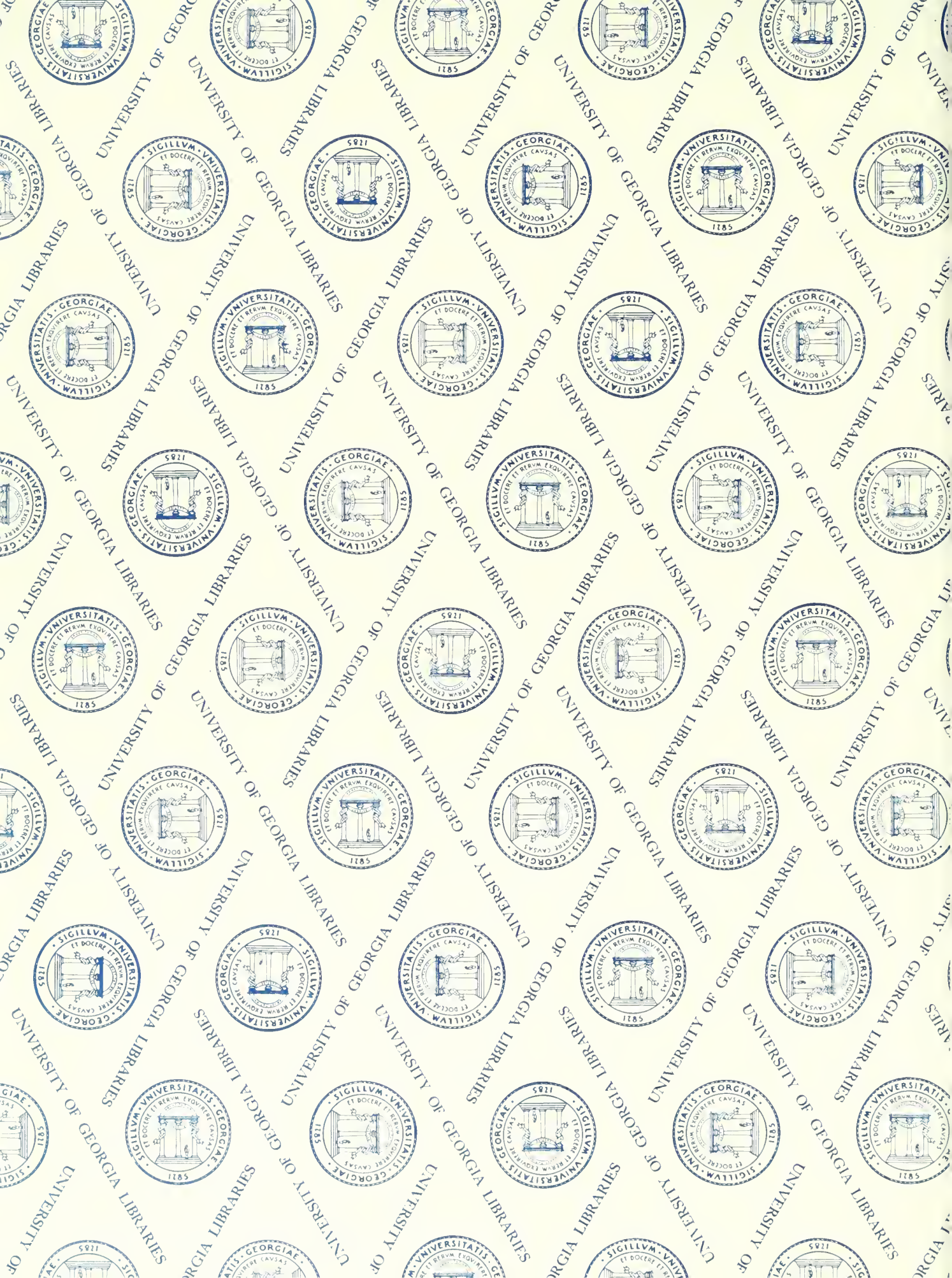
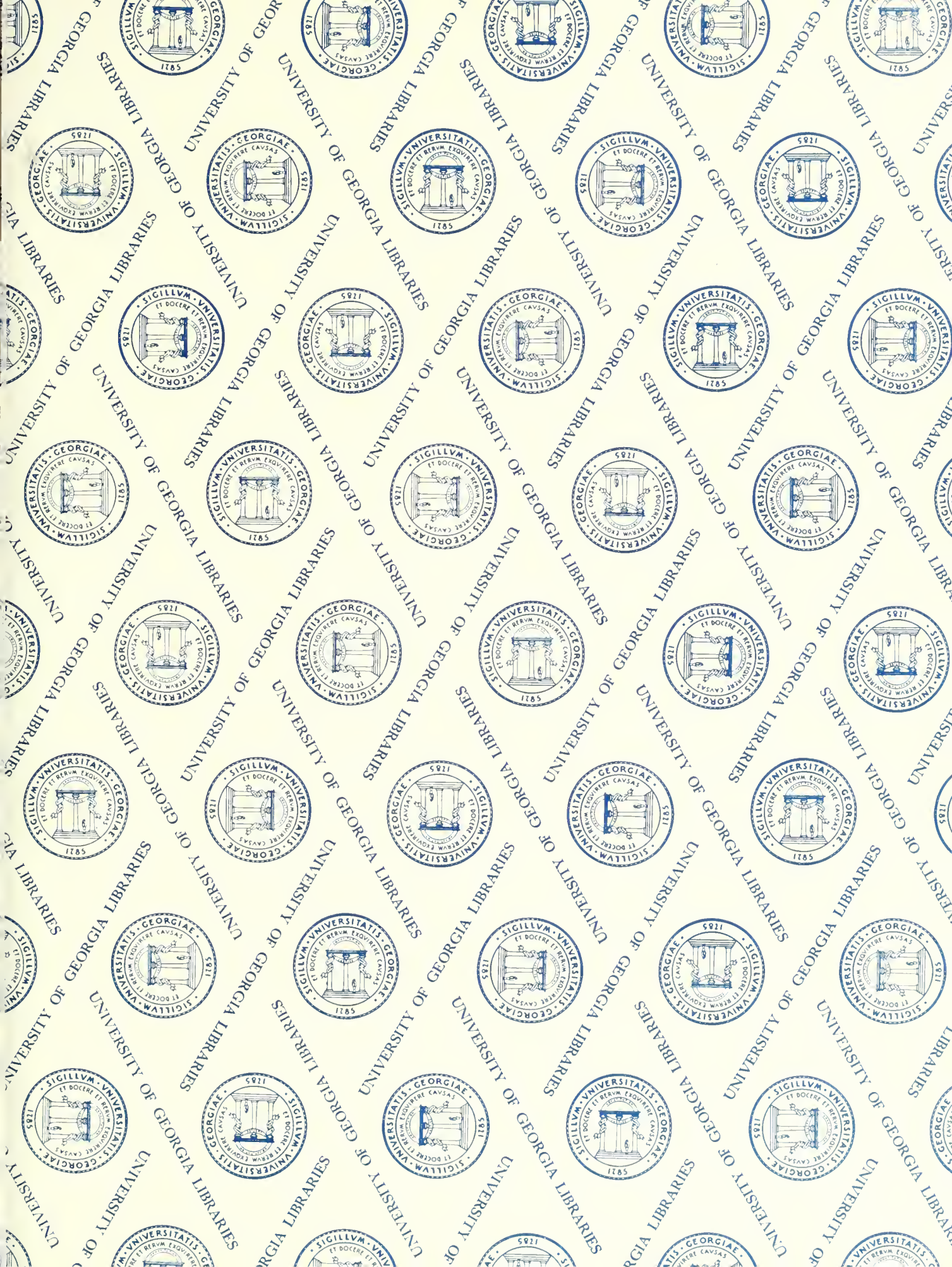


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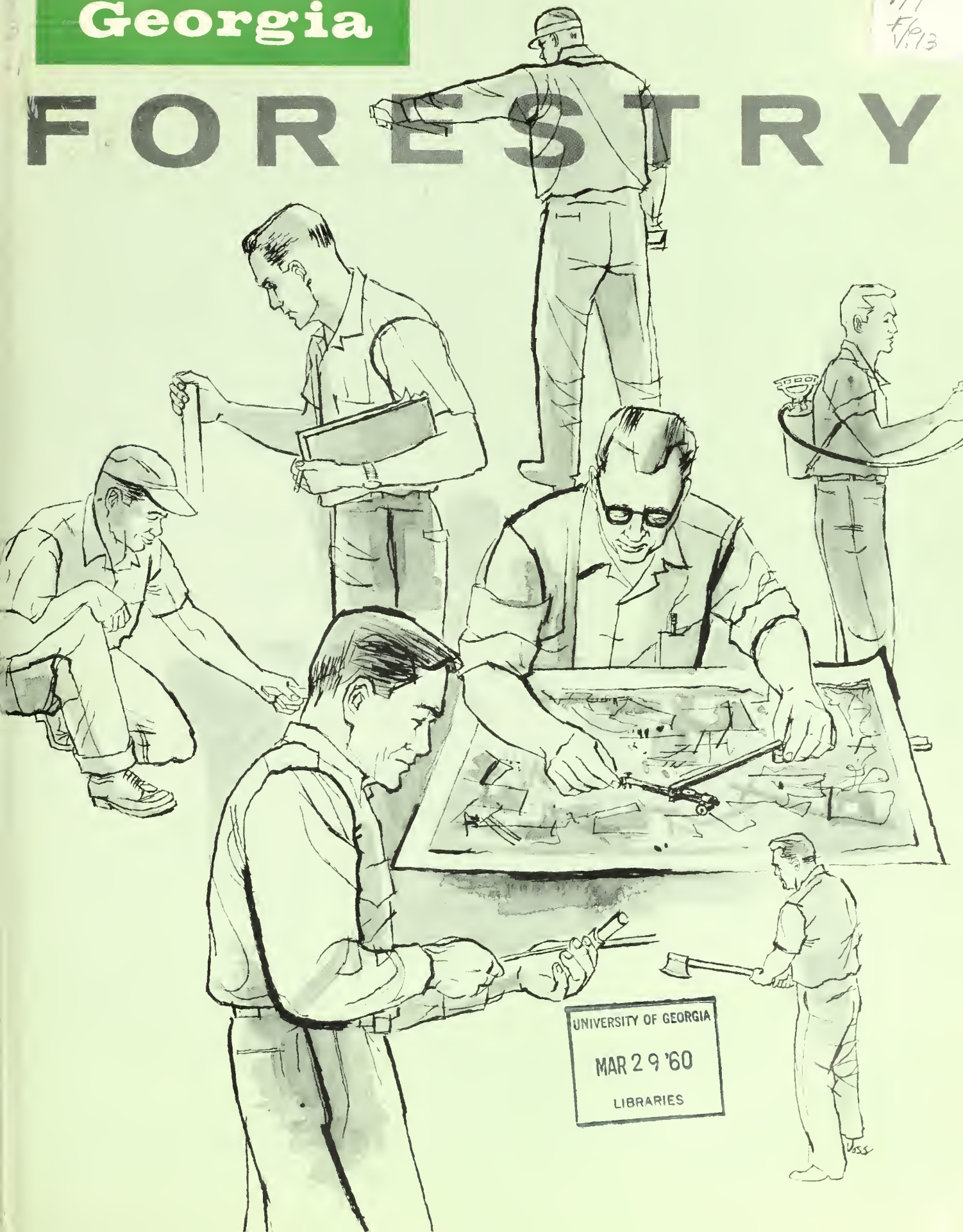


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Georgia

FORESTRY



UNIVERSITY OF GEORGIA

MAR 29 '60

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CRUISING the News

Hunters And Forest Fires

(From the Chattooga Democrat)

Hunters can be a careless lot. Some of the more recent forest fires in Chattooga County have been blamed on squirrel hunters. County Ranger J. B. White says the hunters set fire to trees when they smoke out their prey.

If a tree catches fire, he says, call the rangers. Don't go off and burn up the timberland that means a livelihood for so many persons.

There were three big game hunters in Africa who were resting by their campfire after a hard day in the jungle. One announced: "I'm restless. Think I'll go for a short hike before chow."

The other two didn't fret over his non-appearance for over an hour. Then one glanced at his watch and murmured, "Hmmm! Wonder what's eating ole Ernest?"

So let's don't "eat" up our pretty forests or trees by fire needlessly. It's an expensive habit.

Woods Burning Costly

(From the Baxley News Banner)

Wood burning without notifying the forestry unit can be costly as one citizen found out in City Court this month when he drew a \$200 fine.

The fine was Appling County's first sentence for violation of the Notification of Intention to Burn Law. It was imposed after the citizen pled guilty to the charge. He had been previously requested by Forestry Ranger LeRoy Page not to set any fires unless he first notified the forestry unit.

The Notification of Intention to Burn Law is a county-option measure designed to provide better forest fire protection for Appling County. Notifying the forestry unit before setting any outdoor fires enables state personnel to give safe burning advice, to plow fire breaks for a small sum if the landowner so desires and to alert fire towers or air patrol that the smoke is coming from a fire which is being watched on the ground. Thus, when the smoke is sighted, the forestry unit doesn't have to send a truck or plane to the smoke to see what's causing it. Operating expenses are reduced and equipment and personnel are freed for actual wild fires.

83 Million Seedlings

(From the Lanier County News)

The tree planting program of the pulp and paper industry and pulpwood suppliers in Georgia again exceeded the previous all-time high during the 1958-59 period, according to an eleven-state survey conducted by the South Pulpwood Conservation Association.

It was reported that nearly 83,000,000 seedlings were planted on industry land and distributed to Georgia landowners during the last year. More trees were planted in Georgia by the industry than in any other Southern state with the exception of Florida. Last season, the industry and pulp suppliers gave almost 17,000,000 trees to private landowners in Georgia.

It is said that effective control of undesirable woody plants without damage to the pine is the major management problem in growing pine in the South. There has been many solutions and treatments for hardwood control and now it is hoped these many small seedlings will have a better chance to grow.

The personnel of the Georgia Forestry Commission express their deepest sympathy to the family of Eugene Dobson. The Commission considered Gene to be an outstanding ranger and a young man of highest character and morals. The Cherokee County Ranger carried out assignments in a manner which reflected his high devotion to duty, and thereby brought unto himself, his family and the Commission the esteem of the citizens of Georgia who knew him. This loss will be greatly felt by all who knew him.

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On the Cover

The management forester is a key figure in the progression from seedling to finished product. The figures depicted here are busy turning forest green into U. S. green. By proper land usage, timely and selective cutting practices, and wise marketing your forests can provide a steady income for you.

Member of the

Georgia Press Association.

Georgia Forestry is entered as second class matter at the Post Office under the Act of August 24, 1912.



A.R. Shirley Named To Direct State Forestry Commission

Arthur Ray Shirley, new director of the Georgia Forestry Commission, said it is his aim "to continue a sound and progressive forestry program to serve the timberland owners of the state in the most effective and economical way possible."

Shirley, who in January succeeded Guyton DeLoach as director of the commission, is not new at the responsibility of directing Georgia's forestry activities.

During the administration of Gov.

E. Thompson in 1947, he was appointed head of the agency which was then known as the Georgia Department of Forestry. Following reappointment by Gov. Herman Tamm, he continued to strive for a greatly expanded department which would work closely with landowners and wood using industries in every part of the state.

Shirley, who was graduated from the University of Georgia in 1936, served as a captain in the U.S.

Marine Corps of Engineers during World War II, resigned the state post in 1949 to become secretary and loan manager of the American Turpentine Farmers Association.

The naval stores organization,

which maintains headquarters in Valdosta for its operation in several southeastern states, later named Shirley general manager, a position which he held at the time he was named to the Commission directorship.

In assuming the Commission post, Shirley said, "It will continue to be the primary function of the Commission to work in every way possible toward growing, protecting, managing and harvesting trees that will be of the greatest value to the landowners and to maintain a continuous supply of raw materials for industry."

The new Commission chief emphasized that "forestry is big business in Georgia and much of the present, as well as the future economic welfare of the state, is tied to its forestlands."

He pointed out that Georgia is recognized as one of the leading forestry states in the nation and that "we want to continue to work very closely with all educational and service organizations so all citizens will appreciate the great economic value of the forest, as well as its value for recreation and other uses."

The director said the great importance of proper forestry management can be fully appreciated when the present high value of timberland is taken into consideration. He also stressed the vital importance of good forestry practices to wood using industries and to the thousands on industrial payrolls who depend on the forest for their livelihood.

Shirley, a native of Bowersville, was formally elected to the state post by the Commission's board of directors with the advice and consent of Gov. Ernest Vandiver and was sworn into office February 2 during brief ceremonies in Atlanta.

Known widely throughout the Southeast today for his interest and activities in forestry, he worked one year with the U.S. Forest Service and with the Tennessee Valley Authority during a summer vacation period while still a student at the university.

During his early career, he also served as extension forester and naval stores specialist for the Georgia Agricultural Extension Service.

Under his management, the American Turpentine Farmers Association in January of this year completed the liquidation of all rosin and turpentine that had been pledged to the Commodity Credit Corporation program since 1948.

Association officials point out that \$64,000,000 was borrowed on the products during those years and when the last of the stocks were liquidated in January, records showed there was no loss to the federal government.

Shirley is married to the former Miss Mary Virginia McKey of Valdosta. They have two sons, Ray Jr., who is a sophomore at Georgia Tech, and Rudy, a seventh grade student.

The director, a member of the Baptist Church, Society of American Foresters and Rotary Club, said he hopes to move his family to Macon in the near future.

In taking over the reins of the Commission, which now maintains state headquarters in Macon, district headquarters in 10 strategic areas and unit offices in 148 counties, Shirley said:

"To the personnel of the Georgia Forestry Commission, as well as to landowners throughout the state, I pledge my wholehearted support... the Commission has very capable people and they are doing a tremendous job."

State Begins Planting Of CRITICAL

WATERSHED AREAS



The planting of these areas in pine is a combination of land treatment and flood prevention steps which will contribute directly to soil and water conservation, plant management and flood prevention. The terraces, waterways and trees to be constructed and planted will provide better control of drainage from cultivated uplands. This will cause more water to enter the soil, help decrease the loss of water and reduce land and gully erosion. The farm ponds will provide a reserve of water for the farms concerned, act as soil basins, help control channel erosion, provide recreation and wildlife facilities and provide better distribution for grazing of pasture lands. A reduction in soil production is essential to proper functioning and maintenance of planned channel improvements. Additional truck-tractor plow units will be provided and operated to intensify fire prevention and control within the watersheds.

A watershed improvement project of planting critical watershed areas has been initiated by the Soil Conservation Service. The Georgia Forestry Commission and the U. S. Forest Service are cooperating in the project.

The 832 acres, designated as critical by the SCS, are included in the Hightower Creek, Little Tennessee River, Barber Creek, Palmetto Creek, Tobesofkee Creek and Mill Creek watersheds. These watershed areas encompass some 547,219 acres throughout Georgia. Of this area, 261,060 acres are in forest land. Other areas are expected to be designated later in 1960.

Critical area tree planting was started by the Commission in December, 1959 on the previously mentioned watershed areas. The counties affected include Carroll, 100 acres; Haralson, 30 acres; Towns, 40 acres; Rabun, 60 acres; Oconee, 100 acres; Barrow, 150 acres; Harris, 100 acres; Bibb, Lamar and Monroe, 115 acres; and Whitfield and Walker, 135 acres.

The Commission, in cooperation with the USFS, is providing technical assistance in tree planting and woodland management on a cost-sharing basis. The cost of installing land treatment measure will be borne by the individual landowners with assistance provided through the County Agricultural Conservation Program. The SCS is providing technical assistance for the planning and application of these measures.

Individual landowners will provide labor and farm equipment to accomplish the necessary site preparation and provide and install necessary fencing for protection from grazing livestock.

Land treatment measures to be installed for watershed protection are based upon the use of each acre of agricultural land in accordance with its capabilities. In order to obtain this objective, soil and water conservation and plant management practices, essential to good land use, must be established and maintained.

The principal problem relating to watershed management is the frequency of flooding of low lands, together with large amounts of soil deposits in the watersheds. Damage to drainage ditches, caused by flood water and soil, has made attempts to drain these areas unsuccessful.

Land treatment steps for watershed protection include tree planting, terracing, waterway development, cover cropping, pasture planting, pond construction, drainage and wildlife area improvement. Critical area tree planting, cooperative forest fire control and roadside erosion control make up the land treatment steps for flood prevention.

All monies and authority for conducting this work is provided for in public law 566 dealing with watershed improvement.

National Forest Established By President In Middle Georgia



This is the Hillsboro Headquarters of the Jasper, Jones and Putnam County section of the Oconee National Forest. A similar headquarters at Greensboro supervises the portion of the big forest which lies in Greene, Morgan, Oconee and Oglethorpe Counties.

The 96,364 acres of Georgia land which comprise the recently designated Oconee National Forest today is a far cry from the poorly managed, erosion-ribbed terrain the federal government took over in the early 1930's.

The once submarginal land, purchased by the former Resettlement Administration for rehabilitation under the Bankhead Farm Tenant Act, is composed of two separate tracts. The portion consisting of 66,231 acres lies in Jasper, Putnam and Jones Counties and a 28,133-acre area is in Greene, Morgan, Oconee and Oglethorpe Counties.

B. G. Malone Jr., of Monticello, project conservationist in charge of the larger area of the big forest which gained national forest status last fall by executive order of Presi-

dent Eisenhower, said the land had been "misused for about 100 years" back when the government purchased the area during the depression.

He said erosion had rendered 60 percent of the land useless for cultivation purposes, timberland had been recklessly destroyed, and 75 percent of the inhabitants of the area were living "on or below the poverty line."

Today, the land -- which include the popular Piedmont Wildlife Management Area -- is under a multiple use program.

Malone said he and his assistants

are operating various sections of the vast tract for timber growth and harvest, water conservation, stock grazing, wildlife and recreational purposes. He said the U. S. Forest Service is cooperating with the Georgia Game and Fish Commission in developing the wildlife aspects of the big forest.

Development of the delapidated land actually got underway in 1936. Since that year, the area has been planted with thousands of slash and loblolly pines, yellow poplar, Arizona cypress, catalpa, red cedar and black locust.

Malone described the topography of the land as "broken and rolling" with many small watersheds draining into the Ocmulgee, Little, Oconee and Apalachee Rivers, as well as into Murder and Cedar Creeks.

He said most of the area contains a fine textured soil and erosion has been checked by vegetation and tree planting operations. The project chief said current work programs call for timber stand improvements, construction and maintenance of more roads and trails, and the development of more recreational facilities within the forest.

Malone said emphasis has been placed on the recreation prospects for the area by an ever increasing demand by the hunting, fishing and vacationing public. He pointed out the growing popularity of the Oconee National Forest partially stems from its central location in the state.

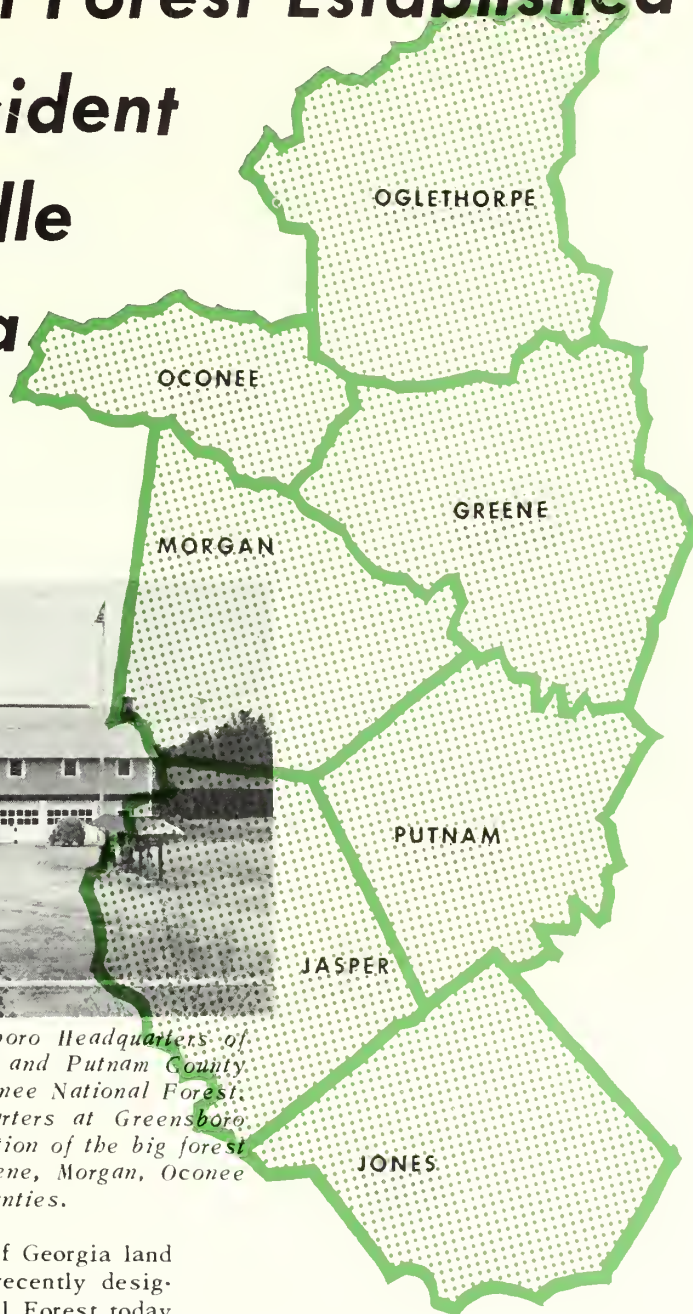
The conservationist said logging enterprise is carried out under a bid system, with private loggers cutting by strict regulations imposed by the forest service.

The 28,133-acre portion of the Oconee forest has headquarters in Greensboro, with B. D. Barr serving as project conservationist. The administrative unit there and the one at Hillsboro are equipped with radio facilities with both the Georgia Forestry Commission and the U. S. Forest Service frequencies.

The two offices also maintain lookout towers and rolling stock which is used for road maintenance and fire fighting purposes.

Malone said the establishment of the Oconee National Forest from the land utilization projects will not materially affect the administration, but will simplify procedures.

The establishment of the Oconee gives Georgia two national forests. The other is the Chattahoochee National Forest, a reservation of more than 668,000 acres in the mountainous regions of North Georgia.



Georgia's Small Woodland Owners Conference

REPORT



that practicing good forestry is good business.

Technical assistance is needed in any field if the business is to be successful. According to the conference report, there are not enough foresters in Georgia available to work with woodland owners. Landowners need help marketing, determining site qualities and conducting proper prescribed burning.

Financially, federal land bank and private banks do make timberland loans. However, interest rates are too high for the small woodlot owner to reach. Special longterm, low interest credit facilities are needed.

For the woodlot owner to receive the maximum benefits from any sort of planned program there must be a coordination of forestry activities. No one person or agency can solve the small woodland problem.

Georgia's need was, essentially, a need echoed by other southern states as each held its own small woodlot session. Vessey stated that a People's problem cannot be solved until they, the people, want it solved. Then, the key to getting the total job done is the development of strong state forestry departments. From these departments must come the leadership and coordination in guiding educational efforts through local forestry councils or

committees.

Local and state leadership can define responsibilities and divide the total work-load among the co-operating agencies of government and private enterprise, Vessey added. Economically speaking, the present dollar will buy more in the future with coordinated effort among all concerned.

Through the statewide meetings, business leaders have been awakened to the fact that wood products have an impact on the community in which they live.

Georgia, with 193,000 small woodland owners, has a tremendous job to do in improving forest practices. If the state is to meet its fair share of future requirements, early action is needed in all phases of forestry. A population increase to 275 million by the year 2,000 will double this nation's demand for wood products. The South is expected to furnish nearly half of this demand.

Vessey pointed out that the state forest program, sponsored by the Georgia Forestry Commission, the "Pilot Forest Program" of the Southern Pulpwood Association, the Rural Development Program, sponsored by the extension service; county development committees, which exist in some states; the work of the soil conservation districts are examples of more coordinated effort.

The summary reports and transcribed records of the small woodlot meetings are available to the public through the state foresters, the forest supervisor, or the Regional U. S. Forest Service Office in Atlanta.



Landowner voices forest needs

The principal need of the small woodland owner in the South is education in good forestry practices. Technical assistance, easier loan money, coordination of forestry activities and more timber stand improvement are other needs mentioned by the small woodland owners at conferences held throughout the South.

James K. Vessey, Southern Regional forester, U. S. Forest Service, stated that nine public meetings were held in the fall and winter of 1958-59 to find out the wants and needs of the small woodlot owner in the South. The sessions were part of a nationwide series of which there were 26. Some 5,000 people attended of which 3,000 participated in the southern meetings.

Georgia's 'Town Meeting', held in November of 1958, drew some 300 timberland owners. In Georgia there are 12.5 million acres of woodlots under 500 acres. Two-thirds of Georgia's woodland owners are farmers whose woodlots average 63 acres each. These woodlots owners are not producing timber at their maximum potential. Some ten million acres of Georgia woodlands need timber stand improvement work at once. That is Georgia's situation.

At present, there is a need for educational programs directed to youth groups, women's organizations, business firms employing woodland owners and through banks. The forester must go to the woodland owner and sell him on the idea

Nursery To Up Quality, Lower Costs



Even sowing of seed will produce more uniform crops, more suitable seedlings.

The Georgia Forestry Commission is initiating a new nursery program aimed at a high production of quality seedlings at a considerable savings to the Georgia taxpayer.

Commission Director A. R. Shirley stated that a modified soil management program is being started with the planting of the 1960 nursery crop according to seed size. Decreased seed bed densities, more effective irrigation control and root pruning, and an increased spraying program for fusiform rust round out the program.

Commission Reforestation Chief Sanford P. Darby said this program will provide even seedling distribution in nursery beds and uniform seedlings to Georgia landowners.

Heretofore, seed have been plant-



Seed are separated according to size to obtain uniform seedlings

ed with disregard to size. This method forced planting machines to be adjusted to the large seed which caused a variation in seed distribution. Under the new planting system, the seed are divided into three divisions...large, medium and small. In planting, the machine openings are set so the small, then medium, followed by the larger seed are sown.

With seed planted in relation to size, all seed are given an opportunity to grow at an uniform rate. Planted with larger seed, the smaller ones are usually overtopped during the initial growing stage. Shaded, the smaller seedlings do not receive proper sunlight to grow into healthy shippable seedlings.

Darby pointed out that cull reduction will mean fewer seeds have to be sown in order to insure a better quality product at a more economic production price. By using fewer seed, there will be a lesser drain on the seed supply which is normally kept at the three year level.

With uniform density in the nursery beds, preventive treatment for damping-off and southern fusiform rust disease can be easily applied by the nurserymen. In addition, sowing and mortality rates can be more accurately computed.

Darby added that the Commission will attempt to produce a high quality seedling having the following specifications: a top of 8 inches, a stem diameter of 1/4 inch with a fibrous root system at least 6 inches long.

All State Nurseries To Be Used In '60 Seedling Production

A. R. Shirley, director of the Georgia Forestry Commission, announces that 250,000,000 seedlings will be grown in state nurseries in 1960-61. This figure, for the first time, will include a number of hardwood species. The director added that all of the Commission's six nurseries will be used in the production of the seedling crop.

Sanford P. Darby, Commission reforestation chief, pointed out that the seedling production should meet woodland owner needs. This is based on the production and consumption of seedlings in 1959-60, Darby said. During this period, there were 236,389,000 seedlings lifted which included slash, loblolly, longleaf, and eastern white pine, yellow poplar and red cedar.

Slash pine will account for the largest percentage of the seedling crop followed by loblolly pine, yellow poplar, longleaf and white pine in quantity of production. Yellow poplar production is being doubled in 1960-61 because of increased landowner demand.

The hardwoods initiated in the growing program include northern red oak, sycamore, sweet gum, dogwood, swamp chestnut, bald cypress, and black walnut. A number of miscellaneous species will also be grown.

At Stewart

TREES & TANKS

Live Together Profitably

Forestry and tanks make strange "bedfellows," but at Fort Stewart, home of the Army's Armor and Artillery Firing Center, the two are proving that they can live profitably together.

The Fort Stewart military reservation, located in portions of Liberty, Bryan, Long, Evans and Tattnall Counties, comprises some 280,000 acres. It is the largest Army installation east of the Mississippi and was the first to employ a full-time professional forester.

Burley B. Luftburrow, son of Georgia's first forester, is the post forester. He is ably assisted by two young professional foresters, Leo Lamond and Jim Lusk. The three foresters head up a 20-man crew which supervises all forestry and fire control work on the huge

post.

Being a military installation, training comes first and forestry second. With two contrasting operations being performed on the same area, problems are a dime a dozen. Trees embedded with shrapnel, pose a problem in timber utilization. The fire control unit has no holidays posted on its calendar year with the training of troops in the use of high explosive ammunition in the form of shells, bombs, grenades and dynamite. Another log is thrown on the fire in the forms of hunters and fishermen. Some 15,000 hunts were held during the past hunting season.

Through the use of mine detectors, which proved so priceless on the battlefield, the fight against lead filled trees is being won. Once the metal is located by the mine detec-

tor, it can be easily removed from the sawlog or pulpwood bolt.

The fire control problem has been met with perhaps the largest fire equipment pool in the South, new developments in fire fighting equipment and four fire towers positioned in critical areas. The fire fighting equipment includes eight D-6 tractors and two D-4 models, two HD-11 and HD-6 tractors, and 11-fire plows. The new developments include a "V" shaped pusher or "yoke" for fire tractors, and another innovation enables a harrow to be easily transported over a concrete road and onto a heavy equipment mover. The four fire towers are located at Richmond Hill, Claxton, Pembroke and Hinesville.

Strengthening this ever-watchful system is a cooperative agreement



Flaming forest presents major fire problem to Stewart fire fighters



Fire lines are reworked to protect forest against flammable understory.

with the Georgia Forestry Commission. Radio and telephone communications are maintained between the Commission's tower in Bryan County and the Army's Tower near Hinesville. The agreement has worked



V-shaped pusher aids tractors in fire fighting

smoothly for the mutual benefit of Army and private landowners in the vicinity of Fort Stewart.

However, modern equipment is not enough to prevent forest fires. The forest growth at Fort Stewart is highly flammable and ignites readily. The worst year being 1955 when 22,000 forest acres were charred by fire. The largest single fire burned over 8,250 forest acres. Yet the post's average acreage loss was lower than that of surrounding areas for that year. The post's fire loss rate from 1956 to date is less than one-half of one percent of the area under protection.

The reservation's timber harvesting program resembles that of any other military installation in the Third U. S. Army area. At any one time during the year there are from three to twenty-five lumber contractors on the reservation. Many contractors often sub-contract their work and so the number of contractors varies from month to month.

Timber production in past years has averaged from \$300,000-500,000 in revenue annually. The residual timber, mostly slash and longleaf

pine, is valued at some \$25,000,000. During the past year, the forestry section supervised the cutting of sawtimber, pulpwood, poles and piling, fence posts, pine stumps, and fuel wood. Private contractors have even purchased pine cones, straw and deer tongue.

Timber management at Fort Stewart has a rosy future because the post has the necessary prerequisites to increase its timber production to many times its present value. The government has received over three million dollars from its timber sales since the land was purchased in 1940 for \$4,707,359.

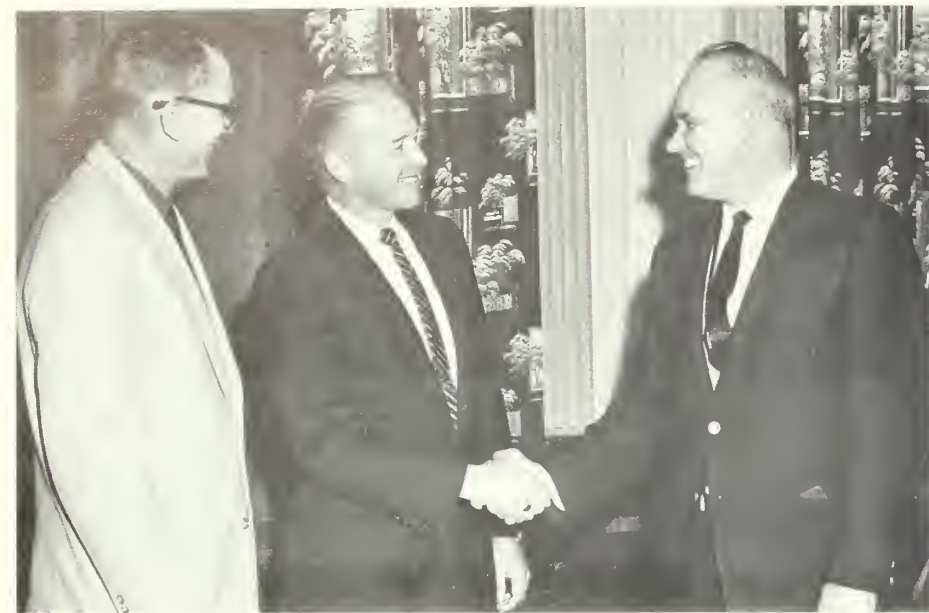
Reforestation is also actively pursued with 250,000 seedlings being planted this past year. Natural reforestation is sufficient in most areas with seedlings being used in former training or artillery impact areas.

Yes, forestry and tanks are strange "bedfellows," but at Fort Stewart they are living profitably together.

Army's mine detector locates hidden damage to Stewart's tree economy. U. S. Army photos.



Fire Control Chief Will Be New Assistant Director



Shirley, right, congratulates Turner who succeeded Hargreaves.

James C. Turner, Jr., Georgia Forestry Commission fire control chief, has been named assistant director of the Commission by Director A. R. Shirley. Turner's successor has not been named.

Shirley, in naming Turner to the assistant's position, stated that he was well qualified for the job having served as chief of management, information and education and fire control divisions of the Commission. "His extensive knowledge of the Commission's organization will be an asset to the state and the people of Georgia," Shirley added.

Turner expressed his gratitude for the faith the Commission has placed in him by his promotion to the highly honored position. Turner said, "I will continue to perform my duties to the best of my ability and offer my full support to the program conducted by Commission Director A. R. Shirley."

The Commission fire control chief came with the state in 1947 as assistant tenth district forester in Washington. In 1951, he was promoted to chief of the forest management division and, in 1954, to assistant fire control chief in Macon, Georgia. In 1956, he was named chief of the information and education division. Turner was appointed to his present position, chief of fire control, in 1957.

Turner received his BS degree in forestry from the University of Georgia in 1947. Turner has served

as vice-president and president of the University of Georgia's School of Forestry Alumni Association. He is also a member of the Society of American Foresters.

Turner is a captain in the active Army Reserve, serving with the 425th Transportation Group. During World War II, Turner served in the Pacific Theater as a First Lt.

A member of the Presbyterian Church, Turner is married to the former Jane Chapman Brooks of Washington. They have two sons, James Candler, III and Frank Brooks.

Hargreaves Accepts St.Regis Position

Georgia Forestry Commission Director Ray Shirley recently accepted the resignation of his assistant director, Dr. Leon A. Hargreaves, Jr. Dr. Hargreaves announced that he will serve in the Land Management Department of the St. Regis Paper Company in Jacksonville, Florida.

In accepting the resignation, Shirley said, "the Georgia Forestry Commission has suffered a great loss in the resignation of Dr. Hargreaves". "Through his outstanding services as assistant director, he has contributed in a most effective way to the building of the Forestry Commission. The director added that Dr. Hargreaves departure is in no way connected with the re-

signation of former Commission Director Guyton DeLoach.

Dr. Hargreaves came with the Commission in 1954 as assistant to the director. In 1956, he became Assistant Director in charge of administration and personnel. In this position he has coordinated all activities in the Commission seed orchards, which are used to develop superior strains of trees. In addition, he has served as chairman of the Southeastern Section of the Society of American Foresters and as president of the Georgia Forestry School Alumni Association.

A native of Pearson, Dr. Hargreaves obtained his BS degree in forestry from the University of Georgia in 1946. The University presented him with his MS degree in forestry in 1947. He also holds a Masters in Public Administration and a PHD in Philosophy which he obtained from the University of Michigan in 1953.

DeLoach Ends 19 Years Of State Service



H. Guyton DeLoach

Veteran forester Guyton DeLoach, director of the Georgia Forestry Commission, resigned January 8, 1960. His resignation culminated some 19 years of forestry service to the state of Georgia.

DeLoach, director of the Commission since June 1949, came with the Commission in 1941 as ranger of Jenkins County. In 1942, he was promoted to assistant eighth district forester. During this period he became recognized as one of the most outstanding men in the South in the field of forest fire protection. He laid the ground work for the development of our present suppression plowing equipment and methods of transporting this type of machinery. The use of radio by the

Georgia Forestry Department in connection with fire control was first used in his district.

In 1948, DeLoach became assistant director in charge of fire control and assisted in bringing additional forest acreage under state protection.

Under the leadership of DeLoach the Commission grew from 43 forestry units, under fire protection, to 132 units composed of 147 counties. This protection is nationally recognized as being among the best anywhere.

DeLoach obtained his BS degree from the University of Georgia in 1939.

Other District, County Changes Are Announced

Jerry Lanier, former ranger trainee in Emanuel County and Henry Swindell, who has served as Reforestation Assistant at Herty Nursery,

have been promoted to assistant district foresters of the First District.

Paul Bledsoe, First District assistant district forester, has been transferred to the Second District, where he holds a similar post.

Horace C. Green, former Mitchell County assistant ranger, has been promoted to Grady County Ranger to replace James E. Forsyth. Forsyth has been granted an educational leave of absence to attend the University of Georgia. W. P. Davis, former assistant Pierce County ranger, has been promoted to Pierce County ranger. He replaces R. C. James who has been granted a one year leave of absence.

Alton Bowen has been promoted from assistant Houston County ranger to Glynn County ranger. John H. Radcliffe, Jr., patrolman of the Lee County unit, has been promoted to ranger of that county replacing J. H. Stanford.

The Commission also announced the recent resignations of Johnny Loney, assistant tenth district forester, and T. G. McClendon, Henry County ranger. Replacements for the two posts have not yet been made.

Foy Barnes, Tenth District radio technician, has been transferred to the Sixth District office, and former patrolman James E. Kelly, has been elevated to Cherokee County Ranger. Andy B. Newbey has replaced Dan Hall as ranger of Dade County.

C. C. Dubberly, former Eighth District radio technician, is now with the Tenth District office.

In other changes, former Assistant District Forester A. L. Kantziper has accepted a post with the Waycross State Forest; J. Reid Beasley is now Richmond County trainee, and Lanny Farr, formerly at Hightower Nursery, has replaced William M. Berry as Reforestation Assistant at Morgan Nursery.

Counties To Vie For Awards At GFA Meet



1957, 1958, 1959, 1960

The 53rd annual meeting of the Georgia Forestry Association is scheduled for Jekyll Island May 4, 5, and 6.

Highlights of the three-day session will include the crowning of "Miss Georgia Forestry" and recognizing the districts and counties for their outstanding work during the year. Harvey Brown, executive director of the Georgia Forestry Association stated that the queen's title

has been changed from "Miss Georgia Green" to "Miss Georgia Forestry" to conform with a similar title designation in a number of other state associations.

Carroll County will be vying for an unprecedented fourth straight title in the beauty contest. Pierce County will be defending its number one position in the statewide general performance rating. Miss Barry McDonald of Carrollton is the reigning

queen.

The Georgia Forestry Commission's ten district offices and 148 counties having forestry units will be after some 13 awards, 12 of which go to the counties. The outstanding county in each district, from which the best county in the state will come; best all-round district, and the county having the best fire record will receive recognition.

Plans are for the "Miss Georgia Forestry" queen to make a three-day all expense paid trip to New York City. A side trip to Washington, D. C. is also planned.

An alternate queen will be selected. She will participate in events when the reigning queen is unable to do so. The deadline for entering the beauty contest is April 28.

Any young lady, who has served in the capacity of queen for an association, industrial group, cooperative or other such organization on a state or regional level, will not be eligible to participate. However, a runner-up in such a contest or a queen on a county or forestry district level may enter.

Brown added that the "Keep Georgia Green" program is one of our greatest weapons for use in forest fire prevention and general public education. Sympathetic public opinion and support are necessary if we are to keep our forestry losses at a minimum.

Fire Report Shows Less Fires, More Acreage Burned In 1959

There were 583 less forest fires in Georgia in 1959 than during the previous year, according to figures released by the Fire Control Division of the Georgia Forestry Commission. The report showed, however, that there were 1,594 more acres burned than during 1958, despite the smaller number of occurrences.

James C. Turner, Jr., Commission fire control chief, explained that the average increase was justified as three new counties, were brought under protection by the Commission last year. These counties have a total of some 400,005 forest acres.

The new counties, which brings to 148 now under state protection,

include Houston, Randolph and the lower section of Clinch.

Of the more than 21 and one-half million acres of state and privately owned forestland, now under state protection, 50,939,70 acres were destroyed during 1959. Turner said that 6,442 fires occurred during the year, and the percentage burned was .237. This compares favorably with the record low of .233 percent recorded in 1958.

The fire control chief pointed out that April was the only month in which any abnormal fire control difficulty was encountered. During this month large fires broke out in the northwest Georgia mountains destroying 1,900 acres of woodlands

in four days. Turner said the Commission's emergency field headquarters facilities were dispatched to the scene, and men and equipment amassed from a wide area kept the forest fire losses from being larger.

The Commission's annual report showed that careless debris burning touched off 2,607 fires while incendiary burns accounted for 1,475 blazes. Smokers were responsible for an additional 1,034 fires. Those causes accounted for more than two-thirds of the fires. Other wildfires stemmed from lightning, railroads, campers, lumbering operations and various miscellaneous causes.

The Commission's law enforcement department investigated 1,286 fires during the year. The investigations, by investigators from the ten forestry districts and the Macon office, led to action being taken on 284 cases of which there were 46 convictions. In addition, there are 34 cases pending action.

HARDWOOD NEWS

Education Program Initiated

The educational phase of an intensive drive to promote better hardwood management in Georgia has been launched by officials of state and federal forestry agencies and representatives of wood products industries.

The long range program opened March 16 with a two-day Hardwood Management School at Rock Eagle State Park. Foresters who attended the training session will in turn advise and counsel landowners and other interested persons on the techniques of sound hardwood management.

Principal instructors at the school were John A. Putnam, hardwood specialist of the Stoneville Research Center, Stoneville, Miss.; Harold O. Baxter, University of Georgia Extension Service, Athens; and James F. Renshaw, U. S. Forest Service, Atlanta.

They lectured on the technical aspects of hardwood management; the importance of hardwoods in Georgia; and the expanding needs for this type wood in the state's plywood, pulp and lumber industries.

In a series of short talks by representatives of the various wood products industries in the state, the grades, species and other specifications for particular manufacturing needs were emphasized by the com-

pany spokesmen.

At that time, Ruark announced that the program was being initiated because of "an increased demand for all types of hardwood needed for pulp, veneer, lumber, furniture, cross ties and other products."

The school at Rock Eagle was concluded with a field project. Foresters and hardwood processors shown how to determine the best grades and uses of hardwoods and were instructed on selecting trees for cutting.

Dorsey Dyer, forester of the Extension Service, University of Georgia, served as chairman of the training school. Others on the planning committee for the technical short course were H. E. Ruark, director of the Georgia Forest Research Council; and Dean A. M. Herrick of the School of Forestry, University of Georgia.

The program, which is aimed at encouraging landowners to grow more and better hardwoods in soils suited to those type trees, was initially set up last December at a meeting held at the Georgia Forestry Center in Macon.

The group appointed Harry Crown of Atlanta, regional manager of the American Forest Products Industries, to head a committee which is now planning publication of a hardwood management booklet.

Foresters Complete First Aid Refresher

Georgia Forestry Commission personnel, representing the ten forestry districts, recently completed a three-day instructors refresher course in first aid at the Forestry Center near Macon. Harry A. Kenning, field representative for the American Red Cross in Georgia, conducted the school for the 17 foresters.

Curtis Barnes, assistant chief of fire control and state safety officer for the Commission, stated that the first aid training was initiated some three years ago, with refresher courses given three or four years. The Commission safety officer said that the instructors annually conduct first aid courses for their field personnel.

Kenning, who has been a first aid instructor for the ARC for 31 years, said he was "well pleased with the enthusiasm of the foresters" who participated in the training sessions. He pointed out that the refresher courses give the 17 key instructors the ability to continually give up-to-date instructions to forestry units, civil defense personnel, schools and other groups in their home communities. The courses are also tied in with Commission safety and fire organization planning.

Barnes added that all of the foresters are instructors in their local Red Cross Chapters.

SPCA MEETS IN ATLANTA

Forestry leaders, from Georgia to New York, pointed out a greater need for a closer relationship between industry and landowner at the recent annual meeting of the Southern Pulpwood Conservation Association in Atlanta.

"To keep the public aware of forestry developments, all the facts must be presented to the grower and manufacturer of wood products... Research and experience must master such forestry practices as planting, weed control, water-table regulations and genetics of hardwoods... Recreation is a field in which the timber industry has an opportunity to demonstrate its responsibility as a 'keeper' of the forest... For the South to continue its economic surge, the pulp and paper industry must do a

FORESTRY SPEAKERS:



Swenning, McCaffrey

better job of pointing out that trees serve the people of the South and nation."

These opinions were voiced to

some 500 representatives of the pulp and paper industry by a panel of outstanding speakers. They included W. A. Binns, Union Bag-Camp Paper Corp., Savannah; Philip A. Briegleb, Southern Forest Experiment Station, New Orleans, La.; Karl Bendetsen, Champion Paper Co., Hamilton, Ohio; B. L. Orell, Weyerhaeuser Co., Tacoma, Wash.; and C. B. Stauffacher, Continental Can Co., Inc., New York, N. Y.

Karl A. Swenning, director woodlands department, Scott Paper Co., Chester, Pa., was named to serve a second term as president of the SPCA. J. E. McCaffrey, vice-president, International Paper Co., Mobile, Ala., is the incoming vice-president.



VALDOSTA HOSTS SAF

Congresswoman Iris Blitch echoed the sentiments of the SPCA session in an address at the annual meeting of the Southeastern Section Society of American Foresters.

The Eighth District Congresswoman announced that the construction of a continuous perimeter road around the Okefenokee National Wildlife Refuge was underway. She added that firebreaks, dikes, sills and other conservation work, which will protect surrounding areas from fire and drought, will be completed in April of this year.

Some 400 professional foresters from Alabama, Georgia, and Florida also heard Mrs. Blitch express an urgent need for additional forestry research, and greater protection of woodlands from fire, insects and diseases.

A technical session, pointing out research activities and needs, was moderated by H. E. Ruark, Georgia Forest Research Council. Speaking at the session were E. V. Brender, U. S. Forest Service, Macon; Louis J. Metz, USFS, Union, S. C.; Lloyd Thorpe, Journal of Forestry, Seattle, Wash. and Herbert C. Carruth, Bowaters Paper Company, Calhoun



Swinford, Owens, Stevenson, Hargreaves, Walker



Metz, Ruark, Thorpe, Brender
Tenn.

Donald Stevenson, Buckeye Cellulose Corp., Foley, Ala., was named SAF section chairman. He succeeded



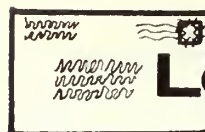
Mrs. Blitch

Dr. Leon A. Hargreaves, Jr., assistant director of the Georgia Forestry Commission. Other officers include James W. Owens, Jr., Gulf States Paper Corp., Tuscaloosa, Ala., chairman-elect; and Bob Swinford, professor at the University of Florida School of Forestry, Gainesville, secretary-treasurer.

Strange Things Happen In



The I&E Mailbag !!!



Letters

Dear Mr. Lane:

A few hours ago we passed the ashes of Fellowship Church. We were again reminded of those who left their homes and firesides on Christmas Eve to fight that fire. But for the Stewart County's efforts, the whole neighborhood might have burned. Just knowing you were there was a comfort to us that night.

Please accept our personal and humble gratitude. I believe this is the attitude of the entire community. Thank you.

Sincerely,

The Billie Moore's
Moore's Nursery

Dear Mr. Mann:

This is an account of the service your Douglas County unit gave me recently.

I called the county unit at Douglasville and asked Mr. Mann for the use of his tractor. I wanted to use it to plow a fire break on my woodlands near the Chattahoochee River off route 92. When asked when I would be there, I told him I was leaving home at once.

Some two minutes after my arrival at the woodlot, the machine arrived. The tractor-operator followed me through the woods and back with the tractor. The fire break was plowed in about 25 minutes. In addition, I was given sage advice on how to handle the situation.

This sort of service is amazing to me. If the entire Forestry Department operates the way those Douglas County men did, even the immortal Stonewall Jackson would welcome you without question. That's the sort of service one dreams about.

Respectfully,

Lonnie B. McTyre

Dear Mr. Jones:

I have started setting out my pines. I see it not only as a profitable but also as a most interesting hobby.

At the time you went over my woodlot, we noticed there were some areas that could be thinned. I do not want to cut anything without your assistance. However, I would like to cut some pulp wood, then sell it to a pulp wood dealer by the cord. I noticed on my last trip that there are a few open spaces that I plan to set out this year.

It is gratifying to ride through Georgia and see it becoming more beautiful through organized forestry. Indeed Bleckley County is most fortunate to have you. The results of your work is very obvious. I hear many fine reports of your accomplishments. With best regards, I am

Sincerely,

Mrs. M. L. M. Nunez

"I am homesick for the smell of Georgia pine," a former resident of the Peach State wrote from a California hospital.

"I broke my hip and I am now laid up...would you please send me a bough of pine to remind me of my home back in my native Georgia," the lady pleaded in her letter.

A little school girl in West Virginia asked for "some live bugs that attack the trees in your state" to be used in a class project.

A man in Cincinnati, Ohio, told of buying a farm in Towns County and requested information on forestry practices in that section of Georgia before moving down south to his new home.

A college in New Jersey wanted booklets on Georgia's state tree, state flower and state bird.

Such are the request which come into the Georgia Forestry Commission's offices here from all states in the union.

Frank Craven, chief of the Commission's Information and Education Department which strives to fulfill all the requests, said the bed-ridden lady on the west coast received a fragrant branch from a Georgia pine. He said the gentleman from Ohio had all his questions answered and pamphlets were mailed to the Jersey college.

But the lass in the West Virginia mountains received a letter expressing regret that live bugs could not be sent through the mails and was asked to accept a booklet on forest insects as a substitute.

Craven said the bulk of requests concern landowners, teachers and students wanting sample bark, sprigs and leaves of Georgia trees or literature dealing with a wide range of forestry subjects.

"But in almost every mail bag

there is usually one unusual request," Craven said.

He told of a church in Lowell, Massachusetts, which asked for a wood sample of Georgia's state tree to be included in a cross being constructed from woods from every state. Craven promptly mailed the church pastor a block of live oak.

A Georgian stationed at an Army post in Arkansas who was pining for his native state received pine seedlings to set out on the reservation.

When the homesick soldier received the small shipment of seedlings from the Commission, he was joined by his commanding officers and other officials of the camp in a ceremony in which the Georgia trees were planted in the Arkansas soil.

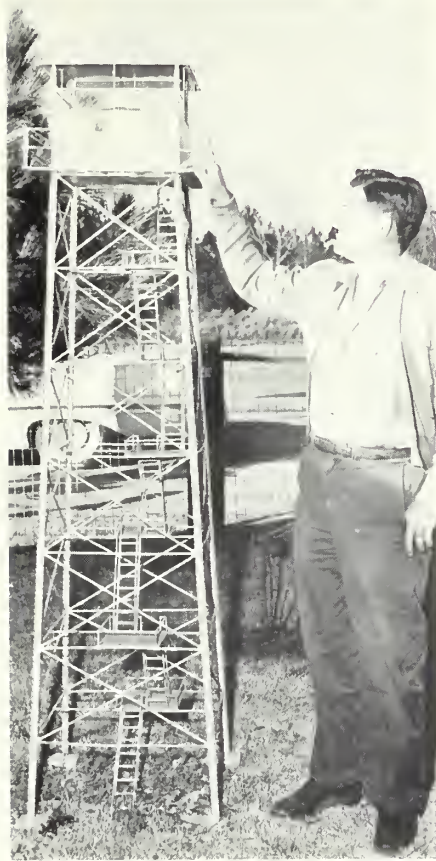
Craven said he also recalls that a school boy in Georgia recently requested a "Prevent Forestry" poster and another wanted to know "What effect rain has on pine trees?"

A considerable volume of the incoming mail deals with requests from children interested in receiving Smokey Bear badges, conservation pledge cards and other material designed for forestry-conscious youngsters. Letters from many young men seek information on the requirements necessary to become a forest ranger.

Craven said he recently found an amusing complaint in the morning mail. A resident in a neighboring state asked why Georgia Forestry, a quarterly magazine published by the Information and Education Department, "Doesn't have any sex in it."

Although the magazine at times contains stories on pollination and articles dealing with research in forestry genetics, Craven said he is "quite sure our disgruntled reader had something else in mind."

Logging the foresters...



Twiggs Ranger Harold Watkins stands beside a miniature fire tower on the front lawn of the unit's Jeffersonville headquarters. The unique display, fashioned from steel reinforcement and welding rods, was built by Assistant Ranger Dan Hasty.

CONSERVATION AWARD...George M. Kyle, U. S. Forest Service, Atlanta, is one of ten professional conservationists to receive the national conservation award for 1959. The award is given by the American Motors Corp. for outstanding work in resource conservation. Kyle was nominated for the award because of his efforts in calling attention to the dangers, of insecticides used in several southern states in control of the imported fire ant, to humans and wildlife. The award presentation was made March 4 at the National Wildlife Federation Convention in Dallas.

IN MEMORIAM...The Georgia Forestry Commission extends its deepest sympathy to Carl I. Peterson in the death of his wife. Peterson is State Forester of Tennessee.



Macon Mayor Wilson tries out musical tree planter as Councilwoman Abney, Municipal Airport Manager Wilson and S. P. Darby examine samples of red cedar planted on airport property. An air-horn, signalled the interval for dropping the seedlings.



Hank Langley, Tenth District pilot, is as handy with a paint brush as he is with a Piper Cub. Langley, here shown working on plywood Smokies for use in special displays, also handles much of the Commission sign painting.

NEW FOREST SCHOOL...The Toombs County Forestry Unit is aiding the FFA chapter of Toombs Central High School in forestry projects on a newly-created school forest. Planting, thinning, hardwood control and timber cruising will be conducted on the ten acre plot. Union Bag-Camp Paper Corp. and the Georgia Vo-Ag Department established the forest.

SCHOLARSHIP AWARDS...The Continental Can Company will award two forestry scholarships to two outstanding high school graduates from Northeast Florida, Georgia or Western South Carolina. These scholarships will be \$4,000 each for four years study in forestry. This is the seventh consecutive year the Company has offered scholarships in states where the Company operates or owns timberlands. The scholarships were previously awarded in the name of Gair Woodlands Corp. which recently merged with Continental Can Company.



Two hundred and fifty science students of Macon's McEvoy High recently toured the Georgia Forestry Center. The girls, who were transported to the Center in five school buses, represented the largest single group ever to visit the facility.

Georgia FORESTRY

MARCH, 1960



Eliminate Your Wood Problems!

Like our early airmen, you too can fly high on a sound wood (s) platform. If your finances are grounded by low-ceiling income, low-income forests may be your problem. Proper planting, protection, and harvesting can get your pocketbook off it's back and off the ground.

Georgia FORESTRY



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On the Cover

The cover is from "Ten Ever-
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toonist recently appeared in the
Dedication of the Okefenokee
Swamp Perimeter Road.

Member of the

Georgia Forestry Association.

Georgia Forestry is entered as second
class matter at the Post Office under
the Act of August 24, 1912.

CRUISING the News

Let's Put Our Trees To Work

(From The Adel News)

In recent surveys it was estimated that the state's 24,000,000 acres of forest lands produce at only half of their capacity. The "six steps up" program has been launched to enlist the aid of schools, forestry people, civic and business organizations in helping to rectify this condition.

We find that the income from forest lands is already moving upward but still more must be done. Recently Sen. Richard B. Russell said that six out of ten Georgia Farmers are cooperating in planned conservation programs for their land. At present every acre of land in Georgia is embraced in an organized soil conservation district.

We have the possibilities of a great tree crop in this section of Georgia. To let trees go to work for us and by cutting away the undesirable and planting new ones, can mean money in our pockets in the future.

Fire Prevention Calls For Extra Effort

(From the Atlanta Constitution)

Thanks to the efforts of firefighters, scientific methods of combatting blazes and rains that fell in the nick of time, approximately 80 forest fires that roared through northwest Georgia mountainous areas are subdued.

But the toll was heavy. An estimated 3,000 acres of private timberland were damaged.

Carelessness and downright stupidity were responsible as is the case with the majority of conflagrations. Georgia Forestry Commission officials attribute the fires to debris burning and believe that some were of incendiary origin. Timber damage from winter storms added fuel to the flames.

As pointed out by James C. Turner, assistant director of the Commission, cooperation is needed to prevent losses from soaring in the months ahead. Those who set trash fires and allow them to get out of hand are responsible for much damage, as are careless campers, motorists who throw lighted cigarette butts from their cars and persons who deliberately ignite fires out of meanness or a warped way of satisfying their egos.

Forestry is a multimillion-dollar business in Georgia. In view of the damage already caused by ice storms and the added danger resulting from fallen trees and broken limbs, every precaution should be exercised to prevent additional millions of dollars going up in flames.

Tree-Farming Profits Overlooked

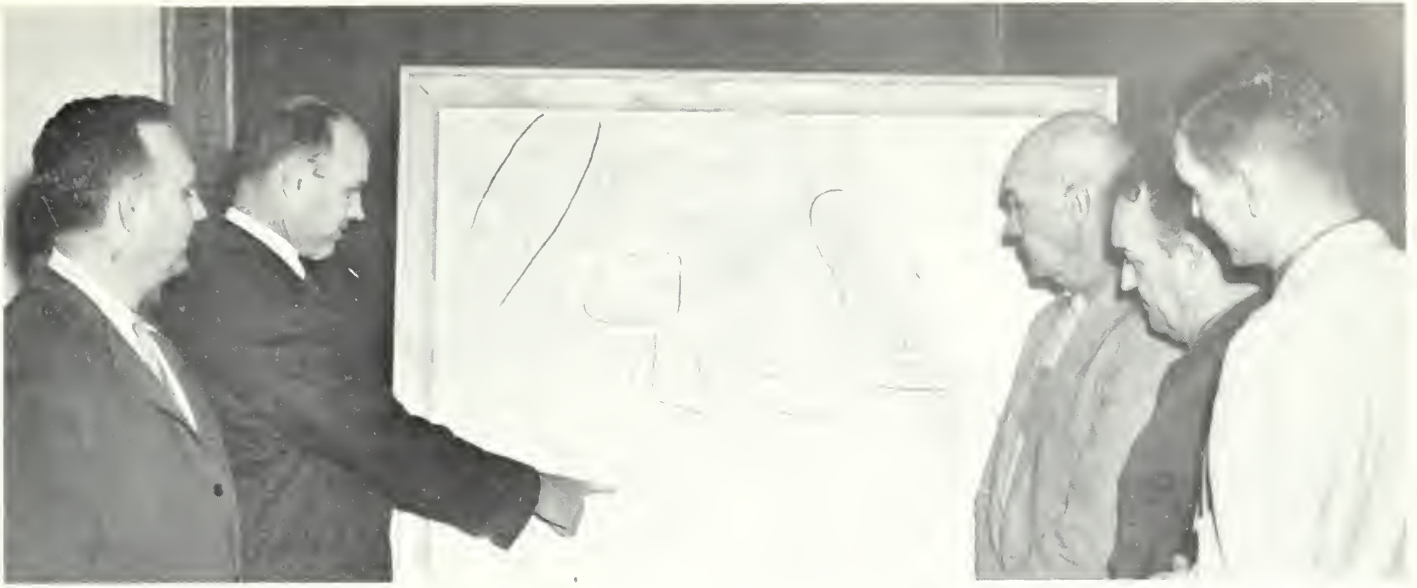
(From the Savannah Morning News)

It is distressing to note that Alabama has forged ahead of Georgia as the state ranking second in the nation in acreage devoted to tree farming. For it means that Georgians are not taking advantage of their wealth in woodlands to the fullest. From size alone - Georgia is the largest state east of the Mississippi River - it could be expected our state should be tops.

Alabama has 1,490 tree farms with 4,942,020 acres; Georgia has 612 tree farms totaling 4,810,394 acres. The state which ranks first, Florida, has only 406 tracts certified as tree farms but these holdings make up a total of 5,199,359 acres.

The title is bestowed on those lands which are operated to get the most in wood products and dollars.

A comparison of the number of tree farms with the total acreages in the three leading states bears up what forestry leaders have lamented about for many years. The smaller landowners have not yet realized that proper management of their woodlands can be a paying proposition just as good forestry management is profitable for the large landowners.



Forestry Agencies Aid Ice-Stricken Woodland Owners

The cooperation, of state and federal forest agencies, timber using industries and timberland owners in the 'clean-up' of North Georgia's ice-damaged timber, is helping to avoid serious mismanagement of timber resources.

The March ice storms, which drapped North Georgia's woodlands in a picturesque coat, left timber open to the invasion of fire, insects and disease. A. R. Shirley, director of the Georgia Forestry Commission, immediately called a meeting of interested persons to throw up a defense against hasty and unnecessary cutting. This would have proven more disasterous than the attacks of timber's natural enemies.

Some 30 persons, representing landowners, wood users, and state and federal agencies, attended the meeting at Berry School in Rome. The group discussed markets, what trees to cut, effect of insect and disease damage and other assistance that could be made available to the woodland owner.

Commercial timber users, in the ice-stricken areas, advised that they would give priority on the purchase of ice-damaged timber. The group agreed that critically damaged trees, which would be lost in a relative short period, should be given immediate attention and priority in harvesting. This would prevent de-

pressed and glutted markets and insure timber owners of the highest value from their salvaged timber.

For assistance on the salvaging of damaged timber, woodland owners were advised to contact their county ranger, county agent, soil conservation service agent, or industrial forester.

Following the session, Shirley named a five man "Timber Salvage Advisory Committee" to draw up guidelines for the salvage of damaged timber. The five man committee, headed by W. H. McComb, Commission management chief, set up meetings in those areas which suffered the severest damage. A survey by Commission personnel indicated that the Seventh District, with headquarters in Rome, took the brunt of the storms. The Lookout and Fort Mountain and Cave Springs areas were hit the hardest.

The Ninth District, with headquarters in Gainesville, had moderate ice damage in Fannin, Union and Towns Counties. The overall damage in North Georgia ranged from none or slight to heavy and varying in degree in isolated areas.

Shirley pointed out that landowners were fortunate that the timber was still in the dormant stage when the storms struck. As a result, there was no immediate problems concerning the invasion of wood-

H. B. Mathias, W. H. McComb, R. N. Jobe, Rex McCord and Harold Baxter

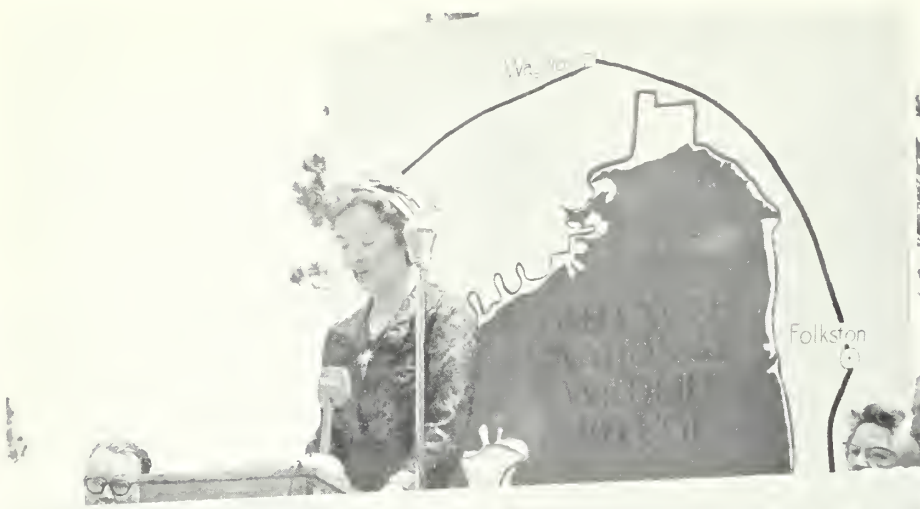
lands by insects and diseases. To combat the immediate forest fire problem, additional Commission personnel and forest fire equipment were sent into the area. Extra management assistance was made possible by the Commission assigning six foresters to the counties where damage was heaviest.

The Commission director stated that woodland owners should now be on the lookout for insect and disease attack. Any signs of attack should be reported to Commission personnel.

Members of the "Salvage Advisory Committee" are, in addition to McComb, H. O. Baxter, Extension Service; Rex McCord, Hiawassee Land Co.; R. N. Jobe, SCS; and H. B. Mathias, Rome Kraft. The county agents served as moderators at the county and community meetings.



Pines bow to Winter's last fling



Congresswoman Iris Blitch dedicates Okefenokee Swamp Perimeter Road

Okefenokee Swamp Road Dedicated

The recent dedication of the Okefenokee Swamp Perimeter Road marks another milestone taken by Georgia conservationists in the preservation of forests and wildlife.

Construction of the 186 mile road, enveloping 700 square miles of wonderland, was started in 1958. Two years prior to construction, the Okefenokee Fire Control Committee sought out the services of Congresswoman Iris Blitch in this endeavor. The Georgia Congresswoman introduced legislation for the construction of the perimeter road as well as firebreaks, dikes and sills. This legislation was passed in the 2nd session of the 85th Congress, and in April of this year the project was completed.

The legislation introduced by Congresswoman Blitch was prompted by the fires of 1954-55 when some 284,000 acres of wildlife refuge were burned over and approximately 150,000 acres of State and privately-owned forest land were destroyed. Completion of the project is a contribution to the landowners, pulp and paper companies and forestry and wildlife officials who comprised the Okefenokee Fire Control Committee following the 1954-55 fires.

The road will lead around the swamp, providing a firebreak and giving fire-fighters an access

to the swamp proper. In the same bill, \$275,000 was provided for the construction of the now completed sill and dike in the Suwanee River and sills, dikes and waterways to maintain water levels in the refuge during dry spells. This will aid in controlling fires that smoulder in the 'big' forest for months at a time.

In the past peat deposits in the swamp have become natural tinderboxes during drought periods. This has presented a fire control problem as these deposits can burn for months thus becoming a hazard to our forests, plant life, fish and wildlife.

Congresswoman Blitch, in her dedication address, stated that Georgia leads the nation in privately owned timberland; first in acreage



Ribbon-cutting climaxes project

of state and private forest land under fire protection; first in the South and second in the nation in pulpwood production; and a world leader in naval stores production.

The Georgia Congresswoman pointed out that this is just the beginning. Groundwork is being laid for the development of our vast water and land resources for flood control, navigation, soil conservation and utilization and recreational facilities in the Eighth District.

The dedication, which took place on historic Cowhouse Island, near the Okefenokee Swamp Park area, was attended by some 1,200 persons including Daniel H. Janzen, director of the Bureau of Sports and Fisheries and Wildlife, Washington, D. C. and Walt Kelly, creator of the comic strip 'Pogo.'

Pine Tree Festival

The 3rd annual Pine Tree Festival, held at Laura S. Walker State Park in conjunction with the dedication ceremonies, climaxed the days activities. Pam Rowe, Ware County high school student, was named Queen of the festival. She was crowned by Lonnie McQuaig,



Motorcade precedes dedication ceremonies



Pam Rowe is crowned by Lonnie McQuaig

queen chairman. Millicent DeShazo, also a Ware County high school student, was runnerup in the beauty contest. Miss Rowe succeeds Miss Mercer Lois Jeffords, 1959 queen.

John H. King, Jr., Waycross conservationist, received the Ware Master Tree Farmer Award that is annually presented by the Commercial Bank of Waycross. Georgia Forestry Commission Eighth District Forester

James Henson made the presentation.

For the first time 4-H and FFA foresters received forest study management recognition. The first place tree award winners were Jo



Massey is FFA winner

Inman, 4-H'er of Manor and FFA member Bill Massey of Ware High School. Other 4-H winners were Obe Giddens, Mike Ratliff and Ben Giddens. The FFA winners included Audie Hough, Jack Griffin, and and Clifton Wright.

The first place winners received \$100 each with the second, third, and fourth place foresters receiving \$50, \$30 and \$10 respectively. Frank Murray, manager of the First National Bank's Farm Service Department, made the presentation.

William Ottemeier, chairman of the



Inman receives award from Murray



Henson presents Tree Farmer award to John H. King, Jr.



Judges have hard time in making selection from Pine Tree Festival beauties

Okefenokee Fire Control Committee, presided over the dedication ceremonies. William H. Rentz, executive vice-president, Commercial Bank of Waycross, was general chairman of the Pine Tree Festival. The combined program was sponsored by the Waycross and Ware County Chamber of Commerce, Okefenokee Fire Control Committee, Georgia Forestry Commission and the U. S. Fish and Wildlife Department.

Tree Ordering Period Announced

The 1960-61 Georgia Forestry Commission seedling ordering periods began June 1st and will continue to October 1st, announced Commission Director A. R. Shirley. Orders received after the deadline will be filled only if cancellations make seedlings available, or if the seedling supply is larger than anticipated.

Reforestation Chief Sanford P. Darby pointed out that orders may be cancelled without penalty until Jan. 1, 1961. Darby added that 25 percent of the purchase price will be deducted, to cover clerical costs, for orders cancelled after Jan. 1. Orders prepared incorrectly or received without payment will be returned, Darby said. ASC purchase orders will be accepted, as well as checks and money orders.

The state has set as its goal the

production of 250 million seedlings in 1960-61. The species to be produced and their cost include slash, loblolly, longleaf, shortleaf, virginia pine, \$4 per thousand. Eastern white pine, swamp chestnut oak, northern red oak, sweet gum, sycamore, black walnut, bald cypress and green ash, \$6 per thousand. A charge of \$10 per thousand will be made for eastern red cedar, yellow poplar and dogwood. A minimum order of 500 seedlings is required for each species.

The Commission's six nurseries, their location and species produced include Davisboro, located near Davisboro, Slash; Herty, Ga. 91 at Albany, slash; Hightower, Ga. 53 near Dawsonville, loblolly, virginia and shortleaf pine; and Walker-Page, Ga. 178 near Reidsville, slash and swamp chestnut oak. Morgan, U. S. 41 between Macon and

Perry, is producing the remaining species listed above.

A transportation charge of 25 cents per thousand trees will be made on tree deliveries by state truck with no limit on quantity. However, any purchaser may pick up their seedlings at the nursery location if they desire. If no ranger is located in your county, seedlings will be delivered to your Soil Conservation Technician and/or county agent.

Seedlings of all species will be shipped from approximately Nov. 15 through Feb. 15, depending on the season. If it is not possible to fill an order, payment will be returned to the purchaser. In no case will an order or payment be carried over from one year to the next.

For additional information contact your county ranger, nearest district forester, or nursery.

Commission Puts Mist Blowers Into Operation

Georgia Forestry Commission Director A. R. Shirley announces that six mist blowers have been put into

operation by the Commission for the control of undesirable trees and brush species. Shirley said this operation, in addition to aerial spraying, gives the woodland owners an opportunity to convert this land to pine growth.

The mist blowers are being used on areas where crops would be endangered by aerial spraying and on small tracts where aerial spraying is impractical. A buffer zone is designated when the tracts are near crops.

W. H. McComb, Commission management chief, said the mist blower tank holds 32-gallons of a solution of 2,4,5-T and oil. Approximately

3-5 gallons of the solution is being used per acre. McComb added that growth density determines the amount of concentration used in the spraying operation.

The chemical used is not harmful to human or animal life. The use of the mist blowers is being confined to areas predominately in undesirable species. The 'blowers' will not be used in areas where there is danger of the damaging established pines.

The cost of this operation is eight dollars per acre, same as aerial spraying.

For aerial spraying, the total acreage to be sprayed must not be less than 20 acres and must not exceed 400 acres. However, woodland owners who are in a radius one-half mile of the point of operation may combine their acreage to meet the minimum requirement. There is no minimum acreage limit on mist blower spraying.

Since the spraying season is during the early summer months, it is urgent that woodland owners get their request in as soon as possible. Landowners requests should be directed to the local county ranger or district forester.



Mist blower is used on undesirable trees and brush species



John A. Putnam, hardwood specialist, lectures at Rock Eagle

Hardwood Trend Points Upward

Hardwoods are to be given a more prominent place in Georgia forestry.

At least, that trend is predicted by those who directed the recent Hardwood Management School at Rock Eagle 4-H Center and many of the enthusiastic foresters and wood products processors who attended the two-day session.

John A. Putnam, hardwood specialist of the U. S. Forest Service's Delta Experiment Station, Stoneville, Miss., made a vigorous appeal to his audience to recognize the true potential of hardwood species which thrive abundantly along the river and creek bottoms and in the mountainous areas of Georgia.

"When hardwoods are being imported to this country from foreign lands under terrific freight rates," he said, "it is reasonable to assume there must be great value to the hardwood species."

Putnam pointed out that "two-thirds of the nation's hardwood stands are in the south" and declared it's time Georgia and her neighbors began protecting and promoting this important crop.

The school at Rock Eagle touched off the educational phase of a long-range program designed by the Georgia Forest Research Council, state and federal forestry agencies and wood-using industries to improve the prestige of hardwoods throughout the state.

The keynote address was given by Robert H. Rush, Rush Lumber Co., Hawkinsville, who told of his firm's management of hardwood tracts, but admitted the dividends would be much greater today "if we had managed the land as carefully as pine lands are being managed."

William J. Barton, staff assistant in the land department of Union Bag-Camp Paper Corporation, Savannah, sounded out hardwood production problems which were later emphasized by other speakers. Barton listed the cost of harvesting, unavailability of markets for certain species and lack of management knowledge as the most obvious stumbling blocks.

He pointed out, however, that his company and others are beginning to use hardwood chips and the demand for this raw material is expected to rapidly increase in the years to come.

L. H. Thompson, Jr., of the Augusta office of Georgia Pacific Corporation, and chairman of the training subcommittee for the statewide hardwood improvement campaign, spoke of the various uses of the production problems facing manufacturers.

He said he feels the cardboard container has "pushed the wood box out of all the areas it can be pushed and the box industry is here to stay." Thompson told of the waste in the manufacture of plywood and cited some of the newer techniques developed to decrease this expense.

He also told of the increasing use of low grade hardwoods in the manufacture of chipboard and other new building materials; research underway in species, sites and soils educational work in advising land-

owners on hardwood management; and a closer cooperation between forestland owners, forestry agencies and industry.

Howard J. Doyle, representing the Furniture, Plywood and Veneer Council of the North Carolina Forestry Association, said "diseases and insects are the real enemies of the hardwoods...the fire problem is now in second place."

Doyle said he would urge landowners to "take another look at the so-called brush on your property... if you look closely, you might find you have a good stand of hardwood."

C. Dorsey Dyer, forester of the Georgia Agricultural Extension Service, served as chief planner and moderator for the Rock Eagle meeting, which also included panel discussions, film and slide presentations and a field demonstration.

H. E. Ruark of Macon, director of the research council, is serving as coordinator for the hardwood improvement program.



Robert H. Rush, keynoter



L. H. Thompson, Jr.

Leave trees that will not die within the next 90 days; salvage damaged timber, first, on those areas where cutting was done last year; and acquire professional assistance before salvaging timber...these and other guides were given in a series of Timber Salvage Advisory Meetings in April.

Approximately 500 woodland owners attended the sessions held in Rome, Cedartown, Buchanan, Trenton, LaFayette, Calhoun, Ellijay and Jasper. Will there be enough markets for my timber and is there any immediate danger from insect attacks were questions utmost in the minds of the landowners.

INSECTS

In the fight against insect damage, Dale Vandenburg, Forest Entomologist, U. S. Forest Service, told landowners they were fortunate the ice storms occurred during the dormant season. He pointed out that there is no evidence at this time indicating major insect infestations. However, weather conditions, in the spring and this summer, and the amount of salvage work will control developments in the future. Vandenburg stated that moist and cloudy conditions favor the development of bark beetles. These beetles may appear late this summer or early fall and could possibly attack healthy trees.



McComb answers 'salvage' questions

Therefore woodland owners are urged to keep a close surveillance of their woods this summer and fall for insect damage. Report any signs of insect damage to your Commission County Ranger.

To keep down insect attacks it is important to be careful not to damage leave trees in the logging operations. Leave tree tops in direct sunlight to provide quick drying, cut and remove leaning trees that show signs of root disturbance are other methods for cutting off the food supply of insects. Vandenburg added that if logs must be stored in the woods, spray the logs with BHC. Also plan to complete your logging in one continuous operation.

MARKETS

Rex McCord, district forester, Tiawassee Land Co., emphasized the need for woodland owners to diversify their production to include sawtimber, pulpwood, posts, poles and other products whenever possible. Landowners were told that industry was making every effort to utilize damaged timber without loss to landowners from deterioration or depressed prices. McCord warned that a market should be determined and a commitment made for sale of the timber before cutting. Specifications, time of delivery and price information should also be determined.

CUTTING

In order to save as much timber as possible, the following guides were passed on to the woodland owners. W. H. McComb, Georgia Forestry



500 Attend

Timber Salv Given At A

Commission management chief, pointed out that trees that have lost two-thirds or more of their live crown from top breakage or stripping of branches should be cut. Fallen and lodged trees should also be cut. Bent trees, with roots still intact, can be left for future cutting. McComb added that areas that have

Clear cut is recommended on this plot



Future salvage



FIRE

An obstacle to salvaging the timber was the ever present fire hazards. Fallen tops and other slash made it difficult to operate equipment efficiently in addition to providing additional fuel on the ground for forest fires. County rangers pointed out that every precaution should be taken in burning brush. They pointed out that the county ranger should be notified of any planned burning as provided under the Notification of Intention to Burn County Option Law. The Commission added men and equipment, including two planes, to help protect against forest fires in the ice stricken area.

TAXES

Nelson Brightwell, forester, Georgia Extension Service, pointed out that the average landowner would probably not be able to claim any deduction on his income taxes. Brightwell added that whether a deduction is recognizable is based on the difference between the adjusted basis for depletion of the damaged timber and the sum of the salvage value plus any insurance recovery.

In the case of ornamental trees, Brightwell stated that the recognized loss is the difference in the value of the property as a whole before and after the storm. However, the loss may not be greater than the adjusted basis of the property as a whole and must be reduced by any recovery. However, a reduction in tax may be had by reporting receipts from sales of timber and forest products as capital gain. For further information see your local Internal Revenue Agent.

Ornamental trees hit by ice storms

Vandenberg on insects



A well constructed home for insects

The 'Timber Salvage Guides' were developed by the Timber Salvage Advisory Committee. The Committee was appointed by A. R. Shirley, director of the Forestry Commission. Members were selected from industries, agencies and other organizational representatives attending a planning session at Berry School in Rome in March. Shirley stated that the 'Guides' will not apply in every condition or circumstance; but if followed, the timber owner should realize an overall satisfactory timber salvage operation or sale.

The following agencies and industries made up the Timber Salvage Advisory Committee...GFC, Hiawassee Land Co., Extension Service Georgia Kraft, SCS, and the USFS. McComb was chairman of the committee. County agents served as moderators at the meetings.



e Guides Meetings

sufficiently damaged trees to provide an operable volume should be cut. However, McComb advised the woodland owners to contact their county ranger, county agent, soil conservation technician or industrial forester to inspect the timber stands and advise on cutting practices before beginning their salvage cut.





Fires Hit N. Georgia Mountains



A monument to careless brush burners

April showers may bring May flowers, but to some 100 Georgia Forestry Commission fire fighters, battling the worst blazes of the year in the Northwest Georgia mountains, it brought relief.

Prior to the rains, Easter weekend fires on Lookout and Pigeon Mts. had destroyed some 1,600 acres of forest land and two unoccupied houses near Rising Fawn. It was estimated that some 3,000 acres of forest land were destroyed in a two week period leading up to Easter.

In an effort to cut down losses, Commission Director A. R. Shirley assigned additional men and equipment, including two airplanes, to the area. Under the direction of Fire Boss Curtis Barnes, assistant Commission fire chief, the men and equipment were dispersed to strategic points preventing further damage.

The Commission's TBM was put into operation dropping some 3,000 gallons of fire retardant on the blazes. The plane operated out of LaFayette where the fire-camp headquarters was set up. A light air patrol plane was also used in directing men and equipment against the flames.

Approximately 80 fires were going in the Seventh District at one time or another during the 'hot' Easter weekend. During the two



Debris from March ice storms make operations difficult

weeks before Easter, there were approximately 170 fires in the 16 county Seventh District with headquarters in Rome. The Dade and Walker County areas took the brunt of the fires. During April, Dade had 25 fires that burned 1,408 acres. There were 24 fires in Walker that burned 980 acres.

Barnes said that most of the fires in the Northwest Georgia area resulted from trash burning. However,

the March ice storms, which hampered fire fighting operations and added fuel to the fires, played a major role in the years' worst fires. In a similar situation last year, (drought conditions) 1,900 acres of woodlands were destroyed by 22 fires in four days. Dade, Walker, Pickens and Chatooga Counties were the hardest hit.

Statewide, Shirley said that more than 28,000 acres of forests were

destroyed by fire during the first quarter of 1960. Shirley pointed out that debris burning, the greatest cause of wild fires, accounted for 1,087 fires which destroyed more than 9,000 acres between Jan. 1 and Mar. 31.

Incendiary blazes were the second greatest cause, with 573 fires, and careless smokers accounted for 472 fires. Other causes listed by Shirley included railroads, campers, lumbering and pulpwood operations, hunters and miscellaneous.

The directors report showed that the Commission's Seventh District led with 7,607 acres destroyed during the quarter. The Tenth District, with headquarters in Washington, reported 1,204 acres destroyed, the smallest loss among the state's ten districts.

Shirley urges all citizens to exercise all precautions against fire while in the woods. He said landowners should check with their county forest rangers to determine whether the county option fire law is in effect before starting a controlled fire.

"Regardless of the," Shirley said, "all persons should check with their ranger before setting debris or field fires. The ranger will advise on whether weather and moisture conditions will permit safe burning."



Fire has to be smothered...



...then raked out

Ann Holcombe Is "Miss Georgia Forestry"



Queen Ann Holcombe

Miss Beverly Ann Holcombe, a Buchanan High School senior, has been crowned Miss "Georgia Forestry" of 1960. The Stewart County Forestry Unit took top honors in the statewide general performance rating. Nine Georgia Master Tree Farm and five Order of the Golden Pine Cone awards were presented.

These activities highlighted the 53rd annual meeting of the Georgia Forestry Association at the Jekyll Island Hotel in May. The two-day session featured speakers including R. Vance Miles, Jr., who gave the keynote address on "Opportunities in our Southern Forests" and Association President, J. Frank Alexander who spoke on the theme of the meeting, "Georgia Forestry...Where are We?"

Other noted speakers and their topics were Allyn M. Herrick, Dean of the University of Georgia School of Forestry, "Training for Tomorrow's Forestry;" B. C. Hartung, Director, Member Relations, National Lumber Manufacturers Association, "National

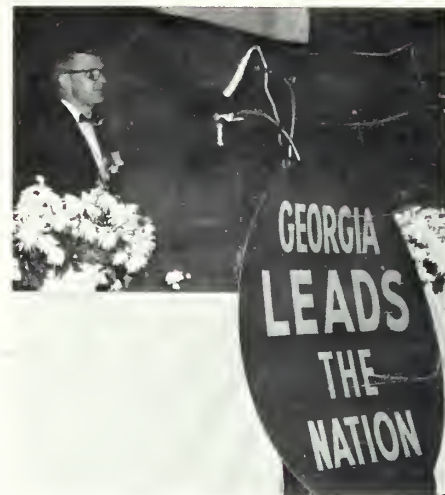
Georgia Master Tree Farmer awards were presented to Mrs. J. W. Smith, W. K. Smith and W. A. Smith all of Juniper; V. C. Walker, Hazlehurst; Dr. G. T. Henry, Barnesville; W. J. Hardin, Avera; and J. M. Tolleson, Perry.

Others included J. H. Beasley and George Beasley, Lavonia; J. B. Parker, Ludowici; Dr. W. P. Barnes, Macon; and N. G. Wade Investment Co., Folkston.

The Order of the Golden Pine Cone was presented to W. H. Turner, Jr., LaGrange; Mose Gordon, Commerce; Jeff Strahan, Savannah; R. Vance Miles, Jr., Tuscaloosa, Ala.; and B. C. Hartung, Washington, D. C.

Reelected, to serve another term of office for the GFA, were J. Frank Alexander, Talbotton, president; William Oettmeier, Fargo first vice-president; and A. E. Patton, Atlanta, treasurer. H. R. Brown, Atlanta, is executive secretary of the Assn.

Wood Promotion Program;" Robert E. Lee, forester, Union Bag-Camp Paper Corp., "Where Are We In Pulpwood



Dean Allyn M. Herrick

Production;" and Robert H. Jordan, Attorney, Talbotton, "Your Place in Politics."

Miss Holcombe, 18-year old daughter of Mr. and Mrs. Chester A. Holcombe, was crowned by Lt. Gov. Garland T. Byrd. She represented Haralson County as she competed with 34 other county winners throughout the state. Runner-up in the state finals was Miss Beth Turner of Lincolnnton. This year marks the first time in four years that Carroll County did not take first place in the beauty contest.

The Gwinnett County Forestry Unit placed second in the statewide outstanding general performance rating. First place in outstanding performance in forest fire protection went to the Wilkes County Unit. The Forestry Commission's Third District placed first and the Tenth District second in district competition.



Runner-up Beth Turner



Jekyll's ancient setting offers picturesque scene for modern queens

Lanier FFA Chapter Wins State Title

The Lanier County Future Farmers of America Chapter recently won the first statewide FFA Forestry Field Day at Covington. In taking top honors the future farmers showed their skills in tree marking, timber estimating, log scaling and other forest tests.

The contest, which featured winners from 15 area elimination field day events throughout the state, climaxed a program sponsored by the Vocational Agricultural Division of the Georgia Department of Education. FFA youths, who have acquired a sound knowledge of forestry, were recognized through this program.

The presentation of an inscribed plaque and \$100 in cash to the Lanier Chapter highlighted the banquet following the state finals. The Newnan FFA Chapter received a plaque and \$50 for its second place showing.

The area meets, as well as the state finals, also featured contests in tree planting, pulpwood estimation, tree identification, ocular estimation, land measurement, pulpwood scaling and sawing. At the finals a more challenging problem was presented in each event to thoroughly test the knowledge of all entrants.

Wood using industries in the state provided prize money on the area level and the Georgia Forestry Assn. furnished funds for the state finals awards.



S. N. Cooper, director of the GFA and Ronnie Bennet, Lanier Co. Ch.



Front row...J. Fountain, Montgomery Co.; G. Minix, W. Winkle and T. New, Louisville Academy. Second row...D. Hawkins, Putnam Co.; B. Wilcher, Louisville Academy; H. Lott and A. Boyett, Claxton and J. Gresham, Washington-Wilkes Co.'s. Third row...C. Goodouns, Montgomery Co.; D. Fender, and C. Allen, Lanier Co.; and G. Smith, Washington-Wilkes.

The chapter winners in each area contest received \$25 and a plaque. Individual winners received \$6 for first place and \$4 for second place. State winners in individual events were presented \$25 for first place and \$15 for second place.

Ed Kreis, Vo-Ag forester, termed

the series of area contests and the state finals a 'huge success.' He said the keen competition pointed up the fact that today's FFA youngsters have acquired considerable skill in the field of forestry and are aware of the great potential which lies in Georgia's vast timberlands.

Late W. Dunaway Honored

Some 500 persons gathered at Elijah Clark State Park near Lincolnton recently for the fifth annual Lincoln County Forestry Day, an event which was dedicated this year to the memory of the late William "Tutt" Dunaway.

It was a celebration at which Phil Campbell, Georgia's Commissioner of Agriculture and principal speaker of the day, told of the increasingly important role forests are playing in the economy of the state.

It was also a day of forestry demonstrations and contests for adults and FFA boys, topped off by an old-fashioned barbecue.

Joe Racy Wells captured first place and was awarded \$25 in the FFA division of the annual tree marking contest and a similar award went to W. H. Goldman, top winner in the adult class.

Rodney McGee was second place winner in the FFA group and third place went to John Smith. G. N.

Wright captured second place in the adult competition and B. O. Wright was third place winner. The prize money, as well as a wrist watch, desk set, cuff links and other awards presented to second and third place winners, was donated by several chainsaw dealers.

William Partridge, Lincoln County forest ranger who has made arrangements for the event since it was founded five years ago, said some 50 citizens of Lincoln County provided money for the barbecue served the large number of guests.

The program prior to the barbecue was conducted by the Georgia Forestry Commission and visiting industrial and out-of-state foresters. B. B. Ross, Lincoln County representative, introduced Campbell and recognition of other special guests and contributors was given by Gordon H. McGee, Lincoln County agent.

Forestry Camps Held

The 14th annual Future Farmers and 2nd annual New Farmers of America Forestry Camps were held this month. Approximately 200 white and colored youths attended the camps sponsored by six mills of the Southern Pulpwood Conservation Association and conducted by the Georgia Forestry Commission and Vocational Agriculture Division of the State Department of Education.

Some 35 boys are expected to attend the Homelite Chainsaw Camp August 22 - 26. The camp will be held at the Richmond County Boy Scout Camp. The Forestry Commission will run the camp.

The FFA Forestry Camp, for Middle and North Georgia boys, was held at Roosevelt State Park near Pine Mt., June 20 - 24. Camp John Hope, near Marshallville, was again the site for the NFA Boys Forestry Camp, May 30 - June 3.

Courses in mensuration, thinning, reforestation, harvesting and marketing and law enforcement were taken by the campers. Short courses were taught by the young foresters in forest utilization, fire and hardwood control, wildlife, insects and naval stores. Classes in the operation and maintenance of chain saws will be featured at the Homelite Camp.

Cash prizes were awarded the top three scorers on an exam covering their weeks work. Certificates were

awarded those who passed the test.

Frank Craven, Commission information and education chief, directed both camps and will be in charge of the Richmond County camp. The sponsoring agencies provided the staff members.

Representing the Commission were Turner Barber and Curtis Barnes, assistant fire control chiefs; John Clarke, assistant management chief; Charley Tillman, James Swindell, Fred Smith and Clyde Bowden, investigators; and Al Jacobs, Chuck Place, and Dave Crooke, assistant district foresters, management.

Others included Paul Bois and Joe Saucier, forest utilization specialist, Georgia Forestry Commission and U. S. Forest Service; Bob Short, I & E chief, Game and Fish Commission; Harry Yates, forest entomologist; and Bob Potter, U. S. Forest Service; Dorsey Dyer, Extension Forester, and Nelson Brightwell, Extension Service; Lamar Merck and Andy Wright, Union Bag-Camp Paper Corp.; Truman Pease, St. Marys Kraft; Dick Schmitt, Brunswick Pulp and Paper; Don Ferris, Rome Kraft; Jim Malsberger, International Paper Co.; Don Sonnen, Georgia Kraft; Tom Leetch, Continental Can Co.; Norman Stone, Owens-Illinois Glass Co.; and Ed Kreis, Department of Education.



Emanuel Unit's entry won second place in the festival parade

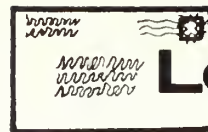
Pines Paid Tribute

"There is enough timber standing in Georgia to build three and a half million homes...enough for every family in Ga., Fla., Ala., Miss., La.

and part of S.C."

This amazing fact was brought out by Lt. Gov. Garland Byrd as he addressed Emanuel Countians and other guests at the recent annual Pine Tree Festival in Swainsboro.

Following the state official's



Letters

Ernest E. Orr, Ranger
Meriwether County Forestry Unit

Dear Mr. Orr:

Your letter of January 20, 1960 addressed to the Commissioners was very much appreciated, and I am certain that I speak for each of them in stating to you that it has been a pleasure to cooperate with the Forestry Unit, and we congratulate you and your associates on the outstanding achievements of your organization.

We, too, are proud that such fine progress has been made in the Forestry Program in Meriwether County and that we have been able to contribute to it.

Your letter will be presented to the Commissioners at their final meeting on February 3 next.

Sincerely yours,

F. W. Allcorn, Jr., Chbr.
Commissioners of Roads
and Revenues

Ray Thomas, Ranger
Gwinnett County Forestry Unit

Dear Mr. Thomas:

This is to express my sincere appreciation for helping me plant the pine trees on my two tracts of land. You have been very thoughtful and I thank God that we have men such as you working for our Great State.

If I can ever help you, I sincerely hope you will call on me. I want you to know that I regard you as a dear friend and I will be by to see you often.

Your friend always,

Sam C. West, Chbr.
Dept. of Christian Education

speech, in which he cited forestry as a \$700,000,000 industry employing 64,000 people, a glittering parade of floats and bands moved past a crowd estimated as high as 15,000.

The annual celebration is in tribute to the role pine trees play in the economy of this section of the state.

Logging the foresters...

WORLD FORESTRY CONGRESS... Seattle, Washington will be host to the 5th World Forestry Congress, the first ever held in the Western Hemisphere. Approximately 2,000 foresters are expected to attend the international meeting Aug. 29-Sep. 10. The United States and the United Nations will issue commemorative stamps. The U. S. Post Office will use special stamp cancellation dies in recognition of the meeting. America's forest industries, forest research installations and forest resources will be open to the foresters in two pre-Congress and the foresters in two pre-Congress and five post-Congress tours.

FELLOWSHIP...The Union Bag-Camp Paper Co.'s graduate fellowship, to the Yale School of Forestry, was won by Anson E. Wright. Such factors as undergraduate grades, abilities as a forester and general competence were considered. The forester will work on his master's degree at Yale this fall.



T. M. Strickland, Richmond Co. ranger dons the Smokey Bear suit to make like a golfer on his unit's float. Strickland's pretty caddy is Miss Jean Ray Olgrille. The float was featured in the recent Masters Parade in Augusta.

WOODS EYE-BALLER RETIRES... Herbert McLain, Mt. Alto towerman, has retired after nine years of watching over Floyd County woodlands. The 63 year old towerman, from his vantage point, was also able to check with towers in other counties on fires that might prove dangerous in their area. McLain mentioned the fact that not a single accident occurred on the tower in his nine years. The Georgia Forestry Commission expresses a well done to a devoted towerman who has set an example of faithfulness to his job.

ANNUAL VISIT...Some 13 students from the School of Natural Resources, at the University of Michigan, toured Georgia Forestry Center facilities and the Hitchiti Experimental Forest earlier this year. The group was headed by Robert Zahner, associate professor of the School of Natural Resources. The School sponsors a trip into the South each spring for interested senior students.

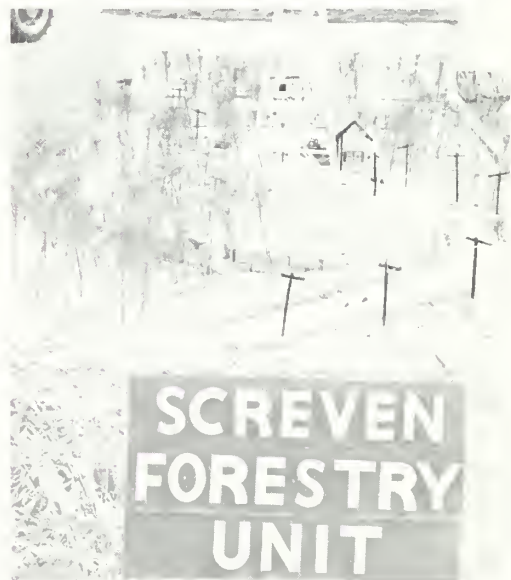


Arkansas A & M won first place in the 3rd annual Forestry Conclave held at Roosevelt State Park, near Pine Mt., Apr. 30-May 1. The University of Georgia winner of the first two conclaves, placed second. North Carolina State College was third. Roger Dennington, vice-president of the Arkansas Forestry Club accepted the first place plaque from W. B. DeVall, head of the Auburn University Forestry Department. Auburn was host to the conclave which will be held in Florida next year.

MEMORIAM...The personnel of the Georgia Forestry Commission express their deepest sympathy to the family of R. Wayne Manning. The Commission considered Wayne to be an outstanding ranger and a young man of highest character and morals. Manning, assistant management forester in the Fourth District, carried out assignments in a manner which reflected his high devotion to duty, and thereby brought unto himself, his family and the Commission the esteem of the citizens of Georgia who knew him. This loss will be greatly felt by the Commission.



Miss Judy Adkins of Irwinton was recently crowned Wilkinson Co.'s Miss Pine Seedling of 1960. Judy competed against 23 other junior misses in a contest held in conjunction with the Miss Wilkinson Forestry contest. The event was sponsored by the Irwinton American Legion Post in cooperation with the Wilkinson Forestry Unit.



The Screven County float placed second in the recent Screven County Livestock Festival parade. In keeping with the festival theme, the legend, "Forests Beef Up Income," was displayed on the sides of the float.

MEMORIAM...The personnel of the Georgia Forestry Commission express their deepest sympathy to the family of R. C. Crumpton. Crumpton, a Laurens County Patrolman, had been with the Commission since 1950. The Commission considered him as one of their excellent patrolmen and one of high character and morals.

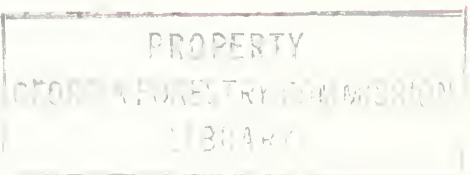
Georgia FORESTRY

JUNE, 1960



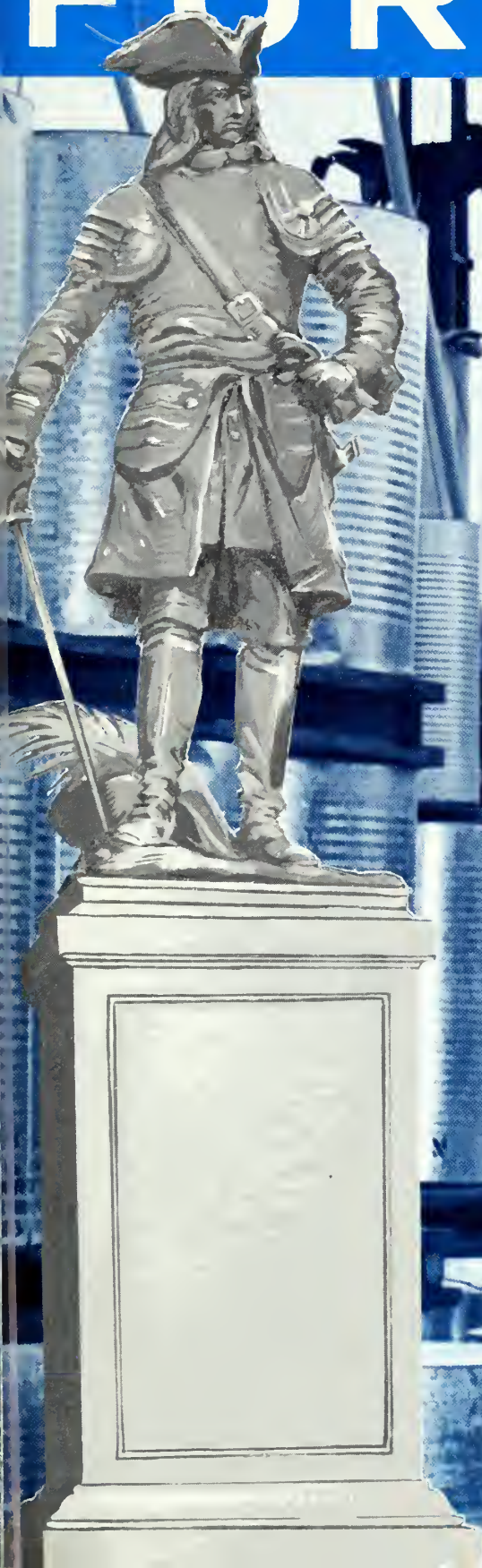
Fire In Hand Is Wood In Forest

This fire, burning on the western slope, on the southern end of Lookout Mt., had already burned two unoccupied houses near Rising Fawn when this picture was taken. Before the fire was put out, extra men and equipment from the Georgia Forestry Commission, citizens and Boy Scout groups from nearby communities worked on the blaze. Careless brush burning caused the fire.



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On the Cover

The monument of General James Oglethorpe looms above historic Chippewa Square in Savannah, the city he founded in 1733. Not far from the famous landmark, which symbolizes the city's past glories, are the bustling state docks, gateway to world markets for Georgia products. Shown stacked high on the wharf are drums of rosin produced from this state's forests -- the source of a wide variety of products which have helped develop Savannah into a rich, expanding industrial empire.

Member of the

Georgia Press Association.

Georgia Forestry is entered as second class matter at the Post Office under No. 35 of August 24, 1912.

Cruising the News

WELL COORDINATED WARE EVENTS

The Okefenokee Swamp project dedication and Ware Pine Festival were outstanding events that were well-coordinated this week.

Not only did visitors to Waycross and Ware County have an opportunity to witness the opening of a major conservation project but they also saw what is being done in this area to promote good forestry practices.

Congresswoman Iris Blitch, who sponsored legislation for the \$728,500 Okefenokee project, described the program as "just the beginning" of plans for developing the natural resources of this area.

She also discussed the importance of forestry in the future of Southeast Georgia.

Protection of our vast woodlands from fire and drought and the importance of good forestry practices were emphasized in the day's program.

Forestry without question, is the key to the economic growth of Southeast Georgia. We were again reminded of this fact by the swamp conservation program and pine festival this week.

(From the Waycross Journal Herald)

PINE BASIC TO SOUTH'S ECONOMY

The pine tree has often been referred to as the South's greatest natural resource. A recent survey by the Southern Pine Association has revealed some information which strongly bears out this view.

The survey showed that at least 3,258,956 workers are involved in the production and marketing of Southern pine lumber, which is generating about \$15 billion worth of business each year.

The survey revealed that in recent years the South's lumber industry has grown many branches. To conserve the harvest and increase utilization, a number of lumber companies have installed specialized "forest factories" whose output is based on the residue of lumber manufacture.

Here are some highlights of the survey:

1. Forty-five percent of the nation's lumber-producing plants are operating in the South.
2. The number of workers, families and dependents, deriving some or all of their livelihoods from Southern pine lumber is over 12 million.
3. The additional business generated by Southern lumber amounts to about six times as much as the value of the lumber itself, which is estimated at \$2,149,000,000 yearly.
4. The lumber harvest is greatly dependent on small landowners. The Tree Farm movement has been found to be a great help in increasing the supply from the small landowners.

Increased attention toward treating the pine tree as a resource to be carefully conserved and utilized can add greatly to the economic strength of the South.

(From the Savannah Morning News)



FRONT ROW...Bishop, Pullen, Gardner, Morgan and Shirley
BACK ROW...Boston, Osborne, Harris and Witherington



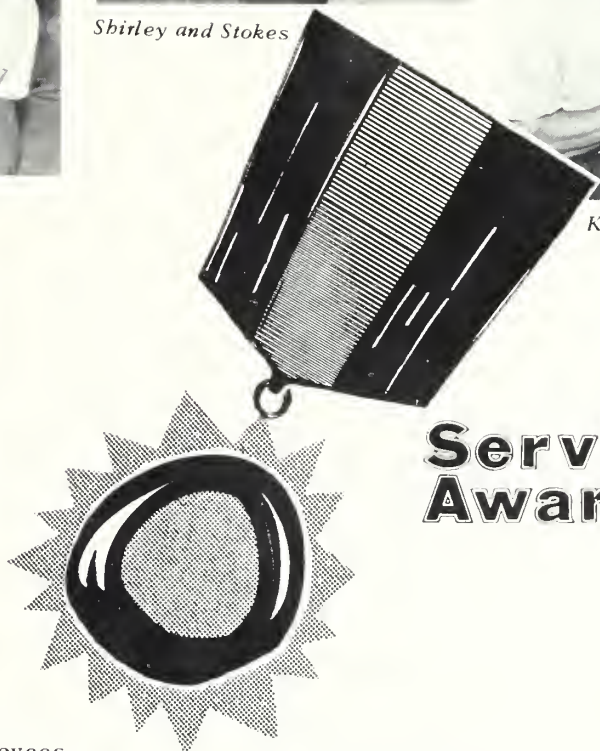
Strickland and Miles



Shirley and Stokes



Kennedy and Spells



Service Awards

Veteran Georgia Forestry Commission employees, Georgia's oldest county units and their forestry boards were recognized recently at special meetings in Middle and South Georgia.

A. R. Shirley, Commission director, head of the awards program, stated that the men who pioneered the development of Georgia's forest, through untiring efforts and at times without compensation, can never be paid in full. It is hoped that through these awards the gratitude of Georgia's citizens will be expressed and in some measure compensate for the many years devoted to one of Georgia's largest industries, Shirley added. In presenting the awards, Shirley told of the growth of forestry, emphasizing its present value to the state and the importance of continuing a progressive forestry program to meet the demands of the South and the nation in the future.

The State's 25 year Faithful Service Award and Service Pin was presented to Benjamin A. Gardner, Wayne County towerman, Jesup; Walter A. Morgan, First District ranger, Statesboro; D. T. Spells, ranger, Consolidated Timber Protection Organization at Homerville; and L. Jasper Stokes, Charlton Co. ranger, Folkston.

Recognized for 20 years service were George Bishop, chief, Forest Administration, Macon; Tom Boston, Bartow Co. ranger, Cartersville; Buster Harris, Morgan Memorial Nursery Superintendent; Frank A. Osborne, past investigator, Waycross District Office; Frank J.

Pullen, assistant Forest Engineer, Arrowhead Seed Orchard; Avery Strickland, Brantley Co. ranger, Nahunta; and Olin Witherington, Third District Forester, Americus.

Georgia's three oldest fire protection units and their boards were honored at ceremonies commemorating their founding. Members of the county unit advisory boards receive no pay for their time and efforts devoted to the respective units, most of which is in their spare time. These units included the Brantley Co. Unit, 38 years; the Consolidated T.P.O. at Homerville, 34 years; and the Charlton Co. Unit, 31 years.

The Brantley Co. board members and length of service include R. L. Bernard, chairman, Waynesville, 28 years; W. H. Brown, Hortense, 25 years; J. L. Miles, Waycross, 25 years; S. B. Highsmith, Nahunta, 8 years; and C. F. Dukes, Hoboken, 2 years.

A. V. Kennedy, chairman, Waycross, 34 years; Waldo Henderson, Lakeland, 17 years; Alexander Sessoms, Cogdell, 15 years; H. W. Mook, Homerville, 12 years; and Odis Hardee, Stockton, 2 years; are members of the Consolidated T.P.O. board.

The Charlton Co. board includes W. C. Hopkins, St. George, 30 years; E. B. Stapleton, Sr., chairman, 25 years; J. M. Wade, 15 years; G. R. Gowen, Jr., 2 years and J. B. Moore, one year, all of Folkston.

Shirley said that the Commission plans to recognize all county unit forestry board members in the near future.

Savannah

REAPS MILLIONS FROM FORESTS



The broad Atlantic Ocean is not the only sea bordering Chatham County.

There is a great, green sea of pine trees that begins on the fringes of the City of Savannah and stretches out across Effingham, Bulloch, Bryan and Liberty Counties and continues over most of the state.

From a plane, this verdant sea of forests, especially in this section of Georgia, appears to spread over most of the land, interrupted only by an occasional "island" city, village or cultivated farm.

The fascinating aspect of this sea, however, is its tide -- a never ceasing tide bringing in raw forest materials which keep thousands in Savannah and Chatham County permanently employed in converting the supply into pulp, paper, lumber, naval stores, bags, crates, doors and a host of specialized products.

The Georgia Forestry Commission recently conducted a survey to determine the impact of this fabulous tide on the general economy of the Savannah trade area.

The study showed that 8,607 men and women within Chatham County earn a combined annual salary of more than \$36,000,000 in wood-using industries ranging from a giant pulp and paper complex to small sawmills, cabinet shops and handle plants.

In addition, the survey revealed that these enterprises annually spend some \$33,160,000 for raw forest materials.

That huge sum goes into the pockets of suppliers out in rural Chatham and neighboring counties. A major portion of those dollars, of course, find their way back into the stores, banks, supply houses, shops and other businesses of Savannah.

The Commission's survey further shows that 4,337 persons in 18 Georgia counties in the Savannah trade territory are directly employed in forestry enterprises and wood-using industries.

They enjoy annual payrolls totaling more than \$8,100,000 and their employers spend another \$15,900,000 each year for forest raw materials. You can add another \$6,000,000 which represents payrolls and wood procurement bills paid by wood industries in an area of South Carolina which is included in the Savannah trade territory.

The transportation industry also reaps tremendous revenue from the many manufacturing and processing enterprises which are based on forestry.

In the Savannah area, approximately \$19,500,000 is spent annually on the transportation of raw forest materials into and finished products out of the plants. The bulk of that figure, which is exclusive of ocean freight, goes to railroads. A smaller portion goes to trucking companies and independent truckers.

As a result of that annual traffic, hundreds of employees in the transportation field indirectly attribute their livelihood to forestry.

The greatest single wood-using industry in the area is Union Bag-Camp Paper Corporation, which has the distinction of being the world's largest kraft plant. The mammoth complex employs 5,300 persons who will earn an estimated \$29,500,000 this year.

Officials at Union Bag-Camp point out that enough pulpwood is transported into the plant by rail each year to make up a freight train stretching from Savannah to Memphis. It produces in one day enough paper to cover a two-lane highway from Savannah to Denver. The bag production during a seven day period would sack up the nation's weekly grocery supply.

Although not as large as the Union Bag-Camp operation, Continental Can Company maintains a modern pulp and paper mill in the area which give an impressive boost to the overall economy of this section of the state.

Georgia Pacific Corporation's large plant on the outskirts of the city converts quality logs into plywoods and veneers, including the new type paneling now popular in the home building trade.

Atlantic Creosoting Company at nearby Port Wentworth treats timbers, piling, poles and other materials used in railroad, dock and highway constructions.

The area also depends on the payrolls of Bradley Plywood Company, Reynolds and Manley Lumber Company, Rathbone, Hair, and Ridgeay Company, Pierpont Manufacturing Company and more than a dozen other firms which produce lumber, doors, cabinets, fruit and vegetable crates, cross ties, prefabricated houses, ski billets, handles, shipping bags, boats, caskets, Christmas trees, turpentine, shingles and other products.

Another important aspect of the big forest products picture in the Savannah area is the booming naval stores industry. All three manufacturing phases - gum, wood, and sulphate - are carried out in this coastal city.

More than a million dollars during crop year 1959-60 went to naval stores farmers in Chatham and 10 surrounding counties for raw gum products alone for processing in Savannah plants. Also produced in forests on the fringes of the Savannah trade territory are several million dollars worth of naval stores materials which are refined at plants in Appling, Toombs, Emanuel and other counties.

The Savannah plants employ 328 persons whose pay checks annually total approximately \$1,100,000.

Local plants also process tall oil, an important by-product of the pulp and paper industry. The crude tall oil is separated into rosin and fatty acids, with much of the rosin finding its way back to the paper mills to be

used as paper sizing. Sulfate turpentine is another product of the pulp and paper mills.

Many other naval stores products refined in this area of Georgia, as well as in other sections of this state and neighboring states, are shipped to various parts of world through the Savannah port -- a port which leads the entire world in naval stores exportation.

Besides the refiners and processors, many brokers, dealers, and buyers annually handle large quantities of naval stores materials from offices in Savannah.

A number of manufacturing plants in the area use rosin and turpentine as their raw materials for many end products.

In regard to the booming pulp and paper industry, which is playing such a dramatic role in the economy of the Savannah area, local leaders often praise the late Dr. Charles Holmes Herty, a native Georgian and scientist whose devotion and leadership led to the ultimate utilization of Southern forests in the manufacture of kraft products.

Today, the Herty Foundation, which consists of a modern laboratory and a fully equipped pilot plant, continues research and product development to make even greater use of materials which are produced so abundantly in Georgia's green sea of forests.

The significant role forest products play in the economy of the Savannah area is dramatically enacted almost daily along the docks that line the Savannah River.

Lumber and shingles are being loaded into ships destined for Venezuela, Sweden, Poland and Egypt. Gums and resins are going to Trinidad, Japan, Denmark, West Germany and the Union of South Africa. Plywood, veneers, and cooperage are tagged for England and Scotland; wood pulp is finding its way to Australia, France, and Brazil; and paper is headed for the Netherlands, New Zealand and Belgium.

The more than 700 members of the local longshoreman unions are well aware that forestry contributes largely to their employment.

The Georgia Forestry Commission is dedicated to the protection, promotion and expansion of the source from which this great wealth in the Savannah area springs.

Area and district foresters, county rangers, and specialists in various aspects of forestry work closely with personnel in the woodlands divisions of companies maintaining forest tracts. They also give valuable assistance to private landowners in fire control, management, reforestation and insect and disease control.

They work to promote practical application of new scientific techniques developed to increase the quality and quantity of our forests. Through a continuous information and education program, Commission personnel encourage practices which will make the forest income even greater than it is today.

Beautiful and historic Savannah is known for her old world architecture, picturesque parks and quaint charm. She flourished in her heyday as a bustling cotton seaport.

But if the greatest contributor to her present-day economic welfare had to be told in just one word, that one word would certainly be: FORESTS.

Weight-Volume Study Started



End measure logs in establishing weights

The ever-increasing practice of buying sawlogs by weight has brought about a forestry project to establish weights for pine sawlogs.

Governor Ernest Vandiver made funds available for the study through the Georgia Forest Research Council. Members of the Georgia Farm Bureau, headed by John Duncan, requested that the study be initiated in an effort to standardize sawlog weights. The project is being jointly conducted by the Research Council, Georgia Forestry Commission, and the Southeastern Forest Experiment Station.

The project involves weighing and measuring logs at numerous logging sites throughout Georgia. The logs are being sampled until sufficient data is obtained to determine if variations in weight exist between sections of the state for the same species and between species. Also, if local variations of soil moisture conditions, such as high, well-drained ground versus low, swampy ground, significantly influences weight to volume ratio.

The logs are weighed and measured at the site to determine the percentages of sapwood and heartwood, longwood and summerwood, the amount of log taper and bark thickness. Wood samples are taken to the Forest Experiment Center at Macon for analysis of moisture content and specific

gravity.

Buying logs by weight rather than by volume has certain advantages. It eliminates human error in scaling and reduces confusion occurring from price differentials based on differences in log rules. It encourages prompt delivery of logs to the mill which reduces the chance of log staining or being attacked by insects and makes for faster handling.

H. E. Ruark, director of the Research Council, stated that, with the increased purchasing of sawlogs by weight. The study should estab-



Weight data is important factor in study

lish weights that will be fair to sellers and buyers of pine sawlogs.

General supervisor of the project is Rufus H. Page, assistant chief, division of forest utilization research, U. S. Forest Service. Assisting Page is Paul Bois and Joe Saucier, wood technologists for the Georgia Forestry Commission and U. S. Forest Service.

The field work is being conducted by Winston Graham, a University of Georgia Forestry graduate and William Morse, a junior at the Forestry School in Athens.

River Basin Investigation Underway

The Georgia Forestry Commission, in cooperation with the U. S. Study Commission Southeast River Basin, is conducting a study of the forest aspects of Georgia's seven river basins. Alabama, Florida and South Carolina are also included in the U. S. Commission's study which covers some 86,718 square miles. Of this total some 51,513 square miles are in Georgia.

W. H. McComb, management chief, Georgia Forestry Commission, stated that the investigation of the seven river basins in Georgia is underway. These river basins include the Savannah, Ogeechee, Altamaha, Satilla, St. Mary's-Nassau, Suwanee, Apalachicola, and coastal rivers between

the Suwanee and the Apalachicola.

The Commission will present the Study Commission with a report of their findings for each of the river basins within their study area. The report will include the description of extent, character, condition, ownership and significance of forest resources in the state. The existing forest resource development plans and programs and forest problems and needed development including programs and facilities will also be furnished.

Bob Burns, assistant district forester, management, Macon, is compiling the forest conservation data for Georgia.



Naval Stores Labor Study Held At Waycross

Labor migration from farm to city is creating a major farm labor problem in what was a stable labor force. The naval stores industry requires considerable labor for its woods operation and has felt this labor shift for a number of years.

The Georgia Forestry Commission, headed by A. R. Shirley, in cooperation with the Naval Stores Conservation Program, has set up applied research test areas on the Waycross State Forest. The research is expected to determine the feasibility of a modified labor system for working the trees. The test areas cover some 314 acres, using 15,000 cups.

It is hoped that the study will provide some broad and possibly striking comparisons in gum yields and value returns per acre, Shirley said. He added that the project should determine if untrained labor can be used effectively for naval stores. This is provided that wages paid by other forest industries, on a minimum forty-hour week per year basis, can be followed, and net income is sufficient to make this method of turpentining practical.

One test area consist of a series of twelve plots laid out in a twenty-eight year old slash pine plantation of 12" X 12" spacing. Each plot has an area of two and one-quarter acres. There are 1,217 cupped faces in the study. There are four treatments being applied to the area. These include selective cupping, thinning, and nine and ten inch diameter cupping.

In selective cupping, the trees are marked for cupping. One cup per tree 9" - 13" d.b.h. and two cups to 14 inch trees and over is the method being used.

In the thinning operation, the trees were cut immediately following marking without turpentining. This was done to compare normal cutting and growth and returns with a worked stand.

Thinning needs are being disregarded in the nine inch diameter cupping. All trees are worked including the minimum nine inch size.

A second test area involves nine and ten inch cupping in a natural stand. In this study, the relative cost and returns are compared bet-

ween the two. The commercial feasibility of the two, when paying the minimum wage scale, is being studied. The study covers just under 200 acres of longleaf mixed with some slash.

The final test area involves ten inch cupping. A comparison is being made between the use of 65 percent acid and 3/4 inch hack and the conventional 50 percent acid and 5/8 inch hack. A longleaf stand, covering 87 acres, is being used in this study. The plot is being treated half and half using some 7,300 cups.

All trees in the study area were

inventoried for sawtimber, when merchantable for that product, and pulpwood. Sufficient measurements were taken in order to reconstruct stands in their entirety for analysis purposes regarding the various management and working projects.

All trees are being worked with the bark hack and acid stimulation. All faces were installed using spiral gutters, double headed nails and two quart cups. Both aluminum and galvanized cups are being used. Chipping is done on a bi-weekly basis using 5/8 inch hack and 50 percent solution of sulfuric acid on mixed slash-longleaf and 60 percent on longleaf.

Shirley pointed out that all labor used has been inexperienced, including the foreman. Cupping was started on April 4 and completed May 13.

Sam Thacker, assistant manager, GFC, and Charlie Shea, area forester, NSCP, developed the three study areas. Shea also demonstrated working techniques to the foreman and laborers. Jimmy Braddy, GFC, is crew leader.



PINE FACES YIELD PRODUCTS GEORGIA IN NAVAL S



The old saying, "if you are going to beg get a cup" is worth millions when applied to the South. That's all you need, a cup under a gutter attached to a slash or longleaf pine of commercial size. Enough of these and you are in the Naval Stores business. This year crude gum prices are the highest ever. Many gum plants are paying up to \$40 per barrel of 435 pound net.

Naval stores, one of the oldest industries in America, designates the products turpentine and rosin. It was derived from the fact that every wooden ship of the British Government stored pitch and tar as a part of their regular stores and ships equipment.

As early as 1610, the British Government offered a

subsidy to the settlers to encourage gum production to insure sufficient quantities for their Empire's needs.

The only pine trees that produce gum in commercial quantities are slash and longleaf. They are found along the eastern coast from Virginia to Florida and in the coastal plains area of Georgia, Alabama, Mississippi, Louisiana, and east Texas.

When the tree is wounded gum flows out to heal the wound. The gum, fluid enough to drip from the tree, is caught in a cup. Until 1908, gum was the only kind of naval stores produced. About 1909, when the virgin slash and longleaf pine forests were being rapidly harvested, scientist found that stumps from these virgin



trees contained commercial quantities of turpentine and rosin. Through a commercial process, turpentine and rosin is removed from the stump wood and is termed 'wood naval stores'.

Another source of naval stores is a by-product of the sulphate pulp and paper process made from pine trees. The by-product in its crude state is known as 'crude tall oil and crude sulphate turpentine.' These products are further refined and are known as 'sulphate rosin and turpentine.' At present, wood rosin accounts for 65 percent, gum 18 percent and sulphate 17 percent of the total rosin production. In turpentine, sulphate accounts for 52 percent, gum 18 percent, and wood 30 percent of the production.

VALUABLE

WORLD LEADER

IN OPERATIONS

In a gum operation, the woodland owner may begin working slash and longleaf pines when they are ten inches in diameter and four and one-half feet above the ground or larger. During the winter months small strips of metal, gutters, are tacked to the base of the tree. They direct the flow of gum into the cup which is attached to the tree under the metal strips.

Gum producing season begins and ends with the growing season, April 1 - November 1. During this period, a workman visits the tree every seven to 14 days. He removes about one-half to three-fourths of an inch of bark and the cambium layer down to the wood for about one-third the circumference of the tree in a horizontal cut. A chemical stimulant is then applied to the wood to insure a longer period of gum flow. These cuts begin just above the metal tins and go upward with a uniform cut in height and width on each operation. The gum is emptied from the cup when the majority of them are filled. The gum is then placed in 32-35 gallon barrels for marketing.

It is delivered to a processing plant where the gum is cleaned, filtered, and washed before distillation. In the distillation process, the turpentine comes off in the form of vapor and is condensed, whereas rosin is the residue left after the turpentine is removed. The crude gum consists of about 20 percent turpentine, 70 percent rosin and 10 percent water, dirt and trash.

Rosin is packaged in galvanized drums, paper bags, or delivered in hot tank cars or trucks. The marketing of gum naval stores has drastically changed during the past 15 years. Prior to the introduction of the central steam gum processing plant in 1939, all turpentine and rosin was processed by individual producers on fire stills.

The first steam distillation plant was built at Hoboken in 1939 by K. S. Varn and Co. At present, Georgia has 14 central processing plants in operation which buy gum from the producers. These central plants are more efficient and improve the quality of the products. In addition, there are 12 gum buying platforms where gum is purchased by an agent for one of the central steam distillation plants.

The gum crop has been of great financial value to the South and especially to Georgia. Georgia now produces 82 percent of all the gum naval stores produced in the United States. The USA produces more than half of the world's production. Georgia is also one of the leading producers of wood and sulfate naval stores.

The price received by a producer for his gum is based on prices reported in the U.S.D.A. Daily Naval Stores Market News Service, Savannah. The crude gum is graded based on color, estimated content of turpentine and rosin and the trash in the gum. The value per standard barrel of gum (435 lbs. net) is based on estimated rosin grade and content in pounds, and estimated gallons of turpentine. The prices noted in the daily market rosin report, less charges for processing the gum are also considered.

The total production of all types of naval stores has remained approximately the same for the past 50 years. Wood naval stores represents about two-thirds of the rosin with gum and sulphate rosin about equal in production at present. Sulphate turpentine comprises about 52 percent of the total production.

Some 2,000,000 drums of rosin are produced each year. It is estimated that sulphate production can produce up to 700,000 drums per year if the paper mills run at capacity. It is estimated that only 12 - 15 percent of the slash and longleaf pines of working size are being worked in South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Texas.

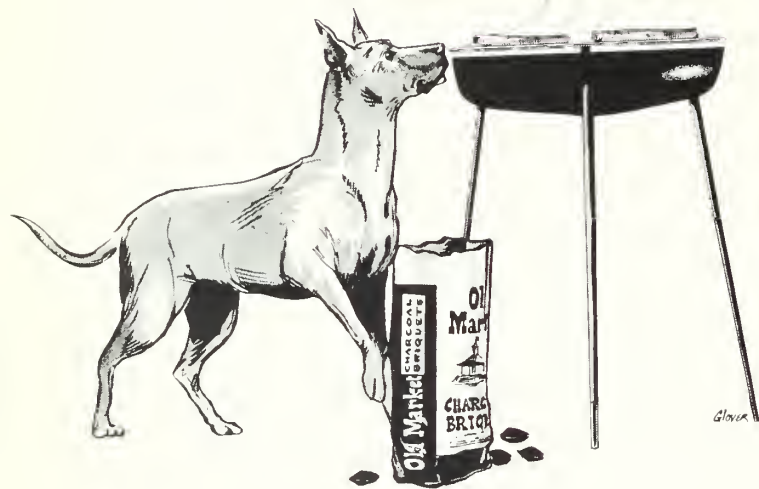
The total commercial forest land in Georgia is 24,000-000 acres with 93 percent in private ownership. Small landowners have approximately 66 percent, with 196 owners possessing less than 100 acres. Approximately 45 to 50% of Georgia's forest lands are located in the slash - longleaf pine areas.

Georgia has the largest acreage of private and state lands under organized forest fire protection. For many years Georgia has been the leader in the acreage planted yearly to forest trees. Turpentine farmers throughout the years have been among the leaders in forest fire prevention and reforestation efforts.

The Georgia Forestry Commission at its Waycross State Forest is having its trees worked for Naval Stores, prior to harvesting them for sawtimber and pulpwood. An important research gum production study was begun this year using 15,000 turpentine cups.

Added up, South Georgia's bleeding pine faces are history's landmark to forestry progress.

NEW INDUSTRY UTILIZES HARDWOOD SCRAPS



Scrap material from three hardwood flooring plants is finding its way into backyard and patio barbecue grills all over Georgia and in neighboring states as a result of a unique wood utilization enterprise at Louisville.

The flooring ends are being charred, ground into dust, mixed with a binder, shaped into neat little briquettes, and attractively packaged for the outdoor cook by the Old Market Charcoal Company, a business venture organized in 1959 by several Louisville citizens.

Following its meager beginning in an old shed in an alley, the company relocated in a brand new plant in April of this year and is now "swamped with orders," according to W. M. Prichard, company president.

"Our goal is to eventually step up production to the maximum," the official said, "which would mean an output of 30 tons of charcoal per day, seven days a week."

As Prichard thumbed through a big stack of orders the other day, however, he told of the time when the company's future was far from rosy.

"When we went into this thing last year," he said, "we began operating with sod kilns ... it was a slow, time consuming process and we were only producing 12 tons of charcoal each week."

Prichard said he and other company officials, which include Dr. and Mrs. J. W. Pilcher, George T. Samples, Frank Easterlin, Isadore Goldwasser and Gene Johnson, "were all pretty discouraged at one point and we were about ready to throw in the towel."

But about that time Prichard and Samples had a brainstorm. They began toying with an idea for a new and economical process for charring wood. Dr. Pilcher became interested and the others in the company joined the experiments.

Experimentation was carried out several months before they finally had a working model. Many modifications

were necessary before the group finally perfected the charcoal burner, often called a "retort."

The burners are first fired by natural gas, but after the inside temperature reaches a certain point, the gases from the wood take over as fuel.

Joe Saucier and Paul Bois, wood technologists of the Georgia Forestry Commission and the U. S. Forest Service, took a look at the ingenious equipment and immediately declared it a very revolutionary charcoal processing method. Other wood specialists agreed with them.

The company now has a patent pending on the invention.

When they were convinced the new process would make charcoal rapidly and economically, company officials lost little time in erecting a plant on a four acre tract on the outskirts of the city.

The flooring scraps, which are purchased from mills in Macon, Thompson and Lumber City, are hauled to the Louisville plant in large vans which are unloaded on a concrete apron by means of an electric lift which literally "dumps" the 16 to 22 tons of wood in a matter of minutes.



Electric lift unloads mountain of scrap flooring ends



A fork lift loads the scrap hardwood onto a conveyor which carries the material into the eight big burners. After the charring process, the lump charcoal passes

through a hammer mill which pulverizes it and blows it through a chute into a 62-ton capacity hopper.

The ground charcoal is carried from the storage hopper into the plant by a screw conveyor. Water and starch are added in a mixing chamber and the material then passes through rotary pillow-shaped dies which press it into briquettes.

The briquettes go through a fifty-foot hot air dryer and on to the automatic weighing and bag stitching department.

The Louisville Chamber of Commerce not only is pleased with the new industry because it provides an industrial payroll, but also highly approves of the advertising the plant's packaged product gives the city's old slave market, a tourist attraction located in the heart of town.

The charcoal bag bears a picture of the market place and a short historical sketch on the famous landmark. "Dr. Pilcher designed the red, white and blue bag," Prichard said, "and we think it is a real eye-catcher."

Saucier and Bois, as well as other personnel of the Georgia Forestry Commission, have commended the Jefferson Countians for their enterprising efforts and have welcomed them into an expanding family of Georgia industries which is utilizing materials that were once considered worthless waste wood.

T. G. WALTERS RETIRES

T. G. Walters, State Supervisor of Agricultural Education for Georgia since 1942, retired July 15.

Walters, a native of Franklin Co., has been connected with vocational agriculture since 1927 when he began teaching agriculture in Colquitt County.

Prior to his Ag work, he attended the Ninth District A. & M. School at Clarksville. Four years later he taught in the schools of Franklin Co. He earned his B. S. degree in agriculture from the University of Georgia in 1927.

Following graduation, Walters became principal and teacher of vocational agriculture at Okapilco School where he taught for three years. He then moved to Moultrie where he stayed until 1937. At Moultrie, Walters organized what has grown into the nation's largest FFA Chapter, and started the community food preservation program.

In 1937, Walters became district supervisor of Agricultural Education for Northwest Georgia and Execu-



tive Secretary for the Future Farmers of America.

On a state basis he teamed with Dr. M. D. Mobley, then State FFA Advisor, to launch the building of a

State FFA Camp. Under their guidance, the State FFA-FHA Camp at Lake Jackson near Covington was constructed.

Walters was named the State's Master Teacher of Agriculture in 1932. The following year he received a certificate of honor from the Georgia Forest Service and the Division of Vocational Education for the most successful work in forestry among Vo-Ag teachers of Georgia. In 1957, the Agricultural leader was chosen "Man of the Year" in Agriculture by the Progressive Farmer and received the American Forestry Award in Education.

Walter's personal enthusiasm for forestry, improved livestock, food for processing and pasture improvement has been transmitted to teachers and farmers, and has been an important factor in the State's agricultural development. He worked effectively with farmers as well as high school students throughout his teaching career and has always been an exponent of adult education.

Conservationists Honored



Langdale, Branch, McDougald and Shirley

"Georgia is blessed with natural resources and Georgia forests are unsurpassed in the nation," said Lt. Gov. Garland Byrd at the first annual governors award banquet at which this state's leading conservationists were honored.

The dinner, held in Atlanta by the Sears Roebuck Foundation in cooperation with the Georgia Sportsmen Federation, was the climax to a statewide program in which citizens contributing to various phases of conservation were honored on the county and district levels.

The state official, who termed the Georgia Forestry Commission "second to none in the nation," said natural resources must be used intelligently. "Conservation," he said, "does not mean hoarding... it means our resources must be used wisely for the benefits of all the people of our state."

Jim Gillis, Jr., of Soperton, was named the "Conservationist of the Year" at the awards event. Judge Harley Langdale of Valdosta, prominent naval stores producer and civic leader, received the statewide Conservation Award in Forestry.

Others honored as regional recipients of the forestry awards were Mike McDougald of Columbus; Steiner Branch of Grovetown; Henry Cummings,

Donaldsonville; and Claude Harman, Greenville.

Other state winners in the program were Carlton Griffith of Warren County, 4-H Division; Bobby Perkins, Barrow County, FFA; Miss Susan Myrick, Macon, soil and water conservation; John Blanchard, Appling County, Game and Fish; C. Fred Ingram, Winder, County Agent.

Junior Conservationist Awards were: Larry Joiner of Buena Vista, FFA youth who reclaimed wasteland and planted 50,000 trees; and Robert Wright of Cordele, 4-H Club member who planted 79,000 seedlings.

Awards to outdoor writers went to: John Burke, Savannah Morning News; Bill Baab, Augusta Chronicle; Charles Elliott, Atlanta Constitution; Ray Anthony, Columbus Inquirer; and Bill Allen, The Atlanta Journal. Allen was the state winner among the writers.

The various awards were presented by Lt. Gov. Byrd; A. R. Shirley, director of the Georgia Forestry Commission; Tommy Walton, state 4-H leader; T. D. Brown, FFA official; Bob Short, information chief of the Georgia Game and Fish Commission; and Cecil Chapman, soil conservation service official.

Ed Dodd, creator of Mark Trail, was presented a gold cup as a special award recipient.

'Cone Hunt' Begun

The Georgia Forestry Commission's annual 'cone hunt' is being conducted during September and October, announced A. R. Shirley, Commission director.

Shirley stated that Commission field personnel will collect some 1,840 bushels of loblolly, shortleaf, virginia and spruce pine cones. Shirley added that hardwood seed would be collected at a later date.

Shirley pointed out that this year's collection is aimed at replenishing depleted seed supplies of certain species and improving seedling quality in North Georgia. Seed collected in that area will be planted at the Hightower Nursery for distribution to North Georgia landowners.

S. P. Darby, Commission reforestation chief, said the seed will be collected from the first district, Statesboro; fifth district, McRae; sixth district, Milledgeville; seventh district, Rome; eighth district, Waycross; and ninth district, Gainesville. Loblolly, shortleaf and Virginia pine cones will be collected from the seventh and ninth districts. The remaining districts will collect the spruce pine cones.

Darby added that it will not be necessary to collect slash pine seed this year since the Commission has a generous supply on hand. It is necessary to keep a large inventory because pines do not produce a good crop of cones every year.

Refresher Taught In Civil Defense

Georgia Forestry Commission field personnel recently took part in one-day civil defense refresher courses. Commission personnel, in 1958, completed a twenty-hour disaster rescue training school which qualified them to teach similar schools in their respective counties and to assist in rescue work.

Since 1958, Commission personnel have been responsible for training fifteen of the forty-one civil defense squads in Georgia. There are twenty

ty six men to a squad. Jack Grant-ham, state civil defense communica-tions officer of Atlanta, stated that Mt. Vernon, Albany, Tifton and Douglas have indicated an interest in setting up squads in their res-pective areas. Commission per-sonnel would conduct these schools.

Grantham added that the refresher course gave the foresters an oppor-tunity to review some of the rescue techniques learned in the basic training sessions. Some of these techniques included knot tying, rescue first aid, casualty handling, stretcher lashing and handling, cas-ualty search, care and use of ladders and basic fire fighting.

The courses were taught at Gainesville, Washington, Milledge-ville, Newnan, McRae, Statesboro, Waycross, Camilla, Rome, and Ameri-cus.

The courses were arranged by Assistant Commission Director, J. C. Turner, Jr. and State Civil De-fense authorities with the coopera-tion of the district foresters.

Vo-Ag Clinic Held

The fifth annual Vocational Agri-cultural Forestry Clinic was held recently at Vienna. The clinic was under the direction of Ed Kreis of the Department of Vocational Educa-tion.

Approximately 15 Vo-Ag teachers from Southwest Georgia attended the last in a series of forestry short courses. Kreis stated that all Vo-Ag teachers in the state now have completed the course. Material pre-sented at the week long session will be used in lesson plans by the tea-chers, Kreis added.

The course was taught by repre-sentatives from the Georgia Forestry Commission, U. S. Forest Service, industry and the Department of Edu-cation.

Subjects taught includes econom-ics of forestry, fire, insect and disease control, naval stores prac-tices in forest management and con-trolling undesirable species. Others include prescribed burning in fire management, and measuring and mar-

keting.

Curtis Barnes and John Clark, Georgia Forestry Commission; Earl P. Jones, E. O. Powers, and A. H. Antonie, U. S. Forest Service; and Robert E. Lee, Union Bag-Camp Paper Corporation were the instruc-tors.

Dr. R. H. Tolbert, head of the Vo-Ag teacher training at the University of Georgia, introduced the weeks program and concluded it with a sum-mary.

New Warehouse Dedicated



A new fire proof warehouse de-signed for faster service and more economical operation for State and county forestry units has been con-structed at the Center near Macon. The new General Services building was officially opened August 20 by A. R. Shirley, Georgia Forestry Com-



mission director.

Shirley stated that the metal and steel structure eliminates an enor-mous fire hazard in the old ware-house. The warehouse has been used for vehicle maintenance and repairs as well as for storage of state and county supplies. Shirley added that the new structure will save the Commission \$1,800 in ware-

house rent which has been neces-sary for storage of supplies.

Lester Lundy, General Services chief, stated that the vacated space in the old warehouse will be used for the mechanic shop. Supplies now stored in the rented warehouse will be put in the old mechanic shop. Lundy added that the move enables warehouse activities to be centraliz-ed in one location.

The 6,000 square foot metal and steel structure with cement flooring has reduced the fire hazard that existed in the old warehouse. Lun-dy pointed out that flammable ma-

terial, such as paints, oils, grease and batteries, will not be stored in the Center's newest addition. To insure further fire protection, the building is located a minimum of 150 feet from the nearest structure.

The new supply center is another example of the continued growth of the Forestry Center since the open-ing of the Commission headquarters in 1957. Other buildings include the communications center, fire, seed, insect and disease labs, cone shed, seed extractor, cone drying kiln, and carpenter shop.

Seedling Blanks Now Available

Blanks for ordering pine tree seed-lings are now available through the Georgia Forestry Commission county rangers.

Georgia landowners are urged to place their orders now to insure de-livery, since all orders received after October 1 will be filled only if seedlings are available. The State nurseries are growing 250 million seedlings for this seasons planting.

Continued on page 14

The seedlings are being grown at the following nurseries. They include Davisboro, located near Davisboro; Herty, Ga. 91 at Albany; Hightower, Ga. 53 near Dawsonville; Walker-Page, Ga. 178 near Reidsville; and Morgan, U. S. 41 between Macon and Perry.

Species available and their cost include slash, loblolly, longleaf, shortleaf, and Virginia pine, \$4 per thousand. Eastern white pine, swamp chestnut oak, northern red oak, sweet gum, sycamore, black walnut, bald cypress, and green ash will cost \$6 per thousand. A charge of \$10 per thousand will be made for eastern red cedar, yellow poplar and dogwood.

This year shortleaf and Virginia pine species are available in quantity for the first time. The growing of these species were increased to meet the anticipated demands of North Georgia landowners who were hit by ice-storms last Spring.

A transportation charge of twenty-five cents per thousand trees will be made on deliveries by state truck with no limit on quantity. If it is not possible to fill an order, payment

will be returned to the purchaser.

All orders must include payment. Landowners are requested to fill out the order blank completely. ASC purchase orders will be accepted as well as checks and money orders.

New Plow Developed



A new fire fighting plow, designed and constructed by Ben Hill Ranger, J. C. Bowen, promises more efficient forest fire protection in that South Georgia county.

The equipment recently drew praise from district foresters who saw it in action at a statewide meeting.

Bowen has greatly increased the speed and efficiency of one of the standard tractor-plow units used for plowing fire breaks. As a result of the modification, forest fire fighters need not worry about tractors bogging as often, the ranger said.

The ranger fashioned a floating extension which locates the plow blade on a wheeled trailer, thus distributing weight over a greater area and minimizing the chances of bogging. Formerly, the weight of the plow blade mounted on the rear of the tractor often caused it to sink in soft ground. The new plow extension, which weighs 1,120 pounds, is heavy enough to penetrate almost any soil in South Georgia, yet light enough to prevent bogging, Bowen said.

The plow blade on his rig which moves up and down with the wheels, always at the same depth, this insuring a more evenly cut furrow.

A. R. Shirley, Georgia Forestry Commission Director, congratulated Bowen on the mechanics of the rig and said he believes it could operate well in various soils in over half the state.

Logging the foresters...



Sara Frances Marshall of Lizella, who represented Bibb County in a recent regional 4-H Achievement Day observance, won first place with her paper on forest management and talk on forest management.

DEDICATION...The new Lake City Research Center office and laboratory of the Southeastern Forest Experiment Station was recently dedicated by Congressman D. R. Matthews. The new structure is located near Olustee, Fla. The building, which provides working space for U. S. Forest Service researchers, contains 8,700 square feet of floor space.

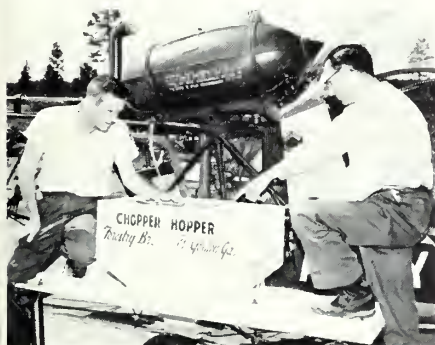
ANNIVERSARY...The annual national meeting of the Society of American Foresters, November 13-16, will commemorate sixty years of progress. "Forestry's Expanding Progress", is the theme of this year's session. The presentation of three special awards will highlight the meeting. They are the Sir William Schlich memorial medal and the Gifford Pinchot medal, both for outstanding contributions to forestry. The third award is for achievement in biological research contributing to the advancement of forestry. President of the Society is C. A. Connaughton.



SOILS SCHOOL...Georgia Forestry Commission personnel recently attended a week long Forest Soils School at the Georgia Center for Continuing Education in Athens. W. H. McComb, Commission management chief, stated that the group studied the practical aspects of forest soils in relationship with species to various site factors. Dr. Jack T. May, assisted by Dr. Larry H. Walker, both of the University of Georgia School of Forestry, arranged the five day program. J. C. Caldwell of the Center for Continuing Education was the program co-ordinator.



Benny Hayes, assistant patrolman of the Baldwin-Hancock Unit, captured this little fawn which was made homeless by a 165-acre forest fire. Benny is keeping the doe as a pet.



This "Chopper Hopper," an aerial tree seed planting unit developed by the Fort Gordon Forestry Branch, is being inspected by T. M. Strickland, Richmond Ranger, left, and Harold V. Barnett, branch chief. The unit, which is attached to a helicopter, has been used to successfully seed vast areas of land on the military reservation.



NEW OFFICERS...W. H. McComb, management chief for the Georgia Forestry Commission, has been elected president of the University of Georgia Forestry School Alumni Assn. He receives congratulations from Ben Meadows, Atlanta, past president. Julian Reeves, seventh district forester, Georgia Forestry Commission, was elected secretary-treasurer. Nelson Brightwell, Georgia Extension Service, Athens, was elected vice-president.



This float, designed and built by the Putnam County Unit, made a big hit with spectators who viewed the parade at the recent Putnam Dairy Festival at Eatonton. The float was also used by the Jenkins County Unit in the Jenkins Dairy Festival at Millen.

SPCA EXCEEDS RECORD...More than 83,000,000 forest tree seedlings were planted on industry land or distributed to Georgia landowners during the past year. This announcement was made in a report by Henry J. Malsberger, general manager of the SPCA, Atlanta. This record exceeded the previous year's tree planting program by pulp and paper companies and independent suppliers of pulpwood. Of this record, 21,377,000 seedlings went to Georgia landowners, a record for the South.

LETTERS

Mr. Ray Shirley, Director
Georgia Forestry Commission

Dear Mr. Shirley:

It is with a great deal of pleasure that I write you this letter of appreciation and thanks for the part you played in sponsoring the recent FFA Forestry Camp at Pine Mountain.

I had two boys as delegates to attend the camp and I attended as one of the teachers who served as counselor; therefore, I speak with first hand knowledge that the camp was great.

Very truly yours,

C. H. Huff, Advisor
Manchester Vo-Ag Dept.

Mr. Frank Craven, Chief
Information and Education
Georgia Forestry Commission

Dear Mr. Craven:

Thank you very much for the prints of the picture made during the dedication of the Okefenokee Swamp Project. I expect to use one of the pictures in some of my campaign material.

Let me also take this opportunity to commend you for the excellent coverage of the dedication given by the Georgia Forestry Commission.

Sincerely,

Iris Blitch
8th Dist. Congresswoman

★ IN THIS ISSUE ★

NUMBER

1

of a series of articles on the

ECONOMIC IMPACT

of forestry on
metropolitan
areas of Georgia

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On the Cover

As our "gift-wrapped" cover suggests, it's that time again -- time for the personnel of the Georgia Forestry Commission to wish all readers of Georgia Forestry a Merry Christmas. This quarterly magazine has featured many stories of forestry progress during the year, and it is the sincere hope of the staff that the publication has helped encourage Georgians to make their forests more productive, thus enhancing our general economy and providing a more prosperous Christmas.

Member of the
Georgia Forestry Association.

Georgia Forestry is entered as second class matter at the Post Office under the Act of August 24, 1912

Cruising the News

FORESTRY IMPORTANT

(From The Adel News)

The forestry and wood products in Georgia employs 54,000 persons, turns out \$700,000,000 worth of products annually and pays out \$247,000,000 in salaries, so reports two well known foresters who spoke in Tifton recently.

The Government is supplementing and paying at least half for the expense of county forestry work. Trees are being planted for future forests as no one knows the extent of the forestry development.

We have Del Cook Lumber Co., Darby Lumber Co. and other pulpwood industries right here in Cook County. We have the Turpentine Industries and a large paper pulp mill in a nearby county. These all offer jobs to our workers and money comes into our County Coffers. We are proud of the establishment of these industries among us. We must assist them in any way possible from a city and county standpoint! They are valuable assets to our county!

DIXIE'S TREE OPULENCE

(From the Atlanta Journal)

A map published recently in the magazine Forest Farmer presents succinctly the reasoning back of good forestry practices-with special application to the South. The Southern states have the trees far more than any other section.

The map shows the South with 195,000,000 acres of forestlands. The Midwest and East have 169,000,000 acres in trees and the Far West is third with 117,000,000 acres. The Western tier of states, running southward to Texas from the Canadian border, is famous as grasslands. They can boast of only 5,000,000 acres in commercial timberland.

Georgia should steadfastly guard this treasure. It should be protected from wanton losses by fire, from disease and neglect. Our trees contribute indirectly to the welfare of every citizen. Forestland conservation thus becomes the obligation of every citizen.

A TREE

(From The Wilkinson County News)

A man named Kilmer once wrote that "poems are made by fools like me, but only God can make a tree" . . . a correct observation.

It survives the murderous onslaught of fire and disease, axe and saw, reproducing its own self, if artificial propagation is lacking.

It has made millionaires out of mendicants and wise men out of fools.

It comforts the babe in his cradle, accompanies man in his short journey on earth, and then extends its protecting limbs over the silent grave of the dead.

It is the servant of man from the day that he is unwillingly thrust, as a puking, puling infant, into this vale of wrath and tears, until that time when he must lay aside the useless possessions of life, the honor or the infamy, the wealth or the poverty, the vanity or the humility, and by others be shrouded in the garments of the grave...where at last all men become equal.

It is currency recognized over the broad face of this globe; more stable and practical than the yellow dross of gold, more valuable and useful than the glitter of diamonds.

It retires the mortgage of the unwise husbandman; provides the sustenance for his off-spring; educates the ignorant; clothes the naked; comforts the pampered; and provides the money to be wasted by the widow.

Yea! Only God can make a tree!

And only man, in his stupidity, destroys it!

"I wish you'd write a piece about people who cut down trees in my woods, she said." They seem to think that a tree which is not growing in somebody's front yard is anybody's property.

"Last year, the week before Christmas, our farm was besieged by city people who drove out into the country to get a Christmas tree-for free. They had cut down a half dozen red cedars before we found it out. Then, we had to sit by the road and tell intruders to stay away.

"The place was distinctly marked 'No Trespassing,' too."

Well, here's the piece. I sympathize with the lady who spoke of her tribulations, and with others who have had the same troubles. There are many farmers who have had a similar experience.

One farm wife I know actually found a couple digging up boxwood at a house site about the distance of three city blocks from her own house. She owned the house site and planned to transplant the boxwood to her own front yard. Just what she said to the transgressors she would not repeat to me, but fortunately, she caught the boxwood stealers, red handed, and she made them replant the box.

She had to go out the next day and water the plant and she had to nurse it through some weeks, but it did live.

The only excuse the visitors offered for taking the plant was "We didn't think anybody lived here."

And there was the couple who dug up bulbs a friend of mine had planted along the roadside just around the bend from her home. They "didn't think anybody wanted them."

It is strange how some city people think anything that grows outside the city is anybody's property. Unless it grows in a front yard and, in some cases, unless the people who live in that house happen to be at home and on watch, the thoughtless, characterless city family appears to think a holly tree is theirs to strip.

Another friend tells me his farm, which is some 500 acres in size, is the haunt of people who are looking for greenery for Christmas decoration. They do not hesitate to cut down whole holly trees or cedars or young pines to drag home for prettying up the house for the celebration of the birth of the Lord Jesus.

"We almost hate to see Christmas come at my house," he said. "We know we'll get so mad about city slickers coming out to our farm and walking off with things that belong to us - not to them."

Every year, as Christmas draws near, you will see on the highways, on Sunday afternoons, cars loaded with people, who have been out cutting a Christmas tree; you can see the poor bedraggled pine or cedar or holly, sticking out of the trunk, beaten by the wind and often covered with dust from the side road over which the tree-cutters rode to find a tree they thought belonged to nobody.

One city man, who owns a small woodlot, said he felt as if he should put a sign on the Christmas tree he brought home from the country, a sign to say: "This tree grew on my own property."

It would be a boon to the farmers if everybody felt as he does. Trees which grow on somebody else's place, no matter how far out in the country, are private property.

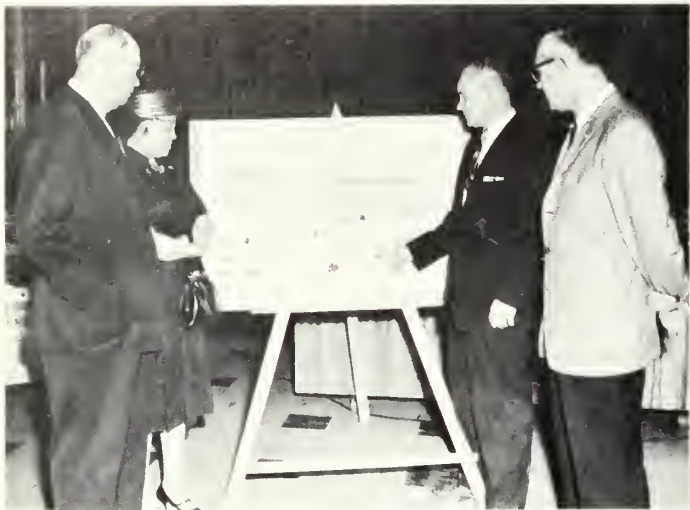


TREE THIEVES

by
Susan
Myrick

Glover

Representatives Inspecting Commission



From left to right: Representative and Mrs. W. H. Kimmons, Ray Shirley, and Representative Bill Parker.

An inspection of Georgia Forestry Commission facilities is being conducted by the Forestry Sub-committee of the Natural Resources Committee, Georgia House of Representatives. The committee headed by Representative W. H. (Bill) Kimmons, began its inspection tour, Nov. 21 and continued through the 23rd. Another tour has been set up for Dec. 13-15.

Representative Kimmons had high praise for the Commission facilities and the program being conducted by the Forestry Commission along with the efficiency with which the program is being carried out. The Pierce County Representative stated that a report on the committee's findings will be made to the Legislature when it convenes in January.

The November tour included the Ware County forestry unit, Eighth District office, Waycross State Forest, Page and Walker Nurseries and the McRae District office. The legislators also viewed the Telfair County forestry unit and hardwood control areas in that county in addition to activities at the State headquarters in Macon.

The December tour will include visits to the following county forestry units: Jasper-Jones, Morgan-Walton, Gilmer, and Bartow. In addition, the group will tour the facilities of the Gainesville District office and Hightower Nursery.

Legislators making the inspection included Representatives W. H. (Bill) Kimmons, Chairman, Pierce County; Bill Parker, Appling County; Hubert Wells, Oconee County; Byrom Fitzgerald, Long County; Roy Kelly, Jasper County; J. Floyd Larkins, Brantley County; W. T. (Bill) McCown, Polk County; and W. G. Todd, Glascock County.

PULP MILL CONSTRUCTION BEGUN IN EARLY COUNTY

Ground breaking ceremonies were held recently for construction of a \$42,000,000 pulp mill at Cedar Springs in Early County. The plant, to be built by the Southern Land, Timber and Pulp Corp., will cost approximately 50 million dollars.

Early Countians recently passed a 25-million dollar bond issue to go toward the mills construction. During the past three years the new industry has grown to where it has a backing of 20,000 stockholders.

Approximately 5,000 persons, attending the ground-breaking ceremonies at which Senator Herman Talmadge was principal speaker, were told the new mill will go into production in about two years. It was pointed out that the mill will employ 450 persons and a similar number will be needed in the forests to harvest and transport the raw materials. The mill will produce newsprint and liner board.

The crowd was also told that a Mississippi company is planning to build a converting plant on adjacent property. They will use some of the kraft liner board to be produced by the new mill. Approximately 200 employees will be on the converting plant's payroll.

Eustace Bishop, president of the Tri-Rivers Development Association, congratulated local people for their part in inducing the company to build the plant near Cedar Springs. The Association is made up of a group of citizens dedicated to encouraging new industry to locate in the area.

Senator Talmadge pointed out that the abundant rainfall and long growing seasons makes Georgia an ideal state for forest production. He noted, too, that Georgians neglected woodlands for a century; but in recent years they have taken a keener interest in caring for this important natural resource.

John Neely, Manchester, president of the new company, stated that Georgians should develop their greatest na-

tural resource...timber. He added that the people of Georgia should furnish the capital needed to develop this resource. The stockholders of the new development are all Georgia citizens.

Congressmen, legislators and business leaders from throughout Georgia were present for the occasion. Schools, government offices and local businesses were closed for the day.



Participating in the ground-breaking ceremony were, left to right, E. E. Wakefield; John Neely, president of the Southern Land, Timber and Pulp Corporation; and Miss Sue Hobbs, Miss Early County.

For the first time biologists are having an opportunity to look into the effects of ionizing radiation on forest growth and productivity.

Oak-hickory-pine and flooded plain forests are being irradiated at distances up to 2,000 feet by mixed gamma and neutron radiation from an air-shielded reactor. This reactor is being operated in the center of a 10,000 acre wooded area on the North Georgia Piedmont Plateau. The entire operation is carried out under the most stringent safety precautions as directed by the Nuclear Safety Department of Lockheed Georgia Nuclear Laboratories.

The significance of this program to our economy and to civil defense arises from our need to know what may happen and how to recover from radiation damage as might result from industrial uses of atomic energy, nuclear accidents or bomb explosions.

Studies in the irradiated area are supported by a gamma radiation field build on the Emory University Campus. It provides for the checking of critical experiments under controlled conditions. This facility is of prime importance since the time, rate, and dose at the reactor site is on a 'take-it-as-it-come' basis.

The irradiated area, in which definite biological studies have been made, at present extends from the reactor to distances of 1,000-3,000 feet depending on terrain. The irradiated area, a radius of some 288 acres, contains an average of 150 trees per acre. The total experimental sample number of trees above three inches in diameter is estimated to be 37,500. These large numbers make it possible to distinguish between the effects of ionizing radiation and those of other adverse environmental factors with which they may easily be confused, such as drought, killing frost, insect damage and disease.

The reactor has been in operation periodically since Feb. 1959. The evaluation of critical dosage determinations has not been completed. However, a rough estimate indicates that the total dose for the first twelve-month period on a line of sight basis was about 32,000 rem at 500 feet; 8,000 rem at 1,000 feet; and 2,000 rem at 2,000 feet.

One of the most dramatic effects has been that of shortening the growing season of the woody plants. In Sept. and Oct., 1959, leaf fall in the irradiated area occurred up to thirty days ahead of that in the surrounding non-irradiated woodlands, a linear relationship existing between dose and earliness of leaf fall.

This Spring there was a marked prolongation of dormancy. Three weeks after the surrounding woodlands had leafed out, the area up to 1,500 feet radius around the reactor still appeared to be in its winter aspect. By the end of five weeks, most trees had leafed out to within 700-800 feet of the reactor. However, many trees inside this area were still void of leaves.

The apical meristems or buds of woody plants appear to be much more susceptible to radiation damage than other parts of the woody plant. For several tree species, within 500-700 feet, most of the terminal buds were completely killed and lateral buds on wood produced several years earlier began to develop. In the intermediate zones, two months after leafing out, many of these trees had only a small fraction of normal leaf coverage.

The cambium of hardwoods appears to be much more resistant than the buds or growing tips. For those trees on which the terminal buds had been killed, the twigs remained green and apparently alive. A rough calculation would indicate that the cambium may be four-five times more resistant than the terminal buds.

Detailed experiments are underway to determine the effects on cambial activity. Several Fritts dendrographs have been in operation over a year. In addition, a hundred Daubemire dendrometers have been attached to as many different trees in order to get a more definite figure on tree growth. Observations have been made on xylem development in several hundred trees over the last 12-month period.

Current investigations are attempting to correlate physiological aspects of growth with observed conditions. Many experimental procedures have been established, but final results and conclusions for most of them will not be known for some time. Only a few of the projects underway have been reviewed here in an effort to give some idea of the nature and extent of this program in radiation ecology and forest productivity.

Opportunities for this research program in Georgia developed from construction of an air-shielded-reactor in Dawson County in 1957 by Lockheed Aircraft Corp. for the U. S. Air Force.

The program on forest productivity is part of a comprehensive research program in radiation effects on vegetation in natural environments conducted by the Department of Biology of Emory University. It is supported in large measure through a research grant to Emory from the Division of Biology and Medicine of the U. S. Atomic Energy Commission. Dr. Robert Platt, Professor of Biology, is the principal investigator. Some ten graduate research assistants and associate investigators, along with their major professors, are involved in the project.



Twilight of a Forest





The Cooper Creek Area.....*Silvan Beauty Preserved For Scenic Aspects*

The Cooper Creek Scenic Area, a 1,240 acre primitive forest in Georgia's mountainous Union County, was recently dedicated to all those who are interested in preserving the site "in an undisturbed state" similar to which our forefathers once knew it.

In his dedicatory address, Congressman Phil Landrum said man has achieved such miracles as the H-Bomb and television, but despite all his advancements "he cannot create beauty as we see it in this location."

He cited the U. S. Forest Service for its foresightedness in setting up the wilderness area and said Georgia is fortunate in having such an area in which students may study ecology.

Judge T. S. Candler of the Georgia Supreme Court, a life long resident of the area, told the dedication ceremony audience that the section once belonged to the Cherokee Indians.

When the Indians were eventually driven out of Georgia, he said, a lottery for the property was held in which widows and soldiers were permitted to draw lots.

A soldier from Savannah held the lucky ticket for the particular area which has now been designated as a wilderness project, but the Chatham Countian didn't want it so the ownership reverted to the state.

The judge said the land was sold in 1902 at fifty cents per acre and resold 35 years later to the U. S. Government at \$6 per acre.

James K. Vessey, regional forester of the U. S. Forest Service, pointed out that the Cooper Creek development is the 17th area of its kind to be set aside in the south as a scenic area.

Other speakers at the dedication were Dr. Charles H. Wharton, assistant professor biology, Georgia State College; and J. C. Holton, an official of the Mens' Garden Club of Atlanta, Inc.

The establishment of the Cooper Creek Scenic Area ties in with the aims of the Multiple Use-Sustained Yield Act signed last June 12 by President Eisenhower.

The legislation provides that the national forests be managed for multiple use and sustained yields. The act lists five basic renewable natural resources for which the national forests were established. These include outdoor recreation, range, timber, watershed, and wildlife.

Vessey, in a recent magazine article, summed up the true meaning of multiple use of our Southern national forests in this manner:

"...To the family, it means a place to camp, picnic or enjoy the scenery; to the sportsman, a place to hunt deer, quail and squirrels, or to catch a creel of trout; to a city or village, an abundant source of water for domestic and industrial needs; to the logger, a place to harvest trees; and, to the farmer, forage for his livestock."

NEW MILL BOOSTS AUGUSTA'S ECONOMY

Continental Can Company's gleaming new \$45,000,000 pulp and paper plant near Augusta added a tremendous boost to the economy of Richmond and surrounding counties when it went into production this fall.

The new mill, which will employ some 400 persons during the first months of operations and perhaps later increase the work force, is expected to hike annual bank deposits in the area by almost \$1,000,000 and account for 400 new automobile registrations.

Personal income going to the mill employees and some 500 persons in allied fields will amount to approximately \$2,500,000 annually.

The allied jobs will include those who furnish the big mill and its workers and families with goods and services.

A mill spokesman said it generally requires four persons in the forests for each man working in the plant. That would add another 1,600 persons who would be employed in harvesting and transporting the raw materials for the mill.

As a result of Continental locating their plant in the area, Southern Glassine Company, a subsidiary of Deerfield Glassine Company of Monroe Bridge, Va., is now building a plant near the larger industry.

F. J. McAndrews, plant manager, said the industry will go into operation about mid-February and will employ some 80 to 100 persons. Glassine is a semi-transparent paper used in lining cereal boxes, candy wrappers and other food packages. The plant will use pulp from Continental Can in its manufacturing process.

Continental's plant will spend more than \$5,500,000 annually for raw forest materials for production of 100,000 tons of bleached board. About 700 cords of pulpwood will be needed daily for manufacture of the paper which will eventually find its way into paper plates, cups, cartons and other products.

The mill is located on a 2,100-acre tract donated by the Committee of 100, an organization composed of business, civic, professional and industrial leaders in the Augusta area who are working to encourage new industry to locate in this section of the state.

Allen H. Douglas, executive director of the Committee of 100, said the organization raised \$250,000 during a two-weeks period in 1959 by public subscription and bought the land and then donated it to the company.

"We feel it was a good investment," Douglas said. "The big mill was being sought from Virginia to Texas and we were very fortunate in finally having Continental Can Company locate here."

Douglas, as well as a spokesman for the company, said several ideal conditions which exist in the Augusta area were the principal reasons that led CCC officials to build their plant in Richmond County.

Those conditions include ample water supply from the Savannah River, tremendous forest acreage from which raw materials can be obtained, site suited for ponding system used by the mill, good supply of labor and several other advantages.

Douglas, whose organization is a non-profit setup operating on an annual budget of \$50,000, said the effects of the new mill can already be felt throughout the area. Although the plant is located on the Central of Georgia Railroad, he said other railroads are increasing their tonnage because of the new industry.

The official of the committee also pointed out that Continental's plant represents the largest single initial investment to come into this state, with the exception of military establishments.

The raw water pumping station at the new plant pumps 17,000 gallons of water per minute, or 25,000,000 gallons per day. The big filter plant can handle 22,000,000 gallons each day.

The modern mill has one of the largest continuous digesters in the industry. It is 109 feet high and 13 feet in diameter. Cooking time requires from four to six hours. Among several innovations in the plant is machinery for a new process in the bleaching operation.

William Schnorbach, a native of Michigan, is plant manager. George Clossay, an Indiana native, is personnel director at the plant and Vernon C. Bodenheimer, who formerly lived in North Carolina, is technical director. T. W. Earle is vice president in charge of the woodlands division, Savannah, and Gene Martin is district woodlands manager.

Ray Shirley, director of the Georgia Forestry Commission, said Continental Can Company's new Richmond County plant represents a "giant step forward in Georgia's important pulp and paper industry ... citizens throughout the state should be grateful to the Committee of 100 and to the company."



Allen H. Douglas, executive director of Augusta's Committee of 100



THE FOREST | WAYCROSS CAME BACK | BOOK

The forests came back.

From the fall of 1954 through the spring of 1955 the Southeastern section of Georgia was engulfed in a fog. A fog that will remain in the minds of hundreds of timberland owners in that area and a monument to carelessness for all Georgians. Folks in these parts had always been used to fog rolling out of the big swamp, but none before had the sharp burning odor of a forest fire.

The fires rolled out of the vast Okefenokee into Charlton, Clinch, and Ware Counties destroying thousands of acres of valuable timber. Trees measuring 10-12 inches in diameter aren't replaced overnight.

Since the disaster of the "Land of the Trembling Earth" woodland owners have been climbing the come-back trail. Landowners rolled up their sleeves and went to work. First salvaging all timber that was usable, then clearing their land and setting up a reforestation program that has seen the planting of 7,264,000 trees since 1955-56 in Ware County. Charlton and Clinch Counties

planted some 12,909,900 seedlings during the same period.

Once again, six years later, tall timber is again reaching skyward, its stretching limbs touching the lives of everyone in this area. Today, the city of Waycross is a thriving community on the strength of her natural forest factory which surrounds her in every direction.

In 1959 the retail sales of Waycross totaled over \$35,000,000. Approximately 11 percent of this total can be directly attributed to personal forestry income.

Some 995 people in Ware County and approximately 2,001 persons in her trade area are in some way employed in the forest field. It is evident why the natives of this "city by the swamp", always take an extra sniff on foggy mornings for the aroma of burnt timber, their bread and butter.

Crossties, spindles, paper boxes, wood furniture, and turpentine are just some of the wood products produced in this city of some 22,000. In addition, pulpwood com-



panies, sawmills, and naval stores operators offer hundreds of Ware Countians employment.

In 1959, Ware County forestry employees had a take home pay of approximately \$1,995,299. During the same period the surrounding counties of Charlton, Clinch, Brantley and Pierce had a great impact on the economy of Waycross. Combined, these counties had 2,000 forestry employees working in naval stores, pulpwood and sawmills and forest related industries. These employees took home approximately \$4,304,130. Almost

of a little less than 30,000 barrels of gum.

The forests of Ware County also provide experimental and recreational areas. The Waycross State Forest, ten miles South of the city on U.S. 1, provides the State with opportunities to set up experimental plots for tests on practices that can later be passed on to the woodland owner. A naval stores labor study is now being conducted at the forest. The Laura Walker State Park offers camping and forestry demonstration facilities for youth and adult groups. Within a stones throw of the Park is

CROSS' ECONOMY STED BY TREES

50 percent of this total can be attributed to the naval stores industry.

The above figures do not take into consideration the \$8,415,689 spent for raw products. Of this total some \$4,637,574 was spent for raw products in Ware County. Major pulp and paper companies in Ware County spent \$1,931,141 of the above total. The companies include Container Corp. of America, Brunswick Pulp and Paper, Buckeye Cellulose, Owens-Illinois, Rayonier Pulp and Paper, St. Mary's Kraft Corp., St. Regis Pulp and Paper, and Union Bag-Camp Paper Corp. These major pulp and paper companies exported approximately 130,000 cords of pulpwood out of Ware County.

During 1959 there were 130,319 cords of pulpwood, 13,206,055 board feet of sawtimber and 29,000 poles produced in Ware County. Naval stores also played an important role in the counties forestry income. There were some 88 producers working approximately 120 crops or 1,209,324 faces. This amounted to a production

the nationally famed Okefenokee State Park. Here thousands of Georgians and visitors from across the nation have an opportunity to glimpse the wonders of the swamp.

Ware County has a total forest acreage of 324,340 acres of which the above facilities are included. Latest figures show that only 269 acres of this area have burned in 1960. This is compared to the 10,637 acres destroyed by the swamp fires of 1954-55.

Ware Countians are again holding up the tradition of one of Georgia's pioneer counties in forestry. Whether he be a holder of a small or large tract of timber or a home owner in the city, Waycross citizens know that forestry is the foundation of their economy and the price it cost to build such a foundation.

For those who have not paid the price in burned timber, travel in any direction from the "city by the swamp" and tall but scared skeletons remind you of the forests that died and came back.

INITIAL FOREST PRODUCTS WEEK OBSERVED



Governor Ernest Vandiver signs 'Forest Products Week' proclamation. Present are Forest Products Week Committee Chairman Oertell Collins and Georgia Forestry Assn. Executive Secretary Harvey Brown.

October 16-22 was National Forest Products week. The President's proclamation of September 15 marked the initial formal recognition to an industry which affects each individual the world over.

Governor Ernest Vandiver pointed out in his State proclamation that forestry has been a key to Georgia's industrial economy by providing a vast raw material supply and creating employment for thousands of Georgians. Georgia has become a leader in forestry through the scien-



Congressman
Forester

tific management of her forests and in insuring a continuous supply of forest products and services, he added.

With Georgia a recognized forestry leader, it was fitting that a Georgian, Third District Congressman E. L. Forrester, Leesburg, took the initiative in pushing legislation establishing National Forest Products Week. As a member of the House Judiciary Committee and as Chairman of Subcommittee No. 4 of that Committee he brought the above legislation before the House in the closing days of the session.

As a result of Congressman Forester's enthusiastic support of all legislation of value to forestry, he has been made an Honorary Life member in the International Order of Hoo-Hoo.

ARMY CONDUCTS WOOD WEIGHING EXPERIMENT

Timber sales on military lands in the Southeastern States bring in some one and one-half million dollars annually, but administrative costs in disposing of this material has increased considerably in recent years, thus whittling down the revenue that actually goes into our national treasury.

Confronted with this problem, The Corps of Engineers, U. S. Army -- the agency that disposes of forest products grown on military areas -- launched an experiment in which it weighed the products rather than following the traditional scaling method in determining wood volume.

The encouraging results of the experiment point toward an eventual savings of 30 to 40 percent if complete conversion from scaling to weighing on any one military installation is accomplished.

Keith D. Lange, Division Forester of the Corps' South Atlantic Division, said preliminary work began by making several timber sales by weight to determine whether the method could be adapted to the unusual conditions found on military reservations.

Five sizable timber sales, consisting of pine logs, pulpwood and poles, were conducted during a six-month period on two large military reservations with the recognition at the beginning that different species of pine would weigh differently; that large timber would weight differently than small timber; and that important factors such as defect and log lengths could effect weight.

Because of the variance in weight within a given area due to these factors, the Corps' foresters scaled and weighed a "sample" volume of each product to obtain reliable information which could apply to the remaining timber to be harvested in the particular sale tract.

The sale contract, therefore, provided that the government would scale or measure a representative percentage of the timber at the beginning of the operation. The material would then be weighed and the average "weight-volume" relationship per unit of measurement determined.

The gross weight of the wood was divided by the net volume scaled to arrive at this factor. From this time until completion of the particular sale, all material harvested was merely weighed, and the weight factor applied to obtain the volume removed.

Lange said the sales produced some "interesting information." He said that on one sale of pine sawtimber consisting of longleaf with some loblolly intermixed, the average weight of one thousand board feet of pine sawlogs (Scribner Dec. C) was 14,750 lbs. This average was based on about 100 M. B. F. of logs.

"We continued to weigh sawtimber on this reservation," he said, "and it was determined after weighing more than 250 M. B. F. that pine sawtimber in the general area, and of this species and of this size, weighed between 14,000 and 15,500 lbs. per M. B. F.

The government forester said the sales made to date indicate that pine timber will vary in weight to some degree in each localized area. He said it was found that on the Scribner Dec. C Log Rule, large logs weighed less per M. B. F. than small logs. He said the difference between the weight of heartwood and sapwood accounted for part of the variance.

"Another reason," Lange said, "was that in the Scribner Dec. C Log Rule, large logs produce less "overrun" of lumber than small ones, hence there was less waste wood lost per board foot of material when it got to the mill."

In discussing the increasing cost of disposing of forest products on military lands, Lange pointed out that the conventional method of scaling not only called for the scaling itself, but a tabulation in scale books, computation of defect, summation of log volumes, and auditing. "Another reason," he said, "is that many of our military reservations are large and travel by employees in scaling at the many timber sales locations has become a significant part of the expense."

The forester said, "We are favorably impressed by the results obtained on the sales of timber to date. We conclude from the investigation that the weighing of forest products may well prove to be the system that we were looking for ..."

(EDITOR'S NOTE: The Georgia Forestry Commission does not approve or disapprove of the wood weighing method for determining volume and quality. Since conditions vary as to tree specie, season, wood density, log grades, rate of growth, elapse of time between cutting and weighing and other factors, Commission studies are being conducted to learn more about the weight versus scale proposition.)



When and what to thin is valuable information to a woodland owner who plans to carry out good management practices on his woodlot. John Hammond, Georgia Forestry Commission management assistant, Macon, and Pike-Spaulding County Ranger John Osbolt, Zebulon, lecture local woodland owners on value of proper thinning techniques.

Joint Forest Management Program Underway

Recent hardwood control and thinning demonstrations, near Zebulon, initiated a joint forest management program between the Georgia Forestry Commission, SCS, ASC, and Extension Service.

The program is being conducted in 23 selected counties throughout Georgia in an effort to intensify forest management. The needs of each county, determined by the cooperating agencies, determine the forest management practices to be stressed in each county.



Pike-Spaulding County Ranger John Osbolt and Pike County Agent S. M. Craig give woodland owners near Zebulon pointers on proper frilling and spraying of cull hardwood species. Woodland owners include J. H. Brazier and Wilbur Elliott.

Washington and Putnam Counties, Sixth District, Cherokee, Chattooga, and Whitfield Counties, Seventh District; Bacon, Wayne, and Lowndes, Eighth District; Franklin, Hall and Jackson Counties, Ninth District; and Wilkes, and Walton Counties, Tenth District, complete the schedule.

Weed tree control, improved selective cutting practices, and reforestation of idle acres headed the list of needs in the selected counties. Improvement in tree planting methods, general woodland improvement on small farms, and marketing aids were other needs brought out at county meetings.

W. H. McComb, Georgia Forestry Commission management chief stated that Pike County was one of the first counties in the state to practice timber stand improvement and hardwood control on pine land. Recently landowners in this county also have begun to make timber stand improvements in hardwood stands, McComb added.

Counties and districts involved in the program include Bulloch and Jenkins Counties, First District; Dougherty and Tift Counties, Second District; Stewart and Taylor Counties, Third District; Pike and Newton Counties, Fourth District; and Houston and Toombs Counties, Fifth District.

FORESTERS COUNCIL AT SCOUT CAMPS



Seventh District Management Forester, Place, shows scouts how to take d.b.b. of trees.

Georgia Forestry Commission district office and county unit foresters served as forestry and nature merit badge counselors this past summer.

Some 16 foresters instructed at 13 Boy Scout camps throughout Georgia. The foresters, who logged approximately 220 hours, ran their classes over a period of 55 days.

Some 16 foresters participated in 13 Boy Scout camps throughout Georgia.

T. B. Hankinson, Commission assistant management chief in charge of the State's part in the program, stated that this was the first time State foresters had served as counselors on a state-wide basis. Fire control, selective marking, watershed values and tree identification were taught the scouts in addition to the merit badges.

The Scout camps included Alapaha, Allatoona, Bert Adams, Chehaw, Strochan, and the George Lanier Council Camp. J. K. Orr, Lynwood Hayne, McKenzie, O'Hara, Okfenokee, Rainey Mountain, and Thunder rounds out the list of camps.

MACON TO HOST FORESTERS ...

The Georgia Forestry Commission and the City of Macon will be host to the nation's State foresters in 1961. The meeting is tentatively set for October 8-12. Commission Director A. R. Shirley extended the invitation at the recent annual State foresters meeting in Missoula, Mont. Georgia was last host to the annual meeting in 1931 when it was jointly held with Florida.

Gum Outlook | Favorable Demand Fair Prices

Representatives from all segments of the gum naval stores industry attended a 'Gum Outlook' program at Baxley in November. Producers, processors, exporters, dealers, members of trade associations and State forestry agencies were among the 1,000 persons in attendance.

The need for more and stronger producer associations was urged by Judge Harley Langdale, president, American Turpentine Farmer's Assn. Judge Langdale added that these associations should be maintained for the future and that there should be an orderly increase in gum naval stores production.

A steady and favorable demand for gum rosin at fair prices was predicted by H. L. Myer, Chematar Pine Products Corp., New York. In reviewing world supply and demand conditions, Myer pointed out that the demand and price outlook for '61 was good but not to expect the prices that prevailed in 1960. Producers present indicated that Georgia's production would increase some 10-12 percent above 1960. At present, Georgia produces 82 percent of all U. S. gum naval stores.

The fact that processors have a definite and important place in the future of gum naval stores was brought out by Bartow Snooks, Vidalia Gum Turpentine Co., Snooks stated that producers are responsible

for planning uniform and high quality products in consumer trade. He added that processors are interested in doing everything possible to encourage gum rosin and turpentine production to meet U. S. and world needs.

Milton S. Briggs, chief, Naval Stores Branch, U. S. Department of Agriculture, emphasized the present supply and disappearance figures for all types of rosin. He predicted a bright future for gum naval stores if owners would place trees in production to meet present and future needs. Briggs added that a considerable increase is necessary each year to meet needs of rosin consumers throughout the world.

Extension Forester Dorsey Dyer advised timber owners to either work or lease naval stores timber during the coming year. He stated that naval stores is an excellent source of revenue that greatly increases income from slash and longleaf pine trees. Dyer added that present prices make working trees for naval stores attractive and still permits the owner to realize almost as much from his pulpwood and sawtimber after being worked out for naval stores.

Norman Hawley, Program Supervisor, U. S. Forest Service, Valdosta, emphasized that area foresters are available to assist any turpentine producer or farmer in their naval

stores production operation. He pointed out the folly of working small trees, emphasizing that no trees under nine inches should be put into operation.

Ray Shirley, Georgia Forestry Commission Director, advised the group of naval stores operations being conducted at the State forest. He emphasized the need for more information on labor costs and other labor and production factors of value to new producers in determining cost of gum production. Shirley pointed out that Commission foresters are being trained in the production of gum naval stores through the naval stores projects on the State forest. This training will enable the foresters to more ably assist woodland owners in the naval stores areas of the State.

John S. Laws, General Manager Filtered Rosin Products Co., Inc. which was joint host with ATFA and other processing groups, welcomed the naval stores group. Downing Musgrove, Assistant Manager, ATFA, presided.

L. W. Eberhardt, Jr., Associate Director, Agricultural Extension Service, Athens, was moderator of the panel discussions. Panel members included, in addition to those mentioned, Jim L. Gillis, Jr., S. O. Spooner, Lindsay Grace, and Ralph W. Clements.

Preliminary Survey Report

Southwest Georgia's farmers own 84 percent of the forest land; forest acreage remains stable; and timber volume shows decline. However, better fire protection methods have increased the number of softwood trees by 18 percent.

These eye-opening factors reveal SW Georgia's present forest condition and needs in order to obtain potential values, according to Ray Shirley, director, Georgia Forestry Commission. Shirley added that present forest conditions in SW Georgia are of great importance to existing potential forest interest to this area and the State as a whole.

The trends were just released in a preliminary report by A. S. Todd, Jr., chief, Division of Forest Resources Research, Southeastern Forest Experiment Station, Asheville, N. C.

The report shows that 3.1 million acres are in forest land or 54 percent

of the total area in Southwest Georgia. This is only an increase of 10,300 acres over the 1951 report.

However, cutting and mortality has reduced the volume of softwood and hardwoods. Hardwoods have replaced pine on 155,750 acres since '51. In 1960, pine made up at least a fourth of the stand on 65 percent of the forest area compared to 70 percent in '51. Softwood volume has dropped 8 percent and hardwood 5 percent during the past nine years. Approximately 20 percent of the hardwood loss was in connection with land clearing, non-commercial thinning, and site preparation. Current softwood growth is some 9 million cubic feet short of replacing the mortality and volume cut each year.

The report pointed out that the areas still growing pine are better stocked than formerly. The report emphasized the need for improved cutting and management practices to

coincide with growth and fire protection advances.

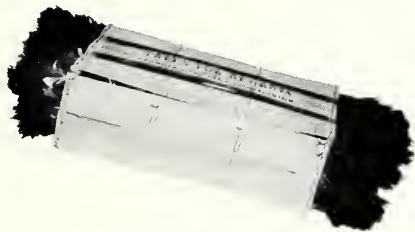
A preliminary report on the Southeast Georgia Unit survey, which was completed in September, is expected shortly, Todd said. He added that work should be completed in the lower Piedmont by late February. The remainder of the study, covering the Piedmont and mountain regions, will be carried out during June, July, and August of 1961.

The survey, which started in August, 1959, is expected to be completed in the latter part of 1961. MacKay B. Bryan, Research Forester, of the Southeastern Forest Experiment Station, U. S. Forest Service, Asheville, is in charge of the study.

The survey is being conducted by U. S. Forest Service personnel with additional backing of the Georgia Forestry Commission, Georgia Forest Research Council, Forestry Association and industry.

New Crates For Seedlings

Thousands of Georgia landowners are receiving their 1960-61 seedling shipments in specially designed wrapping crates. Approximately 68,000 special wire-bound "wrap-around" crates are being put into use this shipping season. The boxes are designed to hold 2,000 and 500 seedlings respectively.



Tests on the "wrap-around" crates, developed by the Georgia

Forestry Commission, show that more efficient packaging and distribution can be obtained. Georgia landowners who received their seedlings in the new type package last year were well pleased, according to Sanford Darby, chief, Reforestation Division of the Forestry Commission.

The "wrap-around" seedling crate is designed so that landowners can remove portions of the seedlings and the remainder be properly protected for future planting. Planters will also find that they can gain access to the contents much easier than trees shipped in standard bales.

From a nursery-management standpoint personnel are able to fasten all packages, graded and packed for shipment, within a given period. This will increase daily nursery output which in turn speeds delivery from nursery to landowner. In the past, nurserymen have been able to lift and grade stock faster than it could be baled.

The "wrap-around" crate requires

no special skill on the part of personnel preparing seedlings for shipment. In addition, no manual or strapping tools are needed for fastening as in past operations.



Commission Director Ray Shirley and Assistant Morgan Nursery Superintendent George Sanders inspect 1960-61 seedling crate.

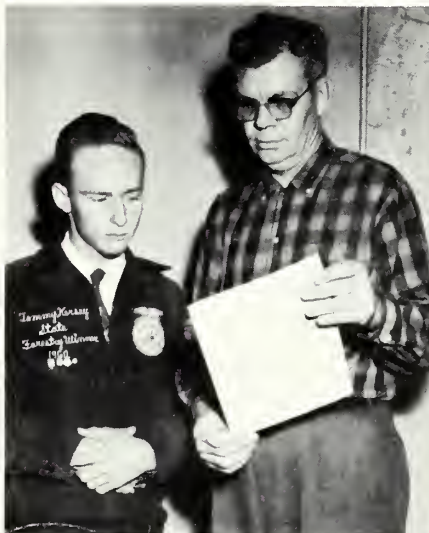
Swainsboro Lad Represents State In Annual Forestry Competition

The 17-year-old Swainsboro lad presented New York City's Mayor Wagner with a Georgia ham, appeared on Dave Garroway's nationally televised show, Today, and spoke to civic clubs and attended special luncheons in Kansas City, St. Louis and Cincinnati.

While visiting those cities during a recent 11-day trip, the Swainsboro High student also presented mayors, congressmen and forestry officials with gavels made from magnolia grown on the Georgia farm of the late Representative Dudley Hughes, founder of the nation's vocational-agricultural training program.

The youth, Tommy Kersey, son of Mr. and Mrs. Jordan Kersey, was representing Georgia as statewide winner in the Seaboard Railroad's annual Home Forestry Project Contest.

Project accomplishments that led to Tommy's selection over some 750 boys competing throughout the state included the planting of 115,000 seedlings, thinning 12.4 acres, hardwood control of 50 acres, selective cutting of 30 acres and construction of three miles of fire breaks.



Tommy Kersey and W. A. Avery

In the expansive project, which he carried out on his father's Emanuel County farm, young Kersey also harvested 16,000 board feet of sawlogs and 34.6 cords of pulpwood.

Tommy won a cash prize of \$275 and his vo-ag teacher, W. A. Avery, also received a cash award. The

teacher praised Tommy for his devotion to his project and termed him "a fine student."

Avery also told of Tommy's plans to spend an extra year in high school to get a more solid background in science and math before entering the School of Forestry, University of Georgia. "He could finish next spring, but he wants a strong foundation," the teacher said.

Tommy's father, who is affiliated with the Emanuel County Unit of the Georgia Forestry Commission, said his son's "heart is in forestry...he wants to work with the Commission after he completes his education...that's all he talks about these days."

The Georgia winner, who placed second in Seaboard's contest last year and also second in Union Bag-Camp Paper Company's Forestry Project competition this year, toured the four cities this fall with winners from North Carolina, South Carolina, Florida and Alabama.

Willard Morris of Homerville was second place winner in the Georgia competition this year. Warren Paulk of Willacoochee was third and Danny Fender of Lakeland placed fourth.

SEEDLING LIFTING

The lifting of the 1960-61 Georgia Forestry Commission seedling crop saw Georgia landowners receiving the highest quality seedlings ever produced by the Forestry Commission. This quality crop includes, for the first time, certain hardwood species.

Commission Director Ray Shirley stated that the adoption of a modified soil management program this past Spring is responsible for the high caliber seedlings. Shirley added that the program meant shifting emphasis from quantity to quality as seeds were given an opportunity to grow at an uniform rate.

Commission Reforestation Chief Sanford Darby stated that the seedlings being shipped have the following specifications: a top of approximately eight inches, a stem diameter of one-quarter inches with a fibrous root system at least six inches long. Decreased seed bed densities, more effective irrigation control and root pruning, and an increased spraying program for fusiform rust were inserted in our management program Darby added.

Hardwood species produced included swamp chestnut oak, northern red oak, sweet gum, sycamore, dog-

wood, green ash, black walnut, and yellow poplar. Softwood species grown were slash, loblolly, longleaf, shortleaf, and Virginia pine, eastern red cedar, and bald cypress.

If the purchaser has to cancel his order, a full refund will be made if the cancellation is made before Jan. 1, 1961. He will be charged 25 percent of the undelivered seedlings after Jan. 1.

Shirley added that landowners can still place their order for seedlings. Planks for ordering pine tree seedlings are available through the Forestry Commission's county rangers. ASC purchase orders will be accepted as well as checks and money orders.

A transportation charge of 25 cents per thousand trees will be made on tree delivery by truck to county units. There is no limit on quantity. However, any purchaser may pick up their seedlings at the nursery location if they desire.

The Commission's six nurseries and their location are Davisboro, near Davisboro; Herty, Ga. 91 at Albany; Hightower, Ga. 53 near Dawsonville; Walker-Page, Ga. 178 near Reidsville; and Morgan, U. S. 41 between Macon and Perry.

CHRISTMAS TREE GROWERS BAND

Georgia Christmas Tree growers have banded together and formed the Georgia Christmas Tree Growers Association. The Association's main objective is to put Georgia grown trees on a competitive basis with northern species.

The newly formed organization will meet in January to elect officers and draw up by-laws, according to temporary Association Chairman Bill Murray, Georgia Agricultural Extension Forester.

Some 30 Georgia Christmas tree growers attended the organizational meeting at Rock Eagle State Park, near Eatonton, in October. The meeting preceded a survey conducted by the Georgia Extension Service which indicated that only 77 of 333 growers were breaking even or making money. Bill Murray pointed out that a good many growers have dropped out of

the business due to lack of knowledge. There is no coordinated research in the field at present, Murray added.

Murray stated that the organization will serve to organize Georgia dealers, coordinate research which in turn will lead to higher quality trees on the Georgia market.

M. C. Stewart, editor, American Christmas Tree Grower's Journal, emphasized the importance of a State Grower's Association. Elimination of duplicated research, pooling of research information and division of work among member organizations are a few of the advantages cited by Stewart.

Dorsey Dyer, Georgia Agricultural Forestry Department Head, presided over the meeting. C. R. O'Kelly, State Agricultural Leader, welcomed the group.

PLANTATION SURVIVAL SURVEY

Georgia is averaging about 70 percent survival in slash and longleaf pine plantations according to the 1960 survival survey. The survey was made by the Georgia Forestry Commission 12 months after initial planting and included samples from 805 pine plantations.

Six casual agents accounted for 73 percent of the 30 percent loss in slash and loblolly pine. Poor planting, drought, competition, cold weather, improper handling of stock and deer and rabbits were the chief mortality causes.

Sanford P. Darby, chief of the Reforestation Division of the Forestry Commission, stated that some of these factors can be controlled. Darby said that through proper supervision, including careful training of field crews, initial seedling survival can be increased.

Of all tree seedlings planted 75 percent were in old fields, 10 percent in pastures or heavy sod, and 15 percent in cut over forest or brushy land.

Of the plantations surveyed, 22 percent of the losses were attributed to poor planting, 22 percent, drought; 14 percent, competition; 8 percent, cold weather; 4 percent, deer and rabbits; and 3 percent, improper handling of planting stock.

Where some land preparation was done an increase in survival was noted. There was a 78 percent survival on those areas that had been disced and harrowed, 76 percent when cut with rotary mower, 75 percent when furrowed, and 72 percent when prescribed burned. These figures are all above the State average of 70 percent.

Of the areas studied, 69 percent had no land preparation. Of the areas that showed signs of some preparation, 13 percent had been disced and harrowed, 9 percent prepared by fire, 4 percent cut with a rotary mower, 2 percent furrowing and 3 percent miscellaneous.

To insure maximum seedling survival, the Commission's local forest ranger will be glad to advise any landowner or reforestation laborers on how to obtain best results in their tree planting program.

Logging the foresters...



Speakers and special guests at the recent dedication of the Cooper Creek Scenic Area were, left to right, seated: Judge T. S. Candler, Congressman Phil Landrum, and Paul Vincent, forest supervisor of the Chattahoochee National Forest. Standing, left to right, are J. C. Holton, vice president of the Atlanta Mens Garden Club; Dr. Charles Wharton, professor of biology, Georgia State College; Jim Vessey, regional forester; Walter Woody, Union County landowner; and the Rev. A. C. Johnson, Dahlonega.



These floats are representative of those entered in recent parades by county forestry units. The Washington County float, left, captured first place in the commercial division of the annual Kaolin Festival parade at Sandersville. The bottom float was entered by the Chatham Unit in Savannah's Fire Prevention parade.



Georgia Forestry Commission foresters participated in mock fire exercises which destroyed some 7,000 acres near Waycross and Claxton. The primary purpose of the exercises was to integrate State personnel and industry fire fighters into an efficient team to battle major fires.



Miss Georgia Forestry, Beverly Ann Holcombe of Buchanan, recently crowned queen of the Georgia Forestry Assn. The queen was accompanied by her mother, Mrs. C. A. Holcombe. Tim Larkins, Delta Airlines, presented Miss Holcombe with her tickets.

LETTERS

Mr. Billy Rowe
Nashville, Georgia

Dear Mr. Rowe:

I can't begin to express my appreciation and the happiness I received from you and the Dads Club sponsoring me in the Georgia Forestry Contest.

It is always a joy and I am proud to be able to represent my county and its people in any contest.

Sincerely yours,

Patsy Giddens

Mr. Jerry Lanier
Assistant District Forester
Statesboro, Georgia

Dear Jerry:

Thank you for your interest in our summer camp. Your program was one of the most talked about features of our section. Through your efforts, many young boys have learned to appreciate more fully our conservation and forestry service.

Sincerely,

Tom Barnett, Jr.
District Scout Executive
Camp Strachan

Mr. F. W. Hubbard, Jr.
Floyd County Forestry Unit

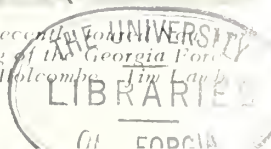
Dear Mr. Hubbard:

Thank you very much for your time and efforts in speaking at our elementary science workshop at Pepperell.

These talks were high points of interest to our science teachers. We believe that the enthusiasm from this workshop will be carried over into the classrooms.

Very truly yours,

Charles F. Anderson, Ch.
Floyd Co. Education Assn.



ANOTHER YEAR OF FORESTRY PROGRESS

1961



acquiring information
concerning the
forestry industry

