forests that surrounds his home.

Tim and his dad flew out to Kansas for the national meet and all was going well until one of the students said "let's just pack up and be ready to head for home, we don't stand a chance in this kind of competition.."

But when the winners were announced the next day, all gloom immediately disappeared. To top it off, the judges announced that Tim had the second highest score in the nation, a mere point or two behind a student from Mississippi.

Tony Waller was used to scaling timber in the tall, straight pines of his native Pierce County and when he was required to measure the oaks, poplars and sycamores out in Kansas, he thought he might have a problem.

As it worked out, however, his doubts were short lived. He did well and so did the two other students on his team. They came home from the National FFA Convention in Kansas City with the first place trophy in forestry.

Tony, son of Mr. and Mrs. Gene Waller of Patterson and a graduate of Pierce County High School, is now a freshman at the University of Georgia. Sitting in the lounge of Russell Hall the other day, the student recalled the annual event which brings FFA boys and girls together from across the nation. He said the real excitement came for the Georgia team when it was announced at an awards breakfast that they had actually won the top prize. "That's when I ran to the phone and called Mommy," he said.

Tony's FFA advisors at the school were Jimmy Mock and Donnie Hattaway. He said the advisors, as well as Don Register and Malcolm Dillard, consultant foresters with the Georgia Department of Agriculture who work with the FFA program statewide, played a major role in helping the students prepare for the national contest.

"We did our work well before leaving home and when we got to Kansas City, I feel we were prepared and had the confidence needed to win," Tony said.

The student grew up on a small farm and he said he intends to major in agriculture at the university.

Jerry Baldree, voc-ag instructor at Clinch County High School, is quick to say that Stephen Tinsley "has the best attitude and is one of the hardest working students in our program."

Perhaps that is why Stephen, son of Mr. and Mrs. Billy Tinsley of Homer-ville, was a member of the trio of South Georgia students that captured first place honors in forestry competition at the annual FFA National Convention in Kansas City.

The student, now 17, became interested in forestry while in elementary school. His grandfather taught voc-ag at the school, followed by his father, who now is on the faculty at South Georgia College in Douglas. "When I was a little boy," he said, "I used to go with my Dad and watch the students work on forestry projects."

Now that he is a high school senior with plans to attend college next year, Stephen's childhood impressions and his more recent interest in FFA activities have convinced him to seek a career in agriculture.

The student and his advisor said study for the national competition got underway last May. In preparation for the contest, Stephen did a lot of field work at the school's 14-acre forest, a tract donated by Union Camp Corporation.

Stephen said the tree identification phase of the contest gave him some anxiety, as the species included many trees that are not grown in Georgia and the South. Nevertheless, the student was the only one in the national contest to correctly identify every tree!

Richard A. Foss has the unique and often challenging responsibility of uniting a half dozen Southeast Georgia counties into an organization bent on luring new industry and jobs into the area.

Foss, a veteran industrial executive who possesses the development skills that greatly pleased a search committee, is director of the Rural Economic Development Initiative, or REDI. It is an unprecedented effort to have neighboring counties work together for the common good of the region.

The counties, all with an economy based primarily on forestry and agriculture, include Emanuel, Laurens, Montgomery, Toombs, Treutlen, and Wheeler.

Representative L. L. (Pete) Phillips of Soperton led a successful move to obtain \$100,000 in state funding at the 1986 legislative session and additional funds were appropriated by the counties. An 18-member REDI Task Force, consisting of three representatives from each county, was named to oversee the project. Dr. Lynn Holmes, president of Brewton Parker College at Mount Vernon, was named chairman of the task force.

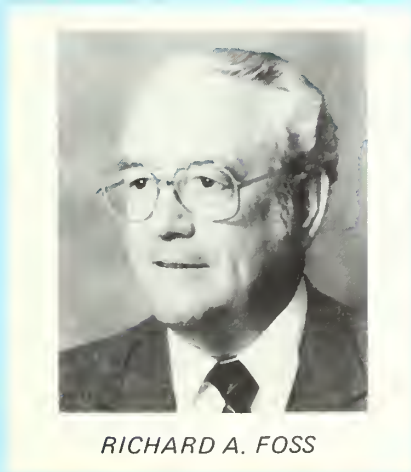
The REDI office was established in centrally-located Soperton in June of last year and Foss was appointed to the post in August. Although on the job less than eight months, the director has worked closely with the task force and has made numerous contacts in the quest for new industry. In a recent speech before a civic club, Foss told of seven industries that are currently expressing interest in coming into the area.

Assets pointed out by Foss are the large labor pool, the area's ideal location between Atlanta's Hartsfield Airport and the seaport at Savannah, adequate water supply, and two electric power companies.

Jim Higdon, Commissioner of the Georgia Department of Community Affairs, said his department is coordinating the activities of counties involved and "if the Rural Development Initiative works as well for these six counties as we hope it will, it can serve as a model for economic development throughout all of rural Georgia."

The Georgia Tech Research Institute is conducting a study to determine what industries the land and work force could best accommodate. Finding new uses for the forests in the region is one of the top priorities, according to Rick Duke of the Institute. He said manufactured homes, oriented strand-board, film-faced hardwood plywood, laminated veneer and gypsum flakeboard are some of the products that would be of interest to potential industry.

John Mixon, Director of the Georgia Forestry Commission, said the six counties represented by REDI "have an abundance of valuable timber and we will work in every way possible with Mr. Foss and the Task Force to aid the project in bringing forestry-related industry into the area."



RICHARD A. FOSS

COUNTIES UNITE IN INDUSTRY SEARCH



Acres of forested land by county

How would you individually bag 7,000 tree seedlings?

How would you organize a parade of 650 fifth-graders?

How would you arrange for the launching of 1,000 green and white balloons?

In other words, how would you prepare to celebrate Arbor Day in Atlanta?

Urban Forester Louie F. Deaton of the Georgia Forestry Commission worked closely with the director and staff of the Atlanta Outdoor Activity Center, with Marcia Bansley of Trees, Atlanta, with the Tree Preservation and Review Board, radio station WVEE, and Marcal Paper Company, to do just that. And the occasion was not only the celebration of Arbor Day, but the certification of Atlanta as a Tree City USA, so it was time to bring on the tree seedlings, the parade and the balloons, indeed!

EARLY PLANNING

The February 20th event was the result of months of planning and preparation. Tentative arrangements were made weeks before Christmas, 1986.

And even that time table was not quite far enough in advance. Organizers learned that to obtain a band for the parade, for example, they needed to schedule about a year ahead of time.

There must be meticulous attention to detail. Volunteers marked off space for school students in front of City Hall one blustery day in January. They braved the winter winds and icy temperatures, but when their metal measuring tape froze, they had to step inside for awhile.

There is also the question of how and where to place parade monitors to assist with the orderly progression of 650 fifth-graders along a ¼ mile parade route through downtown Atlanta.



A crowd gathered at the steps of Atlanta's city hall for an Arbor Day ceremony and to hear the city officially proclaimed a Tree City USA. In the photo below, hundreds of balloons are released as part of the festive activities.

ATLANTA CELEBRATES ARBOR DAY AND TREE CITY STATUS

BY MARY ANNE LINDSKOG

And, of course, the bagging of the tree seedlings becomes an event in itself!

But all these behind-the-scenes activities required to make Arbor Day an event only mirror the quietly ongoing urban forestry activities required to achieve Atlanta's Tree City USA award.

Atlanta is famous for its beautiful trees; in fact, it is known as "The Dogwood City." Georgia Forestry Commission urban foresters advise and assist Atlantans in preserving the health and beauty of their trees.

For example, at the homeowner's

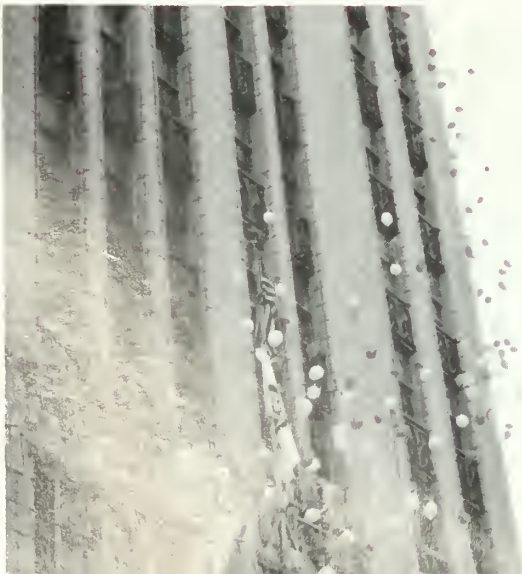
request, a forester inspects shade trees and offers advice about their care. Also, each county office in the Urban District processes tree seedling orders--yes, lots of dogwoods to beautify, as well as Virginia pines and others planted to provide privacy screens and prevent soil erosion on new home sites. Finally, the Urban Project informs city residents about the importance of good management of the urban forest through radio and television programs and announcements, newspaper articles, slide programs and films, presentations to school, civic, and community groups, and literature available at each office.

BEHIND SCENES

All these activities are "behind-the-scenes" of Atlanta's Tree City USA award, but the award could not be achieved without them, anymore than Atlanta could celebrate Arbor Day without each preparation for the February program.

In that sense, planning for Arbor Day in Atlanta, 1987, was a monumental task indeed and a most commendable effort.

So, how would you individually bag 7,000 tree seedlings?





ARBOR DAY CELEBRATIONS HELD AROUND THE STATE

From the mountain towns of Blairsville and Blue Ridge to the windy seaside parks of St. Simons Island, Georgians observed Arbor Day this year by planting thousands of pines, dogwoods and oaks.

Commission Director John Mixon and Mrs. Susan Coffee, president of the Eastman Garden Club, officiated at Arbor Day (February 20) tree planting ceremonies in Dodge County. Approximately 3,800 free trees were distributed to citizens of the county after the chamber of commerce promoted Arbor Day in the local newspaper. Some were reserved for planting on the courthouse grounds and along city streets.

Ranger Everett Rhodes and personnel in his Fannin-Towns-Union County Unit provided Arbor Day brochures to public schools in the area and the Colquitt County Garden Club sponsored a tree planting ceremony at the rural Odom Elementary School near Moultrie.

About 500 live oaks, the official tree of Georgia, were planted along avenues on scenic St. Simons Island and across the state school children in the Columbus area again celebrated the special day by planting pines on the school grounds. The St. Simons ceremony was coordinated by Ranger Clarence Hilburn of the Glynn County Forestry Unit, and Roger Steffens of the Sea Palms Resort.

Milledgeville District Forester Bennie Brant presented a history of Arbor Day in Georgia to a group of citizens and handed out literature. In Washington, Forester James Nolen of the district office in that city, along with Mayor Edward Pope and Mrs. Lucille Singleton, head of the city is beautification effort, planted a ceremonial tree near city hall and school children in Wilkes County participated in the traditional planting rites on school grounds.

The occasion was also used to celebrate Washington's certification as a Tree City USA.

The Commission's Newnan District office reported that schools all over the eleven-county district participated in Arbor Day observance by conducting classroom programs and tree planting activities. Some students visited the nature trail at the district office in Newnan.

Citizens of Macon and Valdosta celebrated Arbor Day by joining a few other select Georgia municipalities as certified Tree Cities.

Marietta celebrated Arbor Day with a noon program at the stage in Glover Park on the square. Students from

Walker School performed "The Giving Tree," and Park Street School students planted dogwood trees at their school. Marietta was re-certified as a Tree City USA by the National Arbor Day Foundation.

Marietta will have further cause for celebration when the city receives the Community Project Award from the National Arbor Day Foundation on April 25 in Nebraska. Marietta won the award in national competition for its renovation of Glover Park on the square, completed in 1986 at a cost of \$750,000. The expense was shared by private donors and the city.

Many other cities and towns, as well as schools, churches, civic clubs, colleges and other institutions and organizations across the state, celebrated the day by planting memorial trees in parks, on the grounds of public buildings and along city streets. Thousands of brochures containing a planting guide, the history of Arbor Day and other information, were distributed by Commission personnel.

NEW TREE CITIES

Atlanta, Macon and Valdosta are the newest cities to join a small group of Georgia municipalities that have earned the Tree City USA designation. Others that have previously qualified to fly the attractive white and green Tree City flag include Columbus, the first Georgia city to have the honor, the tiny town of Trenton in the Northwestern corner of the state, historic Savannah on the coast, Marietta, Avondale Estates, Washington and Augusta.



Commission Director John Mixon, left, presents award to Senator Sam Nunn on behalf of the National Association of State Foresters.

SENATOR NUNN GIVEN BERNARD ORELL AWARD

Georgia Senator Sam Nunn became the first recipient of the National Association of State Foresters' Bernard L. Orell Award at the organization's recent annual meeting in Charleston, S.C.

The award is to be presented annually to an individual who has shown outstanding national leadership in forestry policy making. Georgia State Forester John Mixon presented the Orell award to Senator Sam Nunn, sponsor of the "Pine Trees Bill" which set the stage for the Conservation Reserve Program included in the 1985 Farm Bill.

Senator Nunn also sponsored a letter signed by 26 senators supporting funding in 1987 for the U. S. Forest Service's State and Private Forestry Program and its Research Program at 1986 levels. The letter urged approval of funds for a new forest products marketing program which will help firms discover new domestic markets as well as promote their forest products for export.

Bernie Orell, for whom the award is named, began his forestry career as a recreation officer at Mt. Hood National Forest in 1935. In 1947 he became a technical officer for the Oregon Department of Forestry, an Assistant Professor of Forestry at the University of Washington from 1947-49, and the state forester of Washington State between 1949 and 1953. He then went to work for Weyerhaeuser where he became a company vice president and a leader in national forestry policy.

He held memberships and served in many forestry-related associations and societies. He died in 1983.

An Atlanta based organization, using aerospace technology and Southern yellow pine exclusively as framing for advanced building designs, is creating what corporate executives predict will be a revolution in the home building industry.

Nu-Way Energy Homes, Inc., established in April 1985, specializes in building homes that corporate reports state save 50 percent in energy costs, yet could cost the homeowner 25 percent less than the homes built by conventional methods. Company reports claim the homes exceed building codes, are stronger and more durable than conventionally built homes, and that the techniques can be applied to virtually any architectural design. The company located its headquarters in Atlanta because of the city's national prominence in business and proximity to an abundant supply of Southern yellow pine.

The building designs and technology of the firm are new to the United States from the standpoint of being used on a widespread basis in the home building industry. However, the techniques have been used abroad with great success and popularity for more than 20 years. Housing of this type is common in Japan, Europe and Scandinavian countries.

Although the Atlanta company has competitors, it claims to be the first of its kind established in the U. S. Corporate executives say business is "mushrooming throughout the Southeast." Company representatives say the obvious reason for this is the growing U. S. concern for energy conservation and economically priced/quality housing. They point out that numerous countries abroad have shared these concerns for many years.

Allen Schall, corporate secretary-treasurer who also serves as marketing director, said the exclusive use of Southern yellow pine in high-tech designs for framing plays a key role in producing better quality homes at lower costs. Schall said that during recent years, many builders have resorted to using inferior foreign lumber because it is considered cheaper and easier to work with (easier to nail and saw).

"But most of this foreign lumber is weak and inferior to Southern yellow pine," Schall said. "By using SYP in our high tech designs, less lumber is required for framing because it is placed to utilize its strength to the maximum so the final product costs the builder less and the homeowner less - much less." He added that one of the most popular benefits of SYP use is cathedral ceilings with no trusses. Although these ceilings lack conventional trusses, they exceed building requirements for strength and offer an atmosphere of spaciousness that would be in danger by trusses.

YELLOW PINE IDEAL FOR ADVANCED CONCEPT IN HOME CONSTRUCTION

BY WILLIAM EDWARDS

Schall said homes built with the designs and technology his company uses require SYP studs only every 48 inches, while conventionally built homes normally requires studs every 16 inches. As for the alleged ease of working with cheap, foreign lumber, Schall said the power operated tools used by his company (from factory to on-site assembly) recognize no difference between SYP and weaker lumber.

What Schall is referring to is a procedure for producing all segments of a home before transporting it to the building site. He said that regardless of design, all the company homes are "pre-engineered" in a factory environment that offers quality control and efficiency not feasible in on-site building situations.

The pre-engineered segments are then loaded on a truck and transported to the home site. "This is when our technology and methods becomes obvious to the general public," Schall said. "One skilled carpenter and three unskilled laborers can erect a one story home in one day; a two-story home takes two days. This includes all exterior and interior construction."

"Our on-site assembly crews are specially trained for speed and efficiency," Schall said. "Although there is a wide variety of architectural designs, the basics can be effectively applied to any pre-engineered assembly."

CONTRAST

Schall is quick to point out the difference in what is known as "prefab housing" and his company's "pre-engineering" process. He said builders specializing in prefabricated techniques usually offer only a limited number of predetermined designs to choose from, but with pre-engineering technology the consumer can have the techniques applied to any architectural design. In relation to this benefit, Schall said that although his

company specializes in building homes, they have also used the same technology for building everything from churches to motels.

"In prefab, they tell you what you have to choose from, with the choices often severely limited," Schall said. "With our pre-engineering techniques, you tell us what you want and we adapt to your needs." He also said that some of the prefab industry is identified with inferior products resulting from cutting corners on cost.

"But this is not the case with our organization and techniques," Schall said. "And we can prove it to anyone in the form of detailed engineering reports and simple tests that the consumer can relate to and easily understand."

A case in point is SYP supported panels used in framing. Schall said the interlocking panels of a house have been tested under hydraulic pressure to insure that they will withstand winds of 200 miles per hour. He points out that the conventionally built house will usually collapse under 140 mph winds.

**COMPANY OFFICIAL
JUMPS UP
AND DOWN ON
FOAM INSULATION
TO PROVE ITS
SUPER STRENGTH**

"This has been a major factor in increasing our Florida market," Schall said. "Homeowners on the Florida coast realize the importance of a sturdy home capable of withstanding hurricane winds, so this is becoming one of our fastest growing markets," he added, pointing to a map of the U. S. with markers dotting the Southeast to indicate concentration. Florida markers are heavily concentrated on the coast.

The wall panels are so light a small child can easily pick up a section. Insulated with foam core, they look deceptively fragile. The core looks much like a styrofoam cup crushed to bits and glued together. This delicate looking foam core not only provides a superior insulation for heat and cold, but complements the strength of the SYP support system.

Frank Moore, vice president of the corporation, has a simple test he delights in showing anyone interested. He places a 12-inch square of the foam insulation on the floor (the material looks like anyone could crumple it with the slightest pressure), then proceeds to jump up and down on it. The foam insulation does not budge. Moore weighs 260 pounds.

If this demonstration is not impressive enough, Moore has a field test he also enjoys showing doubters. He places one of the SYP-supported, foam insulated panels on the ground and has a truck drive up on it and park. The panel does not budge. Moore points out that this foam emits no harmful vapors and is manufactured with a built-in fire retardant. The insulation design is also intended to provide potential for the ideal solar home.



Marketing Director Allen Schall explains advantages of using sandwich panels over conventional methods in residential construction.

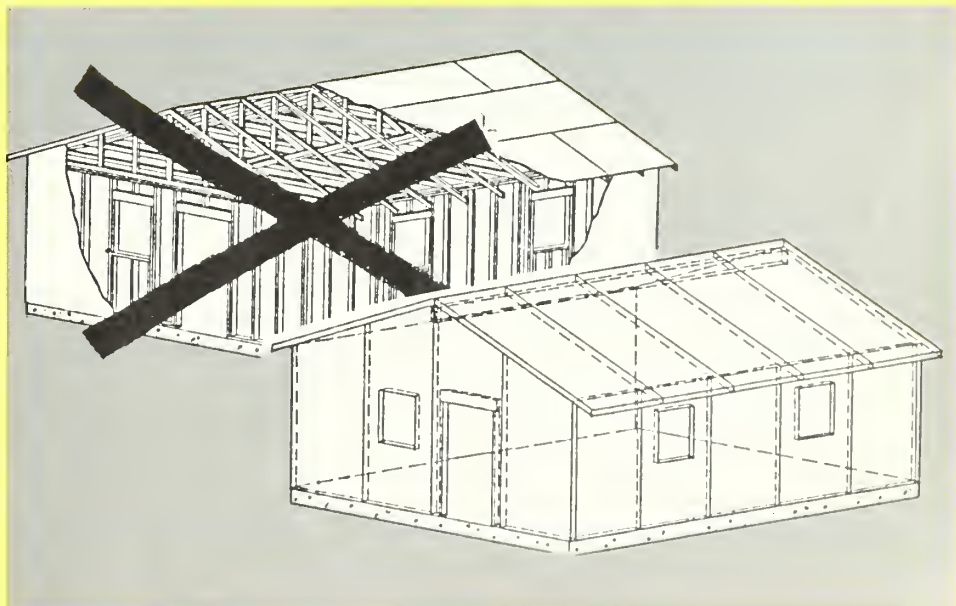
FUTURE PERSPECTIVE

The mention of solar homes sets Marketing Director Schall off on one of his favorite subjects: the necessity to adapt for the future. He sees solar homes and energy conservation as trends of the future. He believes there are certain needs from an ecological, economical, and national set of perspectives that should be recognized.

"For instance," he says, "we're not promoting the use of Southern yellow pine or any other material or building technique for the sake of doing it. What we do and use is determined by the resulting quality and future impact."

When Schall breaks down this basic philosophy, his logic becomes unavoidable. As related to the use of SYP in the midst of a seeming craze to use inferior imported lumber, he evaluates the situation from several angles.

Schall predicts SYP use will increase rapidly with the expansion of pre-engineered housing. He said that with pre-engineered designing, higher quality homes



The manufacturer claims that pre-engineered roof panels save approximately 50 percent of material costs over conventional construction, yet strength and durability are not sacrificed.

BACK TO WOOD



The top photo of a motel shows the building after it had been framed entirely in wood in the conventional manner and then wrapped in plywood. The other is a scene of the structure after the exterior walls had been surfaced with stucco and other construction had been completed.

The King's Inn at the Morrow exit of Interstate 75 south of Atlanta is a prime example of quality builders proving again that wood is an excellent construction material - even better than steel, aluminum or pre-stressed concrete in many instances.

Naytec Corporation, with headquarters in Phoenix, Arizona, is a nationwide organization which plans on building six to eight new King's Inn establishments a year using the same all-wood framing concept.

Tom Naylor, Chairman of the board for Naytec, says all-wood framing is preferable because no King's Inn exceeds three stories in height; so wood offers all the necessary framing requirements plus fringe benefits. Naylor points out that wood is more adaptable and can be worked with faster than other framing materials. He also emphasized that wood framing is easier to insulate and make soundproof.

The Phoenix executive said his corporation has experienced excellent results in using wood framing for motel construction, and the organization is looking forward to building many more similar motels in various sections of the U. S.



can be built with less lumber; this will mean slower (long-term) depletion of forest resources - providing more time for regeneration, which will be a prime need of the future. He also forecasts a new housing boom in lower price ranges that will enable large strata of the population to own homes - that would not be able to do so otherwise. According to Schall, high quality homes will be available at mobile home prices.

For those who might be apprehensive about more automation taking the place of a human work force, Schall does not see it that way. He predicts a beneficial shifting of working forces. He

views it as a "compatible and necessary blending of craftsmanship and technology in maintaining the same basic values that precipitated our (the U. S.)

industrial revolution."

"All this boils down to the fact that a widespread use of SYP in building helps the wood industry, environmental preservation, and the American economy in general," Schall said, "and I would be very glad to see it happen for a number of reasons."

Among Schall's "number of reasons" is a need for Americans to return to American products and ingenuity. He foresees the use of SYP and pre-engineering techniques as being a basic future economic and quality standard for building.

"Many Americans would be appalled at what they're getting for their lifetime investment in a home," Schall said. "Higher priced conventional homes are generally well-built, but the moderate

and lower priced homes often suffer from a maze of inferior variables."

According to self-imposed regulations of Schall's corporation, the organization will not operate on any basis that might cause a crack in their quality standard. He said some buyers have requested certain pre-engineered segments (including SYP) be omitted and left to their discretion. Schall says these requests are always denied because the whole product reflects the company's standards.

"We're going to do it right or we're not going to do it at all," Schall said. "If you offer a higher quality product, at a lower price, at the right time - the market will come to you. We're doing that now and the market is coming to us faster than we can accommodate it."

The words, Naval Stores, continues to puzzle many Georgians, especially those who live in the central and northern sections of the state and many who have moved here from other states.

They see the cupped pines as they travel through the South Georgia forests on the way to the Florida beaches or Jekyll Island, but they don't see anything "naval" about the activity.

Now the American Turpentine Farmers Association, with headquarters in Valdosta, is stepping up its campaign to better inform the public as to what naval stores is all about and explain how it is a part of the booming forest industry in this state.

The term, naval stores, dates back to the earliest days of the sailing vessels when the pitch derived from the pine was used to caulk the wooden hulls of ships to prevent them from leaking.

Today, naval stores identifies a product that is derived from the great pine forests of a comparatively small area of America's South Atlantic and Gulf Coast states.

ANCIENT OCCUPATION

Actually, the collecting of crude gum from pine trees and processing it into useful products is said to be one of the oldest occupations of the human race. One of the early uses was the manufacture of varnish for mummy cases in ancient Egypt. Biblical scholars contend that pitch was used by Noah to make the Ark watertight.

Hundreds of additional uses have been found for naval stores and the ancient art of collecting the raw gum has been greatly refined. Advanced technology in processing plants has opened worldwide markets for the varied products.

Jim L. Gillis, Jr., president of ATFA, said the importance of gum naval stores is sometimes overlooked because the industry is regional and its products are not recognized as they are mainly used in first stage manufacturing of consumer items.

Crude gum comes from special cells that line the walls around miles of small resin ducts that run horizontally and vertically within the tree. In producing the pine gum (or oleoresin) a portion of the bark is removed with a hack that barely exposes the cambium layer and a chemical stimulant is applied to enhance gum flow. The gum drains down on metal or plastic gutters and is collected into cups.

Rosin and turpentine are derived from the raw gum through a distillation process. While small on-the-site processing operations once flourished throughout the forests of the naval stores belt, the raw gum today is processed in three modern plants located in Baxley and Valdosta.

The uses of rosin today range from printing inks and chemicals to a special



Typical gum-producing forest



Naval stores processing plant

TURPENTINE FARMERS ASSOCIATION ENLARGES PROMOTIONAL CAMPAIGN

way of baking a potato and a substance that allows major league baseball players to have a better grip on the ball bat. Turpentine is chiefly utilized in the manufacture of paints and varnishes, medicines, polishes, disinfectants, soaps and waxes.

During World War II, both rosin and turpentine were used to replace commodities that could no longer be imported. Since that time, many of the various products derived from naval stores has continued to fill the needs of the nation's military establishment.

Gillis said the American Turpentine Farmers Association was founded in 1935 to promote all phases of naval stores production and marketing. He said it has been, and continues to be, instrumental in the promotion of research and the voice of gum farmers concerning government programs and other measures that enhance the industry.

KEEN COMPETITION

In recent years, China and other gum producing countries that have cheap labor have provided stiff competition for the American producers. The superiority of American naval stores, however, has preserved foreign markets and lucrative export trade continues. One particular advantage rosin produced in this country has over the foreign product is its use in the manufacture of anti-fouling paint used on the hull of ships. It has unusual qualities not found in foreign sources.

Rosin is also used in the manufacture of solder flux, laundry powders, paper sizing, ester gum, paint dryers, gloss oils, greases, waterproofing compounds, enamels, coatings, adhesives, matches,

linoleums, munitions and fireworks. It is an ingredient in cements used in shoe repairs, roofing, rubber, glass, battery seals, wire and nail coatings. It is used in plastic wood, belt dressings, marking crayons, boiler compounds, electrical insulating compounds, insect powders and is utilized in dozens of other ways.

Additional uses of turpentine include wood fillers, wood stains, salves, bleaches, flavorings, deodorants, lotions and perfumes.

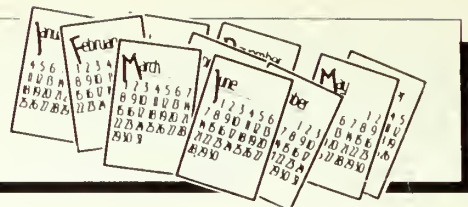
SUPERIOR TREES

Today, conservative and up-to-date methods of harvesting gum does little or no damage to the trees and when they are worked out, they are sold as sawlogs, poles or pulpwood without loss of value. Genetically superior high gum-yielding slash pines are now being grown in Georgia and neighboring states to greatly increase the volume of gum. There has been considerable progress made in research to protect timber from insects and diseases benefiting all timber growers. These accomplishments, along with numerous naval stores production techniques, were developed by the Southeastern Forest Experimental Station, Olustee, Florida.

The USDA supports the industry by providing small cost-shares to eligible producers who carry out recommended conservation practices. The Naval Stores Conservation Program is administered by ASCS in cooperation with the Georgia Forestry Commission and other state forestry agencies.

As the industrialized world discovers additional ways to utilize the renewable resource called pine gum, the association will continue to meet those needs, Gillis said.

CALENDAR



ANNUAL LANDOWNER SEMINAR MARCH 14

The Georgia Forestry Commission and several allied organizations will be involved in the sponsorship of the third annual Southeastern Forest Landowner Seminar March 14 in Atlanta with the theme "Forest Land Ownership in a Period of Change."

The one-day seminar, to begin at 9:00 a.m., will be held at the Georgia-Pacific Center and will concern shrinking softwood inventories, tax reform, acid deposition and other topics and will consider what the impact of these and other changes will have on the forest landowner.

John Gunter, head of the Forest Resources Department, Georgia Extension Service, said the seminar will explore the South's competitive position in world fiber markets, examine the adequacy of timber supplies in the area and probe the question of declining forest growth.

Speakers from several Southeastern universities, the Georgia Forestry Commission, U. S. Forest Service, Georgia-Pacific Corporation and other organizations will address the gathering.

"Special breakout sessions in the afternoon will cover topics like timber and tax reform, pine plantation establishment and making money from wildlife," Gunter said. "If you own forest land or plan to own forest land, you'll want to be there."

The event is sponsored by the University of Georgia Cooperative Extension Service in cooperation with Extension Services, forestry commissions and forestry organizations in Georgia, North and South Carolina, Tennessee, Alabama and Florida; the U. S. Forest Service, the Forest Farmers Association, American Forest Council, and Georgia-Pacific Corporation.

A registration fee will be charged and pre-registration is preferred. For more information, contact the Georgia Forestry Commission or the local county Extension agent.

WORKSHOPS PLANNED

An Effective Writing Skills Workshop for Foresters will be held April 7-8, 1987 at The University of Georgia Center for Continuing Education. The workshop is designed to be a practical

course on clear and effective writing, including: memos, reports (both short and long), and business letters for professional foresters.

A workshop on Point Sampling and Prism Cruising will be held at the Center May 5-6. The course is designed for foresters and selected technicians with little or no experience in point sampling and prism cruising.

For further information on the workshops contact Dr. Leonard A. Hampton, Director of Continuing Forestry Education, Room 237 Georgia Center for Continuing Education, The University of Georgia, Athens, GA. 30602 - phone 404/542-3063 or Mr. Andy Little, Conference Facilitator, 404/542-1585.

DATES ANNOUNCED FOR TWO FESTIVALS

The Okefenokee Forest Frolic is the new name of an annual event to be held in Waycross and Ware County April 9-11.

The Ware-Waycross Forest Festival and the Okefenokee Spring Fling have been combined to form the event, which will be similar to past celebrations.

A parade, banquet, Miss Ware County Forestry pageant and other events will be held during the three-day observance.

A celebration featuring a pageant, parade and other events will also be held in nearby Patterson.

Meantime, the annual Emanuel County Forestry Festival in Swainsboro has been scheduled for May 2-3.

RANGER REUNION SET FOR AUGUST

David Trebil of Manning, South Carolina, who graduated from the Forest Rangers School in Lake City, Florida 20 years ago, is eager to learn the whereabouts of 22 of his former classmates.

Trebil is planning a class reunion August 1 in Lake City to mark the 20th anniversary for the 55 graduates of the Class of '67. He has been able to contact 33 of the members and is now trying to find the remaining 22. Persons having helpful information are being asked to contact David Trebil, P. O. Box 32, Manning S. C. 29102, phone (803) 478-2284.

ASSOCIATION PLANS CONFERENCE IN MAY

The Forest Farmers Association's 46th Annual Southern Forestry Conference will be held in Savannah May 13-15 at the DeSoto Hilton Hotel.

The Conference theme, "Responding to the Challenges of the Coming Decade," will feature a number of prominent forestry leaders.

Pre-conference activities will include a Timber Tax Workshop covering "Winning Strategies Under The New Tax Law," and will be led by Dr. Harry Haney, Professor of Forestry at Virginia Polytechnic Institute and State University.

Three concurrent sessions discussing important issues on effectively managing timberland will also be held as a part of the conference activities. A panel of forest tax experts will discuss "Life After Tax Reform" and how the new tax law is affecting forest products industries and individual timberland owners.

For additional information contact Forest Farmers Association, 4 Executive Park East, Atlanta, Georgia 30329. Telephone number: (404) 325-2954.

COMMISSION TO HOST NASF SOUTHERN GROUP

The Georgia Forestry Commission this year will be host to the Southern Group, National Association of State Foresters, for the organization's annual meeting.

Plans have been completed for the state foresters representing the Southeastern states, as well as information and education department chiefs, management chiefs and forest protection chiefs, to meet May 18-21 at the DeSoto Hilton Hotel in Savannah.

Most of the sessions will concern discussions on issues and problems common to the forestry organizations represented, while some social activities and tours of the historic city are being planned. Special activities are being scheduled for wives.

Director John Mixon said the Commission will be honored to have the group "meet in one of the most beautiful cities in our state and we intend to have a very productive conference."

The group met last year in LaFayette, Louisiana.

Georgia foresters know their way around the state's vast woodlands, but Richard L. Malm has the additional perspective of being well acquainted with the tropical rain forests of West Africa.

Malm, who is a regional woodlands manager of Savannah's Union Camp Corporation, spent two years in the African Republic of Ghana as a forest economist for the Peace Corps. In 1973 and 1974, he was assigned by the Smithsonian Institute to work the former Gold Coast British colony. At the time, the Smithsonian placed foresters in cooperation with the Peace Corps.

A native of Long Island, New York, Malm received his forestry degree from West Virginia University in 1970. He had always wanted to go overseas, and three years later the Peace Corps provided an opportunity.

He remembers Ghana as a nation of geographical extremes. Comparable to Oregon in size, Ghana is bordered on one end by the Sahara Desert while tropical rain forests grow on its Atlantic coastline. These rain forests of giant hardwoods were the main concern of Malm's work with the Peace Corps.

Ghana was attempting to balance a faltering foreign exchange program and forestry provided a viable opportunity. Although cacao (coco) was the main export, forestry exports were not far behind. However, lack of sound forestry practices posed a serious threat to the country's economy. A secondary species utilization problem was a primary concern; for a variety of reasons, many hardwood species were not being used. Lack of regeneration procedures also ranked high on the list of concerns. The OPEC oil embargo of the period compounded the economic problem. Gas lines plagued Ghana in the 70's just as they did the United States. Also, a declining European export market placed increasing strain on financial resources.

In the midst of this economic turmoil and rule by a revolutionary government, Malm and other foresters were engaged in "timber trends" studies to improve the import-export situation and create jobs for the people of Ghana. The basic idea was to establish forestry-related industries within the country including a pulp and paper complex. When Malm was assigned to Ghana, the country was doing little more than exporting logs with minimal concern for regeneration.

Malm worked out of a forest research institute in Kumasi, a city approximately the size of Savannah. Working with other nationalities of foresters, including native Africans, he traveled through coastal rain forests and made frequent trips to the capitol of Accra and the main port of Takoradi.

Most of his dealings among the natives of Ghana involved working with Africans educated abroad. Malm remembers the educated Africans-most had degrees from



Forester Richard Malm of Union Camp Corporation once served in the Peace Corp in West Africa and recalls this and many similar scenes in which huge logs were transported by train from the tropical forests.

Rain Forests Remembered

Britain and spoke excellent English, so language was no problem. However, uneducated segments of the population still spoke only their tribal dialects. Malm picked up enough of the Ashanti dialect to make his way around the country and shop in the market places.

Over the years, there have been pros and cons concerning the effectiveness of the Peace Corps, but Malm has only positive impressions of the organization. In relation to his assignment, he saw the role of the Peace Corps as an educational effort; a role that would have to be implemented and sustained by the countries receiving Peace Corps assistance.

In Ghana, Malm found the people very receptive to his endeavors and the role of

"It gave me an appreciation of the way Georgia manages forestry resources."

the Peace Corps. The majority of native Africans he worked with had been educated in England, Germany, France and the United States. Travel and education had provided them with a realistic view of the world and they wanted to improve their country.

Although colonialism had left an inevitable negative residue, Malm said British influence also left certain sophisticated attitudes and a desire for progress. Malm believes Ghana's concern for progressive forestry practices was a result of British influence.

In contrast, there was a lack of education and extreme poverty. Heat and poverty are the most indelible impressions Malm has of the country. He recalls that anyone who did not wear ragged clothes and drove any kind of a car was frequently considered rich. Malm said many Africans considered him to be rich, although the Peace Corps paid him only \$150 a month.

But there were other impressions. Malm said the giant species of tropical hardwoods have to be seen to be appreciated. The only thing he could compare them with in the United States are some of the California hardwoods. "Many of the trees were so large that a single log would fill an entire railroad car," he said.

In retrospect, he regards his experience in Ghana as valuable. Like many Americans who travel and work abroad, he returned home with a new appreciation for the United States. "When you see some of the conditions in other parts of the world, it really makes you glad to be an American," Malm said. "It gave me an appreciation of the way Georgia and other progressive states manage forestry resources."

That's what Malm is doing now with Union Camp. His regional responsibilities include forest management and procurement of large tracts of woodlands in Georgia, Florida and South Carolina.

Brent Jarrett and his fellow foresters will provide free seedlings to a landowner, give him technical advice on insect control, thinning, fire protection and other aspects of good forest management, only to see him sometime sell his timber to a competitor.

"But that's alright," declared Jarrett, Statesboro Area Manager for Stone Container Corporation. "Our procurement people are not successful, by any means, in buying every tract." Although much time, effort and expense might have gone into working closely with a landowner who ultimately sells to some other company, the forester said, "it is our policy to continue to give him assistance if he wants it."

Stone Container bought Continental Can Company's paper mill at Port Wentworth near Savannah and depends on wood from forests within about a 100-mile radius to keep the mill in operation. All wood must come from private landowners.

Some major pulp and paper mills in Georgia have a large land base in timber that is managed by their own professional foresters, while also maintaining an active landowner assistance program for farmers and others who grow timber in their operational area.

"We do it differently," explained Jarrett. "Stone Container owns no land. We work closely with private landowners in encouraging them to practice good forestry...we feel the close relationship and the assistance we provide will assure our mill of a continuous supply of fiber."

He said his company's procurement foresters offer a fair market price when a landowner is ready to harvest his timber, "but if the landowner and our buyers can't agree on a price, the landowner is free, of course, to sell elsewhere." In some instances, landowners have received free seedlings from Stone Container to replant after having sold their timber to a competitor, Jarrett said.

Today, Jarrett and Jeff Graves, a forest technician, work as a team from the Statesboro office to serve landowners in Bulloch and Screven Counties, as well as a portion of Candler County. There are several other professional people in the office, but when it was opened three years ago, only Jarrett and Pat Lee, district manager, were on hand to provide management plans and handle other phases of the assistance program.

Now the office files are bulging with

LANDOWNER ASSISTANCE INTENSE IN STONE CONTAINER TERRITORY

BY HOWARD BENNETT

management plans. "We work with landowners who have forest tracts ranging from 50 acres to 500,000 acres," said Jarrett, "and about 80 percent are less than 300 acres." The office is currently serving 350 landowners.

In addition to aiding the landowner in site preparation, prescribed burning, herbicide schedule and other areas of management, the company provides free seedlings. About ten million trees are given during a planting season and Jarrett said "one owner alone was given one and a half million seedlings." At present, there is no limit to the number of trees an individual may receive from the company.

"When we started our program in this area, we had to beat the bushes and go out and find the landowners and tell them about our services," Jarrett said, "but now, word of mouth and

referrals are spreading the news for our assistance program."

The forester said many landowners seem to be knowledgeable about basic forestry, but need and appreciate the technical advice his company offers.

When asked if there are unscrupulous timber buyers in search of unwary landowners who don't realize the true value of their timber, Jarrett said "sure, there are probably some around, but we haven't found it to be a problem in our area."

The area manager said the competition Stone Container Corporation has with other mills is the kind the company can live with very well. It is a competitive spirit that fosters better forest management, insures a continuing source of raw materials for industry and provides the private landowner with a fair market.



Technician Jeff Graves, left, and Forester Brent Jarrett complete a management plan on forested acreage for a Bulloch County landowner



Commission Director John Mixon receives proclamation from Governor Joe Frank Harris, center. Others, left to right, include Jim Groom, Mead Corporation; Mary Ann Lindskog, Commission; Leon Brown, Georgia Forestry Association; Tom Norris, Union Camp Corporation; Bryant McCartney, Hiwassee Land Company; Herman Moore, Georgia Pacific; David Westmoreland and Randall Perry, Commission; and Bill Binns, Union Camp Corporation.

GOVERNOR PROCLAIMS GEORGIA TREE FARM DAY

Governor Joe Frank Harris proclaimed January 27 "Tree Farm Day" in Georgia, and the state legislature passed a resolution recognizing and commending the Tree Farm System.

Georgia Forestry Commission Director John W. Mixon presented the governor with a tree seedling when he signed the proclamation at his office in the capitol. The seedling represented more than 300 million tree seedlings that are being planted throughout the state this year.

Leon Brown of the Georgia Forestry Association said legislators will each receive a loblolly pine seedling containerized in a Tree Farm System coffee cup, together with a packet of information about the importance of the Tree Farm program to forestry, Georgia's leading industry.

It was pointed out at the proclamation ceremony that forestry contributes more than \$8.6 billion to the state's economy each year. A projected shortage in Georgia's timber supply over the next 20 years threatens this forest-based economy, and the future of forestry depends upon the supply of timber from the land of private non-industrial landowners who own 70 percent of the 24 million acres of commercial timberland in the state.

The Georgia Tree Farm System is an organization that encourages private

landowners to manage their forest lands for the increased production of tree crops, as well as for an improved wildlife habitat and outdoor recreation. Georgia ranks number one in the nation in Tree Farm acreage, with 7.5 million acres. It is third in the number of tree farmers,

with 3,506 registered in the program.

This was the first time the state legislature has awarded the Tree Farm System a commendation. The Georgia system is part of the American Tree Farm System, a 45-year-old program of the American Forest Council.



Judges examine more than 300 posters to determine winners in the annual Smokey Bear/Woodsy Owl Poster Contest. Left to right are Mrs. Lynn Jones and Mrs. Bernard Bridges, Moultrie residents and officials of the Georgia Garden Clubs; Donald Bennett, Retha Beverly and Tim Weaver, personnel of the Colquitt Forestry Unit, and Mrs. James Phillips of Moultrie, state poster chairman for the Garden Clubs.



GO WITH IT!

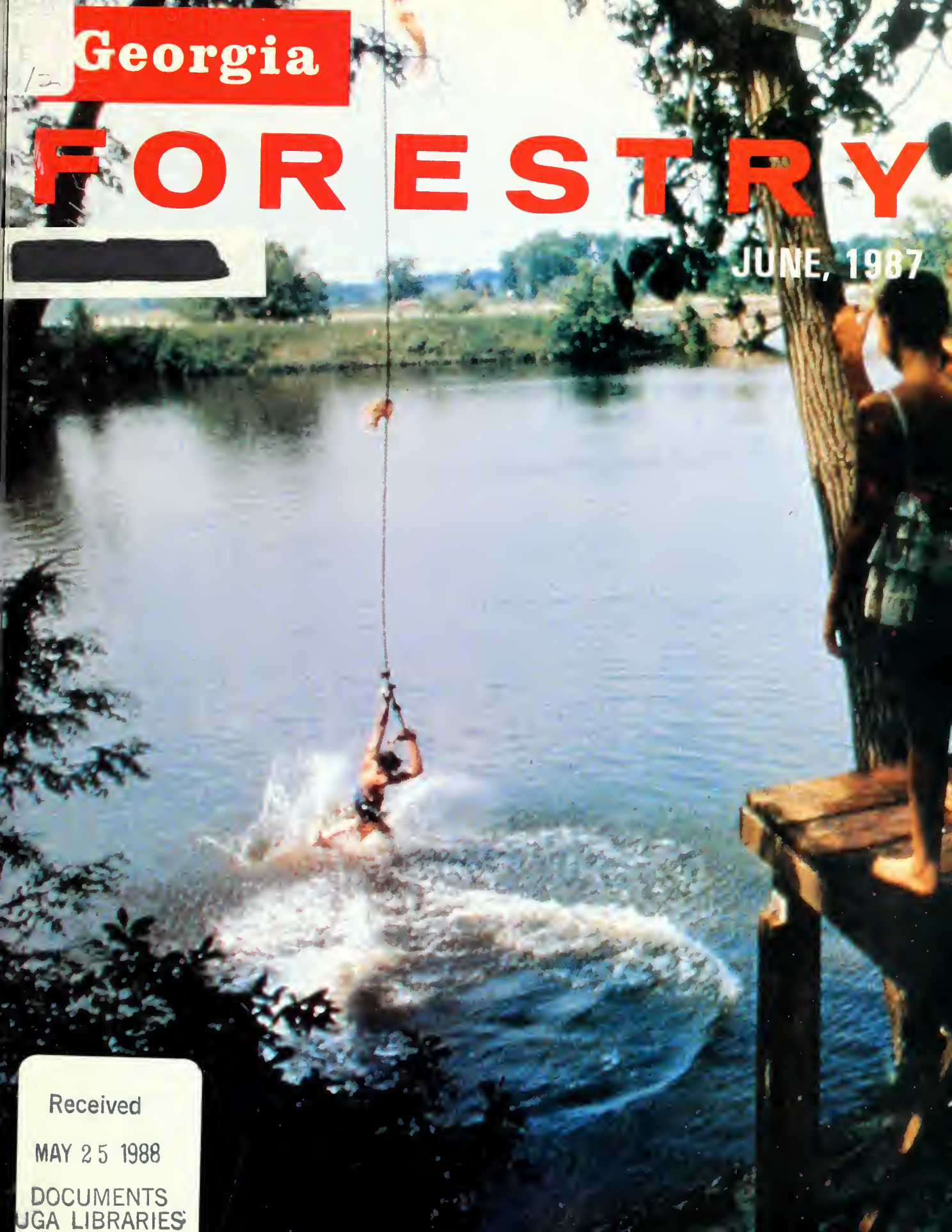
Take the road of sound investment. Plant idle acres and those of low productivity in trees. More and more Georgia landowners are finding that there is real profit in planting their marginal land in fast growing, genetically improved tree seedlings from the nurseries of the Georgia Forestry Commission. You've got the green light, Join Them.

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June, 1987 No.2 Vol. 40

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DISTRICT OFFICES

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Georgia Forestry is published quarterly by the Georgia Forestry Commission, Route 1, Box 181, Dry Branch, GA 31020. Second class postage paid at Macon, GA. POSTMASTER: Send address changes to Georgia Forestry Commission, Route 1, Box 181, Dry Branch, GA 31020.



LONGLEAF PINE

DESCRIPTION: Leaves or needles 10 to 18 inches long, in crowded clusters of 3 to the sheath; dark green in color. Fruit or cone maturing at the end of the second season, 6 to 10 inches long, slightly curved, dull brown, in falling, leaving a few of the basal separating into large, papery scales. A tree often 100 feet or more in height with a straight, slightly tapering trunk about 2 to 3 feet in diameter.



KEY CHARACTERISTICS: Leaves or needles 10 to 18 inches long, in crowded clusters of 3 to the sheath; cone 6 to 10 inches long, dull brown; buds silvery white.

WOOD: Heavy, hard, strong, coarse-grained, durable, light reddish yellow.

USES: One of the best woods for construction purposes, also used for railroad cars, boats, interior finish, pulp and many other purposes. This tree also produces a large percentage of the naval stores produced in the southern states.

DISTRIBUTION: Confirmed principally to the coastal plain but ranging inland in the western part of the state to the vicinity of Rome; forming open stands on dry, sandy soils.

Clarance Ellie Curry, well known around Reidsville and Tattnall County for many years as a farmer, wholesale gasoline distributor, timber buyer and bank director, has now made reforestation his chief interest.

"Pine trees have always looked good to me," declared Curry the other day as two foresters accompanied him on an inspection tour of newly planted longleaf pines on 522 acres of his land. "I decided to turn to trees," he said, "after the last year I farmed and lost \$30,000."

The unusual aspect of Curry's conversion from row cropping to tree planting is the species selected for the large acreage. Georgia landowners are not presently planting great fields of longleaf! Average tracts are only 10 to 20 acres.

Foresters Dennis Pope and Willard Fell of the Georgia Forestry Commission's Statesboro District Office recommended that Curry plant longleaf on the site, which includes three large fields situated on a ridge of deep sand. The long-rooted seedlings were planted at an ideal time. There was ample rainfall during and following the planting of the more than 421,000 seedlings.

OVERPLANTING ADVISED

"We recommended a thicker planting," said Fell, "and we ended up having his contract planters set out about 808 seedlings per acre." The forester explained to the landowner at the outset that the longleaf is generally difficult to plant properly when compared to other pine species. He said the overplanting would compensate for an occasional dead plant already observed across the fields.

Curry planted the acreage under the Conservation Reserve Program after successfully entering a bid of \$43.00 per acre. The federally sponsored program provided half the cost of establishing the trees and will pay Curry an annual rent on the land for ten years.

Pope said other longleaf plantings have been made in the county on a smaller scale and additional landowners are being encouraged to plant the species on their sandy soils.

Meanwhile, Forester Lynn Hooven, who heads the Commission's Forest Management Department, views Curry's planting as "an excellent indication that we can expect a renewed interest in longleaf." Although he admitted the species requires greater care in planting and often grows extremely slow during the "grass stage," he pointed out that the longleaf is more fire and pest resistant than other pines and produces "very high quality timber."

The Commission nurseries have produced a relatively small number of longleaf seed-

ON THE COVER - Our forests provide mankind with many benefits and one of them pertains to clean, clear water. Thanks to the trees that provide cover and prevent excessive soil and debris run off into Georgia's creeks, rivers and lakes, pollution has not destroyed all the "old swimming holes." (Photo from "Take Pride in America Campaign," U. S. Department of Agriculture)

LARGE TRACT PLANTED IN LONGLEAF

FORESTER PREDICTS RENEWED INTEREST IN THE SPECIES

lings in recent years. During the season just ended, for instance, the nurseries grew slightly less than three million longleaf pine, while producing more than 88 million slash and more than 42 million loblolly pine seedlings.

Hooven, a member of a committee working to transfer promising longleaf research results to the landowner, said the Commission nurseries are capable of producing genetically improved seedlings of that species in volume whenever demand warrants it.

Now that the longleaf seedlings have been established on his property, Curry is anxiously watching the weather reports. If his sandy soil becomes too dry, he has an answer to the problem. Sprawling irrigation equipment left over from his farming days is intact in each field and if the need arises, he said he will "start up the big pumps."

The landowner said he appreciates the sense of security derived from a good investment in woodlands. He said he came from a large family and "knew some hard times after

my father died when I was about ten...I know how it is to make a meal out of a 15-cent soup bone and some potatoes."

He said he has always encouraged family members and friends to hold on to their land if at all possible.

Curry, who said he is "going on 82" years of age, has planted almost a half million seedlings that will not mature into marketable timber in his lifetime, but he said he has children and grandchildren who will benefit in the 21st century from the reforestation effort he is making this year.

In the photo below, Foresters William Fell, center, and Dennis Pope check newly planted longleaf in one of three large fields as landowner Clarence Curry looks on. At right, Curry discusses irrigation system with Forester Pope.



Longleaf pine is the most valuable and pest resistance of the Southern pine--yet its acreage have been reduced from over 50 million acres to just over five million acres at the present. Why? The reason, simply put, is that we aren't regenerating longleaf stands back to longleaf. In many cases, with disastrous results, we have switched to other species.

Foresters have come to believe two myths about longleaf. First, survival is consistently poor and secondly, growth is slow (it stays in the grass stage for an extended period).

These two myths become facts if we don't give close attention to the very sensitive characteristics and requirements of longleaf pine. Research and demonstrated operational management have proven that longleaf can be regenerated with consistently good results.

-Roger Dennington
Pine Silviculturist,
U.S. Forest Service

(Excerpt from a longleaf pine regeneration workshop manual).



Old contrasts with new as ghostly image of an Atlanta high rise building looms in background of authentic 1840's farm house located in the heart of Buckhead. The historical Tullie Smith Farm House is part of the Atlanta Historical Society's restoration complex depicting farm life in Georgia during this period. Dorothy Evans, tour guide for the Society, (photo opposite page) demonstrates use of all-wood loom in Tullie Smith Farm House. The authentic weaving device is one of numerous all-wood artifacts displayed in the restoration.

HISTORIC FOREST REFLECTS WOOD ORIENTED CULTURE

Touring the Atlanta Historical Society's 26-acre preservation is like stepping through a science-fiction time warp and emerging in the 1840s - when the varied use of wood was as essential to Georgia's lifestyle as gasoline is now.

Sheltered by a canopy of woodlands, the preservation of historical structures and culture are hidden away in the heart of Buckhead, a fashionable section of Northside Atlanta. The 26-acres include a library, archives, exhibition gallery and administration offices; but the main attractions from a forestry perspective are the Tullie Smith House Farm Restoration and historic forest.

The preservation is fringed by the elite West Paces residential section and located only minutes away from Lenox Square, the Governor's Mansion and downtown sky scrapers. The surrounding forest muffles the sounds of horns blowing and the distant drone of I-75 traffic.

From the backyard of the Tullie Smith farmhouse, the flitting images of passing cars can be seen through the trees. The two-story, plantation style Smith House was originally built in DeKalb County and moved to the Society's grounds in 1969. Since then, an authentic collection of wood outbuildings have been added to reflect the lifestyle of a Georgia farm family in the mid-nineteenth-century.

"One of the most striking aspects of the Tullie Smith complex is the realization that this was a wood oriented culture," said Mary McCall Cash, public relations director for the Society. "The house and surrounding grounds are filled with wood artifacts and reproductions of the era."

Artifacts include a variety of chairs, tables, desks, looms, beds, baby cribs, tools, and kitchen utensils. The outbuildings include a log barn, smokehouse, double corn-crib, and authentic pioneer cabin. All these structures were transported from other Georgia sites (some in the Atlanta area). A

paling fence surrounding much of the farm is a copy of a graveyard fence near LaGrange. The pioneer cabin, a study in strength and simplicity, was transported from the Ben Hill section of Atlanta.

"In fact, everything down to the smallest wood pieces suggests functional simplicity," Director Cash said. She pointed out that even though small farmers were sometimes slaveholders, they often worked with their slaves in the fields from sunup to sundown. Survival and subsistence, not legendary Southern traditions, were primary concerns of these farmers.

Although farm life during this period was often a struggle for survival, the participants apparently ate well, according to regular cooking demonstrations (1840s style) included in the Tullie Smith schedule. Typical table fare includes fried chicken, black-eyed peas, barbeque, biscuits, collards, cornbread and baked potatoes. All cooking is done by wood; oak is preferred.

Lack of refinements is reflected in the use of wood. These farmers built most of their furniture or had a local cabinet maker do it. The result was more functional than decorative. Although metal was available, the preference for all-wood construction is obvious. Most of the wood pieces have no metal at all. For example, the chairs and tables are fastened together with wooden pegs.

**A PEACEFUL
FOREST THRIVES
IN A HISTORICAL
SETTING THAT IS
SURROUNDED BY
THE BUSTLING CITY**

Many of the artifacts have a design or unique cut identifying the maker, indicating a pride in craftsmanship. From the viewpoint of a woodworking purist, craftsmanship was enhanced by this practice. However, delayed response in adapting to the industrial revolution, permeating the New England states during the 1840's, would have negative repercussions for the South during the Civil War. As displayed in the complex, even the backyard vegetable garden was tilled with an all-wood plow.

As Director Cash points out, the sheltering forest creates a cloistered atmosphere suggesting another world, a world of years long past, a mini-world of wood. A network of trail winds through an inviting forest that includes pines, tulip poplar, American beech, oak and hickory.

"Preservation of this historic forest is equally as important as the structures and artifacts," Director Cash said. "All future expansion plans are coordinated with forest preservation objectives."

Cash explained the lower section of the Society's woodlands was a cotton field in the last century. Terraces and gullies are still visible. About 80 years ago, the fields were abandoned, "So nature took it's course and today we have a beautiful, secondary succession forest," Cash said.

This forest complements the swept flower-yard and vegetable garden. The nearby Mary Howard Gilbert Quarry Gardens and Swan Woods Trail contain collections of plants native to Georgia, providing an outdoor laboratory for environmental education. Formal gardens at the Swan House include terraced lawns and massive stairs with water cascades.

What is the value of such a preservation? Dorothy Evans, a tour coordinator with the Society since 1971, sums it up like this: "You really can't understand today and tomorrow until you see and understand the past."

The Atlanta Historical Society is open to members and the public year-round. Programs include nationally known speakers, film and concert series, seminars, and travel opportunities.



NEW FLINT RIVER NURSERY SEEDS FOR FALL PRODUCTION

Some 80 acres in the Commission's new Flint River Nursery in Dooly County have been seeded for fall seedling production and underground irrigation lines have been installed on 230 acres of the facility.

The new nursery near Montezuma is designed to produce 50 million seedlings annually when fully operational. When combined with volume from Morgan Nursery near Byron and Shirley Nursery at Reidsville, the Commission will be growing 200 million seedlings yearly for the landowners of Georgia, according to Reforestation Department officials.

Greg Findley, staff forester in the Camilla District since 1985, has been named superintendent of the Flint River Nursery and now resides in a house adjacent to the nursery.

More than 20 sites were considered before soil specialists determined that the level, 832-acre tract near Flint River was the most suitable for the development of the nursery which will eventually handle approximately 3,000 seedling orders from landowners in Southwest Georgia.

Governor Joe Frank Harris and the General Assembly during the 1987 legislative session appropriated funds for the Commission to buy the land.

Senator Hugh Gillis of the Senate Natural Resources Committee and Representative Pete Phillips of the House Natural Resources Committee introduced the need for the Commission to obtain the new nursery and pushed for the necessary funds to finance the facility.

Part of the Flint River acreage will be used to establish additional slash and loblolly pine seed orchards which will eventually enable the Commission to produce all the genetically superior seed needed in its reforestation program.

The nursery is employing six persons on a permanent status. In addition to Superintendent Findley, a nursery technician and four nurserymen will staff the nursery. As many as 100 persons will be hired during the lifting season and other hourly paid part-time workers will be hired as needed for other duties.

PROJECT LEARNING TREE NOW CO-SPONSORED BY COMMISSION

Project Learning Tree, the award-winning environmental education program designed for educators working with students ranging from kindergarten through high school, is now being co-sponsored in Georgia by the Commission and the Extension Service.

Sharon Dolliver, a Commission forester specialist serving as co-coordinator for the program, said Georgia is among 45 states and three Canadian provinces participating in the effort cosponsored nationally by the American Forest Council. She described the program as a series of workshops and in-service programs for teachers, foresters, park and nature center members, and youth group leaders.

"This is a grass roots volunteer program working in conjunction with local school districts and state agencies," Dolliver said. "The objective is to prepare an international network of students to make wise decisions about conservation practices and use of natural resources."

According to guidelines, the program is designed to supplement existing educational curricula so it can be easily integrated with existing material. The lessons are ready-made and the 175 project activities require little or no equipment.

"The Program works equally well in the city or country," Dolliver pointed out, "whether there is a forest or a single tree." Emphasizing the efficiency and success of the program, she pointed out that President Reagan honored Project Learning Tree during a special White House ceremony for being one of the nation's exceptional volunteer programs.

Georgia cosponsoring organizations include various forestry agencies, departments of education, professional societies, universities, extension departments and forestry associations.

For more information on the program and workshops scheduled in your area contact: Georgia Project Learning Tree, P. O. Box 819, Macon, Georgia 31298-4599.

TEST DETERMINES OAK SPECIES

A recently developed testing method for separating red oak and white oak logs could prove valuable in the future for Georgians in the hardwood business.

Primary value of the test is in log exporting. The process is a quick and accurate method using a 10 percent solution of sodium nitrate sprayed or brushed on heartwood.

A chemical solution turns white oak

yellow-orange, then red-brown, then dark-green- or purple to black. However, when applied to red oak, the solution turns the wood only slightly darker.

The process works only on heartwood. Sapwood and wood colored by fungi won't provide a determining reaction. The test works best on green wood.

NEW REFORESTATION CAMPAIGN ANNOUNCED

By Mary Anne Lindskog

"Reforestation doesn't cost--it pays! Let time make money for you."

The Georgia Forestry Commission's statewide Reforestation Campaign begins in July and aims to make every Georgia landowner familiar with these slogans, in the first marketing plan for reforestation ever adopted by a state forestry agency.

All of the Commission's 890 employees are involved in the campaign, designed to avert the future timber shortage projected by recent forest surveys.

Forestry is Georgia's leading industry, contributing \$8.6 billion to the state's economy annually. Trees are a billion dollar crop in Georgia. However, with the increasing worldwide demand for pine timber, the South must double its timber production by the year 2030. Georgia is in an ideal position to help meet this demand with its favorable climate and land for growing trees. Yet the state continues to harvest more acres of forestland than are planted each year. Even with the Commission's intensified efforts in recent years to encourage reforestation, nearly 200,000 more acres of trees are harvested than are replanted in Georgia annually.

That is why Director John Mixon retained professional marketing consultant Dick Rodgers, who has developed marketing plans for Coca Cola, Clemson University, and other top corporations and institutions, to design a Reforestation Marketing Action Plan for the Commission. With the help of George Brooks of the U. S. Forest Service, Rodgers wrote a marketing plan that was the first of its kind for reforestation.

The plan organized the Commission's miscellaneous, on-going reforestation efforts. First, Georgia landowners were surveyed--a random sample of the tax base was taken on landowners with less than 500 acres of land. (Private, non-industrial landowners have always been the target of reforestation efforts in Georgia, because these landowners possess 64 percent of the state's 24 million acres of forestland.)

GOOD RESPONSE

With a response rate of 40 percent, the survey showed that most landowners were married, over 45 years old and with an annual income of more than \$25,000. Sixty-two percent have some formal education beyond high school. This profile indicated *how* the GFC needs to approach landowners.

On the average each owns 225 acres of land, of which 161 are forested acres. Primarily landowners said they owned their land for its natural beauty and recreational

value. This reason was followed by that of ownership for timber production.

Most of the respondents (67 percent) had sold timber from their land, but only 41 percent of these indicated they had either replanted trees or had planned for natural regeneration prior to harvest. Nearly an equal number--35 percent--said they had left the land as is after the logging operation with no plan of action.

Projecting, then, that 35 percent of the approximately 640,000 harvested acres are left annually in Georgia with no plan of action, except allowing nature to take its course, a total marketing effort for reforestation is definitely in order. The survey indicates *why* the GFC needs a marketing action plan.

In addition, only 29 percent of those surveyed had management plans for their land (66 percent of these followed the plans), and about half of the respondents were unaware of cost-sharing assistance or tax credits

available.

Based on these results, Rodgers wrote the "Marketing Action Plan for the GFC Reforestation Project." Director Mixon appointed a Reforestation Marketing Committee chaired by Forest Research Chief Fred Allen. Rodgers worked with the committee to integrate all GFC services into the campaign.

TOLL-FREE NUMBER

The committee designed printed materials and audio-visual programs to communicate the critical need for reforestation in Georgia. Client kits include: a bounce-back mailer so that the landowner can request GFC information and assistance, postage paid; a services brochure that incorporates GFC management and protection services in conjunction with reforestation; an information fact sheet that briefly discusses the importance of forestry and lists GFC district offices; and a forest management cycle poster, depicting the rotation of a stand of trees from seedlings to final harvest, followed by reforestation provisions. The folder itself is printed with Director Mixon's letter explaining the Reforestation Campaign, and all materials include the Commission's toll-free Reforestation number, **1-800-GA TREES**.

Audio-visual programs used in the campaign include three automated, pre-recorded slide shows on reforestation in north, middle, and south Georgia; the film, "You Have a Friend in Forestry," which depicts GFC services; and films on reforestation and the benefits of wood.

District foresters, reforestation foresters, and a media representative from each district were trained in Macon in May, and these teams, in turn, trained all personnel in each district in the details of the campaign.

Every GFC employee--foresters, rangers, patrolmen, tower operators, supervisors, administrators, chiefs, staff--is involved in the Reforestation Campaign, because this is the effort with which the Commission plans to achieve its goal of reforesting every acre of timber harvested in Georgia.


Special radio and TV announcements and newspaper stories are planned, following the kick-off of the campaign at the governor's office on July 8.

With its statewide marketing campaign, the Georgia Forestry Commission once again leads the nation in reforestation. The plan is a model for other states, demonstrating that "Reforestation doesn't cost--it pays! Let time make money for you."



PINE CONE HOBBY GROWS INTO LUCRATIVE BUSINESS

By Howard Bennett

 The once lowly pine cone, the only part of the tree that has not been fully utilized in recent years, has now found its way into attractive wreaths, candelabras, wall plaques and Christmas trees.

An enterprising couple in the little Peach County town of Byron has founded The Pine Cone Factory, Inc. and now each workday a half dozen young women are busily cleaning, wiring, gluing and spraying the cones as they are fashioned into a wide assortment of gift items.

An appreciation of the pine cone came to Dan and Claudine Gatlyn in December seven years ago while they were serving as missionaries in the Phillipines. After discovering that it was unlawful to cut an evergreen for Christmas tree purposes, they had to be content with an artificial yule tree made of pine cones.

After returning to Georgia and its great abundance of pine cones, the Gatlyns began a backyard hobby of making things from cones for their neighbors and friends. Before long, however, a Warner Robins store heard of their creative cone designs and made a deal to buy the items for resale. Their leisure time pursuit suddenly became a commercial success.

The pine cone enterprise in an old store building in Byron is currently operating full blast to make and ship 1,700 pieces under a contract with a well known restaurant chain that also features gifts and souvenir shops at its many locations along interstate highways. A contract with a southern department store chain is pending.

But why the sudden interest in the common little pine cone?

"Why not?" asked Dan Gatlyn. "After all, the pine cone shouldn't be just something you throw at a dog." It is an object wonderfully made and of real worth, he observed, and "we thoroughly enjoy working with it." In fact, he is so enthusiastic over the versatile cone that he is advocating an annual "Pine Cone Festival" in Byron.

The Gatlyns don't leave all the work to those they have hired. "I come in about six in the morning and begin cutting out pieces for the girls to put together and I end up working about a 15-hour day," said Gatlyn. His wife comes in a little later and works in production and sales, when she is not designing yet another item for the fast growing business to place on the market.

Both emphasize, however, that they don't intend to let their flourishing business interfere with their missionary duties. They are evangelists of the Assemblies of God church. Gatlyn, a Vietnam veteran, is president of the Military Full Gospel Fellowship, an international organization which he founded, and his wife is also active in mission work in this country and abroad.

"We are training people at our factory so we can be away periodically to carry out our evangelism," said Gatlyn. "In fact, we will



spend some time in Washington this summer to fulfill that obligation."

In a colorful brochure showing many of their products, the couple announce that "we welcome you to our factory and to our world of pine cones."

A world of pine cones, indeed! In the crowded storage section of the factory, they are piled high in bulging plastic bags. Barrels, boxes and bins are filled with them and they continue to come as gatherers stop by to unload and collect their penny per cone.

The couple estimate their employees go through from 3,000 to 4,000 cones a day in transforming the woody fruit of the pine tree into gifts of rustic beauty that are being bought and placed in homes and offices across the country.

Owners Dan and Claudine Gatlyn inspect baskets of polished cones ready to be shipped to retail outlets while employees work with glue guns to make a variety of other decorative items offered by the company.



BEWARE OF THREE UNFRIENDLY PLANTS AS YOU ENJOY THE FORESTS

By Terry Price

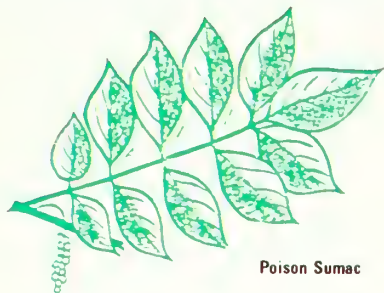
Many people unnecessarily suffer each year from contact with poisonous plants. Poison ivy, poison oak, and poison sumac are three very common plants in the Southeast and they are abundant in Georgia.

Recognition of these plants is the first step in avoiding them.

Poison oak and poison ivy are very similar in appearance. Poison ivy has a greater variety of leaf shapes and usually grows as a vine or small bush less than a foot high.

Poison oak usually does not climb as a vine but occurs as a low growing, upright shrub.

Poison sumac is easily identified from both poison ivy and poison oak. Poison sumac shrubs usually range in height from 5 to 6 feet, but may reach a height of 25 feet. It grows most commonly along the margins of swamps on wet, acid soils.



Leaves of poison sumac consist of 7 to 13 leaflets arranged in pairs with a single leaf (leaflet) at the end.

All three of the poisonous plants contain an oily phenolic substance called urushiol, which causes an allergic reaction on the skin. The plants must be damaged to expose the sap that contains the oil. Though the leaves, stem and roots contain the irritating oil, the berries and pollen do not.

When the plants are burned, the toxic oil coats the soot making airborne material dangerous. Inhaling smoke contaminated with the oil can cause fever tracheitis, bronchitis, and severe rash.

Individuals can also contact the oil from the bodies of pets that have been walking or rolling in the plants, or from clothes, tools, fishing poles, etc. that have contacted the oil. Shoes or boots worn in a patch of poison oak or ivy and coated with the oil can remain contaminated for months and cause the rash on contact.

About half of the population is sensitive to these plants. Some people are more tolerant and must contact more oil to produce a reaction. Sensitivity can change with time. In general, persons repeatedly

exposed to poison oak or poison ivy become more sensitive. Also, persons who have previously walked through patches of the plants without effect can suddenly develop a severe rash after contact.



The most common poison oak has leaves with irregular margins

Longsleeve shirts and full length trousers should be worn at all times when walking in areas infested with plants. The oil can be washed out of any clothing with lots of water and soap.

The skin should be rinsed several times in cold water.

A new aerosol spray called Ivy Block significantly protected employees against poison oak/ivy dermatitis in recent U. S. Forest Service tests. Ivy Block protects by absorbing the urushiol of poison oak/ivy before it can contact the skin.

The spray can be used to protect exposed skin. It can be applied freely to exposed skin and clothing much like insect repellent. One application before going into the field is usually sufficient. Re-application may be necessary after several hours of heavy perspiration.

Ivy Block is being reviewed by the FDA for consumer use. If and when it becomes available to the public, it may be registered under a different trade name. Be on the lookout for the product.

Topical steroids are available by prescription to treat affected skin areas. Persons sensitive to the poisonous oil should obtain steroids (tablets or gels) from a physician before going into the field.

The plants can be controlled with various weed and brush killers. Be careful not to damage any desired plants when applying a herbicide. Contact a local garden center store or nursery to find out more about the various chemicals that are available. Be sure to follow all label precautions and recommendations.



The most common type of poison ivy has leaves with even margins



Donya L. Sartor
Douglas/S. Fulton Co.



Cindy Cook
Decatur Co.



Krista L. Dennard
Treutlen Co.



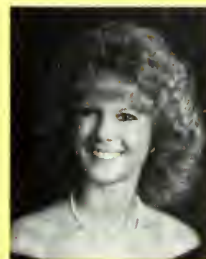
Angel Dixon
Pierce Co.



Marti Marchant
Jeff Davis Co.



Dana Winn
Gilmer Co.



Andrea D. Brown
Pulaski Co.



Kim Deal
Ware Co.



Angela West
Lumpkin Co.



Joanna Cowart
Cook Co.



Melissa Fulford
Wheeler Co.



Lisa Hutchison
Montgomery Co.



Becky Hall
Johnson/Washington Co.



Mitzi J. Perkins
Carroll Co.



Deana K. Wakefield
Atkinson Co.



Renee Adams
Madison Co.



Kimberly Beauchamp
Telfair Co.



Nita J. Browning
Crisp/Dooly Co.



Angie Maetta
Richmond Co.



Jennifer Davis
Glynn Co.

COUNTY WINNERS VIE FOR FORESTRY CROWN

The 1987 Annual Convention of the Georgia Forestry Association to be held June 21-23 on Jekyll Island will host the largest number of contestants ever to compete for the title of Miss Georgia Forestry.

Forty-seven contestants representing 52 counties throughout the state will compete for the honor, which includes a scholarship and other gifts. Miss Georgia Forestry represents forestry interests at festivals, fairs and other events. One of her first appearances will be in Atlanta's Fourth of July Parade when she will be featured on the Commission's float.

GFA President E. Owen Perry, III will preside over the meet expected to attract some 800 foresters, landowners and others. Keynote speakers will be the Honorable Lindsay Thomas, U. S. Congress, GA. Featured speaker will be Lana R. Batts, Vice President-Policy, American Trucking Associations.

Awards to be presented include: Tree Farmer of the Year (and other related tree farming awards), Outstanding County Agent, President's Award, Wise Owl Award, Logger of the Year Award, Meritorious Achievement Award, and awards for Outstanding District and Outstanding County (Commission).

The pageant and crowning of this year's Miss Georgia Forestry will culminate the banquet festivities and convention.

The new Miss Georgia Forestry will be crowned by the retiring forestry queen, Miss Kathy Laurie Finch of Jackson County.



Elise Thaxton
Oglethorpe Co.



Kea Gray
Barrow Co.



Michelle Meeks
Coffee Co.



Stacy L. Garrett
Clarke/Oconee Co.



Ellen Guthrie
Greene Co.



Emily A. Griffin
Clinch Co.



Tracy Atkins
Catoosa Co.



Jana Weatherford
Morgan/Walton Co.



Amanda Hammond
Henry Co.



Kelley Harper
Jackson Co.



Kim Royal
Irwin Co.



Tricia Warrick
Early Co.



Jennifer Krulic
Toombs Co.



Catherine Lewis
Newton/Rockdale Co.



Rachel B. Mattison
Lincoln Co.



GEORGIA TREE FARMER OF THE YEAR PLANTS FOR FUTURE GENERATIONS



Joe Bohannon walks along a forest trail on his property in Coweta County to inspect some of his fast growing pines. Below, he proudly stands with Forester Charles Gremillion at the Tree Farm sign at the entrance to one of his forest tracts.

Joe Bohannon of Newnan, who is just a little past 70, said he met a friend on the street the other day who asked: "Why in the world are you planting all those trees on your land at your age."

The tree planter patiently replied that he has two sons and several grandchildren.

But even if Bohannon didn't have heirs to benefit from forest trees that won't mature for harvest until after the turn of the century, acquaintances say he is the unselfish type who would plant for the satisfaction of improving the land and "leaving the land better than he found it."

That attitude helped Bohannon capture the Georgia Tree Farmer of the Year distinction.

He was nominated for the honor by Senior Forester Charles Gremillion of the Georgia Forestry Commission's Newnan District. A committee of the Tree Farm System toured his land and agreed that he does, indeed, deserve the annual award.

Bohannon and his wife, Mary, will be guests of honor at the annual convention of the Georgia Forestry Association June 21-23 on Jekyll Island, where he will officially receive the award and be cited at a banquet for his excellent forestry practices.

The state's new Tree Farmer of the Year, a retired textile dye salesman, has had his land certified under the Tree Farm System since 1979. The acreage is part of a tract that has been in the family well before the Civil War.

His great grandfather drew a lot in a land lottery in Coweta County in 1827 and before he died in 1852 he had expanded his holdings from 202½-acre lot to farm and forest lands totaling 1,700 acres. Bohannon inherited 278 acres of the land from his father.

The tree farmer sold 50 acres of pine to Georgia Pacific Corporation in 1970 to help pay for the education of his two sons (son Donald is now an anesthesiologist in Savannah and Tom is a certified public accountant in Atlanta). He said he was told by the company's forester that some of the trees were more than a hundred years old.

"After that harvest, I just let the land lie idle for ten years," Bohannon confessed, but after his boys were established in their careers and he was no longer on the road as a salesman, he said he had time to devote to his land.

Walker Rivers, staff forester at the Commission's state headquarters in Macon who earlier served in the Newnan District, said he remembers "the day Mr. Bohannon came through the office door and said he wanted help in managing his land." A management plan was readily implemented and the landowner has faithfully followed the recommendations ever since.

He is now into natural regeneration on some of his land and in other sections he is planting seedlings. Last year, he planted 91,000 pine seedlings and when some were wiped out by the drought, he ordered 23,000 for planting this season.

He maintains almost three miles of properly built forest roads, a network of well placed firebreaks and a routine inspection for bark beetles on his property. He has reserved an 18-acre tract as a wood lot to provide stove and fireplace wood for his home and those of several friends. The property abounds in deer and there are wild turkeys and quail on the land.

Bohannon regularly attends and participates in forestry-related landowner conferences and encourages others to make their land more productive through good forestry practices. He provided the Commission with a three-acre plot for kudzu eradication experimentation project and he has opened his land for tours to promote many aspects of better forest management.

Old terraces that were built back in the days when corn and cotton fields dominated the land are visible today, but they are now covered with healthy, green forests. For the duration of his time as custodian of this land, Joe Bohannon intends to keep it that way.





This high scoring team of Perry High School students captured top honors in the State Forestry Field Day Finals. Front row (left to right) are Scott Bennett, Russell Albritton, Marty Beamon, Robby Rowell, and Scott Miller. Back row (left to right) are Argene Claxton (advisor), Donnie McDowell, Mike Davis, Conley Greer, David Mills, Vic Mizell, Steve Dennard, and Tim Lewis.



The Pierce County High School team captured second place honors at the annual field day. Front row (left to right) are Holly Mock, Jimmy Dickson, Harris Echols, Jim Waters, Jerome Jones and Kyle Crosby. Back row (left to right) are Russell Yeomans, Bobby Russell, Chris Johnston, Duane Lowman, Mike Williams, and Jimmy Mock (advisor).

PERRY CHAPTER WINNER IN STATE FORESTRY FIELD DAY



The Perry High School Chapter of the Future Farmers of America won first place in the Annual Forestry Field Day Finals which engaged the skills of Georgia's top high school forestry competition and their advisors in events ranging from ocular estimation to forest management.

Second place honors in the statewide meet, held at the Commission's Macon headquarters at the Georgia Forestry Center, went to the Pierce County High School FFA Chapter. Chapters competing in the annual event represented the elite FFA Chapters of the state; each chapter had previously won honors on the regional level. Other participating schools in the finals included Oconee County, Banks County, Lumpkin County, Murray County, Worth County, Charlton County, Bleckley County, Swainsboro High, Louisville High, and Harlem High.

Don Register and Malcolm Dillard, consultant foresters, Vocational Agricultural Department, coordinated the event. The finals were sponsored by the Trust Company of Georgia and affiliate banks.

First place winners in the various events

(continued on page 15)



HIGH RISK BUSINESS YIELDS ELEGANT WOODWORK

By Bill Edwards

Heartwood is defined by the dictionary as "The older, inactive central wood of a tree, usually darker and harder than the rest of the tree." The wood is also lighter in weight with an increased resistance to decay and insects. In many species, it is also considered highly attractive for building purposes.

Heartwood of longleaf yellow pine (*Pinus palustris*), is one of the most sought after and valuable of woods. But there is a problem; the vast stands of this species that once grew prolifically in Georgia and other Southeastern states are a thing of the past. For commercial purposes, the only way this species of heartwood can now be obtained is by salvaging old buildings.

Businesses successfully salvaging longleaf heart pine are more rare than the wood. It is risky business requiring financial expertise and specialized knowledge no longer easy to come by.

Despite the difficulties, an Atlanta heart-of-pine-entrepreneur has been quietly thriving in the business since 1973. He works out of a small office - elegantly decorated with the highest quality heart pine - that operates on a national and international basis. His clientele range from celebrities to average homeowners desiring a touch of class. His projects range from small scale local cabinetry to supplying timber for the world's longest swinging/floating bridge, the Queen Emma Pontoon Bridge located at the Harbor of Curacao in the Dutch Netherlands Antilles Islands.

Tim Moran, president of Period Pine, searches the nation for quality longleaf heart pine. He has bought lumber as far west as Chicago and as far north as Boston.

ATLANTA COMPANY HAS PROVIDED BEAUTIFUL WOOD AND WORKMANSHIP FOR HOMES OF PHIL DONAHUE, GEORGE LUCAS, JANE FONDA AND OTHER STARS

Sources include old mills, cotton gins, warehouses and other large structures. Although much heartwood can still be found in old homes, Moran said it is not profitable to dismantle a small structure.

"So scarcity, to a large extent, has to do with finding quality lumber in a structure large enough to make salvage profitable," Moran said. He added that although longleaf pine grew in a relatively small area of North America, the lumber can be found throughout the world, including sites in London and Paris.

After salvaging, Moran's company either ships the remanufactured lumber, or he can go from scratch and work with architects and designers to completion work. If the situation meets his requirements, no job seems to be

too big or too small. He spent more than two years working on the interior penthouse of television stars Phil Donahue and Marlo Thomas. Work on 7,000 square-foot penthouse included cabinetry, molding, interfacing and other decorative facets. His company also supplied heartwood flooring for actress Jane Fonda's home.

One of Moran's most impressive projects is work he did for film director George Lucas (Star Wars). Selected sections of Lucas' 45,000 square-foot Victorian mansion in California now reflect an impressive array of decorative heart pine.

"Longleaf heart pine is not pine as one might know it today," Moran emphasized, "it is the finest lumber ever grown, so current scarcity dictates that most of the lumber is used for decorative purposes." He explained that flooring, paneling, millwork, furniture, exposed beams, and molding are just a few opportunities to add beauty and elegance.

However, since longleaf heart pine was originally used for structural building material, it is currently no less valuable for the same purpose. So Moran's company also provides structural members for inside and outside applications that include floor joists, heavy framing, exposed timbers, porch framing and decking.

APPRECIATION SHARED

Moran offers heart pine in three carefully chosen grades. "Select" is the finest grade available used primarily for paneling, molding and formal flooring. Grade One, the most popular grade, is at least 90 percent heartwood. Grade Two has some defects and is used for informal flooring, unusual paneling, and to create a rustic effect.

Moran's appreciation of longleaf yellow pine is shared by many other enthusiasts. Although the species still grows, Moran considers it "extinct" for all practical purposes - such as commercial growth for harvesting heartwood. There are several reasons.

At one time, the longleaf might have been compared to the buffalo in abundance, but by 1915 virtually all the vast stands of timber had been cut. For a rapidly growing nation rushing headlong into an industrial age, this meant the longleaf was rendered an anachronism. The trees required 150 to 450 years to mature.

But while they lasted, these slow-growing

The beautiful kitchen at left was designed and constructed from heartwood by Period Pine. Shown on opposite page are heavy planks salvaged from an old industrial building and ready to be milled into lumber for decorative uses.





trees provided a building boon. The giant trees grew tall, straight, and had few branches at the ground end. At maturity, the longleaf consisted mainly of heartwood, rather than sapwood, common in many species. This predominance of heartwood gave the longleaf incredible strength and hardness. These qualities made the lumber very popular for various forms of heavy construction, including railroad bridges, pilings, and shipbuilding.

For example, the keel of the USS Constitution was made from a single longleaf pine cut in Darien, Georgia. The availability, strength and beauty also made it popular for home construction. Numerous heart pine homes are still standing in the area as a testimonial that the wood is very near bug and rot proof.

Although the heartwood of many trees is decay and insect resistant, very few approach the quality of the longleaf in these aspects. These characteristics, coupled with the beauty of the wood, make it what Moran calls "one of nature's most perfect creations."

When Moran started in the heart pine business, he knew little about it; few people did. A college graduate with a marketing degree, his interest could be classified only as a hobby. When he decided to go into business, he knew that he had to find someone knowledgeable in the field. This was not easy. Finally, he located an oldtimer in Savannah, 71-year-old Wilmer Stanley. The Savannah man had been involved with remanufacturing heartwood for many years and had his own small milling operation.

"He was an expert. I practically lived with this man for six months," Moran remembers. "He really knew his stuff and the basis for almost everything I know about the business came from him."

One of the first things Moran learned was a correction of the common misconception that longleaf heart pine has no knots. Moran says the reason for this mistaken notion is that the attractive millwork in the floorings of buildings in such places as Savannah and Williamsburg show few knots. He explained

that when these buildings were constructed, heart pine was so cheap that most boards having knots were thrown away.

"The fact is we must grade our lumber by size and frequency of knots," Moran said. "Longleaf heart pine is clearer than any other type of pine, but it does have knots."

Eventually, Moran set up his own milling operation in Savannah to remanufacture heart pine. He said milling can be one of the biggest problems because mills refuse to process the lumber. Moran explained that hardware in dismantled heart pine can wreak havoc on machinery. So the process has to be handled by a mill and personnel specially suited for reprocessing.

RISK INVOLVED

Milling is not the only problem. There is always the risk of losing money when an old warehouse or some other large structure is purchased for dismantling. Moran said that even now, after years in the business, he sometimes makes a mistake and loses money. "But that comes with the territory," he said, "and you just have to go on with the next project."

But all things considered, Moran has done well in the business. He says that he knows of only two or three similar operations that are stable and operate on the scale of Period Pine. He recalls a lot of businesses that were lured into the field by the image of transforming the romanticism of the past into a refined reality of the present.

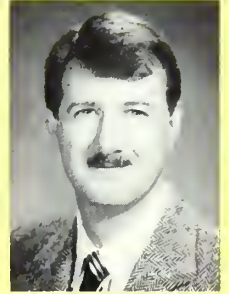
"There are many pitfalls - a lot of things to be considered from a lot of angles," Moran said. "Most of the new businesses operate for a while, then fall by the wayside."

In the meantime, Moran keeps looking for heart pine and turning out work so popular that he needs little conventional advertising. "We do a little advertising," he said, "but we rely primarily on people seeing our work and telling others."

NEW EXECUTIVE DIRECTOR NAMED BY ASSOCIATION

Bob Izlar, formerly executive vice president of the Mississippi Forestry Association, now serves as Executive Director of the Georgia Forestry Association.

In a message in the GFA's magazine, E. Owen Perry, III, association president, said the new director is welcomed with "much excitement and anticipation." He said the GFA "is fortunate indeed to have Bob as our new leader. His impressive background and credentials give him the tools to lead us in new directions with fresh approaches..."



Izlar is a native of Waycross and holds bachelors and masters degrees in forestry from the University of Georgia and a master of business degree from Georgia Southern College.

Following a tour of duty in Korea as an MP officer, he served as district manager of wood procurement for Brunswick Pulp and Land Company and was a division forester for the American Pulpwood Association in Jackson, Mississippi.

Izlar has traveled extensively in Central America, Europe and Scandinavia on forestry matters. In 1985, he was one of 16 official U.S. delegates to the 9th World Forestry Congress in Mexico City.

He is the author of numerous technical journal and popular magazine articles, as well as book chapters and encyclopedia notes. He served as consultant to the National Geographic Society and WQED, Pittsburgh, on two Okefenokee Swamp film documentaries.

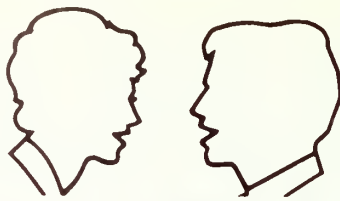
The new director succeeds Glenn Anthony, who recently retired. Leon Brown, editor of the association's magazine, TOPS, also recently resigned and is now with an Atlanta public relations firm.

Izlar has lectured widely throughout the South on the Okefenokee Swamp, forest harvesting, legal obligations of independent logging contractors, woodlands operations management and safety, and forest policy.

A Captain in the U. S. Army Reserves, he is attached to the Selective Service System. He was recently decorated with the Joint Service Achievement Medal and Reserve Components Achievement Medal.

Izlar is an Episcopalian and is a member of several patriotic and professional societies. He is married to Janice Bullard of Waycross and they have a daughter, Tate, 5 and son, Joel, 2.

PEOPLE



IN THE NEWS

PHILLIP BROOME, a native of Rome who came with the Commission in April, has been assigned to the Milledgeville District office to work in reforestation in the 13-county district. The new staff forester is a graduate of Armuchee High School and



BROOME



LEE

the School of Forest Resources, University of Georgia...THORNWELL LEE, a forester who worked for several years with International Paper Company, has joined the staff of the Camilla District. A native of South Carolina, Lee is married to the former Miss Betty Whitlow of Lagrange and they have two daughters, Cynthia and Candice. A graduate of the School of Forestry



BENNETT



GRAHAM

Resources, UGA, he will serve as a management forester...DONALD BENNETT, a native of Moultrie and formerly a patrolman in the Dougherty County Forestry Unit, is now ranger of that unit. He succeeds Newell Lastinger, who recently retired. Bennett is a graduate of Moultrie High School and he attended Moultrie Tech. A deacon in the Autreyville Baptist Church, he is married to the former Miss Vicki Stanfill of Moultrie. They have two children, Leslee and Jaimee...TRACY GRAHAM, a native of Bowman, has been named ranger of the Chattahoochee-Marion County Forestry Unit. A graduate of Elbert County Comprehensive High School, he earned an Associate Degree in Forest Technology from Abraham Baldwin Agricultural College and also attended Athens Tech. He attends the Baptist Church...DONALD ANDERSON, a native of Fitz-



ANDERSON



PRINCE

recently resigned. Anderson, a graduate of Fitzgerald High School, holds an Associate Degree in Forest Technology from ABAC. He is active in the Baptist Church...STEVE PRINCE of Cairo, an aircraft pilot, has been assigned to the Camilla District. Prince, a graduate of Cairo High School, became interested in flying when he was 15 and earned his license at age 18. He is



HESTER

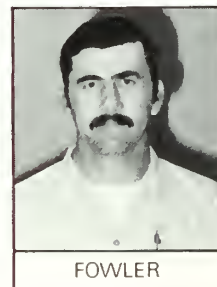


COLLINS

married to the former Miss Renae Vicker of Cairo and they have one child, Collie. The family attends Capel Baptist Church...ALTON HESTER, who served as ranger of the Baldwin-Hancock-Putnam County Unit since 1981, has been named Milledgeville District Ranger. A graduate of Morgan County High School, he served four years in the U.S. Navy and is a Vietnam veteran. He is chaplain of the Elks Lodge and a former commander of the Veterans of Foreign Wars. The district ranger is married to the former Miss Sandra Hinson of Eatonton and they have two daughters, Amanda and Kim. The family attends Marshall Memorial Baptist Church...CHARLES P. COLLINS, who has served as patrolman in Bartow County since 1985, is the new ranger of the Baldwin-Putnam



FINDLEY



FOWLER

County Forestry Unit. A native of Cedartown and a graduate of the high school in that city, the ranger has had training in welding, blue print reading and other technical fields. He is married to the former Miss Joyce Glaze of Cedartown and they have two children, Joyce and Michael. The family is active in the Church of Jesus Christ of Latter Day Saints...GREG FINDLEY, who joined the Commission in 1985 as a forester for the Camilla District, has been named superintendent of the Flint River Nursery in the Americus District. A native of Athens, Findley is a graduate of the University of Georgia with a degree in Forest Resources. He is married to the former Miss Tawna Lambert of Forest Park...FRANK

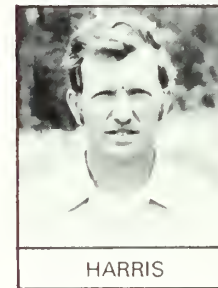


RALEY

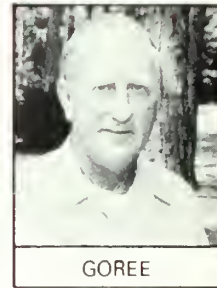


PATE

LANE FOWLER has been named ranger of the Twiggs County Unit. A native of Macon and graduate of Twiggs County High School, Fowler joined the Commission in 1970 as a patrolman in the Milledgeville District. Fowler is a U.S. Army veteran with two years service. He is married to the former Miss Linda Kaye French. They have two children, Tamara Lynn and Alana Marie...BILLY JACKSON RALEY, who joined the Commission in 1965 as a patrolman in the Milledgeville District, has been named ranger of the Wilkinson County Unit. A native of Jeffersonville, Raley is a graduate of American high School and attended Macon Junior College. He is married to the former Miss Wanda Lee Silver and they have one child, Billy Raley, Jr. The new ranger and his family attend Pleasant Plains Baptist Church...BILLY PATE has been promoted



HARRIS



GOREE

to Ranger of the Washington County Unit. A native of Sandersville, he joined the Commission as a patrolman in the Athens District in 1984. Pate is a graduate of Washington County High School and served two years in the U.S. Army. He is married to the former Miss Lynn Schlup of Angola, Indiana...JOHN HARRIS, a native of Macon, has been named ranger for the Hancock County Unit. Harris joined the Commission in 1972 as a patrolman for the Milledgeville District. A member of the Presbyterian

Church, he is married to the former Sandra Norris. They have one child, Kristin ...CHARLES ROBERT GOREE, a native of Lumpkin who came with the Commission in October, 1958, as a patrolman, has been named ranger of the Quitman/Stewart/Webster County Unit. He is the recipient of a 17-year service award from the Soil Conservation Service for serving as counselor during the Natural Resources Conservation Workshop held each summer on the campus of ABAC. The new ranger is married to the former Miss Adelyn Ragan of Cuthbert and they have two children, Connie, 21, and Chuck, 17. The family attends County Line Baptist Church...VAN MOORE, a native of

CAMILLA DISTRICT FORESTER BLEDSOE TO RETIRE JULY 31



Another veteran district forester of the Georgia Forestry Commission has announced plans to retire.

Paul L. Bledsoe, who came with the Commission January 1, 1958 and served in several positions before attaining district forester status in 1977, said he will retire July 31.

A native of Moultrie, Bledsoe graduated from Moultrie High School and served in the U. S. Army for three years. He attended Abraham Baldwin Agricultural College and later graduated from the School of Forest Resources, University of Georgia.

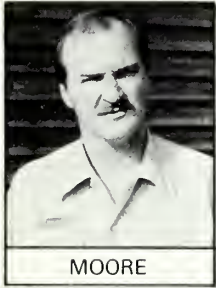
The Camilla District Forester began his career as ranger of the Colquitt County Unit

in 1958. It was a time in which graduate foresters were required by the Commission to serve one year in a ranger position at the outset of their career.

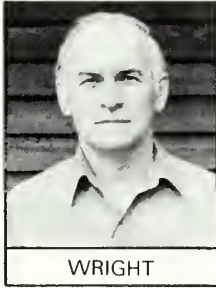
Bledsoe also served as ranger in the Dougherty County Unit, assistant district forester in Statesboro and assistant district forester in Camilla.

The retiring district forester is married to the former Miss Ann Grimes of Colquitt. They have two daughters, Dena and Paula, and a son, Paul.

District personnel are planning a retirement dinner or outing to honor Paul Bledsoe.



MOORE



WRIGHT

Dahlonega, has been promoted to Ranger of the Forsyth Unit. A graduate of the University of Georgia School of Forest Resources, Moore joined the Commission in 1986 as a patrolman for what was then designated the Forsyth/North Fulton Unit. He is married to the former Cary Ensley. Moore succeeds ED WRIGHT, who retired from the position after 33 years service with the Commission.

ANNUAL WORKSHOP HELD

More than 200 high school students from throughout the state are attending the 26th Annual Natural Resources Conservation Workshop being held this month at Abraham Baldwin College in Tifton.

The schedule includes a wide range of subjects including soil conservation, climate, temperature, management of national forests, marketing gum, history of naval stores, recreation in forest lands, woodland aesthetics, rural fire defense, and other forestry related subjects.

A number of Commission personnel are assisting with the workshop; Staff Forester Allen Dozier and Forestry Specialist Sharon Dolliver are serving as instructors. Dozier is in charge of the "Forest Protection" sessions and Dolliver is teaching "Forest and The Environment" segments.

Commission personnel serving as advisors for the meet include: Jimmy Davis, Ocilla; Denny Thigpen, Reidsville; Lori Mertz, Dublin; Mike Clark, Fitzgerald; Donald Bennett, Moultrie; Lex Williams, McRae; and James F. Fenn, Jesup.

Guidelines for forestry related topics emphasize proper management of forest lands are essential to sustain nature's plan for providing oxygen, water, fish and wildlife, wood products, and recreational areas.



Kathy Laurie Finch has become quite familiar with the woodlands of her state while serving as Miss Georgia Forestry, but when she was selected for the honor last June she wasn't told that her duties would include this kind of activity at the 20th Annual Claxton Rattlesnake Roundup. Nevertheless, she was pretty brave as long as the handling concerned the last half of the rattler. She graciously let Ken Darnell take care of the business end. (Special photo by Jonas N. Jordan).

(continued from page 11)

were Marty Beamon and Russell Albritton of Perry High, tree planting; Jack Weathers of Newton County, standing pulpwood estimation; Kevin Meagher of Oconee County, standing sawtimber estimation; Jerry Adams of Swainsboro High, ocular estimation; Greg Smith of Clinch County, land measurement; Russell Yeomans of Pierce County, compass; Mike Davis of Perry High, insects and diseases; David Harris of Hariem High, forest management; and David Gilbert of Lumpkin

County, selective marking.

Robert Sailors, State Supervisor of Agricultural Education, presided at the awards ceremony. Susan R. Schenck, Commercial Banking Representative of Trust Company Bank, presented the awards. Commission Director John Mixon said this year marked the second time state finals for this event have been held at the Forestry Center. He said the Commission is vitally interested in the FFA field day program because it encourages young people to pursue forestry careers and promotes sound forest management.

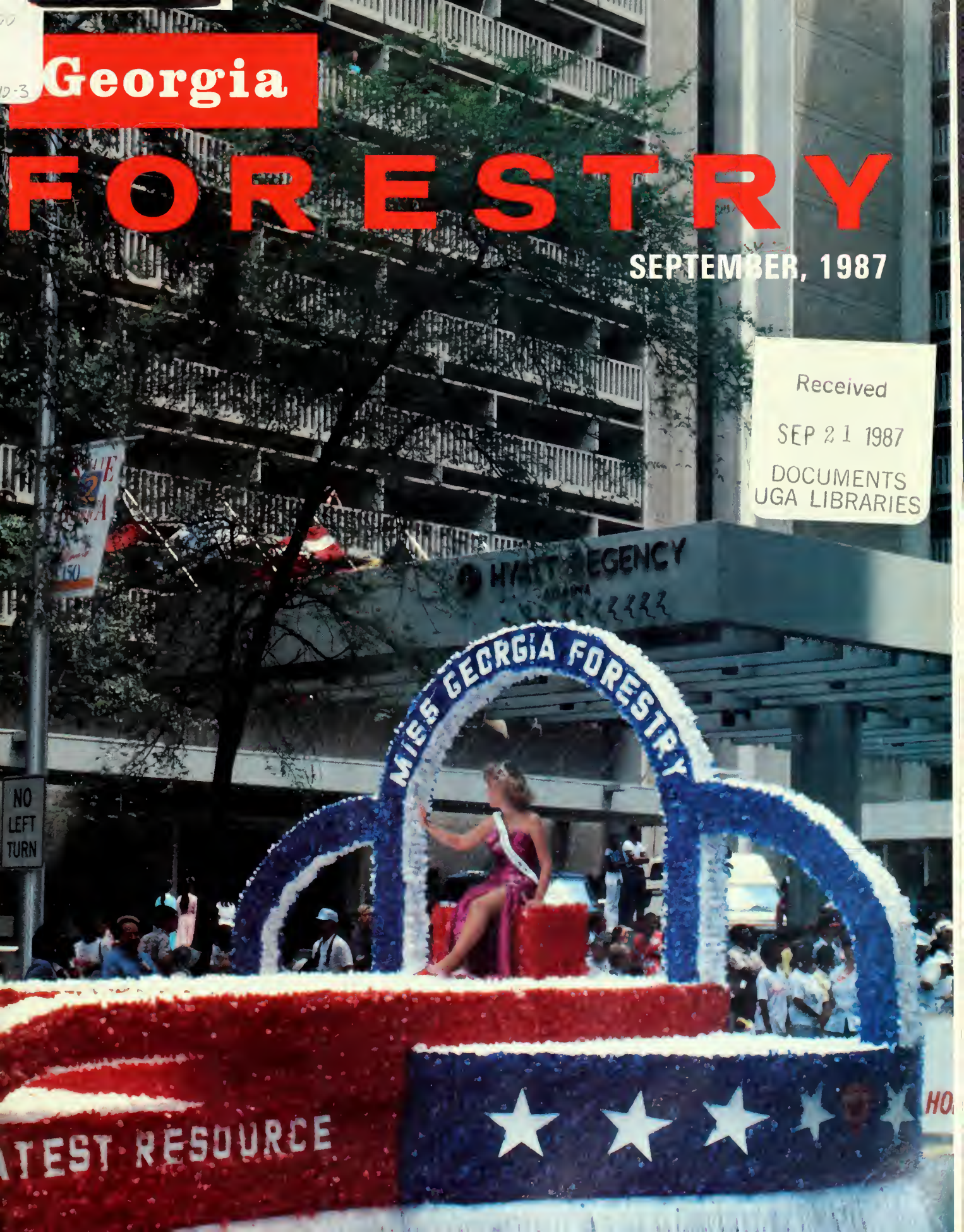
**“Maybe I’d
be a lot
better off
just plant-
ing trees.”**



Maybe so, Mr. Georgia Farmer. You would certainly be better off planting pines if you’re cultivating marginal land year after year that yeilds little or no profit, but requires a lot of your time and energy. Contact your local Georgia Forestry Commission office for information on the rewards of growing trees.

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DISTRICT OFFICES

District One
3088 Martha Berry Hwy., NE
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Route 11, Box 37
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Route 4, Box 168A
Athens, GA 30605

District Four
P. O. Box 1080
Newnan, GA 30264

District Five
Highway 49
Milledgeville, GA 31061

District Six
Route 2, Box 266
Washington, GA 30673

District Seven
Route 1, Box 23A
Americus, GA 31709

District Eight
Route 3, Box 17
Tifton, GA 31794

District Nine
Route 2, Box 722
Camilla, GA 31730

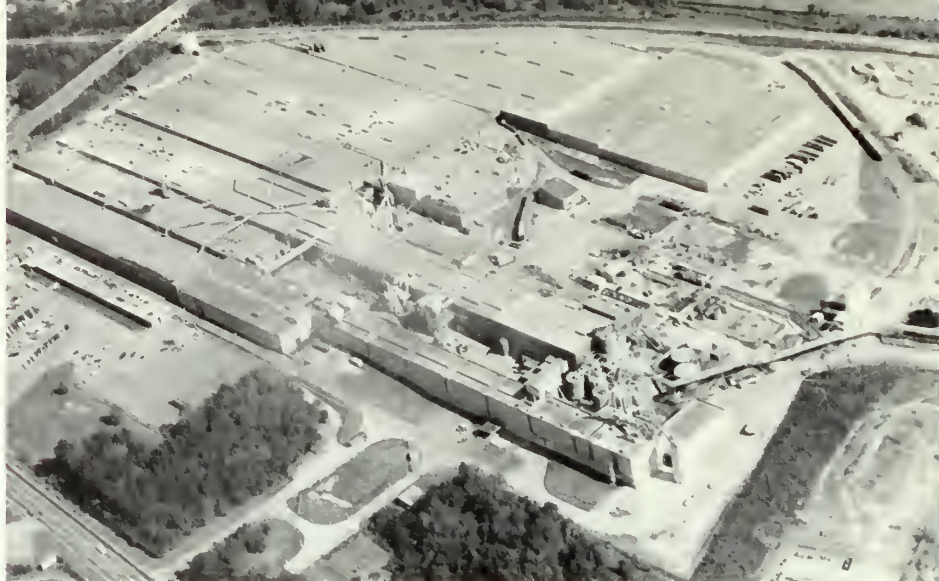
District Ten
Route 2, Box 28
Statesboro, GA 30458

District Eleven
Route 1, Box 46
Helena, GA 31037

District Twelve
Route 6, Box 167
Waycross, GA 31501

Urban Forestry
6835 Memorial Drive
Stone Mountain, GA 30083

Georgia Forestry is published quarterly by the Georgia Forestry Commission, Route 1, Box 181, Dry Branch, GA 31020. Second class postage paid at Macon, GA. POSTMASTER: Send address changes to Georgia Forestry Commission, Route 1, Box 181, Dry Branch, GA 31020.



Wood-using enterprises from the smallest cabinet building shop to this giant Armstrong World Industries plant in Macon - said to be the largest ceiling material manufacturing plant in the world - are included in the Commission's revised industry directory.

INDUSTRY DIRECTORY COMPLETED

A directory of wood-using industries in Georgia has been completed and is being distributed through local offices of the Forestry Commission. The publication is a 1987 listing of plants that manufacture or process wood, and a report of timber volumes used during 1986 by plant type, species, and section of the state.

Paul Butts, Commission utilization for-ester who prepared the 103-page publication, said the directory is prepared as a marketing aid for Georgia grown or manufactured forest products. The utilization report is designed to show trends in timber production and use, and to emphasize the importance of forestry to the local economy.

The publication is based on a statewide survey made by Commission personnel at three year intervals. All plants were contacted by personal visit or telephone.

Primary industries, such as sawmills, are those which use round timber as a raw material, and 500 listings are in this section. Secondary industries, such as furniture plants, use timber and other partially manufactured wood. Listings in the secondary processors section total 1,005.

The directory also includes 15 pulp mills which process wood, and nine which process pulp from other mills or waste paper.

Primary manufacturers are listed by plant type, county, facilities, employment class, species used, and major products. Secondary processors are listed by type, county, employment class, and major products.

The utilization report reveals that round timber use in 1986, excluding pulpwood, firewood, and posts, totaled 3.04 billion board feet. This was a six percent increase over 1983, and a 131 percent increase over 1964, when the report series started. During this 22-year period, pine sawtimber use increased 186 percent from 922 million board feet.

Thirty-five percent of sawtimber was processed in the Southeastern part of the state, 16 percent in the Southwestern, 34 percent in the Central, nine percent in the North Central, and six percent in the Northern. State pulpwood harvest for these respective areas was 46, 10, 24, 13, and 7 percent. Yellow pine accounted for 87 percent of sawtimber and 83 percent of pulpwood.

The report shows that 176 sawmills processed 82 percent of sawtimber, 18 veneer and plywood plants used 15 percent, 20 primary treaters used 2 percent, and 15 other round timber processors used the remaining one percent.

Including pulp mills, 91 percent of all bark residue was used as industrial fuel. Eighty-four percent of pine and 70 percent of hardwood coarse residues were used for pulp. Less than one percent of bark, chippable, and fine residues were unused.

Secondary manufacturers include 14 bark processors, 77 box and pallet plants, 507 cabinet-millwork-custom furniture, 108 furniture, 48 mobile home-camper-prefab, 54 preservative treatment, and 42 truss plants.

ON THE COVER

Miss Georgia Forestry, Kim Deal of Waycross, waves to the crowd on Peachtree Street as the Georgia Forestry Commission float moves along the July 4th parade route in Atlanta. Miss Deal was selected for the crown from a field of 46 contestants. (See story on Page 14).

Trucks hauling logs and other forest products, as well as other large tractor-trailer rigs on Georgia highways, are sometimes involved in serious accidents and the general public often condemns the entire trucking industry, according to a trucking association official.

Although recognizing that many large trucks are operated by expert, safety-conscious drivers, the Georgia Forestry Association, with full support of the Georgia Forestry Commission, is waging a campaign aimed at reducing the number of accidents involving forest-related trucks.

In the past, logging trucks have been exempt from roadside safety inspections required of most other trucks. It is anticipated that legislation will be passed by the General Assembly in the next session that will require all log trucks to have safety inspections conducted by the Georgia Public Service Commission (PSC).

Twelve counties in Georgia now have regulations limiting logging traffic access to county roads. These counties, located mostly in the red clay Piedmont area, require a surety bond and notification to officials of the intent to log a tract of timber.

Logging trucks have been regulated in the Western United States for nearly 40 years. Additional county and municipal ordinances were also enacted in the 1970's to regulate logging activities in those states. Several southern states since 1980 have adopted laws affecting logging activities.

The American Trucking Association is also going to crack down on log truck drivers. Lana Batts, vice president of the Association, told the industry attending the recent annual convention of the Georgia Forestry Association on Jekyll Island that her group is focusing on improving driver qualifications, equipment safety and making safety a higher priority of trucking companies.

"We're going to inspect the drivers more," Batts added. "If the drivers can't meet the safety requirements, they're out of business."

The new president of the Georgia Forestry Association, Bill Oettmeier, told those attending the meeting that trucker safety is going to be the number one issue. Incidentally, Oettmeier is a forester who manages 216,000 acres of timberlands near Fargo.

Of the 18 that died in Georgia in 1986, one occurred when a log truck, 30,000 pounds overweight and over two feet overheight, snapped a powerline suspended over an Evans County road. Residents who had lost their power called the local electric company. While two men who were sent by the company were repairing the powerline, another truck, also 30,000 pounds overweight and nine inches overheight, hit the line again. The pole snapped, killing the man on the pole while breaking the back and leg of the other repairman.

Georgia law currently requires all heavy trucks to be inspected by the PSC, but the law had exempted farm vehicles and log trucks.

John Mixon, director of the Georgia Forest-



THE TROUBLE WITH TRUCKS

Let's hear it for the Georgia Forestry Association!

"Trucker safety is going to be the No. 1 issue," said Bill Oettmeier who has just been elected president of the 3,800-member Georgia Forestry Association.

For too long, safety has failed to receive enough attention. The group is calling the situation "critical."

We agree. It is time to focus on improving driver qualifications, equipment safety and keeping safety a top priority. The association has issued a call "to get the bums off the road."

That's strong language, but it is past due in coming. The timber industry is vital to Georgia's economy. However, we don't need to stay asleep at the wheel when it comes to highway safety.

We encourage the GFA to keep on trucking for higher, safer standards for the logging industry.

-From the Ludowici News

ry Commission, said that the forest industry, along with other forest interests across the state, have a big and important task ahead. "By working together and working closely with those in the logging industry," Mixon added, "I feel sure we can prove to the general public that forestry is indeed a responsible industry."

The new Georgia law requiring that the name of the registered owner of a truck or the name of the person leasing the vehicle be painted on the truck as follows:

"40-8-9. It shall be unlawful to operate in this state any truck or truck tractor having an owner declared gross weight of 43,000 or more pounds which does not comply with the name display requirements of this Code section. Each such truck or truck tractor shall have displayed on each side thereof the name and principal place of domicile of the registered

owner or, if the truck or truck tractor is operating under a lease arrangement, the name and principal place of domicile of the lessee, except that trucks and truck tractors operating pursuant to a authority granted by the Public Service Commission or the federal Interstate Commerce Commission shall display the name of the holder of such authority and such other information as may be required by these commissions. The display shall be in sharp color contrast to the background and shall be of such size, color, and shape as to be readily legible during daylight hours from a distance of 50 feet while the vehicle is not in motion; and such display of additional information which does not interfere with the legibility of the display required by this Code section."
(All laws and parts of laws in conflict with this Act are repealed.)

KNOW YOUR PROPERTY LINES

DON'T LET TIME AND WEATHER ERASE YOUR FOREST LAND BOUNDARIES

BY ROBYN ANTHONY

"Land is the only thing in the world that amounts to anything for 'tis the only thing that lasts... 'Tis the only thing worth working for, worth fighting for - worth dying for."

Gerald O'Hara in *Gone With the Wind*.

Georgians have historically been tied to the land. Land has been equated with wealth, and the antebellum South was full of small farmers as well as large plantation owners whose very existence depended on the land. Although this dependence on the agricultural way of life contributed to the downfall of the Old South which found itself mismatched in the Civil War against the industrialized North, tradition is hard to break, and many Georgians still hold close ties to the land that has been passed on through many generations.

Today, there are many types of landowners in Georgia. Some owners actually make their living off the land, others prefer to dwell in rural areas although they don't cultivate the land, and yet others are absentee landowners who live in the cities or suburbs and visit their land only a few times a year.

All Georgia landowners, no matter how small their property is, are encouraged by the Georgia Forestry Commission to manage their land and the first step is knowing exactly what land is theirs. Establishing and maintaining property boundary lines lets the landowner and everyone else know precisely what land belongs to whom, said Lynn Hooven, chief of the Commission's Management Department.

"The number one reason I know to be knowledgeable about your property boundaries is so you can communicate the information to someone else," said Hooven.

The ability to communicate the knowl-

edge to someone else is necessary when any type of forestry activity takes place. This activity can be anything from timber cutting to a prescribed burn, and unless the correct lines are established, any number of difficulties may arise. There has been an increase in legal problems concerning boundary line disputes in Georgia, and Hooven points out the need for landowners to take the initiative to clearly and accurately define their boundary lines.

"THAT IS ONE OF THE INTANGIBLE BEAUTIES OF OWNING LAND. YOU CAN GET UP EARLY IN THE MORNING AND DRIVE AROUND YOUR BOUNDARIES AND TAKE PLEASURE IN THE FACT THAT THE LAND IS YOURS."

Hooven told of an experience he had while working as a ranger. It involved a landowner who wanted to stage a controlled burn.

"The man requested help from the Commission, and I went out to assist him. I was in the process of plowing a firebreak around the property he thought was his when his neighbor came running out saying we were plowing on his land. Luckily

the situation was resolved and no harm done, but if it had been people cutting timber, it would have been pretty disastrous at that point," said Hooven.

It's also wise to have accurate boundaries of the property defined when the land is to be bought or sold.

"It's a whole lot easier to sell property if you take the potential buyer out and point out the boundaries," Hooven said. "And if you're buying a piece of property, establish boundaries and maintain those boundaries."

Billy Humphries, a professional forester and president of Forest Resource Consultants, Inc. with offices in Macon, also emphasizes the need for landowners to be aware of their correct property boundary lines.

Humphries said there was a case recently in Morgan County where a landowner sold his tract of land which supposedly consisted of 580 acres, as that was the figure on the deed. After the purchase had taken place, the new owner had the land surveyed and found the tract was in actuality only 475 acres. The land was both bought and sold in good faith, and it was just a simple case of ignorance for all involved, but the buyer ended up losing about \$63,000 in the deal.

Humphries also points out another complication that might develop for a landowner who is unsure of the exact boundaries of his land.

"You can actually lose land by not establishing and maintaining boundary lines. Adverse possession occurs when a landowner uses a 'safe but inaccurate' method of establishing the boundary lines," Humphries said.

For instance, if landowner A decides to harvest the timber on his land but isn't sure exactly where his boundary line is, he may start cutting the trees at a line he knows is

not the actual boundary line, but is definitely within the bounds of his property. He starts cutting at this line to be safe. At a later date, his neighbor, who is landowner B, decides to harvest his own timber, and not knowing his exact boundaries either, cuts up to the "safe" line established by landowner A. Landowner B now thinks that the "safe" line is the actual boundary line, and landowner A disputes this claim. Both landowners have a disagreement on their hands that can only be resolved in court.

"Landowner A has, at this point, lost his timber and will have to pay about \$5,000 in legal fees. There's just no way he can win," said Humphries.

"Establishing the boundary lines is also a good idea from a neighborly point of view as well as a legal point of view. After all," said Humphries, "you don't want to purposely encroach on someone else's property." Humphries explained that 25 or 30 years ago there wasn't as much need for clearly marked lines. Fathers and sons walked the boundary lines generation after generation to keep the lines established. Neighbors also kept in closer touch with each other. If one landowner wasn't sure of his boundary line, his neighbor was and they trusted each other.

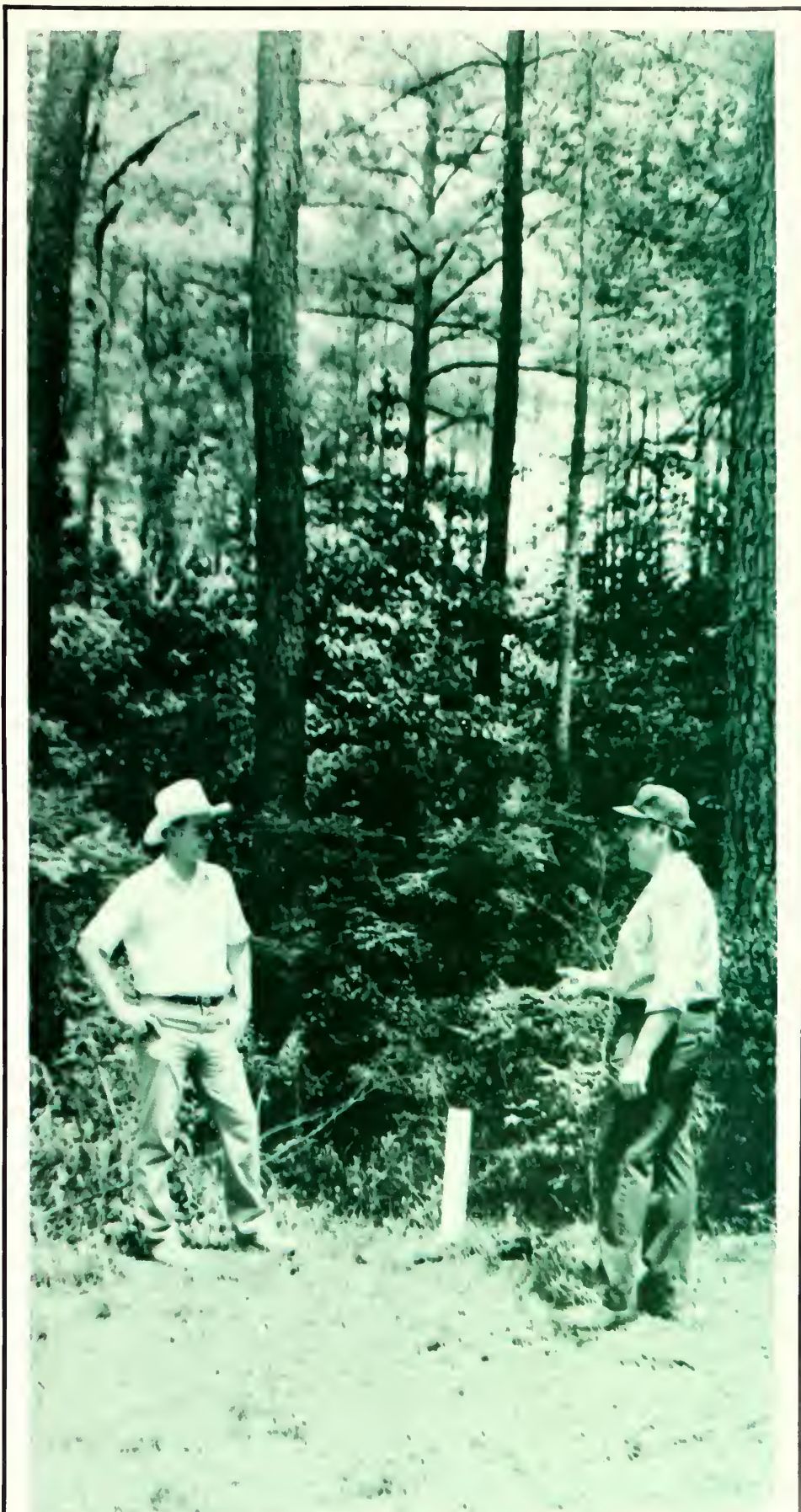
Unfortunately, today most landowners are not as familiar with their land as the generations of owners before them, and there are stories everyday of people filing lawsuits against their neighbors for trespassing. It's often an easy way to capitalize on someone else's mistake, and all landowners would be wise to protect themselves.

Both Humphries and Hooven advise landowners to contact a licensed consulting forester that does land surveying or a licensed land surveyor to have their correct boundary lines established. It should be pointed out, however, that to have the boundary lines on a piece of paper isn't enough. A landowner should request a "true line survey", and once that true line is established, it should be marked with a permanent material such as concrete, metal, or paint.

It is important to use something permanent as a line marker so that the land will not have to be surveyed again years later. As Hooven warned, "to slash a tree isn't really permanent. Time and weather will erase that slash." Paint can be used, he said, but it is advisable to mark enough trees so that if a storm blows over one or two, there will still be plenty of marked trees standing. He also reminded landowners that wooden stakes will decay in time.

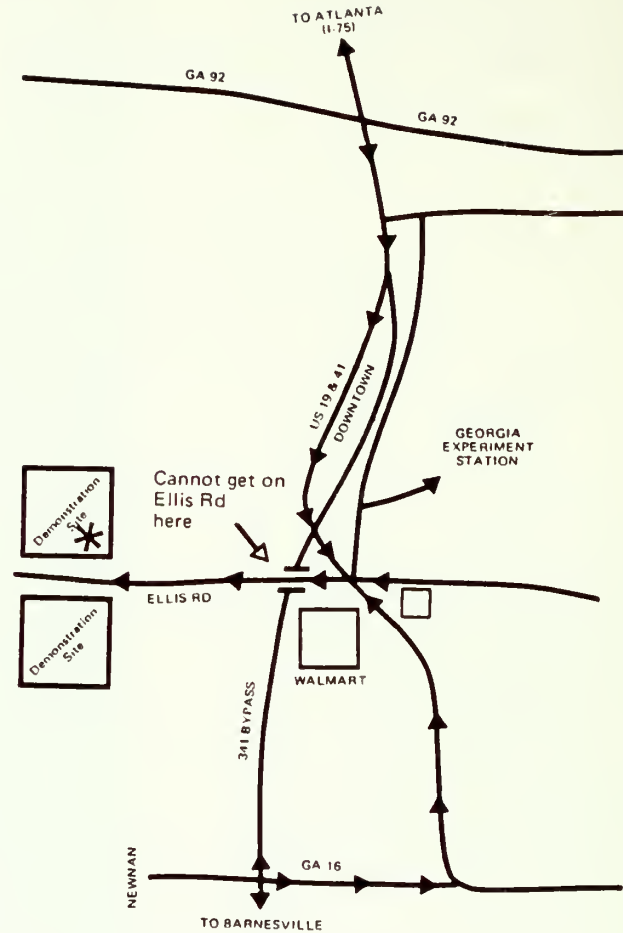
Hooven said he once knew a landowner who frequently drove along the boundaries of his land after clearing a path of trees and undergrowth.

"That's one of the intangible beauties of owning land. You can get up early in the morning and drive around your boundaries and take pleasure in the fact that the land is



A landowner and a forester inspect a permanent and highly visible boundary line marker.

LAND-USE AND FOREST MANAGEMENT FIELD DAY



Private landowners throughout the state can learn the latest techniques for increasing land value and preserving natural resources by attending the September 16 Land-Use and Forest Management Field Day at the University of Georgia Experiment Station in Griffin.

Scheduled to begin at 8:30 a.m. and continue through the afternoon, the event is described by one of the sponsors as a "unique and enjoyable approach to land-use seminars."

Sponsored by the Forestry Commission, University of Georgia College of Agriculture, and other related organizations, the all-day session will feature several distinguished speakers and 12 demonstration sites where state and national specialists will not only demonstrate a variety of valuable techniques, but also offer landowners the opportunity to participate.

Demonstrations will include kudzu control, wildlife management, prescribed burning, herbaceous weed control, forest herbicides/controlling undesirable species, logging road construction and streamline management, mechanical site

preparation and artificial regeneration, forest pests, thinning practices, timber marketing, natural regeneration, and hardwood management.

**"...I THINK
IT COULD BE
COMPARED WITH
THE PLEASANT
QUALITIES OF A
COUNTY FAIR."**

According to Dr. Al Smith, professor of agronomy for the UGA station, the coordinators of the meet are using a new

approach. "We found many landowners want to attend such meetings because they realize the importance of the information," he said, "but they don't look forward to sitting in a building all day listening to one speaker after another until it becomes drudgery. We have some great speakers that no one will want to miss and they are well integrated into a fast-paced format."

Dr. Smith, who served on the budget committee, said those involved in planning felt there is no reason why such a meet has to be dull and tiring, so committees were formed to use creative approaches. The result is a non-regimented field day offering demonstrations and vigorous speakers - with ice water and refreshments at the various sites and no set schedule for anyone to follow; landowners may choose to attend the demonstrations that interest them.

To make things even more interesting, a barbeque lunch is included in the \$6.00 registration, and \$2,000 in prizes will be awarded throughout the afternoon. Although the field day concentrates on site demonstrations, several distinguished

speakers will address vital topics on land use and forest management. Speakers include former Senator Herman Talmadge, John W. Mixon, director of the Georgia Forestry Commission; and Bob Izlar, executive director of the Georgia Forestry Association.

Bob Farris, reforestation forester with the Commission's Newnan District, who served as chairman of the committee organizing the field day, said there is another plus factor in the non-restrictive schedule for demonstration sites. "When landowners hear about a meet like this," he said, "too many of them are less than enthusiastic because they envision themselves having to struggle through thick wooded areas and fight off an army of ticks."

However, Farris said that won't be the situation at the Griffin meet. He predicted landowners will be pleasantly surprised to find themselves taking leisurely walks down shaded grassy pathways, with a break now and then for refreshments from a soft drink wagon or a cup of ice water. Then they might decide to visit any one of a

number of display booths, comfortably set up in tents by forestry and land management organizations.

"We've attempted to make this session as enjoyable as possible," Farris said, "and I believe it's going to be reflected in attendance. I wouldn't go so far as to call it a carnival atmosphere, but I think it could be compared with the pleasant qualities of a county fair."

Farris credits the idea for this attractive atmosphere to Preston Fulmer, Commission District Forester for the Newnan District. Fulmer, who served as chairman of the speakers committee, said he believed the field day should be enjoyable as well as educational. "After all," Fulmer said, "there shouldn't be anything unpleasant about learning how to manage your land profitably, while preserving natural resources for future generations."

Fulmer also pointed out that much of the planning for the meet is geared to the absentee landowner and many landowners from Atlanta and other urban areas are expected to attend. Although the meet is expected to attract landowners mostly from the Piedmont and Upper Coastal Plain regions of the state, he hopes to attract a favorable percentage from all sections of Georgia and even from surrounding states.

"This field day is very well put together," Dr. Al Smith said. "The information and techniques presented could be of equal benefit to landowners in Florida, Alabama, North Carolina and South Carolina. I don't know that I've ever seen so many agencies of this type coordinate efforts to reach common goals. It's very exciting."

Sponsoring agencies include: Department of Natural Resources; Agricultural Stabilization and Conservation Service; Soil Conservation Service; Georgia Soil and Water Conservation Committee; Georgia Forestry Association; and United States Forest Service.

Landowners interested in attending the field days should call toll free 1-800-GA TREES for registration information.

TIME TO CUT WOOD

It might be a little early for Georgians to think ahead and plan for the first autumn chill in light of the present scorching weather the state is experiencing, but the Commission is reminding homeowners that now is the best time to cut firewood so that it will be properly seasoned when cooler.

In order for the firewood to dry sufficiently, it should be stacked in a shelter or have some type of protective covering. The sides of the stack should be left open so that the air can circulate and dry the wood.

Free literature on cutting, curing, and storing firewood, as well as information on how to operate a chainsaw safely, is available at all Commission offices.



STRANGE RECEIVES WISE OWL AWARD

When "Red" Strange decided to retire from his position with the United States Forest Service, the board of directors would not accept his resignation. The members said they realized what an asset this man was to forestry! He did retire, however, but forestry continues to reap benefits from his knowledge and contributions.

The Georgia Forestry Association showed James D. Strange just how important he was when the members of the GFA Awards Committee honored him with the coveted Wise Owl Award. Mr. Strange was unknowingly nominated by the members and presented the award at the recent annual convention on Jekyll Island.

Red Strange, nicknamed from his once red hair, has been working for the interests of forestry for over 55 years. He received his bachelors degree in Forestry from the University of Georgia in 1932 and began

(continued on pg. 15)

FOREST LANDOWNER CONFERENCES ARE SET FOR SEPTEMBER

A series of Forest Landowner Conferences will be conducted in September by the Georgia Forestry Commission and other organizations to better inform the landowner on how timber can be more profitably grown through wise planting, management and marketing techniques.

The conferences will be held from 1:15 P.M. to 4:30 P. M. Landowners are being asked to attend the conference in his or her area and to expect to spend a profitable day in learning more about the potential of forest land.

Conference dates and locations are as follows:

•
SEPTEMBER 10 - ROME: Krannert Center Main Ballroom - Moderator: Francis Morris, Georgia Kraft.

SEPTEMBER 17 - ATHENS: Flinchum's Phoenix - Moderator: John Gunter, UGA - Head, Extension Forest Resources.

SEPTEMBER 22 - TIFTON: Rural Development Center - Moderator: W. D. Erickson, ITT Rayonier.

SEPTEMBER 25 - JESUP: Cracker Williams Recreation Center - R. L. Malm, Union Camp Corporation.

•
Other sponsors include the Georgia Forestry Association, Extension Forest Resources, University of Georgia Cooperative Extension Service, and Forest Farmer Association.

IN THE LONG

NO SUB



tion reported that a concrete tie is an engineering problem - the tie can be drawn many times on paper but may still crack under pressure.

Virtually every type of tree grown in Georgia has been used in the manufacture of crossties, excluding extremely soft hardwoods such as cottonwood and willow. The most commonly used species are oak, sweetgum, birch, beech, maple, sycamore and hickory. The oak is the predominate species manufactured for crossties.

One of the reasons the railroads use wood is because of its service life. When treated, a crosstie from a sycamore, for example, can be used effectively up to 40 years. The average life expectancy of a properly treated wood tie is 30 to 40 years. This length of time depends on tonnage, rail changeouts, roadbed quality, maintenance, climate and track curvature.

Most ties manufactured in America are treated with various formulations of creosote coal tar solutions. A creosote tar solution is a mixture of number one distillate creosote oil, a derivative of coal tar, and of the coal tar itself.

Creosote pressure-treating results in long-term resistance to decay and insect damage. This procedure also slows moisture movement out of the tie while reducing rainwater absorption.

Wood has another property that makes it a popular and practical choice for crossties. Wood has a high strength-to-weight ratio. This means that the bending strength of wood is exceptional, as demonstrated by the fact that less than five tenths of one percent of all wood ties removed from tracks are classified as broken. A single treated tie is said to withstand a maximum of 260 pounds per square inch.

The nine inch square by nine foot piece of wood has been used in Georgia for more than 110 years. The British railroads were using stone blocks, cast iron chairs and wrought iron edge rails, which were beyond the meager American capital. A mile of railroad in Great Britain, counting costs of equipment, land, track, and bridges, totalled \$180,000 in the 1840's. The same distance in America with wooden

Railroads long ago gave up wood as a fuel to fire their locomotives, but down through the years they have never found an adequate substitute for the wooden crossties that support their rails.

Railroads in the United States have been using wooden crossties since 1832. Stone blocks were laid as the first support in 1827, but one winter the quarries closed and some innovative maintenance man thought of using wood. That idea began the enduring relationship between

the railroads and the forest.

Wood has not been the only material tested, but the major railroads have either stuck with the wood or returned to the dependable material. Steel ties were used but were found to be too expensive; America in the early 1800's was a struggling new country that could not afford to install miles of expensive steel ties.

Concrete ties have also been tried, but engineers are still trying to perfect their use. An official of the Railway Tie Associa-

HISTORY OF THE RAILROAD

TITUTE FOR THE WOODEN TIE

BY DEANNA MILLER

crossties cost only \$20,000 to \$30,000.

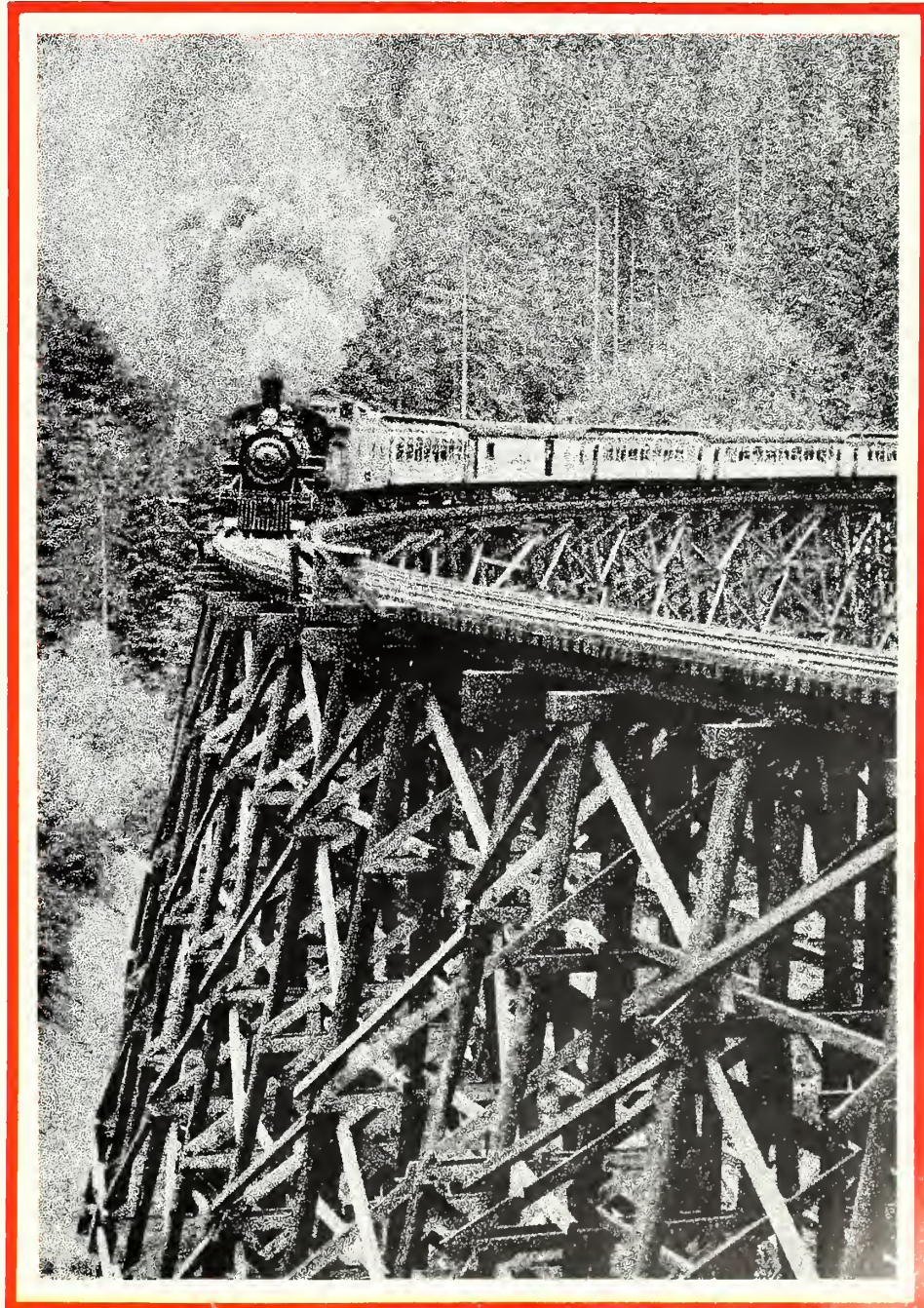
With the exception of crossties, wood has been eliminated from American railroads. Wood-burning locomotives vanished by the middle 1880's; wood freight cars were made obsolete by steel in the late 1890's, with wooden passenger cars following in the next decade. Train stations made of wood are often preserved merely as Victorian relics. But the wooden crossties remains essential in the 340,000 miles of railway tracks that crisscross this nation.

Today, approximately 800 million ties are in use; only about 19 million are new ones replaced each year. Since the ties can last for 40 years (even 60 in some remote areas) the manufacturers are not receiving as many orders as they did in the past. The nation's railroads were putting down 100 million crossties per year in 1900; in recent years manufacturers annually sell about 33 million ties.

Georgia experienced a big business in the manufacture and sale of crossties at the turn of the century. The oak, found throughout the state, was in high demand. Today, approximately 200,000 ties are produced in Georgia each year. Crosstie producing plants in the state are becoming as scarce as old wooden train depots. An official with Southern Wood Processing in Spartanburg, North Carolina, explained the recent slump in sales. The railroads in the 1970's, he said, were experiencing the same recession that had hit other industries. The railroads were cutting back on crosstie orders and apparently were not replacing ties as often as they had in the past. Some plants are switching to producing furniture parts instead of crossties.

Despite the recent drop in demand for wooden crossties, officials of the Railway Tie Association believe the story of wooden crossties is not over. The railroads

will gradually increase its performance and demand more crossties. The forest and its vast resources will continue to be a vital part of the country's railroads.



During the first half of the nineteenth century, virtually everything about the Georgia railroad was wooden, from its freight and passenger cars to the wooden trestles that would suspend the railway high above rivers and deep crevices. Many of the durable structures still exist.

One of the most aggressive potential enemies of the Georgia Forestry Commission and other forest interests is making its way South. The gypsy moth, which has mainly been seen in the Northeastern United States, is now appearing as far west as the state of Washington and has been detected throughout the South.

The gypsy moth concerns the Commission because the pest is a serious defoliator of trees. Although it feeds on over 100 species of trees and shrubs, the pest's favorite tree is the oak. The caterpillar also prefers such types as apple, alder, beech, basswood, gray and river birch, hawthorn, cherry, elm, blackgum, hickory, hornbeam, larch, maple, and sassafras. Older larvae will successfully feed on pine trees.

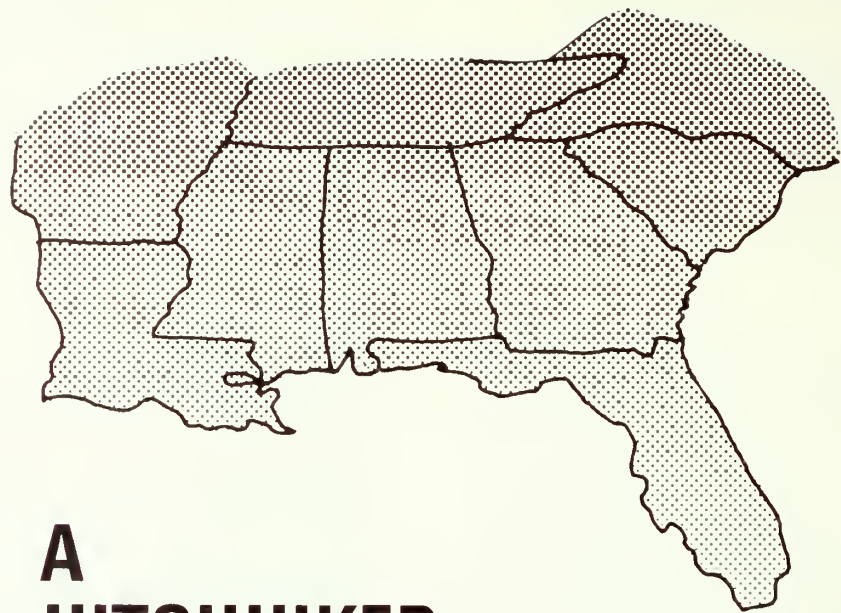
Forests filled with aspen or gray birch in the Northeast were the most susceptible during the first 20 years of the moth's infestation. The reason for this vulnerability is that these species of trees grew mainly after certain disturbances in the woods, such as storms and urbanization. Trees that have been thinned or damaged by a storm favor occurrence and persistence of the gypsy moth because this creates protected places on the trees for the moth to rest, pupate, and oviposit.

Although the Commission is watching the spread of the gypsy moth carefully, a serious epidemic is not apparent, according to Terry Price, the Commission's entomologist. "The Georgia Forestry Commission has been setting traps throughout Georgia to survey for the moths," Price said. Traps are baited with a sex lure that attracts only the male gypsy moth, he explained. If a male moth is found, teams of specialists will go into the area surrounding the particular trap and inspect the woods. Later more traps will be set in order to determine whether the one moth was incidental, he said.

One of the most popular ways a gypsy moth travels is by hopping a ride on a recreational vehicle. A family, for instance, may be leaving their home in Massachusetts, where the moth first appeared, and egg masses or even an adult moth may be attached to their vehicle. Once the vehicle reaches its destination, perhaps in a Georgia recreational area, the eggs could hatch and the caterpillars would be introduced to a new locale.

The United States first saw the gypsy moth in 1869 when a biologist, L. Trouvelot, wanted to interbreed the moth with silkmoths to produce a hardy race of silk-producing caterpillars. Larvae escaped from his Medford, Massachusetts lab causing the current infestation of the Northeast United States.

Professor Trouvelot warned Boston officials of the potential disaster, but he failed to convince them to destroy the moth. Efforts to eradicate the moth became necessary when the pest was so numerous in Medford and surrounding areas. In 1890, the Common-



A HITCHHIKER PEST IS HEADING SOUTH

wealth of Massachusetts undertook steps to establish the first law in the United States for the extermination of an insect.

Along with the serious damage done to trees and shrubs, the gypsy moth can also cause car accidents and is a health menace. The gypsy moth has been known to blanket roads by the millions in such states as Connecticut and Massachusetts, causing cars to slide as if on ice. People with allergies and sinus trouble may experience discomfort during the caterpillar's moulting season. The discarded skin will get into the air and result in sufferers of sinus-like problems.

10,000 MOTH TRAPS SET ALONG GEORGIA'S NORTHERN BORDER, OTHER SECTIONS

Since the escape from the Medford lab in 1869, the gypsy moth has defoliated 200 thousand square miles of forest and ornamental trees. Price said the Commis-

sion will continue to monitor the pest and advise the public if the situation becomes threatening.

The Commission, in cooperation with other organizations, has set approximately 10,000 moth traps along Georgia's northern border and other sections of this state. "We don't want to be caught napping," said Dr. Wayne Berisford, a professor with the University of Georgia's Entomology Department and chairman of the state's Gypsy Moth Advisory Committee. He said the traps serve as "an early warning system."

It has been pointed out that the female moth cannot fly, which slows their natural rate of movement Southward. However, they can lay egg masses on recreational and other vehicles and if the eggs hatch while such vehicles are passing through Georgia, a population is established in this state.





Ranger Brion Williams of the Habersham County Forestry Unit, who supervised much of the structure's renovation, stands on the stone platform at the base of historic Chenocetah Tower.

OLD MOUNTAINTOP TOWER NOW USED BY COMMISSION

50th ANNIVERSARY OBSERVED

On a clear day you can see a half dozen Georgia Counties and the mountains of two neighboring states. Your eyes can pick out the beginning of the celebrated Appalachian Trail and follow it for some distance into the blue haze of North Carolina.

The vantage point is the observation room atop Chenocetah Tower, an imposing stone structure built a half century ago on the summit of Chenocetah Mountain on the outskirts of Cornelia.

Built by local labor under a federal program during the country's depression era,

Governor Joe Frank Harris and Congressman Ed Jenkins were featured speakers September 4 at a ceremony marking the 50th anniversary of Chenocetah Tower.

Other dignitaries participating in the brief ceremony at the mountaintop landmark near Cornelia were Director John Mixon of the Georgia Forestry Commission; Supervisor Pat Thomas, U. S. Forest Service; Senator John Forester; Glenn W. Ellard, Clerk of Georgia House of Representatives and others. Forestry and other exhibits were featured on the tower grounds.

Carolyn Stewart, one of the program planners, said the Habersham County High Schools' Blue Band performed, vocalist Janet Robertson sang and the local Boy Scouts posted colors.

the familiar Habersham County landmark was used for forest fire observation on a seasonal basis by the U. S. Forest Service for 34 years. It was abandoned in 1971 in favor of surveillance by aircraft.

Now the fortress-like tower has been reactivated by the Forestry Commission. Ranger Brion Williams and his personnel of the Habersham County Unit renovated the 54-foot tower for Commission use after they were forced to dismantle a conventional steel tower that had been constantly hit by vandalism because of its remote location.

The unit last summer replaced some of the woodwork, replaced windows, added mortar to part of the stonework and repainted the spiral staircase. "We worked long and hard to get it in good shape," said Williams. The unit's efforts today are reflected in the attractive tower and the surrounding mountaintop grounds that are the scene of a community Easter Sunrise Service each year.

The Commission, however, was not alone in the restoration of the old tower. Members of the Chenocetah Conservation Corps, formed several years ago to preserve and protect the old tower and grounds, and the Cornelia Garden Club have been active in extensive landscaping planning and fund raising for the project. The local chamber of commerce and other groups are also involved.

Park benches and lights will be installed on the grounds and native flowers and ground cover will be planted along the walkways.

The Chenocetah Tower is built of huge granite stones, with walls two feet thick. It is situated on a square stone platform with a granite balustrade. It is 1,830 feet above sea level.

Architecturally, the tower is both an example of the 1930s era of public works design and the construction and craftsmanship of local people using local materials under federal direction, according to a survey by the U.S. Forest Service.



Urban forestry is discussed at City Hall in Macon by (left to right) Commission Director John Mixon, Mayor George Israel, forestry student intern Terri Bates, Forester Sharon Dolliver, forestry student intern Ken Sewell, and Emory Greene, chairman of the Bibb County Board of Commissioners.

SURVEY REVEALS NEED FOR CITY TO HALT RAPID DECLINE OF TREES

A survey of the city of Macon's urban tree population, now being conducted jointly by the Commission and city, is revealing with increasing clarity that the city's scenic tree population faces drastic decline unless appropriate professional care is provided.

Sharon Dolliver, statewide urban forestry coordinator for the Commission, said the current study was prompted by a similar Commission study conducted last summer which revealed that one third of the trees in Macon's historic district were dying, dead, or had already been removed, and more than 60 percent of those remaining were in poor condition.

The current survey, being conducted by college interns hired by the Commission and city for three months, continues to confirm previous negative findings of the previous study. Dolliver said current conclusions indicate the definite need for professional services of a full-time urban forester to monitor tree populations and coordinate preservation and replanting activities.

"Much of Macon's tree population consists of old trees that are in declining condition," Dolliver pointed out. "Most of these are the representatives of their species which would enhance the beauty of the city in many years to come - but only if professional monitoring and resulting care is provided. Then whatever loss is inevitable can be regulated so the character of the city will not be disfigured."

Dolliver, who has worked on urban forestry projects throughout the state, emphasized that if professional care is not provided for Macon's trees, a large percentage of Macon's trees will be lost, and possibly lost so quickly that the city's image will be seriously marred.

"The problem with most situations like this is that people see urban trees every day, and have probably seen them for



many years; so they assume the trees are completely healthy and okay," Dolliver said. "But, unfortunately, this is often not the case. All too often, when the general public begins to notice a decline in urban tree population, it's too late. Also, there is always the danger that an entire species can be wiped out by a single type of insect or disease."

Dolliver said potential loss of an entire species is most likely a monoculture (large number of a single species) of trees exist. "Macon is approaching such a monoculture in cherry trees," Dolliver pointed out. "The city is now internationally known for the annual cherry blossom festival. This fact alone warrants the services of a full-time urban forester."

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L. L. "Pete" Phillips

A FORESTRY FRIEND CLAIMED BY DEATH

The Georgia Forestry Commission and every other agency and organization in the state that is vitally concerned with conservation last month lost a true friend.

State Representative L. L. "Pete" Phillips of Soperton died after a lengthy battle with cancer and many state officials and other friends from across Georgia gathered for the funeral in his home town to pay tribute to a leader who worked so diligently for the preservation of the state's natural resources.

Commission Director John Mixon said the representative from District 120 "was a great and true friend of forestry and the entire forestry community will now miss his friendship and support." Mixon said Representative Phillips, himself a professional forester, worked through the General Assembly to help the Commission in a number of important projects. He was chairman of the House Natural Resources Committee.

The Commission extends deepest sympathy to the family during this time of sorrow.

BILLION DOLLAR MILL DEDICATED

Governor Joe Frank Harris and other state dignitaries were among more than 1500 people attending the recent dedication of Effingham County's new \$1 billion Fort Howard paper mill located on the Savannah River outside Rincon.

The Governor, who performed the official ribbon cutting ceremony at the dedication, pointed out that Fort Howard's 1985 decision to locate the new forestry related industry in Georgia set a record as the largest single capital investment in state's history. Recalling that he operated a

bulldozer two years ago at the plant's groundbreaking ceremony, Governor Harris said, "I remember digging and breaking ground for this beautiful plant that is here today."

Constructed 15 miles upriver from the port city of Savannah, the facility began making paper products last September and became fully operational in March of this year. Now employing approximately 300 workers from six surrounding counties, Fort Howard officials expect total employment to reach 1,000 by 1992 when plant expansion is completed.

Robert Holt, a spokesman for the company, said rapid progress is being made and the plant's second paper machine should be installed by mid-1988. When this second machine becomes operational, Holt said an additional 500 workers will be employed.

Fort Howard, with national headquarters in Green Bay, Wisconsin, is a major manufacturer of paper and paper products. The majority of these products are sold through wholesale distributors to food service markets. Other users include hospitals, educational institutions and the dairy industry.

Holt said the Effingham County plant is classified as a tissue mill and specializes in four products: bathroom tissue, facial tissue, napkins and paper towels. He said the company also has tissue plants located at Green Bay headquarters and Muskogee, Oklahoma. Holt said the Rincon plant produces 22-foot-wide sheets of paper at speeds exceeding a mile a minute.

The Fort Howard spokesman pointed out that the company has rights to patents that enable it to process waste paper in the production of their tissue paper products. He said this process becomes highly technical in some phases and requires special training for numerous employees.

Economic impact of the Fort Howard facility on the Rincon/Springfield area is already obvious. A new shopping center and numerous businesses have been established since the plant began operation. New chain establishments included Walmart, Revco, Hardee's, and Huddle House.

Governor Harris commended Fort Howard on its progress and said the decision of the forestry related industry to build in Georgia was the result of "teamwork between state and local government, the public and private sector, and the state's congressional delegation."

Fort Howard spokesman Robert Holt echoed the governor's views when he said, "Our company has received tremendous cooperation for the Governor's office and all state and local agencies. We look forward to many years of success and service in Georgia."

REALISTIC FLOAT TREE FOOLS BIRDS

A female bird knows that the best place to build a nest for her young is in a tall tree. She searches for the perfect tree that will shelter her newly hatched chicks from nature's harmful elements. In Ware County, a mockingbird did just that, but what she found for her nest was a fake tree on a Georgia Forestry Commission float!

The display on the float is actually a talking tree complete with a huge trunk, spreading branches, and moving eyes and mouth. Designed by commission personnel at the Macon office and built by the Berrien and Ware County Units, the float accomplished its purpose this summer by appearing in numerous parades to represent forestry.

The float was parked behind an old shed for a much needed rest, and that's when the mocking bird decided to build her family's home in the artificial tree.



BEETLE UPDATE

The Southern Pine Beetle is beginning to increase in portions of Pickens, Whitfield, Dawson, and Rabun Counties and populations are expected to continue on an upward swing to several North Georgia Counties before the end of 1987, according to Terry Price, Commission entomologist.

Based on the most recent aerial survey and field reports from district personnel, 985 spots were recorded throughout the state. Dawson County had the biggest occurrence with a total of 85 spots.

Historically, the duration of outbreaks in the more northern counties of the state is about one season as opposed to 18 months to three years in the Piedmont and the current activity, therefore, is not expected to carry over into 1988, Price said.

"The total acres of hardwood has increased considerably in this region of the state since the 1972 Forest Service survey," he said, "while the total acres of pine has decreased...This may possibly explain why the duration of outbreaks is considerably shorter in this region than in other areas of the state." He said spots tend to die out when pine is intermixed with hardwoods.

PERRY STUDENT TAKES TOP WORKSHOP HONORS

Student Keven Beckham of Perry captured top honors at the recent Natural Resources Conservation Workshop, an annual summer training event sponsored by the Commission and several other conservation-minded organizations.

The high school student received a \$750 scholarship, a camera and a plaque at the workshop held on the campus of Abraham Baldwin Agricultural College in Tifton.

Other top achievers and their awards were Stanley Slater of Collins, \$500 scholarship, \$25 cash and a plaque; Bobby Mathis of Cochran, \$400 scholarship, \$25 cash and a plaque.

WORKSHOP PLANNED

Vendors and landowners who are planting pine seedlings under the federal cost-share programs (FIP, ACP and CRP) are asked to attend one of the Commission's vendor workshops to be held around the state this fall.

Frank Green, GFC staff reforestation forester, said the Commission has been given the responsibility of making sure quality reforestation is being carried under the various programs. Proper planting procedures and related topics will be discussed. Workshop dates at GFC District Offices will be announced.



Miss Kim Deal of Ware County was No. 46 in a field of 46 contestants, but the judges made her No. 1 when they selected her for the Miss Georgia Forestry Crown.

WAYCROSS STUDENT CAPTURES MISS GEORGIA FORESTRY TITLE

Miss Kim Deal of Ware County was recently crowned Miss Georgia Forestry for 1987. The 18-year-old student at Waycross Junior College was selected from a field of 46 contestants who had won pageants in their local home counties.

She was crowned at the state finals held in conjunction with the annual convention of the Georgia Forestry Association on Jekyll Island.

The pretty blue-eyed blonde, daughter of Mr. and Mrs. Terry Deal of Waycross, enjoys playing basketball and tennis and spends much of the summer each year as a counselor at the Rock Eagle 4-H Camp. She said she feels that being a counselor of children

ranging from 11 to 13 years of age is one of the most rewarding experiences of her life.

Miss Deal is obtaining an Associate Degree in Journalism from Waycross Junior College. She later plans to work toward a bachelor's degree but says it is too early to tell where and what she will be studying.

The new Miss Georgia Forestry, who was crowned by the retiring queen, Miss Kathy Laurie Finch of Jackson County, was featured on the Georgia Forestry Commission float in the July 4th parade in Atlanta and will participate in other parades, festivals, fairs, and other events concerning forestry.

Along with being a camp counselor, Miss Deal has been active in the Anchor Club, Stu-

dent Council, 4-H club, and editor of her high school newspaper.

Placing second in the pageant was Miss Nita Jane Browning, representing Crisp and Dooly Counties. Miss Browning is the 17-year old daughter of Mr. and Mrs. Curtis Browning of Cordele.

Miss Stacy Lynn Garrett of Watkinsville was voted Miss Congeniality by the other contestants. She is the daughter of James and Sheila Garrett of Oconee County.



Miss Gum Spirits of Turpentine poses with Jim Gillis, president of the American Turpentine Farmers Association.

MISS NANCE WINS GUM SPIRITS CROWN

Heather Marie Nance of Charlton County was crowned Miss Gum Spirits during the finals of the annual Miss Georgia Forestry pageant on Jekyll Island.

Each year, pageant contestants representing the tier of South Georgia counties comprising the state's naval stores belt are eligible to compete for the Miss Gum Spirits crown.

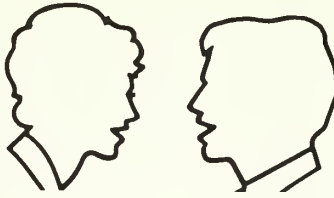
Miss Nance, 18, is the daughter of Mr. and Mrs. William R. Nance and is currently studying finance at the University of Georgia.

The new Miss Gum Spirits will represent the American Turpentine Farmers Association in parades, festivals and other events. Her portrait will appear on the association's 1988 calendar.

Miss Nance succeeds Miss Kara Boatright of Bacon County, the retiring Miss Gum Spirits.

PEOPLE

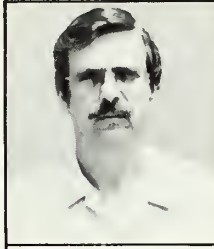
IN THE NEWS



FORESTER CHARLES R. GREMILLION, Newnan District Office, has been named district forester in Camilla, to replace Paul Bledsoe, who recently retired. Gremillion started with the Commission in 1984 as a forest

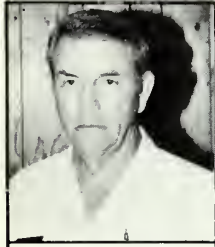


GREMILLION



PATE

ranger. He is a graduate of Louisiana Tech (1966). He and his wife, Karen, from Douglasville, have two children, Michael and Christian...WILLIAM PATE, JR. has become the new ranger of Washington County Unit, Sandersville, to replace Wade Robinson. Pate, a native of Davisboro, came with the Commission in 1985 as a forest patrolman. He served two years in the U. S. Army, with one year in Vietnam. He is married to the former Lynn Schlup of Angola, Indiana...



DEVEREAUX



GRINER

THERON L. DEVEREAUX, veteran Athens district forester, has been assigned a new position of managing special statewide projects with offices in Athens. Devereaux, a Wayne County native, graduated from Jesup High School and received a BSF from the University of Georgia. He and his wife, the former Christine Barret from Ludowici, have five children. Devereaux came with the Commission in 1959 in Elbert and Madison Counties. He served in the U. S. Army for three years...RICHARD DONALD GRINER, district forester, Washington District, has been reassigned to head the Athens Office. Griner began working for the Commission in 1958 as an assistant ranger in Worth County. He is a graduate of Mitchell County High School and received a BSF from the University of Georgia. He is married to the former Polly Tye from Shorterville, Alabama, and they have two boys, Richard and Bob. Griner

served in the U. S. Marine Corps for two years...SAMUEL SWEAT has become the new ranger of Atkinson County. Sweat, a Waycross native, is a graduate of Ware County High School. He is married to the former Michelle Taylor of Waycross. They have one daughter. Sweat began with the Commission in 1982 as a forest patrolman in Ware County...WADE ROBINSON, ranger of the Washington-Johnson County Unit was honored recently by many friends as he retired from the Commission after 32 years of service. He was cited for his service



SWEAT



ROBINSON

to the two counties in fire prevention, RFD promotion and other contributions. Robinson and his wife, Lavonia and a granddaughter live in Tennessee.

* * *

PERSONNEL AWARDED

The Georgia Forestry Association recognized the "Best District and the Best County Unit" of the Georgia Forestry Commission at the organization's recent annual conference on Jekyll Island.

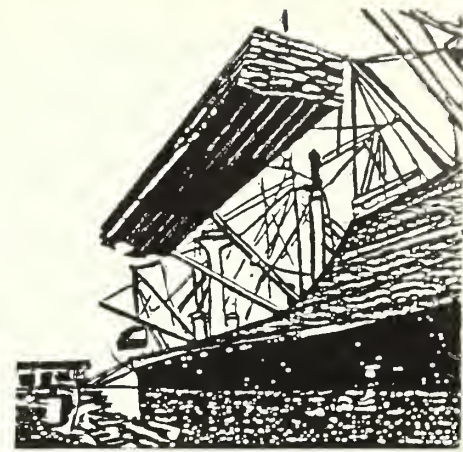
The Awards Committee of the GFA selected District Nine as the best district of the Commission. District Forester Paul L. Bledsoe accepted the award for the district, which is composed of Baker, Mitchell, Calhoun, Clay, Colquitt, Decatur, Dougherty, Early, Grady, Miller, Seminole, and Thomas Counties.

The GFA also presented Newton-Rockdale County Unit the award for the best unit of the Commission. Ranger Beryl Budd accepted the award. Other unit personnel included Forest Patrolmen Bobby Crow, Larry Mitchell, and Archie Ballard, and Tower Operator Geraldine Cargile.

(Strange - cont. from pg. 7)

working for the U. S. Forest Service in 1933.

While working with the USFS, Strange appraised and acquired land for national forests, gave professional and management advice for national forest timber. He was also



SEMINAR ON EXPORTS PLANNED FOR SEPT. 11

Georgia's small businesses will explore the importance of exporting softwood products when the International Trade Development Center (ITDC), a division of the Georgia Small Business Development Center, holds a day-long seminar September 11 at the Coastal Georgia Center for Continuing Education in Savannah.

The theme of the seminar, "Softwood Lumber Exporting: What are the Possibilities?", will focus on exporting pine and cypress lumber products and increasing worldwide trade for forestry products in Georgia and the Southeast. The event is expected to draw attendees from a ten-state area.

Speakers for the seminar will be representatives from state forestry departments, forest products association, and lumber companies from throughout the Southeast. Topics include exporting from Georgia, the function of agents and brokers in overseas markets, special packaging requirements, and export lumber quality. The agenda also includes a tour of a Savannah lumber firm that specializes in handling and packaging lumber for export.

The seminar is being sponsored by the ITDC, the Georgia Forestry Commission, the Extension Forest Resources Department of the University of Georgia's Cooperative Extension Service, the Georgia Department of Industry and Trade, and the U. S. Foreign and Commercial Service, U. S. Department of Commerce.

Registration and other information may be obtained by calling Tom Hammett at the ITDC, Small Business Development Center, Athens, (404-542-5760) or Julian Beck at UGA's Extension Forest Resources Department, Athens, (404-542-3446).

associate director for the southeastern area of USFS.

Since his retirement in 1969, Strange has continued to work in a forest-related capacity. He is a consultant to attorneys, public organizations and agencies, private landowners and banks, on the management and acquisition of forest land.



**ARE YOUR CHILDREN
INVOLVED?**



PROJECT LEARNING TREE

Project Learning Tree, the award winning environmental education program designed for teachers working with students ranging from kindergarten through high school, is now co-sponsored in Georgia by the

Georgia Forestry Commission. If your children are not involved in this exciting program, write to Georgia PLT, P. O. Box 819, Macon, Georgia 31298-4599 for some very interesting details.

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TREES-AN EXPANDING
FOREST INDUSTRY!**

Georgia FORESTRY

USPS No. 217120

December, 1987 No. 4 Vol. 40

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3088 Martha Berry Hwy., NE
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Route 11, Box 37
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Urban Forestry
6835 Memorial Drive
Stone Mountain, GA 30083



This great Live Oak at Baptist Village in Waycross is typical of the species that thrives in Georgia. This tree is 76 feet high and has a crown spread of 150 feet.

STATE TREE NAMED 50 YEARS AGO

The live oak (*Quercus virginiana* Mill.), which flourishes along the coastal plains and islands of Georgia, was declared the state tree 50 years ago by the Georgia General Assembly. The beautiful evergreen became a symbol of Georgia on February 25, 1937, after the Edmund Burke Chapter of the Daughters of the American Revolution suggested the live oak.

Along with the state's abundant pine trees, the live oak has become an emblem of Georgia and the South. The tree is closely associated with the state's early history, occupying the land where the first early settlers resided.

The live oak, with its red-tinged bark and acorn fruit, is the only native oak tree of Georgia that stays green year-round. The leaves are dark green on the top and pale green underneath. The bark of the live oak is slightly furrowed with small scales.

Georgia claims the live oak as her state tree, but she is not the only state in which it grows. The tree is seen in a strip of country mostly along the East Coast from Virginia to Florida. The live oak is believed to be native as far as lower Sumpter County, South Carolina.

Most people associate the oak with its potential mammoth size. The average height of a full grown live oak is 40 to 50 feet with a trunk three to four feet in diameter.

Georgia also possesses one of the largest of the live oaks. The oak at the Baptist Village in Waycross is 9½ feet in

diameter. It has a crown spread of 150 feet and is 76 feet in height.

In the 18th century, the live oak was used mostly for ship building. The wood is heavy, hard and has strong qualities that made the oak perfect in the construction of ships. The Act of 1799 provided for naval construction to supply live oak frames for six 74-gun ships. During World War II, several small crafts were contracted to be built at Brunswick, presumably for naval use. That incident is believed to be the last time live oak was cut for naval use anywhere in that vicinity.

The live oak was also involved in other historical events. It was under the "Secession Oak" at Bluffton, South Carolina, that, according to citizens in that area, the first large gathering of people congregated around to discuss seriously the secession from the Union.

Fifty years ago, a group of people thought enough of the live oak to proudly declare it Georgia's state tree. Remembering the words of the General Assembly on February 25, 1937, "the live oak, being a tree indigenous to the soil of our State ...and which is so closely associated particularly with the lives of such famous Georgians as John Wesley and Sidney Lanier," the Georgia Forestry Commission commends the Daughters of the American Revolution and the Georgia General Assembly for the contribution they made a half century ago in designating the mighty live oak as our official state tree.

ON THE COVER A Christmas tree farmer checks Virginia pines as another harvest season rolls around. The picturesque Sandy Creek Tree Farm on Hammock Road in Twiggs County, owned and operated by Don and Doyle Watson, is one of about 500 Christmas tree farms now in production in Georgia.

Georgia Forestry is published quarterly by the Georgia Forestry Commission, Route 1, Box 181, Dry Branch, GA 31020. Second class postage paid at Macon, GA. POSTMASTER: Send address changes to Georgia Forestry Commission, Route 1, Box 181, Dry Branch, GA 31020.

Mitchell County tree farmer C. M. Stripling stood before an applauding audience of some 200 of the nation's top forestry executives gathered at San Francisco's Fairmont Hotel for the 1987 Annual National Forest Products Convention. Representatives attending ranged from Georgia to Alaska. C. M. Stripling had just completed his acceptance speech for the National Tree Farmer of the Year Award. He competed with more than 58,000 tree farmers to bring this coveted honor home to Georgia.

As the applause faded, Stripling remembered that hot November day in 1939 when he planted his first of 1,000 seedlings by hand - even though he had been warned such an endeavor might kill him.

"I don't care if it kills me," he finally told his mother. "I can't be like this anymore. If I die - I die." And after a year of "sitting around trying to get better" the 19-year-old Stripling walked out of his family homeplace in Camilla, bought a dibble, a thousand pine seedlings, and started planting them by hand. Today, that same farm, with 800 acres of carefully managed trees, is the nation's number one tree farm.

But at 19, Stripling had no intentions of becoming any sort of farmer. ("Being a doctor was all I ever intended," he said). Stripling had started his second year of college, confidently headed for medical school, when a required physical examination diagnosed dangerously high blood pressure. Within a week he was back in Camilla, sent home for a cure that did not exist.

OVERCAME PROBLEM

"Back then people didn't know anything to do for high blood pressure, but there were some weird theories going around," Stripling remembers. "I didn't actually take any prescribed medication until 1968."

However, during 1939 Stripling was the victim of some of these "weird theories" including purgatives and a tonsilectomy. Being an only child, Stripling recalls his mother's tendency to be over protective. But after a year at home, never feeling the slightest bit ill, Stripling decided he could no longer tolerate the role of an invalid. However, he was not completely opposed to remaining on the family farm because his mother had health problems.

This odd combination of medically induced circumstances resulted in 10 acres of hand planted pines that would set a trend for Stripling's lifetime and lead to national prominence and honors.

"Those trees would have never been planted if I hadn't had high blood pressure," Stripling said. "I had a lot of time to think during that year and I realized how risky farming could be. I knew a farmer needed something to prop him up and this government (ASCS) program for planting trees seemed like a natural."

However, Stripling's enthusiasm for planting trees in 1939 was not shared by



Tree Farmer C. M. Stripling, right, and Commission Forester William C. Lamp hold the dibble Stripling used to plant his first trees back when he was 19 years of age. Below, the champion tree farmer addresses the Atlanta press corps as Governor Joe Frank Harris looks on.

NATIONAL TREE FARMER OF THE YEAR HONOR GOES TO GEORGIA LANDOWNER

BY BILL EDWARDS

other landowners. Their reactions ranged from laughter to serious concern for young Stripling's sanity. But Stripling did not find the project humorous and regarded himself to be of sound mind. He accepted the critics with indifference and persisted. Stripling never returned to college. He stayed home, farmed, got married, had two children - and all along the way continued to plant trees.

"I wouldn't say anybody followed my

example, but I was one of the first in Mitchell County to seriously go into tree farming," Stripling said. "One of the main reasons I did it was for diversification. We just didn't have any trees on our place. Lots of people already had trees."

Stripling believes the benefits and financial security of tree farming just became too much for most people to ignore. "It's not hard to get in a bind farming and run up a million dollar debt," he pointed out. "I know quite a few people around here who have done it and bailed themselves out - saved the farm - by selling trees. I also know some who had no trees to sell and went under. One bad year of farming can wipe you out. You need a prop. It's as simple as that."

ECONOMIC STIMULUS

If Stripling's "prop" theory sounds simplistic, he can become academic. Punching out a mathematical story on his calculator, he shows how for a comparatively insignificant amount, he planted a tract of timber that recently sold for \$300,000. Then documenting every step, he calculates how this \$300,000 translates into a \$4 million economic stimulus by circulating through wood yards, pulp and paper mills, products, salaries, and sales. Based on this calculation he shows how 20 million similar acres of pines in the Conservation Reserve Program can translate into \$6

(continued on page 14)





Timothy M. Cooney

GEORGIAN GIVEN NATIONAL AWARD

Timothy M. Cooney, a trust officer with The First National Bank of Atlanta, has been named the 1987 recipient of the Young Forester Leadership Award presented by the Society of American Foresters.

Cooney is awarded for contributing to furthering the application of computer technology to forestry science. He also is cited for increasing membership in the Forest Resources Systems Institute from 10 members to 500 during his term as president.

At First Atlanta, Cooney is responsible for managing information systems for the Timberland Division in the Investment Management Group of First Wachovia Trust Services. Currently, the division manages more than 65,000 acres of forest in three Southeastern states for pension funds and individual customers.

Cooney joined First Atlanta in August after leaving Forest Resources Systems Institute, Inc. He also has been an economist and programmer/analyst for the Quinault Indian Nation (Department of Natural Resources), a research associate at the University of British Columbia, and a forest technician for the Michigan Department of Natural Resources. He serves as an advisor to the board of directors of the Forest Resources Systems Institute.

A native of Commerce, Mich., Cooney is a 1976 graduate of Michigan State University with a bachelor of science degree in forestry. He earned a master's degree in forest economics at the University of Columbia in 1981. In addition to being active in the Society of American Foresters which has 20,000 members nationwide, he has been a regular contributor to The Journal Of Forestry.

Cooney and his wife live in Douglasville, Ga.



Forester Darrell Busch, right, manager of the Ernst Brender Demonstration Forest, and Forest Technician Howard Underwood of the U. S. Forest Service, Macon, discuss a seed collection and monitoring devise on the forest.

DEMONSTRATION FOREST ESTABLISHED TO SHOW LATEST MANAGEMENT SKILLS

BY DARRELL BUSCH

The Georgia Forestry Commission now has a "showcase forest" in central Georgia that demonstrates the many benefits of properly managed woodlands for landowners and other visitors to the reservation. It is also a site where professional foresters will study examples of the latest techniques in forest management.

The Commission, in cooperation with the U.S. Forest Service and the Southern Industrial Forest Research Council, has established the Ernst Brender Demonstration Forest. Just off Hwy. 18 in Jones County. The purpose of the forest is to provide a place where foresters, landowners, students, teachers or others interested in forest resources, can visit to see actual field demonstrations that employ good forest practices and to learn more about the environment and the profession of forestry.

BRENDER MEMORIAL

The forest is named for the late Ernst Brender, well known pine silviculturist and project leader in the Southeastern Forest Experiment Station in Macon from 1945 to 1975. The demonstration forest is centered on the U.S. Forest Services' Hitchiti Experimental Forest and included demonstration sites on the Hitchiti Forest, as well as nearby sites on private land.

The demonstration program is now being planned and will be primarily aimed at three different groups. The first group is the non-industrial private forest landowner, which includes farmers who have a portion of their lands in forests, city dwellers who own land in the country, and other groups such as hunt clubs and private camp members. This group is a critically important one for forestry in Georgia. Many studies have shown that those in this category own over 60 percent of the forestland in Georgia but tend to do the least to care for and manage the woodlands. If a way could be found to encourage this group to more fully attain the potential of their forestland, it would be a great advantage not only to the landowner himself but to the economy of the state and the vitality of the forest products industry. They need to be aware that practices lead to higher timber yields, a higher quality forest product, lower soil erosion, higher water quality, better wildlife habitat and more and better opportunities for recreation.

Because intensive, industrial style forestry can be expensive, many landowners are discouraged from doing anything and this lack of management results in poor quality woodlands. The Brender Demonstration Forest, therefore, emphasizes extensive, natural regeneration and

management systems to help convince a small landowner that he can safely and effectively reforest his land after a timber sale.

Demonstrations will include clearcut regeneration, seed tree, shelterwood and uneven-aged management systems. Artificial site preparation and regeneration will also be shown. There will be demonstrations on how to restore abused and high-graded cutover lands and they will be shown on a scale of operations typical of the private, small forest landowner.

The second group for which demonstrations are planned is the general public. This group tends to be eager to learn about forestry and the environment.

VARIED DEMONSTRATIONS

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Demonstrations will include interpretive nature trails, an arboretum, displays, films and exhibits, and an informative self-guided tour of forest management sites. The public will learn about the history of the area and the land ethic and environmental processes at work.

The third group will be the forestry professionals. This group includes consulting, state, federal, and industrial foresters, as

well as students, educators, researchers and land managers. The U. S. Forest Service's Southeastern Forest Experiment Station has, since 1946, conducted a program of scientific research on the Hitchiti Experiment Forest. Making the past, present and future research plots accessible and interesting will be a goal of the staff of the Brender Forest. By having these sites available, the professional community will be brought up to date on the latest in the field, as well as receiving valuable refresher courses on subjects such as fire control, silviculture, mensuration, reforestation, forest operations and forest education.

Presently, the Brender Forest is staffed by two people--a full time forester and one assistant. There is a building on site with office space and an auditorium with a capacity of about 50 persons.

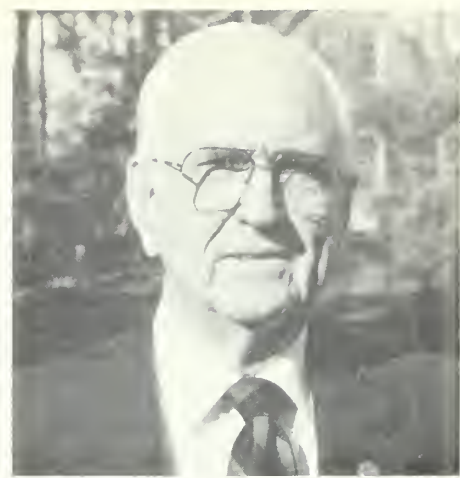
The Hitchiti Forest is also a center of population in the central part of the state for the endangered Red-cockaded woodpecker. Demonstrations showing the management of pine woods for improvement of Red-cockaded woodpecker habitat are also planned.

DEDICATION PLANNED

There is a 400-acre natural reserve which contains some stands of old-growth timber.

Dedication of the facilities, which are now being renovated, is planned for sometime in April, 1988.

The Brender Demonstration Forest offers an opportunity for all people--landowners, professionals, the general public--to continue to learn about Georgia forests, the state's most valuable natural resource.



L. W. (Hoop) Eberhardt

EBERHARDT NAMED TO HALL OF FAME

The greatest recognition a professional can obtain comes from his peers; they are the people who have first-hand knowledge of that person's true value and accomplishments. Induction into the Forester's Hall of Fame is the highest honor given to a professional forester in Georgia by his peers.

L. W. "Hoop" Eberhardt of Athens was recently accorded the distinction by the Georgia Division, Society of American Foresters.

After graduating from the University of Georgia with a Bachelor of Science in Forestry in 1936, Eberhardt began his career as assistant county agent in Berrien County. He quickly moved up to county agent and in 1940 was promoted to the state staff as a specialist in forestry and 4-H. He initiated 4-H, forestry and naval stores camps by obtaining financial support from the forest industry. The contacts and his dedication to youth reached dynamic proportions. He became a district agent and in 1963 was appointed Director of the Cooperative Extension Service at the University of Georgia.

Eberhardt accepted the challenge of raising funds to finance the building of the Rock Eagle 4-H center, which today is said to be one of the finest facilities of its kind in the world.

CONTRACTS EXPLAINED

Since many timber sale contracts do not specifically address reforestation clauses, landowners may wish to consult "Timber Sale Contract Reforestation Clauses" by Bob Izlar and Doug Domenech, publication #85-A-3, available from the American Pulpwood Association, Inc., Suite 1020, 1025 Vermont Ave., Washington, D.C. 20005 for \$1 a copy.

The timber contract is the part of the timber-sale process where the interests of all legs of the landowner/forester/logger triangle come together.

Georgia Forestry/December 1987/5

Ernst Brender, for whom the demonstration forest is named, was inducted into the Georgia Foresters Hall of Fame in 1972. He headed the Hitchiti Experimental Forest for 25 years and was author of more than 40 scientific papers and articles. He retired in 1975 and died of a heart attack in 1985.



REVISED NATIVE SEEDS AND PLANTS BOOK NOW AVAILABLE

A revised edition of the publication *Sources of Native Seeds and Plants* has been released by the Soil and Water Conservation Society.

The new edition contains the names, addresses, and telephone numbers of

nearly 250 growers and suppliers of native vegetation in 38 states, Canada, and Mexico.

Copies of the 360page booklet are available for \$3.00 (\$2.50 for orders of 10 or more), postpaid, from SWCS, 7515 N.E. Ankeny Road, Ankeny, Iowa 50021-9764.

When world attention was focused a few weeks ago on tiny Jessica McClure trapped in an abandoned well in Texas, Forest Ranger Paul Petty shuddered to think that a similar ordeal might have occurred in his North Georgia county if his unit had not filled in 145 old wells.

"Actually, a lot of the credit should go to Rip Collins", said the Pickens County ranger who succeeded Collins as head of the unit. "Petty, who formerly served as a patrolman, said "we not only covered up 145 wells throughout the county, but we filled in 60 mining holes."

The retired Collins apparently was prompted to intensify a campaign started in 1975 to eliminate the hazards around old home places after Patrolman Charles Padgett in 1979 rescued a man from the bottom of a 50-foot well.

Ranger Petty said his unit is continuing to fill in old holes and the work is not only being done to protect the public, but to prevent his own firefighters from being killed or injured as they subdue fires in heavily wooded areas where vines and brush often obscure abandoned wells and mines.

ABANDONED MINES

He said the mines are sometimes "as big as the crawler tractors we use in plowing firebreaks and even bigger." They are old talc mines and they are usually well camouflaged by vegetation. Talc is a very soft mineral used to make talcum powder and lubricants and was mined until a few years ago in many sections of Pickens and adjoining counties.

The ranger said the unit works closely with the county's board of commissioners in spotting and eliminating the perils and the routine duty in recent years hasn't called for heroic action such as that displayed by Patrolman Padgett back in 1979. The patrolman was on a mobile home fire when he saw an official of an electric co-op on some rotten boards and plunge into the deep well.

Disregarding his own safety, he had someone on the scene tie fire hoses around him and lower him into the well to rescue the injured victim.

Many wells and other dangerous obstacles have been eliminated by Commission personnel in other sections of the state.

District Forester David McClain, who directs Commission activities in 15 counties in the Gainesville area, said his men fill in abandoned wells when requested by landowners, or when they come upon a well and confront the owner to receive permission to destroy it.

MARKING DANGER

"I'll tell you when old wells are really dangerous!" said the forester. "When you're out marking timber and you need to be looking up, instead of down, and can't look out for wells that are grown over with honeysuckle or kudzu."

McClain said that during his career he has worked in counties where test pits and mines where copper, iron ore and gold has once been mined and then deserted to become holes that left forest firefighters in jeopardy.

District Ranger Lynn McElroy said personnel in the Newnan District during the past year have covered six abandoned wells.

Forester Jack Long, associate chief of the Commission's Forest Protection Department, recalled that a patrolman plowed out a fire one night and upon returning to the scene the next morning to determine the fire damage, found that his tractor had straddled a deep well.

Long pointed out that the man could have been killed or seriously injured if he had hit the hole head on or if the heavy machine had

caused the well to cave in. He also told of a patrolman who hit a well and only the brush guard prevented the tractor from falling deeper into the well.

"There are plenty of old wells still out there and they are hazardous," said Long. "I am talking about the old wells that had to be dug by hand...big enough for a man to get into." The modern well with an electric pump is bored and piped and presents no problem, he said. "It's the old fashioned well that's two to four feet in diameter and hidden in a tangle of vines that can cause trouble."

COUNTY UNIT ELIMINATES MANY ABANDONED WELLS

TO PREVENT POSSIBLE DEATHS OR INJURIES



Ranger Paul Petty of the Pickens County Unit examines another abandoned well that is scheduled to be filled in by his personnel in a continuing effort to make the county safer for firefighters and the general public.

Georgia, especially rural Georgia, with miles of county maintained roads and bridges, has many substandard bridges by today's modern standards. While these bridges may be safe, they do not always allow the full tonnage of loads that modern commerce and farming activities require.

As a way to economically address the problem of substandard county bridges, the Georgia Forestry Commission advocates the use of engineered wooden bridges using pressure treated southern yellow pine as the primary component of the bridge.

Tommy Loggins, associate chief of the Commission's Research Department, said the Commission is actively encouraging the use of pressure-treated modern bridges as a competitive alternative to the more traditional concrete and steel constructed bridges.

Now that many rural bridges are in need of upgrading to increase their carrying capacities, the time may be arriving when a locally grown and manufactured product can be used to upgrade the transportation system, he said.

The reason for this, Loggins pointed out, is that in recent years research has increased the useful life of wood for use as a building material and has yielded more efficient designs as well. "With the new-engineered wooden bridge designs and treatment processes, we believe wooden bridges are as durable as concrete and steel, are highly aesthetic additions to the roadway, and can be locally produced and installed."

One thing Loggins expects to boost the argument for wooden bridges is a timber bridge and construction manual that is being produced for distribution sometime during the spring of next year by the Forest Products Laboratory in Madison, Wisconsin.

The publication, *Timber Bridges; A Manual to Detail Easily Built, Long-Lasting Structures*, is geared toward both local and state highway engineers and designers. Loggins described the forthcoming manual as the state of the art on current wooden bridges and said it contains results of the latest research on the subject.

Loggins cited many additional advantages of timber bridges: The fact that they are simple to fabricate and cost competitive should appeal to county governments which will have the job of replacing the majority of the substandard old bridges. The pressure-treated timber bridges have high strength to weight ratio, sound and thermal insulation, shock resistance, and are immune to de-icing chemicals. Environmentalists should be pleased with the eye appeal they offer and the fact that they are constructed from a renewable resource.

Many Georgians would benefit from the construction of timber bridges. Presently, many farmers and loggers must go out of their way to detour in order to avoid unsafe



This bridge of pressure treated softwood prefabricated panels was assembled on the abutments in just one day. The bridge, located in a rural section of Pennsylvania, is typical of the type span the Georgia Forestry Commission is advocating for replacement of some old bridges in Georgia.

COMMISSION ADVOCATES GREATER USE OF WOOD IN CONSTRUCTION OF BRIDGES

BY ROBYN ANTHONY

bridges, and Loggins said the pressure-treated southern yellow pine bridges would be capable of handling the heavy loads which would save the farmers and loggers both money and time.

The construction of such bridges would also benefit the state's economy since the pine would come from Georgia's forests, treated in Georgia, by Georgians, Loggins pointed out.

GEORGIA'S F

Just as the great virgin forest was invaluable today and can be further enhanced

BY H



Georgia's first forest was composed of virgin stands of pine and hardwood that supplied the basic need of the early settlers.

It has been said that at the time the first settlers came to this country it was conceivable for a squirrel, by taking a circuitous route, to jump from limb to limb from the Georgia coast to the Mississippi River without ever having to touch the ground.

That, of course, was the great virgin forest that blanketed much of the Eastern Seaboard and provided pioneers with an abundance of material for building cabins, rail fences, animal shelters, forts and other structures in a lush wilderness of hardwoods and pine.

The early Georgians used wood in a hundred ways. It was winter fuel for their fireplaces, which were used for cooking as well as for heating their rustic homes. Wood was used to make their furniture, spinning wheels, looms, and farm wagons. It built their first churches, schools and trading posts.

The wide use of trees was, of course, essential to the development of the fledging Georgia farms and towns that slowly emerged from the forests, but the plentiful trees ultimately became an unappreciated resource. Their prolific growth became a burden as they had to be laboriously cleared by man and oxen to make way for agricultural field and garden plots. They had to be removed to provide grazing land for livestock and to create paths and meandering trails that were later to become principal roads.

It is difficult today to imagine the many hours the Georgia frontiersman spent in producing a single plank by using a drawing knife or hand plane. He eventually advanced to the pit saw and finally witnessed the first water-powered sawmills along rivers and other streams. Steam later replaced water-powered mills and railroads gradually snaked across the state to ease the logistical problem of moving logs from the forest and mill production to the marketplace.

The emergence of the railroad also brought timber companies into the state that often clear cut vast areas and left the exposed land open to soil erosion. The expanding population brought about an increase in forest wildfires that often burned for days.

The widespread exploitation of timber and the uncontrolled fires eventually brought a close to an era - a virgin forest was disappearing.

THE SECOND FOREST

The turn of the century saw nature begin to re-establish trees on logged sites and burned over areas. The volunteer seedlings in the early 1900's gradually turned the countryside green again. It was the beginning of Georgia's second forest.

The widespread growth, nurtured by Georgia's ideal soils and moderate climate, represented the forests that would supply the sawmills that dotted the state in the 1930's and through the 1950's. It was an era that encompassed both the Great Depression and World War II.

The Civilian Conservation Corps, an organization that sent thousands of young Georgia men out across the state to plant trees and engage in other conservation practices, was formed during the economic depression. The CCC was initiated in 1933 and for nine years aided in the country's economic recovery and served the cause of practical forestry in Georgia and states across the nation.

The war that came later brought a great demand for lumber, paper, naval stores and other products derived from the woodlands. Much of the second forest timber was depleted to meet the demands of war and industrial needs following that crisis. One measure, however, that spurred reforestation in the late 1950's was the federally financed Soil Bank Program - a program that brought a great tree planting surge to Georgia.



The second forest was mainly re-established by nature on cutover lands and vast acreage that had been ravished by fire.

JRTH FOREST

Georgia's early settlers, it is of prime importance for the twenty-first century.

BENNETT

THE THIRD FOREST

The long string of railroad cars loaded with pulpwood and wood chips and the many trucks hauling logs along the state's highways are familiar everyday scenes in almost every county in Georgia. The products that are being transported to the mill are from the third forest - our present-day forest.

It is the forest that is feeding the 15 insatiable pulp and paper mills that operate around the clock and the woodlands that are supplying a great volume of logs for Georgia's 176 high-production sawmills. The 23.7 million acres of commercial forests in the state also provides an endless supply of raw materials for plywood and veneer mills, pole and post treatment plants and others that comprise the 500 industries that are primary users of round wood. In addition, more than 1,000 secondary industries, including naval stores processors, depend on the forest.

Forestry today is the leading industry in Georgia. It contributes \$8.6 billion annually to the economy and provides employment for more than 80,000 men and women. Standing timber in the state is valued at more than \$12 billion and annual harvests earn landowners more than \$400 million.

The third forest has resulted from both natural regeneration that occurred on abandoned farm land and the intensive establishment of pine plantations by private landowners and forest industries. Genetically improved planting stock, better forest management by landowners and effective fire protection have contributed to Georgia's ability to retain and enhance her forest wealth.

Technology, however, has expanded wood utilization and consumer demand for wood energy and products derived from wood has increased sharply in recent years. The rate of trees harvested exceeds those that are planted and unless the gap is closed, the third forest will fall short of satisfying needs within a few years.

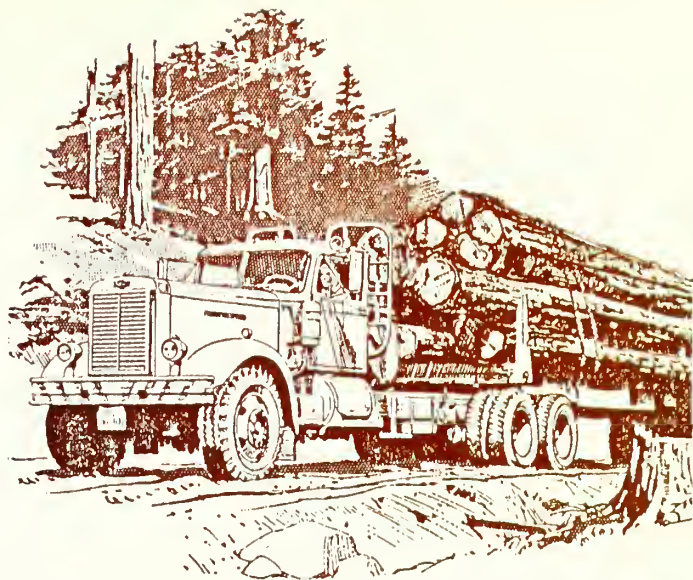
THE FOURTH FOREST

Today, the fourth forest - the forest destined to fulfill the needs in a new century, is just emerging. It is the millions of seedlings now flourishing across the state and the millions that will be planted this season and in the seasons to come.

Georgia is one of the nation's fastest growing states and the future forest must meet the demands of an expanded population. Population growth, of course, brings about a greater demand on land. Shopping centers, industrial parks, super highways, airports and residential developments will take a tremendous toll on land and further reduce acreage available for forests.

Georgia presently has an abundance of commercial forest land, but the 23.7 million acres is expected to decline to about 21.8 million acres by 2030. With the reduced acreage projected in the future, a vigorous reforestation drive now in effect will have to continue unabated if Georgia is to meet the challenge in the twenty first century.

There will never be a time again, of course, when Georgia will have the benefit of a virgin forest, but man's ability to genetically improve



The third forest resulted in natural regeneration and the establishment of pine plantations as a growing industry demanded more wood.

seedlings, control age-old enemies of the forest and vastly improve timber management, marketing and utilization has obvious advantages over the early settlers who only knew wood for its most basic uses.

IN THE NEW CENTURY

The obvious key to a vigorous forest economy is the perpetuation and improvement of the woodland to the extent that the state will always have an adequate inventory of timber.

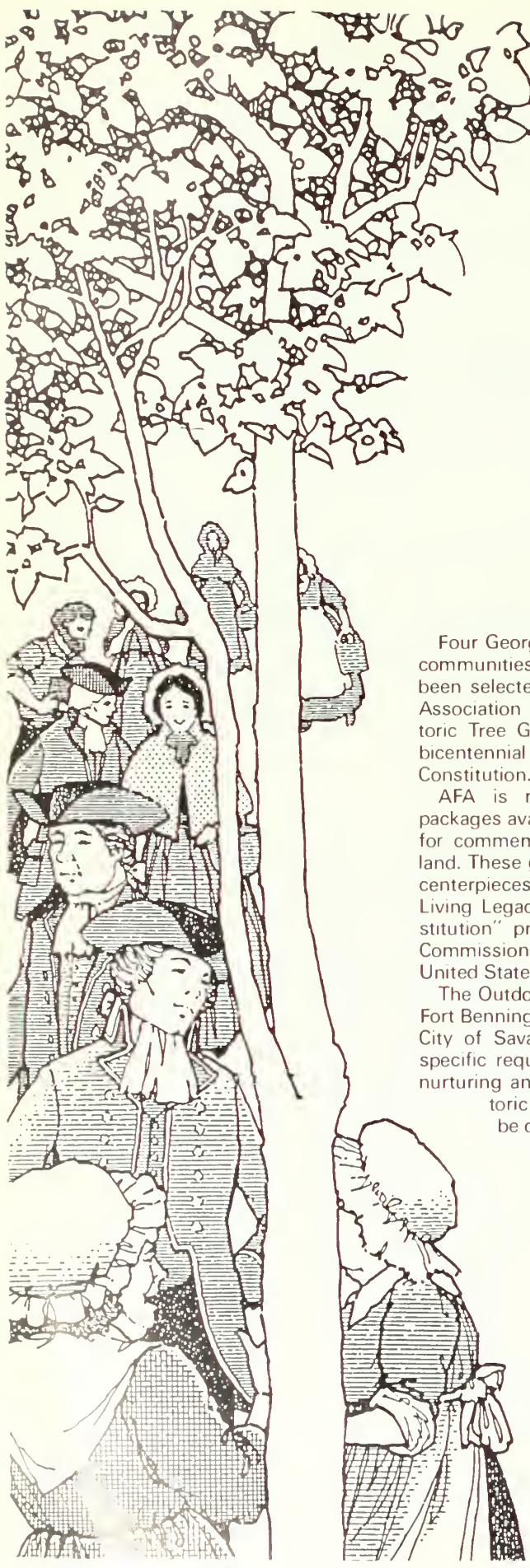
There are bright prospects for the forest industry in Georgia, according to a study by Dr. Phillip A. Cartwright in the Georgia Economic Forecasting Project at the University of Georgia. The study showed that growth in the industry may exceed the national rate of 25 percent, with as many as 14,000 new jobs created in the industry by the turn of the century.

A complex computer model is used to predict changes in the state's timber supply, demand and price in a study conducted by Dr. Albert A. Montgomery of the Department of Decision Sciences at Georgia State University. His study also showed the potential for a healthy forest economy in the future if the present trend in which removal outstrips growth can be reversed.

In the new century, as in the past, timber supply, demand and price will be determined by technological advances, population growth, income and economic climate, changes in land use, forest management intensity and other factors.

A report on the nation's Fourth Forest is being prepared by the U. S. Forest Service in cooperation with other agencies. In Georgia, the Forestry Commission is working with the federal agency on the report for this state. Copies will be available early in the new year.

FOUR GEORGIA COMMUNITIES TO RECEIVE HISTORIC TREE GROVES



Four Georgia communities, along with communities from 31 other states have been selected by the American Forestry Association to receive Famous and Historic Tree Groves to commemorate the bicentennial of the United States Constitution.

AFA is making the historic grove packages available to select communities for commemorative plantings on public land. These groves are said to be perfect centerpieces for a community's "Plant A Living Legacy to the United States Constitution" project, as sponsored by the Commission on the Bicentennial of the United States Constitution.

The Outdoor Activity Center in Atlanta, Fort Benning, the City of Jackson, and the City of Savannah were found to meet specific requirements in Georgia for the nurturing and long-term care of the historic plantings. The seedlings will be one or two seasons old when

shipped, so they will need nursery care for the next few years to ensure development. Afterward, the seedlings will be planted in a public place in the community.

The American Forestry Association located historic trees in different growing regions to make the program available to as many communities as possible. The seedlings were grown from

the seeds of trees connected with the country's birth, development and founding fathers.

Brad Castleberry, Community Relations Officer at Fort Benning, said that their Famous and Historic Tree Grove will be part of the base's planned bicentennial of the Constitution Celebration.

"We will receive ten seedlings sometime between December of this year and March of next year. Once the seedlings get mature enough to plant, we will have a dedication ceremony, but we haven't decided on a location for the grove as yet." It will be accessible to the public for easy enjoyment, and it will be marked with some type of commemorative plaque, he said.

Dr. Donald Gardner, director of the Park and Tree Department of the City of Savannah, said he thinks it's appropriate that his was chosen to be a recipient of one of the groves.

"Savannah is a very historic city, and if any city in America should receive a Famous and Historic tree grove, it should be Savannah," he said.

Gardner said it is particularly fitting that one of the seedlings will be a descendent of the black walnut trees located on Mt. Vernon property.

"After the Battle of Yorktown, George Washington visited Savannah and presented to the city a captured British cannon," he said.

Gardner said the seedlings will be placed in a nursery upon arrival in Savannah and on maturity (approximately two years), they will be planted in Colonial Cemetery, which is the resting place of Button Gwinnett, one of the signers of the Constitution, as well as several Revolutionary War generals.

Another interesting aspect to the program is the fact some seedlings will come from four Georgia trees. The selected trees are among 17 nationwide that will provide seedlings for distribution to participating

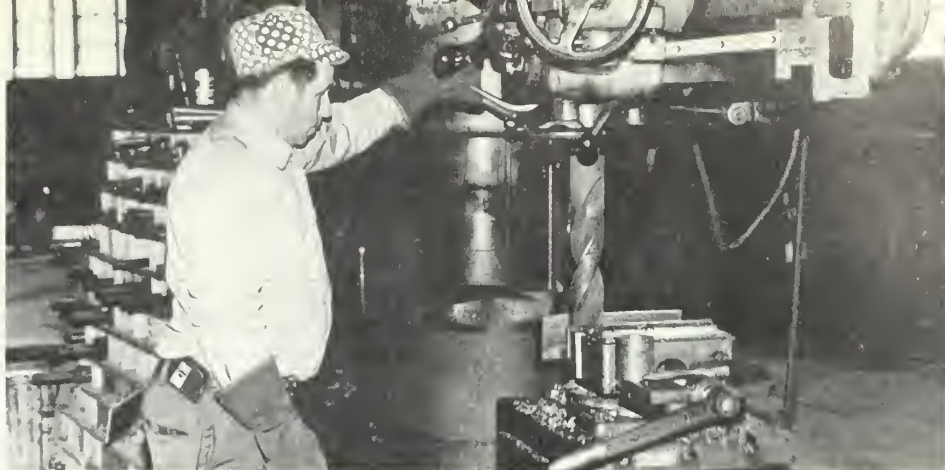
communities.

"The Tree (white oak) That Owns Itself" now in its second generation in Athens is one Georgia tree in the program. In 1820, William H. Jackson willed to the original white oak, "for and in consideration of the great love I bear this tree;" entire possession of itself and of all land within 8 feet of the tree on all sides. The tree died in 1942. One of its offspring was set in the same spot to become the second "Tree That Owns Itself," and the only tree in the world that inherited the land on which its forbear stood.

The United Daughters of the Confederacy planted the second Georgia tree selected, which is the historic American Holly on the grounds of the Laurens County Historical Society and Museum in Dublin. It was planted about 60 years ago to commemorate soldiers who died in the Civil War.

The third Georgia tree, the Liberty (willow oak) tree was planted by the Daughters of the American Revolution in Milledgeville in 1921. Soil samples from the most historical places in each of the 48 mainland states were collected and placed in the tree well where the tree was planted.

The final tree from Georgia, the famous Hagin-Holland (white oak) grew from an acorn planted by Archibald Holland and Elizabeth Hagin on their Dallas, Georgia homesite in 1836.



Jerry Roth operates a huge drill press in the well-equipped shop at the Commission's state headquarters in Macon. The shop fabricates and repairs much of the machinery that is used in forest firefighting and tree nursery operations.

COMMISSION SHOP PROVIDES SAVINGS BY BUILDING, REPAIRING EQUIPMENT

Virtually every piece of fire fighting equipment owned by the Georgia Forestry Commission has been made, modified, or at one time repaired by the Commission's fabricating shop located at the Macon headquarters.

The shop operates under the Forest Protection Department, and the main function is to build fire fighting equipment, said Wesley Wells, chief of the department.

"We stay busy constantly and never get to the point where we have nothing to do. There are times when we aren't pushed so hard, but we never catch up completely," said Larry James, shop foreman.

Work carried out for Forest Protection includes building and installing brush guards, manual and hydraulic ramps, and fire plows, with building and installing fire plows the major function.

James explained that at one time the Commission bought all of its plows. "Six years ago, we could buy plows at \$2,700 each from a well known manufacturer, but a year later, the price was hiked to \$5,800 each. We haven't bought any since that time. Up until now, we've just repaired the ones that we already have, but this year we started fabricating them ourselves."

James said the shop has built seven this year at the old price, which is a 50 percent savings over purchasing the ready built ones. The shop has built about 40 other plows in the past year.

"Judging from the comments I hear from the field, we now have the best plows that the Commission has ever had. They don't require as much maintenance and they also plow better," said James.

Besides the large amount of work done for Forest Protection, the shop also does a great deal of work for the Reforestation Department.

"We supply the nurseries with seedling lifters, root pruners, undercut blades, wagons, packing stands, conveyor stands, and other equipment," said James.

The exact amount of money the GFC shop has saved the taxpayers over the years is not readily available, "but it would have to be considerable," said James.



Ella Atkinson is presented the Young Forester of the Year Award by Eley C. Frazer III, president of F & W Forestry Service. Others are Dr. Tom Rodgers, left, state 4-H leader, and Dr. Kim Coder, Extension Service forester and 4-H coordinator.

FIRST FEMALE TO WIN FORESTRY SCHOLARSHIP

Ella Atkinson, a 16-year-old 4-H member of Roberta in Crawford County, has become the first female to win the F & W Forester Award and scholarship, which is presented annually for outstanding achievements in forestry among Georgia's 185,000 4-H members.

Miss Atkinson, who combines an interest in forestry with her musical talents, was presented the 1987 F & W Award during the annual 4-H Congress in Atlanta by Eley C. Frazer, III, president of F & W Forestry Ser-

vices, Inc., Georgia's largest forestry consulting firm.

The award, which carries a \$500 college scholarship, was established in 1983 by F & W Forestry Services to encourage young people to consider forestry as a career. The recipient of the F & W Young Forester Award and scholarship is chosen by a panel of judges from the University of Georgia Cooperative Extension Service, which directs 4-H forestry and wood science activities in the state.

FLINT RIVER NURSERY DEDICATED

A drenching rain that broke the autumn drought fell on the Commission's new Flint River Nursery on the morning of November 17 and for awhile it seemed the downpour would dampen the spirit and limit the turnout of guests for the dedication of the facility.

The crowd did come, however, and at the appointed hour the governor's helicopter came down from the leaden sky.

In his dedicatory address, Gov. Joe Frank Harris praised the Commission for its rapidity in transforming an 832-acre tract of farmland into a tree nursery that is already producing 50 million pine seedlings. He reminded some 250 timber growers, farmers, political leaders, foresters and others attending the ceremony that only a generation or two ago "Cotton was King" in Georgia.

"But now," the governor said, "the fields that were once white with cotton are forest green...and today forestry is king in Georgia." He referred to published reports claiming that forestry in the state is now an \$8.6 billion industry and declared that "I am now calling it a nine billion dollar industry as I travel around the nation and the world because I know it will reach that point if it hasn't already done so."

GEORGIA'S FUTURE

Governor Harris said he looked down at the green fields of seedlings from the helicopter during the landing approach at the nursery near Byromville in Dooly County and "saw more than millions of seedlings...I saw the future of Georgia...certainly a large part of Georgia's future."

The dedicatory speaker told of several forest-related industries that have recently come to Georgia and pointed out the need for a greater volume of wood to keep pace with the industrial development across the state. He again challenged landowners to plant an acre of trees for every acre of timber harvested.

Wayne West, chairman of the Dooly County Board of Commissioners, read a proclamation that declared November 17, 1987 as "Flint River Nursery Day in Dooly County." Commission Director John Mixon, who introduced the speakers and special guests, commended West and the board for the close cooperation given during the development of the nursery.

The General Assembly in 1987 appropriated funds for a new nursery and the large tract near the Flint River was selected by soil specialists who had considered 20 sites. Part of the acreage will be devoted to slash and loblolly seed orchards.

200 MILLION SEEDLINGS

When in full production, the new nursery will produce approximately 80 million seedlings. This season, the 50 million being grown at Flint, plus those produced at the Commission's other nurseries will total 200 million seedlings for the current planting season.

In addition to the Governor and West, others making brief addresses at the dedication, which was held in a recently completed packing shed and cold storage facility at the nursery, were Senator Hugh Gillis, Sr., chairman of the Natural Resources Committee; Representative Terry Coleman, chairman of the Natural Resources & Environment Committee; and Jim L. Gillis, Jr., chairman of the Georgia Forestry Commission. Ray Shirley, former Director of the Forestry Commission, gave the invocation.

Following the dedicatory program and a tour of the facilities, a fry was given by the Dooly County Board of Commissioners.



More than 250 persons were on hand to hear Governor Joe Frank Harris make the dedicatory address at the Commission's newest nursery. In the bottom scene, the initial crop of seedlings at the Flint River Nursery is ready to be harvested.

REGISTRATION BOARD NAMES NEW MEMBERS

Craig Earnest of Dalton and William C. Humphries Jr. of Jeffersonville have been appointed by Governor Joe Frank Harris to the State Board of Registration of Foresters.

The appointments were announced with the re-appointment of William Lazenby of Macon and Arthur Carter of Cartersville. All four were sworn in at a ceremony in the Governor's office.

Earnest is with Hiwassee Land Company in Calhoun, while Humphries owns and manages Forest Resource Consultants, Inc. in Macon.

The Board, established in 1951 by the General Assembly, is responsible for the regulation of the forestry profession in the state, including examination and licensing of foresters. The Board may also authorize investigations in any charges of fraud, deceit, gross negligence, incompetency, or other misconduct by any forester registered by the board.

TIMBER INVESTMENT WORKSHOP PLANNED

If you are a forest landowner, manager, consultant, service forester, accountant, attorney or any other professional who works with private non-industrial forest landowners pertaining to tax and estates planning, you will be interested in "Winning Tax Strategies: Timber Investment Planning Under the 1986 Tax Reform Act." A workshop at The University of Georgia Center for Continuing Education, January 13-15, 1988.

It will provide a working knowledge for major tax aspects of timber resources management. The focus will be on each major area of federal income estate and gift tax laws that affects timber.

Instructors are Dr. Harry L. Haney, Jr., Associate Professor and Extension Specialist, Forest Management-Economics, Department of Forestry, Virginia Polytechnic Institute and State University, Blacksburg, Virginia; and Dr. William C. Siegal, Project Leader for Forest Resource Law, Taxation and Economics, U.S. Forest Service, New Orleans, Louisiana.

For further information, contact Andy Little, 251 Center for Continuing Education, The University of Georgia or phone 404/542-1585.

UPDATED WOOD HANDBOOK IS SOURCE OF AUTHORITATIVE INFORMATION

The *Wood Handbook*, a recently updated desk reference publication prepared by the Forest Products Laboratory is now available for use in the wood products and construction industries.

The 23-chapter handbook, which includes a glossary and selected references for additional information, is designed as an aid

STRANDBOARD PLANT TO BE CONSTRUCTED IN JACKSON COUNTY

The Timber and Minerals Division of the J. M. Huber corporation has announced plans to construct an oriented strandboard plant in Jackson County.

Strandboard is a reconstituted structural wood panel having strength characteristics similar to plywood. To make OSB, narrow strands of wood are cut from whole trees, dried, mixed with exterior glues and then pressed under high heat and pressure. The panels are used widely in construction and in remodeling and repair applications.

Huber's plant will be located on approximately 328 acres near Commerce. Construction is underway and the plant is scheduled to begin operations in December, 1988. Estimated cost is \$40 to \$50,000,000.

Once in full operation, the plant will employ 120 people. Employees are expected to come from the local area and annual direct payroll is estimated at \$2,500,000. Wages due to secondary employment could likely be two to three times this number.

Pine, yellow poplar and sweetgum will

"Strandboard manufacturers can use a mixture of soft and hard woods and the establishment of plants in Georgia, and especially in North Georgia where there is a surplus of hardwood, will certainly strengthen the pulpwood market...it's the stimulus we have needed."

Paul Butts, Commission's Utilization Forester

be used to produce OSB panels at Huber's new facility. Approximately 250,000 cords will be purchased annually from the area around Jackson County. Production of the panels is estimated to total 285,000,000 square feet each year. "This is enough 4' X 8' panels, that if placed end to end, would stretch from Commerce to Seattle and then some," A company official said.

Meanwhile, a second strandboard plant is being established in Jackson County and one was recently built near Valdosta.

to more efficient use of wood as a construction material. The handbook provides detailed information on wood as an engineering material. The publication is designed to give engineers, architects and builders an authoritative source of information on the physical and mechanical properties of wood

Copies of the revised *Wood Handbook* are

GEORGIA SAF DIVISION OFFICERS ARE ELECTED

H. Ed Hutcheson, vice president, Resource Group of Georgia Timberlands, Inc., will become chairman of the Georgia Division of the Society of American Foresters January 1, and Thomas T. Gilpin, forest tree nursery manager, Georgia Kraft Company, has been named chairman-elect.

Hutcheson is a graduate of the School of Forest Resources, University of Georgia, and is primarily responsible for resource management, land acquisitions and sales for his company. He is a licensed real estate broker and a registered forester.

Gilpin was assistant nursery manager for St. Joe Paper Company from 1978 to 1980, and a Peace Corps volunteer in forest silviculture/education from 1974 to 1977. He graduated from the University of Georgia's School of Forest Resources.

He has served as the Pine Mountain Chapter secretary-treasurer, chairman-elect, and chairman.

Sharon Dolliver, a 1976 graduate of the School of Forest Resources, UGA, will be secretary-treasurer for the second year.

She worked as an urban and management forester for the Georgia Forestry Commission in DeKalb and Rockdale Counties from 1976-1981.

She has since returned to the Georgia Forestry Commission as a senior forester in the Forest Management Department.

WOOD HEATING BOOK NOW AT GFC OFFICES

Persons wishing to combat rising utility costs with wood heaters can now turn to an authoritative publication to help with decisions concerning purchase, installation and maintenance of such heaters.

Wood Heating - Safety, Savings and Comfort, a manual prepared by the Research Department, Georgia Forestry Commission, and the Governor's Office of Energy Resources, contains such information as where to place a heater in your home, which chimney designs are the safest, and how to get your money's worth when purchasing firewood. One chapter even deals with wood heating for mobile homes.

Persons interested in obtaining a copy of the illustrated, 54-page publication should contact the nearest office of the Georgia Forestry Commission.

available from Superintendent of Documents, U. S. Government Printing Office, 710 N. Capitol Street, Washington, DC 20404. Requests should include complete title and stock number: *Agriculture Handbook No. 72, Wood Handbook*, Stock No. 001-000-044-56-7. The cost is \$27.00 (subject to change without notice).

NATIONAL TREE FARMER

(continued from page 3)

billion.

"The potential is tremendous and it's the CRP (Conservation Reserve Program) push that makes the difference. It's one of those rare programs that benefits everybody right down the line - from the landowner to the federal government. Even the man on the street who doesn't even know about it, benefits because he is enjoying the results of a healthy economy."

Stripling's contagious enthusiasm for tree farming has been spawned by 48 years of practicing what he preaches. Although he planted trees through the years, he marks 1955 as the year he "really got started" by setting out 40 acres of pines. Then, in 1956, an accident made him even more aware of the need of security provided through tree farming. Chasing a cow on horseback, Stripling hit a fence post and injured his left leg. The impact was so great that it broke the saddle in half and shattered the leg so severely that doctors feared it might have to be amputated. Stripling recovered and did not lose the leg, but the accident caused him to go into high gear tree farming with new respect for future planning.

STRIPLING'S MOTTO

"I guess that accident is what really sealed my motto; if you plan for the future, the present takes care of itself," Stripling said. Preparing for the future is what Stripling has been doing for many years. He keeps a daily journal of forestry related activities and knows what his land is capable of producing and what it will be worth every year from now until 2010. He continues to refine and maximize forest productivity by planting, replanting, thinning, harvesting, and experimenting with different species. His innovative experiments are only one of the plus factors setting him apart.

One experiment involves growing sand pine on land that many would consider to be worthless; but the sand pine is growing and Stripling has gathered data that could prove valuable in the future. He points out that there was a time when all pine trees were considered virtually worthless.

Stripling also plants slash, longleaf and loblolly pine. A manicured pecan orchard and some impressive live oaks can also be found on his property. Stripling's detailed journal shows that he has experienced remarkable success fertilizing pine seedlings. On other sites, he mows between the tree rows to reduce competition until the stand is old enough to benefit from prescribed burning. All appropriate sites are burned on a two-year rotation basis. Future plans include using chemicals to reduce hardwoods and release pine growth (another experimental oddity for South Georgia).

Stripling's concern for tree farming goes beyond economics. He has developed a protective rapport with the land that influences many of his actions - including his intense tree farm program. Some of his attitudes border on the mystical quality reflected by early American Indians in their feelings for land and nature.

"Through the years, I have felt that tree farming is the ultimate in good soil stewardship. When I plant trees, I feel a little closer to the Great Being that rules the Universe," Stripling said.

However, Stripling's protective tendencies get even more personal. As his son and daughter grew up and had families of their own, he saw they had little interest in his land and he feared that after he died the land might not remain in the family.

"And it just means more to me to know that after I'm dead that sort of thing won't happen," said Stripling while looking out the window at the vast cluster of live oaks surrounding his house. "You can't live as close to a piece of land as I have all my life and not feel something for it. I know pretty near every tree, bush, rock, and most of the animals on this place."

Stripling leaned back in his desk chair and replaced the journal on his desk. "I've had a horror of my land being rented - much less sold," he said "Land goes to hell when it's rented."

So to prevent the land from falling into unrelated hands, Stripling decided to make it an enterprise that would increase in profit provision and basic value. He considered tree farming the best way to sustain this condition. His children have now developed a new respect and interest in the family farm, he said.

"They can't afford to get rid of it or rent it now," Stripling said. "I hope it goes on to my grandchildren and they feel the same as I do about it."

When anybody wins an honor as competitive as the one Stripling won, the inevitable question comes up concerning what makes him better than thousands of other competitors. Obviously, he is an excellent tree farmer with superior management skills, innovative ideas, and academic inclinations. He has excelled in the economic as well as aesthetic facets of tree farming.

SHOWCASE FARM

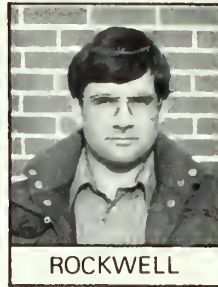
But Stripling's interest is not only his tree farm, but in all tree farming of the future. He has allowed his tree farm to be used as a showcase and allowed other tree farmers to place experimental plots on his land. And when it comes to tree farming, Stripling is a political activist. He has addressed forestry issues on the local, state and national level. His testimonies appear in the Congressional Record - including testimony on the Conservation Reserve Program.

Stripling also worked with Senator Sam Nunn (D-GA) and Representative Charles Hatcher (D-GA) in preparing a program for

Forester WAYNE WORSHAM, a native of Thomaston and a graduate of the School of Forest Resources, University of Georgia, has been assigned to the Camilla District to serve as a management forester. He is



WORSHAM



ROCKWELL

married to the former Becky Burke and they make their home in Donalsonville...Forester GEOFF ROCKWELL, a native of Virginia and a graduate of the School of Forest Resources, UGA, has been assigned to the Tifton District to serve as management forester. He is married to the former Ann Moore of Lynchburg, Va... Forester BILLY NELSON, a native of McRae, was recently assigned to the Commission's Statesboro District. The new forester, the son of Mr. and Mrs. W. R.



NELSON



VEACH

Nelson of McRae and a graduate of Auburn University, will work in forest management...Ranger SANDRA T. VEACH, who formerly headed the Barrow-Jackson County Unit, has been assigned to the Ernst Brender Demonstration Forest near Macon. A native of Cartersville, Veach

farmers to plant trees as a means of FMHA debt relief. Numerous trips to Washington were made at his own expense.

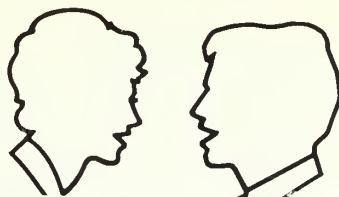
C. M. Stripling is now a trim, healthy 67-year-old. He has been a participant in the revolution that has occurred in forestry and agriculture during the past 40 years and he sees the years to come in a positive light.

He sees the Camilla area in Georgia, like many other places, as an area in transition - healthy transition. Stripling does not mourn the passing of a bygone era of farming romanticized as an American tradition. He sees a different perspective on agriculture emerging with a greening of Georgia in pine forests and cash profits. Stripling does not nostalgically grieve for a lost labor force removed from farming by technology.

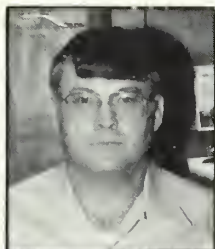
He sees vast new labor opportunities shifting to a new agriculture, forestry, and forestry-related industries - especially in what Governor Joe Frank Harris defines as a \$9 billion forestry industry in Georgia.

PEOPLE

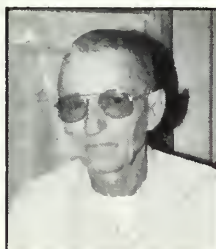
IN THE NEWS



came with the Commission in 1980 as a patrolman and was named ranger in 1986...PAUL PETTY, a native of Pickens County, has been named forest ranger of the Pickens County Unit to succeed CHARLES (RIP) COLLINS, who recently retired after 20 years of service. Ranger Petty has been a member of the Georgia National Guard and also served in the Air Force Reserve. He is married to the former



PETTY

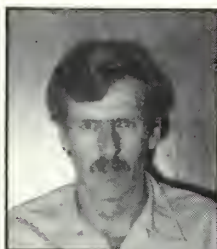


COLLINS

Sharon Waldrop and they have two children. The family resides in Talking Rock. Fellow employees gave a farewell dinner for the retiring Collins and personnel throughout the Rome District presented him with a quality chain saw...RICK SHELTON HATTEN, a native of Macon and a graduate of the School of Forest Re-



HATTEN

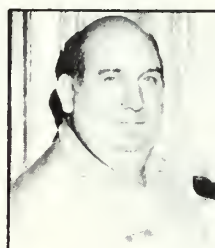


DAUGHTRY

sources, University of Georgia, has been named ranger of the Barrow-Jackson County Unit. He previously worked with tree service companies in Atlanta and Riverdale. The new ranger is married to the former Karen Dumphroff and they have two daughters ...ROBERT T. DAUGHTRY has been named ranger of the Morgan-Walton County Unit to succeed Walter H. Jones, who recently retired. The ranger came with the Commission as a patrolman in 1982. Ranger Daughtry and his wife, Patricia, have three children. He attended Phillips Business College...CLIFF HARGROVE, forester, who came with the Commission in 1978 and has served in several positions, including supervisor of the Dixon Memorial State Forest, has been named Washington District Forester to

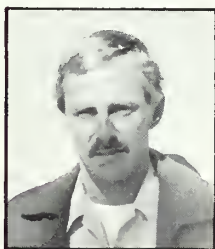


HARGROVE



GRINER

succeed Don Griner, who transferred to head the Athens District. Hargrove is a native of Waynesboro and a graduate of forest management at Clemson University. The district forester and his wife, Susan, have one daughter and they attend the Methodist Church...DON GRINER, a graduate of the School of Forest Resources, UGA, recently transferred from Washington, where he had served as district forester since 1972, to become district forester of the Athens District. He came with the Commission in 1958 as assistant ranger in Worth County and was promoted



DAWKINS



STORY

to several other positions during his career. Griner and his wife, Polly, have two sons and attend the Baptist Church...BILL DAWKINS, formerly a Wilkes County patrolman, has been named ranger of the Lincoln County Unit. He came with the Commission in 1977. Dawkins is a native of Washington and an instructor for the Georgia Fire Academy. He replaces Ranger GEORGE STORY, who recently retired. Story came with the Commission in 1968 as a patrolman and was named ranger in 1972. The retiree and his wife, Kay,



GREMILLION



WYNN

have a daughter and two grandchildren ...CHARLES GREMILLION, a forester in the Newnan District office since 1984, has been named district forester for the Camilla District. He attended Northeast Louisiana State College and Louisiana Polytechnic Institute and previously worked with the U.S. Forest Service. Gremillion and his wife, Karen, have a son and a daughter and they attend the Catholic Church...CURRAN (BUCK) WYNN, previously a reforestation forester in the Tifton District, has been named supervisor of the Dixon Memorial State Forest to replace Cliff Hargrove, who transferred to the Washington District. Wynn came with the Commission in 1975. He is a graduate of the School of Forest Resources, University of Georgia. The forester and his wife have two children...PAIGE ROBERTS joined the Commission's Atlanta Office as public relations and information specialist. She was previously employed by Pringle Dixon and Pringle Advertising and Public Relations Agency in Atlanta. A native of Baton Rouge, LA., she graduated from the University of Georgia's School of Journalism. Her work with the Commission will be concentrated mainly in the Atlanta Metropolitan area.



ROBERTS

COMMISSION SHOP

(continued from page 11)

At times, in order for the shop to fulfill a request, a little ingenuity may be needed. Although they get orders quite often for equipment that they have never built before, James said that only once every three or four years do they find something impossible to build, and even then it is simply a lack of the needed equipment that keeps them from filling the order.

Wells agrees and adds, "What usually happens is that we see a design somewhere that we would like to have, and we come back to the shop and ask our people to build it. They all put their heads together and come up with something. It's usually a trial and error procedure with everyone working together."

Wells said that he has yet to see another state forestry agency that has a shop that is comparable to that of the Commission's. "We have had people come in that see our shop and say that they wish they had a shop with the capabilities that we have. Some state forestry agencies don't have a fabricating shop at all or don't have one with the equipment and capabilities that we have," said Wells.

It is obvious that the shop provides a valuable service, and Wells estimated that the Commission's budget would increase by many thousands of dollars without the shop.



*Merry
Christmas*

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