

NORTH CAROLINA
AGRICULTURAL EXTENSION SERVICE
ANNUAL REPORT

for

1959.

Period covered: December 1, 1958 to November 30 1959

Name of Project: Farm Forestry Extension Work

Covering work done by J. L. Gray, In Charge, Forestry Extension; W. M. Keller, Head, Management Section*; and Forest Management Extension Specialists W. M. Stanton, R. S. Douglass*, J. C. Jones*, John Gilliam, E. M. Jones, Leonard Hampton, Work of G. W. Smith, Head, Wood Products Section; L. H. Hobbs, Wood Products Extension Specialist; and W. E. Keppler, Wood Products Extension Specialist, covered in separate reports.

Percentage of time devoted to project: 100

Date Submitted: May 24, 1960. Signed: J. L. Gray
Project Leader

Date Approved: _____, 1960. Signed: _____
Asst. State Director of
Extension Work

Date Approved: _____, 1960. Signed: _____
Director of Extension
Work, U. S. Department
of Agriculture

* See Page 11 of report.

A N N U A L R E P O R T
F A R M F O R E S T R Y E X T E N S I O N W O R K
N O R T H C A R O L I N A

December 1, 1958 - November 30, 1959, Inclusive

John L. Gray, In Charge, Forestry Extension
J. C. Jones, Forestry Extension Specialist

David S. Weaver, Director
N. C. Agricultural Extension Service
N. C. State College of Agriculture and Engineering
of the University of North Carolina
and
U. S. Department of Agriculture, Cooperating
State College Station
Raleigh, N. C.

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ANNUAL REPORT

1959

FARM FORESTRY EXTENSION WORK

NORTH CAROLINA

John L. Gray, In Charge, Forestry Extension
J. C. Jones, Forestry Extension Specialist

I. Results or Accomplishments by Major Work Phases

A. Tree Planting

Forest Management Extension staff members devoted approximately 16% of their time to tree planting in 1959.

With the emphasis placed on the Soil Bank and Conservation Reserve programs and the need for restocking idle and poorly stocked land, this phase of the Extension forestry program required more of the staff members' time. It is evident that this will remain an important phase of the program for many years.

During the 1958-59 tree planting season a total of 27,080,300 tree seedlings were ordered on special yellow application blanks distributed by Extension personnel, or were placed by Extension personnel on special offers. This was an increase of 11,458,000 seedlings over the 1957-58 distribution by Extension people. This means that the county Extension staffs were responsible for placing approximately 27% of the total state nursery production. See Exhibit A of the appendix for a summary.

In eight counties the county agents' staffs were responsible for placing over one million pine seedlings each. Anson County

placed orders for 4,169,000 tree seedlings, a figure that represents 1,137,259 more seedlings than were produced by the state nurseries during the 1946-47 planting season. These eight counties and their totals are as follows:

Anson -----	4,169,000
Cumberland -----	1,851,500
Halifax -----	1,114,400
Lincoln -----	1,436,000
Mecklenburg -----	1,794,500
Northampton -----	1,027,500
Rutherford -----	1,538,000
Scotland -----	1,866,000

For complete planting summary by counties see Exhibit B in appendix.

Direct handling of any free seedling program has been discontinued by the Extension Forestry Department. However, local assistance by county Extension staffs is given to industries and other donors making free seedlings available to adult landowners and 4-H Club members in their counties. All counties do not receive free seedlings since the selection of counties is made by the donors.

A large number of planting machines were purchased during the 1958-59 planting year. Some were bought by agencies such as banks, radio stations and implement companies and made available to the landowners through the county agent's office. Others were purchased by individuals going into the contract tree planting business. The fact that machines are available in practically every county of the state has given support to the tree planting program.

Fred E. Whitfield, forestry specialist in the Southeastern District, writes that there was an increase of 41% in the number of seedlings ordered during the 1958-59 tree planting season over that of 1957-58. E. M. Jones, specialist in the Southwestern District,

stated that the increase was roughly 58% there. Mr. Jones also stated that with the increase in tree seedlings planted there was an even greater increase in acreage planted since most planters this year have followed the recommended wider spacing, thus reducing the number of seedlings per acre.

There is an increasing interest in white pine and Fraser fir planting in the mountain counties. As these seedlings become more available to the landowners, it is expected that an increase in planting will result.

The percentage of survival of one- and two-year-old planted pines dropped in 1959, particularly in the southern tier of counties, the greatest loss occurring in the sandhill area. Much of the loss was attributed to poor handling of the seedlings after delivery to the contract tree planter or landowner and to planting methods. Two one-day training schools for contract tree planters were held to give instruction in the proper methods of handling, storage and planting of seedlings. One school was held in Richmond County with 36 contractors present, and the other in Mecklenburg County with 48 contractors in attendance. See Exhibit C for staff and instruction covered in these schools.

B. 4-H Forestry

Forest Management Extension staff members devoted approximately 13% of their total work time to the 4-H phase of the program.

All one hundred counties held forestry training programs for 4-H Club members; and 27,630 club members, an increase of 7% over the previous year, received definite training in forestry from county Extension workers or members of the Forestry Extension staff.

Four-H Club members completed forestry projects and turned in records from all 100 counties of the state. There were 8,119 club members enrolled in forestry projects, with 4,900 projects completed. This is an increase of 10% in completed projects over the previous year.

In the demonstration phase of the 4-H program, 39 counties had an individual or team entrant in district contests. All six Extension districts declared a winner, and each winner received an expense-paid trip to 4-H Club Week held in July at North Carolina State College, Raleigh. The six district winners entered the state competition during 4-H Club Week; and Bob Wilson, from Mecklenburg County, Southwestern District, was state winner. He was given an engraved gold wrist watch.

The fifth annual 4-H Forestry Camp, held at Camp Millstone, August 17 to 22, 1959, was attended by 93 delegates from 92 counties. Twelve assistant county agricultural agents, two from each Extension district, attended the camp as counselors. Those attending were:

Hugh Ables, Cherokee County
Charles Earnest, Surry County
Cyrus Greene, Orange County
Phil Haas, Mecklenburg County
Jerry Hardesty, Currituck County
W. W. Franklin, Harnett County
Ed Nolley, Catawba County
Grover Rodgers, Richmond County
Bill Rogister, Hertford County
H. D. Vernelson, Jones County
Earle Wise, Madison County
Ed Yancey, Johnston County

Members of the Forest Management Extension staff; H. M. Ellis, In Charge, Agricultural Engineering Extension; W. E. Roberts, Sandvik Saw and Tool Corporation; E. W. Davis, F. A. Moehler and

J. A. Pippin of the North Carolina Division of Forestry, served as instructors.

In the record phase of the program, 90 counties selected county winners and awarded medals to them on county achievement days. A long-time record was prepared and entered in state competition by a club member from seven counties. The 1959 long-time record winner was Polly Lee Jones, Duplin County.

C. Brushland Conversion

The Management staff devoted approximately 21% of their work time to this program. The different practices applicable to the different areas of the state were covered in the 1956 annual report.

This program gained considerable momentum during the year and attracted the attention of landowners, professional workers, equipment dealers and operators. Support of equipment dealers and operators provided impetus to this phase of the program, and their cooperation made possible method and result demonstrations in the conversion of brushland to pine. Results obtained with the crawler-type tractor and KG blade have been particularly interesting since its use generally speeded up land preparation work and left the land in good shape for planting or seeding. Less topsoil was moved or disturbed with the use of the KG blade. The availability of contractual service is generally state-wide, except for the mountain counties.

E. M. Jones, forestry specialist in the Southwestern District, reported on a demonstration in Caldwell County on the farm of Mr. Claude Bradshaw:

"The area was selected because of the young poplars. For the control of undesirable hardwood Mr. Bradshaw used 2-4-5-T and 2-4-D mixed with fuel oil. Five acres were treated by four men in twelve hours. Total cost for the demonstration was \$12.00 per acre, including labor and chemicals."

W. M. Stanton, specialist in the Eastern District, reports that eight "Little tree injectors," for the application of herbicides in controlling undesirable hardwoods, were purchased in Bertie County by landowners following a demonstration in the use of various methods of applying chemicals. He also cited other examples of landowners releasing young pines and converting brushland to pine.

Hardwood-control method demonstrations were conducted in many counties, using Ammate and 2-4-5-T chemicals applied in notches and frills. Lenoir County held four demonstrations of this type. In Lenoir County a crew was organized by one of the landowners and has been doing contractual work.

ACP cost-sharing assistance has aided many landowners in their hardwood conversion and control work, and the lack of such funds has kept others from getting the job done. A discussion of ACP funds was made in the 1958 report.

D. Long-Time Cooperators

Approximately 15% of the total work time of the department was spent on this program phase.

The goal of this phase of the management program is to have at least one cooperator in each county. It is a continuing program, and it has been presented in detail in previous reports. Twenty new co-operators were added during the year, making a total of 98. Some counties have two cooperators in this program.

Mr. Lindsley Wagstaff became a cooperator in Person County.

John H. Gilliam, specialist in the Northwestern District, reports:

"A 50-acre demonstration area was set aside on Mr. Wagstaff's farm to demonstrate marketing and utilization of farm timber. A combination marketing job was done for pulpwood and sawtimber, with trees to be left also painted. The sawtimber was tallied to give a volume estimate and pulpwood was marked to be sold by the cord. The buyer purchased both products, getting good-quality sawtimber and good pulpwood yield per acre since each product was selectively marked."

E. Roadside Demonstrations

The Extension forestry staff spent only .3% of their time on this phase.

Five signs were placed this year, giving a total of 69 roadside sign units. Four signs were placed in the Northwestern District and one in the Western District. It is difficult to measure the effect of these sign units on the general public and individual landowners. It was felt that the time required to establish these demonstrations could be spent on other phases of the management program that contributed more to the individual landowners and total Extension program. Units will be established in areas where it is felt that this program will serve the local clientele.

F. Measurement, Harvesting and Marketing

Approximately 17% of the staff members' time was spent on this phase of the program.

Exhibit A of the 1958 Annual Report showed the Forestry Extension Department organized into two sections, Forest Management and Wood Products. The Wood Products Extension Section activities are covered in a separate report.

Advising and assisting woodland owners in measuring and marketing of their forest products is one of our most important jobs. Results

from this phase of the program are quickly measured and evaluated. We recognize the timber buyer and processor (pulpwood dealer, logger and sawmill operator) as our clientele; and we want to know them, work with them, and obtain their cooperation in our programs. The relationship with this group is good, and through this relationship much can be done for the buyer and the seller.

A "Timber Sales Brochure," Exhibit D, was prepared to aid and protect both the buyer and seller of forest products. The sale agreements in the brochure were reviewed and accepted by pulpwood and timber dealers, as well as our own staff, before distribution.

The number of consulting foresters has increased in the state. Their services are giving landowners a greater opportunity to avail themselves of professional advice and assistance in forest management, marketing and utilization.

A recent report by Dr. William Turner, Head of Farm Management Extension, shows an increase of 12% in the farm income from the sale of forest products from 1958 to 1959. This is a greater percentage increase than any other single commodity listed except for cotton, which increased 15%. In 1951, the State Crop Reporting Service reported \$18,000,000 from the sale of farm forest products. In 1955, they reported \$41,000,000; in 1957, \$48,300,000. Their 1958 figure was approximately \$50,000,000. If this trend continues for 1959, forestry will be the third largest farm commodity in this state from the standpoint of gross yearly sales.

G. Forest Insect and Disease Program

The staff members spent approximately 6% of their time on this phase of the program.

As reported in the 1958 annual report, Mr. Fred Whitfield went on leave of absence and enrolled at Syracuse University to take graduate training in the field of forest entomology and pathology. He returned to the staff in August, 1959, and was assigned state-wide responsibility in the field of forest insects and diseases with office at North Carolina State College, Raleigh.

A tentative Extension forest insect and disease program - Exhibit E of the appendix - was outlined and discussed with our staff, School of Forestry faculty and the Departments of Entomology and Pathology of the School of Agriculture and Extension Service at North Carolina State College. The program was also presented to subject-matter specialists of the Southeastern Forest Experiment Station and North Carolina Forest Service.

Diseases of red cedar were discovered in areas throughout the state and in the beds of the North Carolina Division of Forestry nurseries. Diseases in the nursery beds reduced the number of red cedar seedlings available to landowners for the 1958-59 planting season. Diseases in red cedar plantations have affected the marketing of these trees as Christmas trees.

H. Department Administration, Supervision and Program Development

The graduate training program was given added impetus when the sponsor provided funds for two staff members to study during the 1959-60 school year. W. M. Keller, Head, Forest Management Section, entered Duke University in September to do graduate work in the field of personnel and public administration. R. S. Douglass,

specialist in the Southeastern District, entered Duke University in September to study soils. Both members will return to the staff in September, 1960.

In administrative changes, J. C. Jones, specialist in the Northeastern District, assumed duties as Acting Head, Forest Management Section; and Fred E. Whitfield replaced R. S. Douglass as specialist in the Southeastern District.

In October a three-day staff conference was held in the Raleigh offices. For a detailed outline of this conference see Exhibit F of the appendix.

As of November 30, 1959, Forest Management staff members and assignments were as follows:

<u>Name</u>	<u>Title</u>	<u>Area and/or Subject Matter Responsibility</u>	<u>Headquarters</u>
J. L. Gray	In Charge, Forestry Extension	State-wide	Raleigh
W. M. Keller ^{1/}	Head, Forest Management Section	Graduate-study leave	—
J. C. Jones ^{2/}	Forest Management Extension Specialist	Northeastern District	Raleigh
W. M. Stanton	" " " "	Eastern District	Plymouth
R. S. Douglass ^{3/}	" " " "	Graduate-study leave	—
J. H. Gilliam	" " " "	Northwestern District - Christmas trees - state- wide	Wentworth
E. M. Jones	" " " "	Southwestern District	Charlotte
L. H. Hampton	" " " "	Western District	Asheville
F. E. Whitfield	" " " "	Southeastern District - Forest insects and diseases - state-wide	Raleigh

- ^{1/} Graduate-study leave, Duke University
^{2/} Acting Head, Forest Management Section
^{3/} Graduate-study leave, Duke University

II. Activities at the State or Area Level

A. Work with State Extension Supervisors, District Agents and Youth Leaders in Program Planning

During the year each Forest Management specialist met in conference with his district agent to discuss the forestry program to be carried with the agents in his district.

In planning the 4-H Forestry Camp for 1959, conferences were held with the 4-H Club staff and district agents to select county 4-H Club leaders to attend the camp. Mr. John Piland, district agent in the Eastern District, was invited to attend.

B. Assistance Given to or Received from Other Subject-Matter Specialists and Research Personnel

In October, 1959, a three-day short course for the Forest Management Extension personnel was held. Dr. Bruce Zobel and Robert McElwee of the School of Forestry conducted the course. A one-day field day was made with the cooperation of the North Carolina Pulp Company. See Exhibit G of the appendix. This was the best-received short course given the management staff.

Assistance and cooperation was given Fred Whitfield in planning the insect and disease program by Extension and School entomologists and pathologists. Dean R. J. Preston and Dr. T. E. Maki of the School of Forestry gave guidance to the development of the program, also.

As in the past, several subject-matter departments contributed their time and services to the success of the 1959 4-H Forestry Camp. H. M. Ellis, In Charge, Agricultural Engineering Extension, served

as an instructor in a class on better fencing techniques. Mr. Anderson supervised the barbecuing of chickens to feed 200 boys and girls. Ralph Mills, photographer from the Visual Aids Department, recorded the camp activities. The films and pictures were used on TV and in newspapers throughout the state.

J. C. Jones, specialist in the Northeastern District, assisted the School of Forestry in conducting a short course in "Forest Genetics and Its Application to Forest Management," by making arrangement for the lectures, housing of participants and coordinating the three-day program. He served the same functions for the "Fifth Southern Conference on Forest Tree Improvement," a two-day meeting held on the North Carolina State College campus.

C. Assistance Given to or Received from Various State, Federal and Other Agencies or Interest Groups

American Forest Products Industries through the State Forest Industries Committee wanted to publish a how-to-do-it booklet and initiate a "Busy Acres" publicity program in North Carolina. They also wanted to expand the tree farm program to 500 certified tree farmers. The management staff aided the tree farm program by inspecting 48 farms and submitting completed inspection reports to the North Carolina Tree Farm Committee for certification. Staff members helped edit the "Busy Acres" booklet for North Carolina and furnished a mailing list, made up by county Extension agents, of people who had not shown previous interest in timber growing.

At the request of the North Carolina Forest Service a two-week short course in forest management was held for thirty forest

rangers from the eastern part of the state. Staff members from the School of Forestry and Entomology Extension served on the instructional staff. For the program outline and staff listing, see Exhibit H in the appendix.

A one-day marketing procedure training school was held for forty-seven Farm and Home Administration Coastal Plain supervisors. As a result of this school, the F. H. A. adopted a policy to call in a consulting or state service forester to advise and assist their clients when making a timber sale. See Exhibit I for this program.

John Gray, In Charge, Forestry Extension, served as meeting chairman of the annual meeting of the North Carolina Forestry Association. A panel presentation and discussion, "Effective Methods for Preparing Cutover Land for Replanting," was held, with Don S. Matheson, county agricultural agent, Orange County, as moderator. A tour of demonstration areas was held, with members of the management staff assisting.

John H. Gilliam, specialist in the Northwestern District, helped organize the North Carolina Christmas Tree Growers' Association. The association began with thirty-seven members.

On request from the Christmas Tree Growers' Association and Mr. Gilliam's assistance, permission was obtained from the North Carolina Division of Forestry to sell Christmas trees grown from state nursery stock with the roots attached.

A trial planting of Scotch pine, using five different strains from Pennsylvania, was made by Mr. Gilliam in the upper Piedmont,

mid-Piedmont and upper Coastal Plain areas of the state. It will be determined how successfully this species can be grown in these areas of the state.

A report on "Progress in the Forestry Extension Program of the School of Forestry and the Agricultural Extension Service" was given to the Forest Management Advisory Committee to the School of Forestry. See Exhibit J of the appendix for this report and a list of members of the Advisory Committee. Your special attention is invited to this report.

III. Assistance Given County Extension Workers with Both Adult and Youth Work

During the year the county Extension workers are contacted by the specialist to discuss program planning. Close personal service is given to the agents whenever it is needed. Once a program is planned, assistance is given in obtaining industry support for demonstrations, conducting the demonstrations and follow-up work needed in the program. John Gilliam of the Northwestern District reports:

"A monthly TV series was started over Channel WFMY, Greensboro, on the 4-H forestry program in the district. Each 4-H agent planned a program with his 4-H forestry boys for a program in this series."

Mr. Gilliam also prepared a series of slides on management practices necessary in growing Fraser fir and white pine for Christmas trees.

L. A. Hampton, Western District specialist, assisted the state 4-H leader, Charles Taylor, in the purchase and management of a 200-acre tract of timber on Rich Mountain near Brevard. The area will be used for 4-H forestry projects and demonstrations and for recreation.

IV. Contribution to Regional and National Extension Program

John L. Gray, In Charge, Forestry Extension, was reelected chairman

of the Southern Extension Forestry Council in October, 1958, to serve until 1962. He held a meeting of the Executive Committee in February, 1959, at Columbia, South Carolina. A report on the 1958 Southern Extension Foresters' Workshop was prepared and circulated to all Southern Extension foresters and Extension directors. Mr. Gray was instrumental in establishing the ECOP forestry subcommittee of the American Association of Land-Grant Colleges and Universities and was appointed as one of two state Extension foresters to serve as adviser to this subcommittee.

Mr. Gray organized the taking of an opinion poll of 69 Extension foresters on the question of division affiliation in the national Society of American Foresters. The poll indicated that affiliation with the Society's Division of Education was desired. The Society and Division officers were advised of the results of this poll, and the Extension foresters were invited to become members of this division and attend its sessions at the national meetings.

During the year the Department was awarded a three-year A.M.A. national program development contract in forest products marketing. Its purpose is to develop methods and materials for Land-Grant colleges to conduct Extension programs with the lumber industry and one other segment of the forest products industry. Details of this project are covered in project plans of work and reports under A.M.A. Contract 12-05-300-33.

PROGRESS IN FOREST PLANTING
NORTH CAROLINA
1950 to 1959

<u>Winter and Spring Planting Season</u>	<u>Total Seedlings Distributed^{1/}</u>	<u>Total Placed by Extension Personnel^{2/}</u>
1949-50	11,765,000	4,212,000
1950-51	15,107,000	3,706,000
1951-52	15,102,000	4,142,000
1952-53	13,480,000	3,544,000
1953-54	18,003,000	4,365,000
1954-55	26,880,000	5,817,000
1955-56	38,650,000	5,798,000
1956-57	59,273,000	15,830,000
1957-58	83,761,000	15,522,000
1958-59	98,000,000	27,080,000
1959-60	83,057,000 97,000,000	30,427,800 Not compiled until spring

- ^{1/} These figures include Tennessee Valley Authority seedlings distributed in the fifteen Valley counties. This was discontinued after 1956-57 planting season.
- ^{2/} County Extension personnel contacts are primarily with smaller land-owners. Number of orders placed by Extension personnel has ranged from 45% in early 1950's up to 69% of total orders received in recent years.

COOPERATIVE EXTENSION WORK
IN
AGRICULTURE AND HOME ECONOMICS
STATE OF NORTH CAROLINA

NORTH CAROLINA STATE COLLEGE OF
AGRICULTURE AND ENGINEERING.
NORTH CAROLINA COUNTIES AND
UNITED STATES DEPARTMENT OF
AGRICULTURE COOPERATING

EXTENSION SERVICE
HOME DEMONSTRATION WORK

State College Station
Raleigh, N. C.
July 8, 1959

To: All County Agricultural Agents
From: Walt Keller, Forestry Extension Specialist
Subject: Summary of Tree Seedlings Ordered Through Extension Personnel
during the 1958-59 Planting Season
Enclosures: Planting summary and several recent forestry publications

During the past 1958-59 planting season a total of 27,080,300 tree seedlings were ordered on special yellow application blanks distributed by Extension personnel or were placed by Extension personnel on special offers, such as the Halifax Paper Company matching offer. A list of the number of seedlings placed in each county is attached.

I would like to point out that in eight counties - Anson, Cumberland, Halifax, Lincoln, Mecklenburg, Northampton, Rutherford and Scotland - the Extension staffs were responsible for placing over one million seedlings. I would like to single out Anson County for special mention. John Potter and his staff placed orders for 4,169,000 tree seedlings for planting in their county. This represents a tremendous effort, and becomes of increasing significance when we look back and see that as late as the planting season of 1946-47 the entire production of tree seedlings in the state of North Carolina was only 3,029,714.

I am also enclosing several recent forestry publications, which you may find of interest. I am sending these as a reference copy for your office. Unfortunately, we have no additional copies of any of these publications. If you feel you would like additional copies, you might write directly to the office which published them and see if they can supply you. In most cases, however, these publications are good only as a reference for you. They are not written in a manner which would make them good for general distribution.

I call your particular attention to the bulletin, "Insect Enemies of Southern Pines." This is excellent and has been reviewed by Dr. George Jones, Extension entomologist, and comes to you with his approval.

EASTERN DISTRICT

County	: Appli- : : cations :	Seedlings ordered
Beaufort	: 5 :	7,000
Camden	: 3 :	43,000
Carteret	: 5 :	10,500
Chowan	: 4 :	9,500
Craven	: 5 :	82,000
Currituck	: :	
Dare	: 5 :	4,000
Gates	: 7 :	38,000
Hyde	: :	
Jones	: 3 :	8,000
Onslow	: 4 :	37,000
Pamlico	: 6 :	4,000
Pasquotank	: 1 :	2,000
Perquimans	: 1 :	500
Tyrrell	: 1 :	500
Washington	: 3 :	3,500
District	: :	
total	: 53 :	249,500

NORTHEASTERN DISTRICT

County	: Appli- : : cations :	Seedlings ordered
Bertie	: 11 :	60,000
Edgecombe	: 47 :	137,000
Franklin	: 6 :	49,000
Granville	: 77 :	615,500
Greene	: :	
Halifax	: 113 :	1,114,400
Hertford	: 37 :	171,500
Johnston	: 19 :	257,000
Lenoir	: 29 :	90,000
Martin	: 8 :	13,000
Nash	: 13 :	32,500
Northampton	: 131 :	1,027,500
Pitt	: 5 :	16,500
Vance	: 5 :	52,000
Wake	: 9 :	10,000
Warren	: 41 :	413,900
Wayne	: 57 :	318,500
Wilson	: 3 :	6,500
District	: :	
total	: 611 :	4,384,800

SOUTHEASTERN DISTRICT

County	: Appli- : : cations :	Seedlings ordered
Anson	: 147 :	4,169,000
Bladen	: 47 :	208,000
Brunswick	: 9 :	26,000
Columbus	: 11 :	124,000
Cumberland	: 36 :	1,851,500
Duplin	: 7 :	21,000
Harnett	: 15 :	291,000
Hoke	: 18 :	112,500
Lee	: 12 :	69,500
Montgomery	: 118 :	975,500
Moore	: 35 :	461,500
New Hanover	: 5 :	18,000
Pender	: 9 :	223,000
Richmond	: 46 :	833,000
Robeson	: 25 :	162,500
Sampson	: 61 :	551,000
Scotland	: 46 :	1,866,000
District	: :	
total	: 647 :	11,963,000

NORTHWESTERN DISTRICT

County	: Appli- : : cations :	Seedlings ordered
Alamance	: 9 :	41,000
Alleghany	: 41 :	230,000
Ashe	: 1 :	10,000
Caswell	: 11 :	43,000
Chatham	: 26 :	344,000
Davidson	: 4 :	8,000
Durham	: 2 :	82,000
Forsyth	: 13 :	47,000
Guilford	: 18 :	35,500
Orange	: 13 :	156,000
Person	: 22 :	82,500
Randolph	: 33 :	94,500
Rockingham	: 46 :	190,500
Stokes	: 7 :	44,000
Surry	: 15 :	71,500
Wilkes	: 70 :	141,500
Yadkin	: 11 :	44,500
District	: :	
total	: 342 :	1,665,500

SOUTHWESTERN DISTRICT

County	: Appli- : : cations :	Seedlings ordered
Alexander	: 4 :	18,000
Burke	: 10 :	62,500
Cabarrus	: 4 :	6,000
Caldwell	: 31 :	206,000
Catawba	: 28 :	171,000
Cleveland	: 56 :	606,000
Davie	: 17 :	44,000
Gaston	: 24 :	62,000
Iredell	: 21 :	253,000
Lincoln	: 71 :	1,436,000
McDowell	: 17 :	55,500
Mecklenburg	: 75 :	1,794,500
Polk	: 45 :	634,000
Rowan	: 24 :	244,000
Rutherford	: 151 :	1,538,000
Stanly	: 4 :	4,000
Union	: 42 :	514,000
District total	: 624 :	7,648,500

STATE TOTAL : 2,657 : 27,080,300

WESTERN DISTRICT

County	: Appli- : : cations :	Seedlings ordered
Avery	: 17 :	92,500
Buncombe	: 38 :	49,000
Cherokee	: 38 :	170,000
Clay	: 10 :	31,500
Graham	: 1 :	500
Haywood	: 45 :	63,500
Henderson	: 43 :	97,500
Jackson	: 18 :	140,500
Macon	: 34 :	75,000
Madison	: 13 :	35,000
Mitchell	: 49 :	174,000
Swain	: 6 :	7,000
Transylvania	: 20 :	104,000
Watauga	: 34 :	82,000
Vancey	: 14 :	47,000
District total	: 380 :	1,169,000

TREE PLANTING TRAINING SCHOOL

November 18 and 19, 1959

Conducted by:
North Carolina Forest Service,
North Carolina Agricultural Extension Service,
North Carolina State College School of Forestry

- I. Purpose of this training school ----- F. H. Claridge, State Forester
- II. Nursery preparation of trees for shipment and delivery procedure -----
P. A. Griffiths, Assistant State Forester, Management
- III. Care of trees on arrival ----- Nov. 18 - Harold Nelson, Chief Forester,
A. Out-of-ground storage North Carolina Pulp Company
B. Heeling in Nov. 19 - A. T. Davison, Jr., Consulting
C. Cold storage Forester, Durham
- IV. Preparation of trees for field planting ----- Nov. 18 - Dr. T. E. Maki, School
A. Grading for size and disease freedom of Forestry, N. C.
B. Dipping and weevil-control treatment State College
C. Foliage clipping Nov. 19 - John Gray, State Ex-
D. Care of trees at the planting site tension Forester
- V. Field planting technique ----- Nov. 18 - Harold Nelson
A. Hand planting Nov. 19 - A. T. Davison, Jr.
B. Machine planting
C. Crew organization, equipment,
crew training and supervision
- VI. ACP and Soil Bank specifications and inspection ----- Lyell Hicks, Manage-
ment Forester, N. C. Division of Forestry
- VII. Contract or agreements ----- Nov. 18 - J. C. Jones, Head, Forest Management
Extension
Nov. 19 - Chris Goodwin, Regional Forester,
N. C. Division of Forestry

TIMBER SALES PROCEDURE
BROCHURE

Prepared by:

John L. Gray, L. H. Hobbs
and J. C. Jones
Extension Forestry Department,
North Carolina Agricultural
Extension Service
State College
Raleigh, N. C.

FORESTRY MARKETING ASSISTANCE AVAILABLE

County Agricultural Agents

The County Agricultural Agent and his Assistants can assist and advise you on many of your forestry problems. They can help you determine whether or not a sale is practical and what products will be most profitable to harvest. They can suggest whom to contact if trained forestry help is needed. The agents are familiar with the local woodland conditions, marketing practices and know most of the local buyers. For special problem cases, programs, tours, demonstrations, etc., the Forestry Management Extension Specialist is available through the County Agent. These specialists, their headquarters and counties each covers are listed as follows:

Forestry Management Extension Specialist - County Agricultural Agent's Office,
Plymouth, N. C.

Beaufort	Dare	Pasquotank
Camden	Gates	Perquimans
Carteret	Hyde	Tyrrell
Chowan	Jones	Washington
Craven	Onslow	Bertie
Currituck	Pamlico	Hertford
		Martin

Forestry Management Extension Specialist - County Agricultural Agent's Office,
Clinton, N. C.

Anson	Harnett	Pender
Bladen	Hoke	Richmond
Brunswick	Lee	Robeson
Columbus	Montgomery	Sampson
Cumberland	Moore	Scotland
Duplin	New Hanover	

Forestry Management Extension Specialist - North Carolina State College, State
College Station, Raleigh, N. C.

Edgecombe	Johnston	Vance
Franklin	Lenoir	Wake
Granville	Nash	Warren
Greene	Northampton	Wayne
Halifax	Pitt	Wilson

Forestry Management Extension Specialist - County Agricultural Agent's Office,
Charlotte, N. C.

Alexander	Davie	Polk
Burke	Gaston	Rowan
Cabarrus	Iredell	Rutherford
Caldwell	Lincoln	Stanly
Catawba	McDowell	Union
Cleveland	Mecklenburg	

Forestry Management Extension Specialist - County Agricultural Agent's Office,
Wentworth, N. C.

Alamance
Alleghany
Ashe
Caswell
Chatham
Davidson

Durham
Forsyth
Guilford
Orange
Person
Randolph

Rockingham
Stokes
Surry
Wilkes
Yadkin

Forestry Management Extension Specialist - County Agricultural Agent's Office,
Asheville, N. C.

Avery
Buncombe
Cherokee
Clay
Graham

Haywood
Henderson
Jackson
Macon
Madison

Mitchell
Swain
Transylvania
Watauga
Yancey

Service Foresters, North Carolina Division of Forestry

These men are available on request to examine your woodlands and help you decide what steps to take in making a sale. In addition, they can select, mark and measure trees ready for sale, and give you a volume report. In carrying out this marking service, the landowner is required to pay for the marking paint used at \$2.00 per gallon and furnish one man to help.

In sawtimber, there is no charge for the first 20,000 board feet marked and measured. Above this, the charge is \$0.50 per 1,000 board feet marked.

In pulpwood, there is no charge for the first 10 cords marked. Above this, the charge is \$0.15 per cord marked.

State employees do not cruise or appraise timber for sale on land that is to be sold, for estate settlement, for settlement of fire damage or trespass, or to help establish real estate values.

The State Service Forester can devote only five days of time a year to any one landowner. Each forester has a large area to cover and stays pretty well booked up; so if you need him, get in touch with him as early as possible in preparing for a timber sale.

The State Service Forester for your county may be contacted through the County Forest Ranger, or by writing to the District office. The District offices in North Carolina and counties served by each are listed as follows:

District 1

Service Forester - North Carolina Division of Forestry, Box 7146, Asheville, N.C.

Buncombe
Henderson
Madison

McDowell
Mitchell
Polk

Rutherford
Yancey

District 9

Service Forester - North Carolina Division of Forestry, Box 936, Sylva, N. C.

Cherokee	Haywood	Swain
Clay	Jackson	Transylvania
Graham	Macon	

District 10

Service Forester - North Carolina Division of Forestry, Box 47, Lexington, N. C.

Davidson	Iredell	Rowan
Guilford	Randolph	

District 11

Service Forester - North Carolina Division of Forestry, 405 West Franklin Street, Box 307, Chapel Hill, N. C.

Alamance	Granville	Vance
Durham	Orange	Wake

District 12

Service Forester - North Carolina Division of Forestry, Box 755, Belmont, N. C.

Cabarrus	Gaston
Catawba	Stanly

Private Consulting Foresters

At times it is advisable for a landowner to hire a Consulting Forester to work for him. A consultant can be hired by the day, on a contract basis, or on a commission basis in the event of a timber or timber and land sale or purchase. He can serve in many situations where a public forester cannot, such as trespass cases, establishing real estate values and acting as a business agent. Most of them are prepared to offer almost any type of technical or business service needed in connection with owning and operating woodlands.

Following is a list of consulting foresters in North Carolina:

Alexander, Tom W., Waynesville
Altman, James A. Starmount Realty Company, Greensboro
Boswell, A. W., M. C. Braswell Company, Agriculture Building, Battleboro
Brown, Max T., Box 214, Louisburg
Carlson, Elmer J., Route 5, Hendersonville
Chalfant, J. W., 3135 Sussex Road, Raleigh
Coile, T. X., Route 3, Box 376, Durham
Cook, Francis J., 402 Gates Street, Salisbury
Crank, P. F., Point Harbor
Davison, A. T., 3004 Norwich Way, Hope Valley, Durham
Frankenfield, H. B., Tryon
Graeber, Robert W., Guilwake Forests, 303 Hillcrest Road, Raleigh
Gustafson, Robert, Eastern Forestry Company, Hertford
Hafer, Alvin B., Laurinburg
Harris, Cecil, Spring Hope
Herelevich, Victor W., 3627 Stratford Boulevard, Wilmington
Hobbs, J. E., 2628 Kilgore Avenue, Raleigh

District 2

Service Forester - North Carolina Division of Forestry, 204 Federal Building,
Box 594, Lenoir, N. C.

Alexander	Burke	Watauga
Alleghany	Caldwell	Wilkes
Ashe	Surry	Stokes
Avery		

District 3

Service Forester - North Carolina Division of Forestry, 5 Federal Building,
Box 664, Rockingham, N. C.

Anson	Lee	Richmond
Chatham	Montgomery	Scotland
Hoke	Moore	

District 4

Service Forester - North Carolina Division of Forestry, Race Track Road,
Box 173, New Bern, N. C.

Beaufort	Duplin	Onslow
Carteret	Jones	Pamlico
Craven	Lenoir	

District 5

Service Forester - North Carolina Division of Forestry, Route 3, Box 88,
Rocky Mount, N. C.

Edgecombe	Halifax	Pitt
Franklin	Nash	Warren
Greene	Northampton	Wilson

District 6

Service Forester - North Carolina Division of Forestry, Lumberton Road,
Box 1046, Fayetteville, N. C.

Cumberland	Johnston	Wayne
Harnett	Sampson	

District 7

Service Forester - North Carolina Division of Forestry, Kramer Building,
Box 516, Elizabeth City, N. C.

Bertie	Gates	Pasquotank
Camden	Hertford	Perquimans
Chowan	Hyde	Tyrrell
Dare	Martin	Washington

District 8

Service Forester - North Carolina Division of Forestry, Chadbourn Highway,
Box 628, Whiteville, N. C.

Bladen	Columbus	Pender
Brunswick	New Hanover	Robeson

Hook, Walter W., Jr., 4819 Buckingham Drive, Charlotte
Holmes, Malcolm T., Jr., 5332 East Lakeside Drive, Raleigh
Hudgens, Tom A., Flat Rock, Commercial Foresters, Inc.
Jackson, Gorham E., 604 West Main Street, Washington
Johnson, Ralph S., c/o McNair Investment Company, Laurinburg
Loughead, Harvey J., 339 Vanderbilt Road, Biltmore Station, Asheville
Marshburn, Walter J., Jr., 206 West Surginor Road, Rockingham
Maughan, William, 5 Sylvan Road, Durham
Moore, M. S., Route 3, Box 851, Green Springs Road, New Bern
Morin, R. A., 2532 Sunset Avenue, Greenville
Nash, Nelson, Smithfield
Pettigrew, George W., Route 5, Raleigh
Pew, Douglas E., Whiteville
Price, H. R., Soco Street, Asheville, Commercial Foresters, Inc.
Stingley, J. M., 116 Bayshore West, Jacksonville
Stuart, Edward, Jr., Hertford
Traylor, Don F., Southern Pines
Utley, William H., Box 645, 803 Clark Avenue, New Bern
Wasilik, John J., Franklin
Whitman, J. Atwood, Glendon or Box 176, Warsaw
Williams, John F., Windsor
Wood, Richard A., 18 Buckingham Road, Asheville, Commercial Foresters, Inc.

Industry Foresters

Advice and marking service can be obtained, free of charge (including marking paint), through the pulp and paper industry or their respective pulpwood dealers, on pulpwood sales to them. Many pulpwood dealers are graduate foresters or they hire foresters to work for them. These services may be obtained by writing to the individual company or by contacting a local pulpwood dealer. The County Agricultural Agent can generally put you in touch with those who offer this service in your individual county.

SAMPLE OF INVITATION TO BID ON TIMBER

TIMBER FOR SALE

I, John Doe, Route 1, Timberville, N. C., offer for sale to the highest bidder, certain standing timber on the Doe Home Place, and situated across the hard surfaced road, in front and to the right of the Doe Home.

LOCATION:

In Forest County, N. C., approximately 8 miles from Timberville, N. C., and about 2 miles from Poplartown, N. C.

TIMBER:

The timber consists of the following:

Pine - 300 trees scaling 75,828 bd. ft. and includes all trees 12 inches and larger in diameter at stump 8 inches above ground.

Poplar -- 67 trees scaling 9,616 bd. ft. and includes all trees 14 inches and larger in diameter at stump 12 inches above ground.

Total bd. ft. pine and poplar---85,444

QUALITY:

The above timber is of excellent quality - tall, clean stem, and large size. The pines average 252.7 board feet per tree. The poplar average is 143.5 feet per tree.

The above estimate of timber volume is based on a 100% cruise. It is shown here for information only and is not to be construed as implying or guaranteeing any specific amount of timber by the owner.

INSPECTION:

I, the undersigned, will show the timber to any or all prospective buyers by appointment. Call me at Timberville 22353 any week day between 9:00 A. M. and 6:00 P. M.

CUTTING TIME

ALLOWED:

A period of one year (12 months) from time of signing contract will be allowed for cutting. Extension of time: Additional time will be granted upon the payment of \$50.00 per month for a period

not to exceed one year (12 months).

TERMS:

Five (5) per cent with Bid.
Balance - ninety-five (95) per cent
upon signing of contract.

BIDS:

Sealed bids will be received until
12 o'clock - Noon Saturday, October
26th, 1959. All bids should be addressed
to John Doe and plainly marked "Timber
Bid" on lower left corner of envelope
containing bid. Check made to John
Doe in the amount of five (5) per cent
of bid must accompany bids which will
be opened promptly at 12 o'clock -
Noon, Saturday, October 26th, 1959 on
the front porch of the Doe Home. The
owner reserves the right to accept or
reject any or all bids. Bids and checks
not accepted will be returned promptly.

I invite your inspection, appraisal
and Bid.

Signed:

John Doe, Owner

Address: Route 1, Timberville, N. C.
Phone: Timberville 22353

SAMPLE
TIMBER SALE AGREEMENT

State of North Carolina, _____
County.

This conveyance, made this _____ day of _____, 1956, by _____ and _____ his wife of _____ County, State of North Carolina, parties of the first part, hereinafter referred to as Sellers, to _____ of _____ County, State of North Carolina, party of the second part, hereinafter referred to as Buyer, WITNESSETH: That the said _____ and _____, his wife, part _____ of the first part, for the sum of _____ Dollars (_____), and other valuable consideration, have bargained and sold, and by these presents do bargain, sell and convey to _____ and his/her/their successors and assigns,

Article I

All _____ trees to be cut have been marked by the Seller or his agent with a yellow paint spot approximately 4 feet from the ground and on the stump just above the ground line. No timber or trees, regardless of species, are to be cut except those marked with paint by the Seller or his agent as outlined above.

Article II

All trees or timber designated for cutting being situate on that tract or parcel of land belonging to said par _____ of the first part, lying and being in _____ Township, _____ County, State of North Carolina, adjoining the lands of _____ and others and bounded as follows:

Article III

The Buyer agrees:

1. To pay the Seller the sum of \$ _____
for the above-designated trees. Payment shall
be made in the following manner:

\$ _____ upon execution and delivery
of Sales Agreement or deed.

2. To pay the Seller for any trees not design-
ated for cutting, and which are _____, according
to the following true pre-estimate of value schedule:

Minimum diameter in inches:	
outside bark at point not :	
more than 3 inches above :	Price per
ground line :	Tree
6 to and including 11.9 :	
12 to and including 17.9 :	
Over 17.9 :	

3. To waive all claim to the timber or trees
covered in this sale agreement unless cut, paid
for and removed on or before _____,
19____, unless written extension of time is granted
by the Seller.

4. To suppress immediately any fires origi-
nating from acts or negligence of the Buyer or his
agents and to pay in full for any damages to young
trees or other property of the Seller caused by
any such fire.

5. To protect all trees not designated for
cutting from unnecessary injury in logging and
milling operations.

6. To repair damage and otherwise restore
ditches, fences, roads, bridges or other improve-
ments damaged beyond ordinary wear and tear by
the Buyer or his agents, to a state or condition
at least equal to that now existing.

7. To pull back into the cutting area all
tree tops, limbs and debris dropped by the Buyer
or his agents into cultivated fields, pastures
or other open land areas not designated as wood-
lands.

8. Not to assign this agreement in whole or in part without the written consent of the Seller.

9. All tops resulting from cutting the timber covered in this agreement remain the property of the Seller unless specifically stated otherwise herein.

10. Slabs, edgings and sawdust developing in cutting of the timber covered in this agreement shall remain the property of the Seller.

Article IV

The Seller agrees:

1. To guarantee title to all trees designated above for cutting and to defend such against any and all claims for taxes, mortgages, or any other legitimate encumbrances at his own expense.

2. To grant to the Buyer or his agents during the life of this agreement, the right of ingress and egress across and upon the sale area and any adjacent property of the Seller for all men, materials, and logging and sawmilling equipment, but specifically reserves the right to approve the location of any new roads across cultivated fields or pastures.

Article V

The Buyer and Seller mutually agree that in case of dispute over the terms or intent of this agreement, final decision shall rest with an arbitration board of three persons - one to be designated by each party to this agreement and the third to be selected by the first two designated. It is further mutually agreed and understood that the expenses for such arbitration will be borne by the party who has, in the judgment of the arbitration board, failed to comply with the terms of this conveyance. However, if the arbitration board finds that the terms of the contract have been fulfilled, then the party requesting arbitration will bear any and all costs of such action.

In witness hereof I/we hereunto set my/our hand and seal.

Signed in duplicate this _____
day of _____, 19____,

But in making this agreement it is to be understood that the Seller agrees to deliver to the Buyer the title to the property in the form of a deed of conveyance, and the Buyer agrees to accept the same.

(Witness) (Seller) (Seal)

(Witness) (Seller) (Seal)

(Witness) (Buyer) (Seal)

1. To guarantee title to all lands designated above for selling and to defend such against any and all claims for taxes, mortgages, or any other legitimate encumbrances of his and his heirs.

2. To warrant to the Buyer or his agents during the life of this agreement, the right of inheritance and to defend such against any and all claims for taxes, mortgages, or any other legitimate encumbrances of his and his heirs, and to defend the same against any and all claims for taxes, mortgages, or any other legitimate encumbrances of his and his heirs.

Article V

The Buyer and Seller mutually agree that in case of dispute over the terms or intent of this agreement, final decision shall rest with an arbitration board of three persons - one to be designated by each party to this agreement and the third to be selected by the first two designated. It is further mutually agreed and understood that the arbitration board shall be composed of one person from each party who has, in the judgment of the arbitration board, failed to comply with the terms of this agreement. However, if the arbitration board finds that the terms of the agreement have been fulfilled, then the party requesting arbitration shall pay all costs of arbitration.

In witness whereof the parties have signed their names and seals.

Witness in duplicate this _____ day of _____ 19____

SAMPLE
PULPWOOD - TIMBER SALE AGREEMENT

State of North Carolina, _____ County.

This conveyance, made this _____ day of _____, 1959, by _____ and his wife _____ of _____ County, State of North Carolina, hereinafter called the Seller, to _____ of _____ County, State of North Carolina, hereinafter called the Buyer, WITNESSETH: That the Seller and the Covenant on his part does hereby sell and convey unto the Buyer, his or its heirs, successors or assigns all the merchantable forest products as designated hereinafter on the premises described:

Section A.

Article I: The property included in this sale agreement as designated by the Seller is described as follows:

Section B.

Article I (Choose option that applies)

Option a - Clear cutting

1. In consideration of the sum of \$ _____ paid to the Seller by the Buyer, the Seller conveys under the terms of this agreement the forest products hereinafter described in this option.

2. Size limitations according to species as follows:

3. If seed trees are to be left, they shall be so designated by the Seller in a manner agreed to by the Buyer.

Option b - Selective cutting

1. All trees to be (cut) (left) shall be marked by the Seller or his agent with a paint spot approximately four feet from the ground and on the stump just above the ground line.

Section C.

Article I

If the purchase agreement is based on prices per unit of measurement, the following provision shall apply to this agreement. The Buyer agrees to pay the Seller:

- a. The sum of \$ _____ per standard cord for pine pulpwood,
\$ _____ per standard cord for hardwood.
- b. The sum of \$ _____ per M Bd. Ft. for pine sawtimber, \$ _____
per M Bd. Ft. for hardwood sawtimber.
- c. The sum of \$ _____ per M Bd. Ft. for _____ logs, \$ _____
per standard cord for _____ laps.
- d. Sawlogs to be measured by _____ Log Rule; standard
cord 128 Cu. Ft.

Article II

The Buyer covenants and agrees that under Section C, Article I, he will furnish to the Seller a statement showing the volume removed and will pay the Seller for the same at the stipulated and agreed rates, and the Seller will have the right to verify the statements so made by the Buyer.

Section D.

Article I

The Buyer agrees:

1. To waive all claim to the forest products covered in this sale agreement unless cut, paid for and removed on or before _____, 19____, unless written extension of time is granted by the Seller.
2. To suppress immediately any fires originating from acts or negligence of the Buyer or his agents and to pay in full for any damages to young trees or other property of the Seller caused by any such fire.
3. To protect all trees not designated for cutting from unnecessary injury.

4. To repair damage and otherwise restore ditches, fences, roads, bridges or other improvements damaged beyond ordinary wear and tear by the Buyer or his agents, to a state or condition at least equal to that now existing.

5. To pull back into the cutting area all tree tops, limbs and debris dropped by the Buyer or his agents into cultivated fields, pastures or other open land areas not designated as woodlands.

6. Not to assign this agreement in whole or in part without the written consent of the Seller.

Article II

The Seller agrees:

1. To guarantee title to all trees designated above for cutting and to defend such against any and all claims for taxes, mortgages, or any other legitimate encumbrances at his own expense.

2. To grant to the Buyer or his agents during the life of this agreement, the right of ingress and egress across and upon the sale area and any adjacent property of the Seller for any men, materials, and logging and sawmilling equipment, but specifically reserves the right to approve the location of any new roads across cultivated fields or pastures.

Article III

The Buyer and Seller mutually agree that in case of dispute over the terms or intent of this agreement, final decision shall rest with an arbitration board of three persons - one to be designated by each party to this agreement and the third to be selected by the first two designated. It is further mutually agreed and understood that the expenses for such arbitration will be borne by the party who has, in the judgment of the arbitration board, failed to comply with the terms of this conveyance. However, if the arbitration board finds that the terms of the contract have been fulfilled, then the party requesting arbitration will bear any and all costs of such action.

Article IV

Special Provisions: (Where will pulpwood and/or logs be measured, when and where will payment for pulpwood and/or logs be made, how will logs and pulpwood be designated where both are to be cut from the same area, etc.)

(Over)

In witness hereof I/we hereunto set my/our hand and seal.

Signed in duplicate this _____ day of _____, 19__.

(Witness)

(Seller)

(Seal)

(Witness)

(Seller)

(Seal)

(Witness)

(Seller)

(Seal)

Article III

The Buyer and Seller mutually agree that in case of dispute over the terms or intent of this agreement, final decision shall rest with an arbitrator chosen by three persons - one to be designated by each party to this agreement and the third to be selected by the first two designated. It is further understood and intended that the arbitrator for each arbitration will be chosen by the party who has, in the judgment of the arbitration board, failed to comply with the terms of this agreement. However, if the arbitration board finds that the terms of the contract have been fulfilled, then the party requesting arbitration will bear any and all costs of such action.

Article IV

Special Arbitration (This will be used only in case of dispute over the terms or intent of this agreement) shall rest with an arbitrator chosen by three persons - one to be designated by each party to this agreement and the third to be selected by the first two designated. It is further understood and intended that the arbitrator for each arbitration will be chosen by the party who has, in the judgment of the arbitration board, failed to comply with the terms of this agreement. However, if the arbitration board finds that the terms of the contract have been fulfilled, then the party requesting arbitration will bear any and all costs of such action.

TENTATIVE EXTENSION FOREST INSECT AND DISEASE PROGRAM

1. Revise present bark beetle leaflets. Prepare leaflets on pine tip moth, weevils, sawflies, wood borers, and miscellaneous insects. Prepare leaflets on foliage diseases, root rots, pitch canker, crown-rust, needle cast, and little leaf.
2. Training meetings in identification, prevention and control of shade tree insects (which are also forest insects) in Asheville, Charlotte, Greensboro, Winston-Salem, Durham, Raleigh, Goldsboro, Wilmington, Elizabeth City, Rocky Mount, or where necessary. This program would be geared to reach professional agricultural workers and foresters, public and private, as well as shade tree "experts."
3. Set up procedure for publicity and information program for handling outbreaks and reinforce reporting pests through Farrier. Help agents with forecasting outbreaks. Coordinate with state forest service (Bo Greene).
4. Expand Farrier's report and include diseases.
5. In cooperation with State Forest Service Pest Control Officer and Southeastern Experiment Station set up a state-wide forest pest committee within the framework of the North Carolina Forestry Association with a technical advisory group. The advisory group would be composed of Southeastern Forest Experiment Station, State College, and State Forest Service pathologists and entomologists.
6. Are clinical facilities for diagnosing specimens needed?
7. Short course in forest insects and diseases for cooperators in tree improvement program. Later a course for nurserymen. A similar program for professional foresters, both public and private. These programs to be provided here in Raleigh.

FOREST MANAGEMENT EXTENSION SPECIALIST
STAFF CONFERENCE

October 5, 6 and 7

Monday Afternoon

2:00 Fellowship Program
Southern Extension Forestry Council
North Carolina Forestry Association Meeting
Progressive Farmer Program
Whitfield's Program

4:00 Seminar

Tuesday Morning

8:30 Coming Attractions (Specialist Meeting in December)
Sign Program
Fact Sheets:
(1) What subjects
(2) Whom to write

9:30 Break

10:00 Wood Products Extension Program - George Smith and Staff

Tuesday Afternoon

1:30 Where Are We Now?

- (1) List by county what goals you want in each (meetings, demonstrations, tours, etc.)
- (2) Gilliam - Christmas tree program
- (3) Whitfield - School (insects, shade trees)
- (4) Hampton - Long-term management program
- (5) Other specialists reports
- (6) What programs to leave to agents (4-H, etc.)
- (7) What new programs
- (8) Primary clientele
- (9) Card-request program with industry

(10) Seedling situation and ACP

(11) County ranger short course

Tuesday Evening

5:30 - 6:00

John L. Gray Mortgage Manor, New Hope Road - Light supper and heavy discussions

Wednesday Morning

8:30

- (1) \$100,000 research program in brushland conversion and investment analysis project possibility
- (2) Plan work without Raleigh office help
- (3) "Busy Acres" - R. W. Shoffner's signature on letters
- (4) Relations with other professional workers
- (5) Marketing publications
- (6) Small woodland owners conference report
- (7) Pine planting brochures
- (8) Yield information

SUMMARY

GENETICS SHORT COURSE - FOR EXTENSION PERSONNEL

Tuesday, October 27

9:00 - 11:00

Basic Genetics -- Saylor

(A development of basic genetic principles, presented simply and concisely, in order to obtain understanding necessary to later discussions. Questions are encouraged.)

11:00 - 12:00

Inheritance of properties in forest trees -- Zobel

(An explanation of what little is known about inheritance, and how this ties into basic genetics.)

12:00 - 1:30

Lunch

1:30 - 3:30

Seed Orchard Concept -- McElwee

Tree Selection

Seed Production Areas

Seed Certification

(A discussion of the current approach in the South, and how it can be used by the forest landowner.)

3:30 - 4:00

Geographic Races -- Zobel

(Brief review of the importance of geographic seed source and what we know now.)

4:00 - 5:00

Place of Genetics in Forestry -- Zobel

(Illustrating its potentials with natural and artificial regeneration, its use by industrial organizations and the small landowner. Possibilities with hardwoods will be discussed if time is available.)

Wednesday, October 28

All-day field trip

(Leave at 7:00 a. m.; go to N. C. Pulp lands (McElwee) - look at seed production area (Peavy and Zobel) seed orchard, select tree and management operations if time. Trip will be informal, allowing free discussion.)

Thursday, October 29

- 9:00 - 10:00 Questions and summary regarding field trip -- McElwee
(Any questions regarding the trip will be answered at this time, plus a pulling together of points covered.)
- 10:00 - 11:30 Approaches in Forest Genetics -- Zobel
(Selection versus hybridization use of exotics, use of ecotypes, vegetative propagation, etc. Slides will be used. Stages and use of flowering cycle knowledge will be discussed if time.)
- 11:30 - 12:00 Insect Disease, and Drought Resistance -- Zobel
- 1:30 - 3:30 Wood Properties -- Zobel
(Variation within trees, among trees, as well as genetic potentials. Effects of growth rate on wood properties, etc. Only portions of above can be covered during the time allotted - slides will be used.)
- 3:30 - 5:00 Genetics in Management and Summary -- McElwee and Zobel
(Summarization, questions and discussion of such things as rotation ages and stocking will be discussed. Presence of "sprinters" and "runners," extension of species ranges, uses of different species--such as value of Virginia and pond pine--will be discussed, depending on time allotment.)

FOREST MANAGEMENT SCHOOL

FOR

COASTAL PLAIN RANGERS

July 27 - August 7, 1959 - - - Raleigh, North Carolina

SPONSORED BY:

Department of Forest Management
School of Forestry
Extension Forestry Department
Agricultural Extension Service

NORTH CAROLINA STATE COLLEGE

S T A F F

J. L. Gray, Extension Forestry
J. C. Jones, Extension Forestry
W. M. Kulash, Entomology Extension
J. E. Maki, School of Forestry
Ralph Winkworth, N. C. Forest Service
R. L. McElwee, School of Forestry

P R O G R A M

Classroom: Room 173, Kilgore Hall

All morning sessions will be held in this room.

All afternoon sessions will assemble in this room.

Monday, July 27, 1959

MORNING:

8:00 Introductions and announcements
8:20 Management - the forest tree
10:00 Break
10:15 Mensuration - Basic mathematics

AFTERNOON:

1:30 Field instruction. Management - forest soils and tree
 Characteristics

Tuesday, July 28, 1959

MORNING:

8:00 Mensuration. Areas, basic volumes
10:00 Break
10:15 Management. Forest stands.

AFTERNOON:

1:30 Field instruction. Management. Forest typing and stand
 classification.

Wednesday, July 29, 1959

MORNING:

8:00 Management. Silvics.
10:00 Break
10:15 Mensuration. Units of tree and forest products measurement.

AFTERNOON:

1:30 Laboratory instruction. Management. Insects and diseases.

Thursday, July 30, 1959

MORNING:

8:00 Mensuration. Height, diameter, and taper.
10:00 Break
10:15 Management. Tree growth and stand development.

AFTERNOON:

1:30 Field instruction. Mensuration. Instruments and techniques.

Friday, July 31, 1959

MORNING:

8:00 Management. Stand development.
10:00 Break
10:15 Mensuration. Use of prism and angle gauge. Basal area determination.

AFTERNOON:

1:30 Field instruction. Mensuration. Instruments and techniques.

HAVE A NICE WEEKEND! GET PLENTY OF REST!

Monday, August 3, 1959

MORNING:

8:00 Mensuration. Log rules and their application.
10:00 Break
10:15 Management. Management principles.

AFTERNOON:

1:30 Field instruction. Management. Management principles and stand development.

Tuesday, August 4, 1959

MORNING:

8:00 Management. Precommercial treatments and stand improvement. Genetics.
10:00 Break
10:15 Mensuration. Volume tables.

AFTERNOON:

1:30 Field instruction. Mensuration. Application of volume tables and growth rate determination.

Wednesday, August 5, 1959

MORNING:

8:00 Mensuration. Principles of cruising. Cull determination.
10:00 Break
10:15 Management. Intermediate and harvest cuts.

AFTERNOON:

1:30 Field instruction. Management. Precommercial treatments. Intermediate and harvest cuts.

Thursday, August 6, 1959

MORNING:

8:00 Management. Silvicultural systems. Policies of N. C. F. S.
10:00 Break
10:15 Girard volume tables. Review.

AFTERNOON:

1:30 Field instruction. Carry out tree selection and volume determination exercise on prescription.

Friday, August 7, 1959

MORNING:

8:00 Written final exam.
9:00 Critique of student field exercise assignments.
12:00 Dinner in field.

AFTERNOON:

1:00 Continue field critique.
2:30 Graduation exercises.

PROGRAM

COASTAL PLAIN F.H.A. SUPERVISORS
FORESTRY TRAINING SCHOOL
GOLDSBORO, N. C.

April 29, 1959 9:30 AM to 4:00 PM

- 9:00 - 9:30 Registration - Wayne County Agriculture Building. Coffee, courtesy of Wayne County F.H.A. Office.
- 9:30 Marion C. Holland, Area Supervisor, F.H.A. Goldsboro, N.C., Presiding.
- Welcome to Wayne County
- Purpose of Training School, Review of Program and Introduction of Dignitaries and Instructors - Marion Holland
- 9:45 Travel to Leo Mitchell Farm, Fremont.
- 10:15 Review of Borrower's Situation, Procedure Followed in Saw Timber Sale - Wilton Ward, Wayne County F.H.A. Supervisor.
- Critique and Future Benefits - Walter Keller, Forestry Extension Specialist.
- 11:00 Travel to Kenneth Edgerton Farm, Gurley Dairy Road.
- 11:30 Drink Break
- 11:45 Review of Borrower's Situation - Wilton Ward
- DIVIDE INTO GROUPS
- Stop #1 - Pulpwood Thinning and Sales Procedure - J. C. Jones, Forestry Extension Specialist.
- Stop #2 - Characteristics and Recommendations for Mature Saw Timber - John Gray, State Extension Forester.
- Stop #3 - Recognizing Pre-commercial Pine Stand Conditions - Walter Keller, Forestry Extension Specialist.

12:45 Travel to Little River Forest Nursery

1:00 Dinner at Little River Nursery

1:45 Review of Morning Program and Questions -
Panel of Morning Instructors.

2:00 Sales Agreements and Timber Deeds - L. H.
Hobbs, Forestry Marketing Extension Special-
ist.

Question Period

2:45 Ice Cream Break

3:00 Sources of Technical Forestry Assistance
to Landowners.

Question Period

Summary of Training School - J. C. Jones,
Forestry Extension Specialist.

Comments - Ralph Turner, Chief of Program
Operations, State F.H.A. Office.

3:35 Tour of Little River Forest Nursery - W. A.
Bland, Nursery Superintendent, N. C. Divi-
sion of Forestry.

4:00 ADJOURN

PROGRESS IN THE FORESTRY EXTENSION PROGRAM
OF THE
SCHOOL OF FORESTRY AND THE AGRICULTURAL EXTENSION SERVICE
NORTH CAROLINA STATE COLLEGE

- I. The "New Look" in Extension Forestry - Three years ago, the Extension Forestry staff began putting into effect a plan for modernization and expansion. It is designed to equip this group to assume larger responsibilities in North Carolina State College's forestry program.

Prior to 1956, the Extension Forestry staff was made up of eight general forest management specialists. They worked with people who at that time were considered as the primary clientele of the Agricultural Extension Service - county agents, farm woodland owners and 4-H Club members.

Program emphasis was placed on developing initial landowner interest in forestry and the know-how to carry out elementary management practices. There was very little relationship between this primarily Agricultural Extension Service forestry program and the School of Forestry program.

This is being changed. The main purpose of Extension's modernization plan is to qualify and reassign the staff so as to promote and conduct programs in all phases of forestry and with all clients whom the Agricultural Extension Service and the School of Forestry are committed to serve. We visualize that the Extension staff will have working responsibilities in all phases of the School of Forestry's program with the exception of resident teaching, alumni affairs and the actual performance of research.

We are about 40% of the way through this modernization plan. It involves:

- A. Advanced training of existing staff - With liberal fellowship support from R. Hoe and Company and the Richardson Foundation of Greensboro, one staff member has completed a master's program in wood technology at North Carolina State. A second has completed a master's program in forest entomology and pathology at Syracuse. A third is now at Duke working on a master's program in forest economics and public administration. A fourth is now at Duke working on a master's program in forest soils and forest ecology.
- B. Reorganization, expansion and job reassignments - In the summer of 1958, the Extension Forestry Department was divided into two sections with an individual specialist assigned as section head in each. These sections and program phases assigned to them are:
1. Forest Management Extension Section - All phases of forest management up to and including landowner marketing of stumpage and raw forest products.
 2. Wood Products Extension Section - All phases of processing from

raw material procurement through and including trade promotion and consumer education.

The Wood Products Extension program is new. At present there are only two regular Extension specialists on the staff. Job assignment is on an industry-segment basis. One man works primarily with the lumber industry. The second works primarily with the furniture industry.

This fall we were awarded a national 3-year contract to develop a basis for Land Grant Colleges to conduct Extension programs with the lumber industry. This added a third man to our Wood Products Extension staff. We are committed to keep him when the contract expires. At that time we will assign him to work with another individual segment of the wood industry.

The Wood Products Extension program is developing rapidly, and we are feeling the need right now for at least two more staff members.

The Forest Management Section consists of seven specialists. Six of these are general program specialists assigned to districts of fifteen to eighteen counties each. Five of them have been headquartered in the field.

As these men complete graduate training, they are being moved to the college and given statewide special-phase assignments. In addition, they will continue to cover a district but on a more restricted work basis.

One completed graduate training this summer and has been reassigned as a forest insect and disease specialist. One now at Duke will be moved to Raleigh when he completes his training and will be assigned as a statewide specialist in reforestation and site preparation.

Next year a staff member is scheduled for a year's special training and reassignment in bottomland hardwood management.

In one case, we have made a specialized assignment prior to formal graduate training. One staff member has been assigned to Christmas tree production and marketing as a result of his interest in this field and informal training he has received through attending short courses and association meetings in other states and through contact with experienced growers.

- C. Changing clientele - The clientele of the Wood Products Section is clearly defined. Its contact work has been with owners, executives or others in decision-making positions in the wood industry. Both the Agricultural Extension Service and the School of Forestry agree that this is the clientele to be served by a Wood Products Extension program, and no change in clientele is contemplated at this time. The present staff is qualified by experience or specialized training

to work successfully with professional wood technologists, industrial engineers and industry executives.

At present, the Wood Products Extension staff is serving research clientele of the School of Forestry without regard to state boundaries. No conflict has arisen here because no other southeastern state has an Extension staff trained and assigned to work with wood processing firms.

Field contact is direct from the specialist to the plant and not through county agents.

The Forest Management Extension staff faces a different situation. They have been working primarily with non-professional forestry clients. They are going through the process of becoming qualified to serve professionals and executives in forest management. They are working towards the day when people like you will consider them as a prime source for technical information and guidance in program planning and development. They hope that in time you will want to call on them to organize and hold training sessions for your professional foresters on new techniques or phases of existing knowledge in which your staff needs additional training. They are planning through frequent field contact to bring you progress reports on research studies conducted here that apply to your operations. They are working towards the day when the research staff here will rely heavily on their guidance in selecting problems for attention and will look to them to take the lead in securing support for additional research where needed.

County agents and other agricultural workers will continue to be primary clients of this group also. Program assistance to this group is changing, however. The staff is spending more time training agricultural workers and furnishing them with information which they can understand and use without calling in a professional forester every time a routine request is received. They are spending less time making routine field visits. They are seeing to it that county agents and other agricultural workers understand and use the services of other forestry program groups or individuals who are in the business of furnishing management service to individual landowners.

- D. Relationships with other professionals, associations and program agencies - Our concept of our relationship to other groups or individuals who deal with people we have considered our clientele is changing.

We have been for some time the largest Extension Forestry staff in the United States. We have, in years past, been concerned primarily with pushing our own program ideas through our own people. We have been quite concerned at times that other various forest interest groups and key individuals have been somewhat indifferent to our efforts and have shown little inclination to support our requests for additional staff members and other resources needed to expand our program.

We are beginning to feel that perhaps we can make a much larger contribution to forestry progress by helping other organizations and individuals expand or strengthen their particular functions in the forestry complex.

We have not come to this decision out of a desire to manifest the Christian spirit or prepare ourselves for an early death. It is the result of a clearer recognition of needs, trends and present-day realities.

For example, A.F.P.I. has money to spend in North Carolina for developing the interest of landowners in forest management. This is our job too, but we have always felt we did not have enough manpower, money and time to do the job as we would like to see it done.

A.A.P.I. through the State Forest Industries Committee wanted to publish a how-to-do-it booklet and initiate a Busy Acres publicity program in this state. They also wanted to expand the Tree Farm program to 500 certified tree farmers. They invited us to help.

This was an industry-conceived and -sponsored program in which we did not have a voice at the initial planning and decision-making stage. Yet they had the money and most of the manpower to do both jobs. We decided that our job was to help them get the most out of both. Accordingly, we helped edit the state "Busy Acres" booklet for North Carolina, furnished mailing lists of people who had not shown previous interest in timber growing and wrote up a considerable number of landowners with whom we had worked for tree farm awards.

As a result, both programs were a success. The State Forest Industries Committee and our staff were highly pleased at the large amount of publicity given to forestry in the mountain area where the 500th tree farm award program was held. We were both satisfied that the "Busy Acres" message was effectively written and reached the people who needed it. And the taxpayers were spared some \$2000 to \$3000 expense which would have been needed for us to publish a booklet of this type.

We are adopting a similar concept with other program groups. For example, we are beginning to recognize that there cannot be a strong Land Grant College Extension forestry program without a strong Land Grant College forestry research program. Accordingly, we are spending more time with our research counterparts here at the college. We are attempting to see that their research results reach the people in the field and are applied and appreciated by them. We are working to secure financial support for additional research needed.

For some time we have been concerned over the lack of active and informed forestry lay leadership throughout the state. We have also been concerned over the lack of contact and understanding between lay leaders and professional forestry leaders. We feel that the North Carolina Forestry Association is the logical organization through which to build up an informed, active leadership alive to opportunities for expanding timber growing and manufacturing and willing to

make their influence felt where needed.

Accordingly, for the past two years we have spent considerable time working with the Association helping them to plan and organize projects and activities which would draw progressive landowners and others with a stake in forestry to the support of the Association.

These are but three examples, but they will give you an idea of the direction we are taking in our relationships with other organizations and groups.

In summary, we are working towards a highly trained staff, qualified to work with executive, professional or lay clientele, closely integrated with research and dedicated to strengthen not only State College's contribution to forestry, but also that of other forestry program groups. This is our "New Look." We are well along in this modernization and hope to have the staff training and job reassignment phases completed by the summer of 1963.

II. Progress in Forest Management Extension

A. Highlights of 1958-1959

1. The North Carolina Christmas Tree Growers' Association was organized with the help and guidance of Extension personnel. In cooperation with the North Carolina Division of Forestry two meetings were held to discuss Christmas tree production and marketing. As a result of these meetings, the Penrose Nursery at Hendersonville was set aside for the production of fir for Christmas tree planting. The regulation prohibiting the resale of Fraser fir with roots attached was changed at the request of growers. A grading system for Fraser fir planting stock was inaugurated.
2. Eight long-time cooperator demonstrations were set up in the mountain counties in cooperation with T.V.A. All but one of these cooperators are carrying out these plans to the letter. These will serve as woodland management demonstrations with cut and return figures available.
3. A two-week short course in forest management was held for thirty forest rangers of the North Carolina Division of Forestry. All personnel came from the eastern part of the state. Additional short courses will be held for personnel in other areas of the state during the next year.
4. A marketing procedure training school was held for forty-seven F.H.A. Coastal Plain supervisors. As a result of this training school, the F.H.A. adapted a policy to call in a consulting or state service forester to advise and assist their clients when making a timber sale, and to insist that written sale agreements be used.

5. Assistance was given the School of Forestry in arranging and conducting a genetics short course and symposium.
6. In cooperation with the North Carolina Division of Forestry, two planting training schools were held, one in the western area on white pine and one in the east on yellow pine. Over 400 professional foresters and agricultural workers attended these schools. Planting brochures were prepared and distributed to them as aids in selling tree planting to landowners.
7. Through the county agricultural agents, over 27 million tree seedlings were placed on a total of 2,657 applications.
8. Extension foresters worked with the state Tree Farm Committee in its efforts to reach a goal of over 500 certified tree farms in North Carolina.
9. We helped review and edit the "Busy Acres in North Carolina" booklet published by the American Forest Products Industries. We helped publicize the program through radio and television. Through the county agents we furnished 27,000 names of landowners not active in timber growing, as a mailing list for this publication.
10. An information card request for assistance program was established with two pulp mills - Champion Paper & Fibre Company and International Paper Company. County agents use these postcards to refer requests for assistance in pulpwood sales direct to conservation foresters of these two companies.
11. Work with the county agricultural agents in 4-H was continued. Forty-three counties took part in forestry demonstration competition. The 4-H Forestry Camp, sponsored by Bell Telephone & Telegraph Company was held in August, with 93 boys from as many counties and 12 agents attending.

B. New activities planned for 1959-60

1. An Extension program in forest insect and disease prevention and control is being developed. The initial phases of this program have been discussed with the Forest Management Research faculty, Forest Management Extension specialists, forest entomology and pathology personnel of the Southeastern Forest Experiment Station and the Pest Control Forester of the North Carolina Division of Forestry.

As a result of our own thinking and that of these groups, we have in mind the following initial activities:

Revise present bark beetles leaflets. Prepare leaflets on sawflies, pine bark aphid, pests of Fraser fir, and wood borers (from the logger's viewpoint). Prepare leaflets on foliage diseases, root rots and oak wilt.

Hold six training meetings next summer in larger cities in identification, prevention and control of shade tree insects and diseases. This program is to reach professional agriculture workers and foresters, as well as shade tree "experts." Object of these schools is to train agricultural workers to recognize major forest insects and diseases and be familiar with control recommendations.

In cooperation with State Forest Service Pest Control officer and Southeastern Experiment Station, set up a state-wide forest pest committee, within the framework of North Carolina Forestry Association, if possible, with a technical advisory group. This advisory group would be composed of personnel from State College and the State Forest Service.

Explore the possibilities of setting up clinical facilities at State College for diagnosing insect specimens.

Hold a short course in forest insects and diseases for field men in the tree improvement program. Hold a short course for nurserymen on nursery diseases.

Begin to take over some of the North Carolina field request "trouble shooting" load now being handled by research personnel of the Southeastern Forest Experiment Station.

2. Hold a short course in forest management for Piedmont county ranger personnel of the North Carolina Division of Forestry.
3. Hold a short course in forest management to serve as a refresher for professional foresters in private enterprise.
4. Hold two one-day training schools for contract tree planters, in cooperation with the North Carolina Division of Forestry.
5. Hold twelve brushland conversion demonstrations showing equipment and techniques.
6. Publish planting guide brochure for white pine and southern yellow pine.
7. Prepare seven county marketing publication guides. This is an individual county list of buyers based on a 1958 canvass made by the Southeastern Forest Experiment Station in eight Piedmont counties.
8. Expand planting and management of Fraser fir and management of red cedar for Christmas tree production through publications and demonstrations conducted in cooperation with the North Carolina Christmas Tree Growers' Association.

9. Put our own staff through a special three-day short course on forest genetics.

FOREST MANAGEMENT ADVISORY COMMITTEE
October 23, 1959

G. Anderson	Brunswick Pulp and Paper Company Brunswick, Georgia
N. T. Barron	Union Bag-Camp Paper Corporation Franklin, Virginia
J. A. Beal	United States Forest Service Washington, D. C.
F. H. Claridge	North Carolina Division of Forestry Raleigh, North Carolina
W. E. Cooper	Virginia Forests, Inc. Richmond, Virginia
E. L. Demmon	Asheville, North Carolina
H. J. Doyle	North Carolina Forestry Association Raleigh, North Carolina
C. H. Driver	International Paper Company Bainbridge, Georgia
T. W. Earle	Continental Can Company, Inc. Savannah, Georgia
J. J. Ennis	Champion Fibre and Paper Company Canton, North Carolina
H. H. Flickinger	International Paper Company Georgetown, South Carolina
A. B. Hafer	Forest Consultant Laurinburg, North Carolina
T. G. Harris	Halifax Paper Company Roanoke Rapids, North Carolina
G. H. Hepting	Southeastern Forest Experiment Station Asheville, North Carolina
J. Huff	Halifax Paper Company, Inc. Maysville, North Carolina
G. E. Jackson	North Carolina Forestry Association Raleigh, North Carolina
J. W. Johnson	Union Bag-Camp Paper Corporation Savannah, Georgia
D. Johnston	American Forestry Association Wake Forest, North Carolina
R. B. Johnston	American Furniture Company North Wilkesboro, North Carolina
J. B. Lattay	Riegel Corporation Acme, North Carolina
A. A. Lehocky	South Carolina Commission of Forestry Columbia, South Carolina
W. M. Maughan	Durham, North Carolina
W. M. Morgan	Catawba Timber Company Catawba, South Carolina

J. W. Myers, Jr.	Forest Farmers Association Atlanta, Georgia
H. A. Nelson	North Carolina Pulp Company Plymouth, North Carolina
T. C. Nelson	Southeastern Forest Experiment Station Asheville, North Carolina
E. T. Newsom, Jr.	Georgia Kraft Company Macon, Georgia
R. M. Osborn	Union Bag-Camp Paper Corporation Franklin, Virginia
H. S. Redding	North Carolina National Forests Asheville, North Carolina
C. F. Speers	Southeastern Forest Experiment Station Asheville, North Carolina
C. G. Spencer	Carthage, North Carolina
E. P. Stephens	Champion Fibre and Paper Company Canton, North Carolina
O. G. Traczewitz	International Paper Company Georgetown, South Carolina
K. S. Trowbridge	North Carolina Pulp Company Plymouth, North Carolina
L. A. Whittle	Brunswick Pulp and Paper Company Brunswick, Georgia
J. J. Wiley	West Virginia Pulp and Paper Company New York City, New York
R. Wolcott	Inland Container Corporation Rome, Georgia