

ANNUAL REPORT  
FARM FORESTRY EXTENSION

NORTH CAROLINA

1946

R. W. Graeber, In Charge, Forestry Extension  
John L. Gray, Assistant Extension Forester

AGRICULTURAL EXTENSION SERVICE

State of North Carolina

ANNUAL REPORT

19 46

Period covered December 1, 1945 to November 30, 1946  
(Month) (Month)

Name of Project Farm Forestry Extension Work

Covering work done by R. W. Graeber, In Charge, Forestry Extension,

John L. Gray, Assistant Extension Forester,

and Farm Foresters (see page 2 in report).

Percentage of time devoted to project: 100

Date submitted: April 12, 19 47. Signed: R. W. Graeber  
Project Leader

Date approved: \_\_\_\_\_, 19 \_\_\_\_\_. Signed: \_\_\_\_\_  
State Director of Ext. Work

Date approved: \_\_\_\_\_, 19 \_\_\_\_\_. Signed: \_\_\_\_\_  
Director of Ext. Work  
U.S. Dept. of Agriculture

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December 1, 1945 - November 30, 1946, Inclusive

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R. W. Graeber, In Charge, Forestry Extension  
John L. Gray, Assistant Extension Forester

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I. O. Schaub, 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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NORTH CAROLINA

R. W. Graeber, In Charge, Forestry Extension  
John L. Gray, Assistant Extension Forester

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The Farm Forestry Extension work in North Carolina is a two-fold program:

The first and primary phase is that of promoting better forestry practices on the farms through educational and demonstrational procedure. This is a cooperative project by and between the Agricultural Extension Service of the North Carolina State College of Agriculture and Engineering of the University of North Carolina and the Agricultural Extension Service of the United States Department of Agriculture. It is conducted under the provisions of the Smith-Lever Act, the Clarke-McNary Act, Section V, and other supporting laws, both federal and state.

The second phase is a combination of service and education under the Farm Woodland Management Project, a cooperative program by and between the Agricultural Extension Service of North Carolina State College and the Forest Service of the United States Department of Agriculture. This phase of the program is conducted as part of the farm forestry program under provisions of the Norris-Doxey Act.

The Extension Service with the cooperation of the Department of Forestry Relations, Tennessee Valley Authority, carried on a program of forest planting for erosion control in the drainage area tributary to the Tennessee River.

The Farm Forestry Extension work is under the general supervision of Dr. I. O. Schaub, Director of Agricultural Extension work, with the following forestry personnel employed:

R. W. Graeber, In Charge, Forestry Extension, State College, Raleigh  
John L. Gray, Assistant Extension Forester, State College, Raleigh

Farm Foresters: E. J. Sylvester, Windsor  
R. E. Reed<sup>1/</sup>, Clinton  
H. E. Blanchard<sup>2/</sup>, Whiteville  
F. J. Cook<sup>3/</sup>, Durham  
W. H. Wheeler, Jr., Wadesboro  
John E. Ford, Wilkesboro  
James E. Hobbs<sup>4/</sup>, Raleigh  
A. H. Maxwell, Morganton

Purpose: The purpose of the Farm Forestry Extension work is to assist farmers in developing a systematic program of forest management, protection and harvest of timber crops and to aid in the marketing of forest products with the long-time goal of making the farm woods a permanent producing part of a balanced, economic farming enterprise.

How Conducted:

1. From the educational approach. By teaching through the demonstration method farmers, timber owners, timber operators, 4-H Club members learn better practices by doing a given job. Instruction is given to farmers and 4-H Club members through cooperating county agents, home agents, 4-H Club leaders, vocational teachers, neighborhood leaders, and others, at meetings, demonstrations,

- 1/ R. E. Reed resigned effective December 31, 1945, to set up personal business. Replaced by W. G. Davis, effective January 16, 1946. Davis resigned effective May 21, 1946. Replaced by Ross S. Douglass, effective July 1, 1946.
- 2/ H. E. Blanchard resigned effective December 31, 1945, to enter private work. Was replaced by Walter W. Barnes, effective March 1, 1946.
- 3/ F. J. Cook resigned effective October 31, 1946, to enter private work. Was replaced by Virgil G. Watkins, effective November 1, 1946.
- 4/ James E. Hobbs resigned effective August 15, 1946, to pursue graduate work. Was replaced by Donald F. Traylor, effective September 1, 1946.

through literature, correspondence, press, radio, et cetera. A broad understanding and spirit of cooperation were shown by county agents throughout the year.

2. Through service: By aiding farm timber owners in a program of timber harvest and sale. Through this part of the program both extension foresters and farm foresters assist farmers in selecting, marking, and scaling merchantable timber to provide a profitable harvest and at the same time leave a thrifty-growing stand for future crop. In addition to two extension foresters we have eight farm foresters who are employed under the Farm Woodland Management Project under the cooperative operation of the Agricultural Extension Service and the U. S. Forest Service. The farm foresters now serve thirty counties (Chowan added July 1, 1946) regularly and were called upon for special assignments during the year in twelve additional counties. The extension foresters handled many calls for this type of work in other counties throughout the state.

This work was originally set up to promote the marketing of farm timber to meet the war effort. Beginning July 1, 1945, the project was broadened to include all phases of farm forestry, such as: (1) Farm timber marketing, (2) Management of farm woods, (3) Forest planting, (4) Forest protection - fire, disease, and insects. It now means a combination of education and service.

(See body of report for detailed results.)

The cooperative arrangement between the Agricultural Extension Service and the Department of Forestry Relations of the Tennessee Valley



Authority for the promotion of erosion control through the planting of forest trees was continued through this year. However, the limited supply of tree seedlings available caused the accomplishment not to be so great. This project is limited to the fifteen counties which drain, as a whole or in part, into tributaries of the Tennessee River. Under similar arrangements these agencies have cooperated in the "Tree Crop Field Test Demonstrations," largely with budded trees of selected strains of black walnut.

(See body of report for details.)

The Agricultural Extension Service has a working agreement with the state forester and the Forestry Division of the North Carolina Department of Conservation and Development. Under this agreement we cooperate in the distribution, among farmers, of planting stock grown by the two state nurseries operated by the state forester under provisions of the Clarke-McNary Act, Section IV.

(See body of report for details.)

The Soil Conservation Service, with the help of the Extension Service, has had supervision of Soil Conservation Districts and has conducted some forestry work with farmers in these districts who have signed a five-year work plan. This agency has furnished forest trees for planting on farms having the five-year cooperative agreements. The personnel of the Soil Conservation Service has cooperated with the extension forester and county agents in educational meetings and demonstrations, as well as in securing applications from farmers for trees to be furnished by the state-operated Clarke-McNary nurseries.

The Extension Service has cooperated with the Farm Security Administration (now Farmers Home Administration) by visiting farms operated by



F. S. A. clients under the tenant-purchase program, for the purpose of making timber estimates and appraisals as a basis for timber sales, and in developing cutting plans to maintain a growing forest. This applies to both the extension foresters and farm foresters. Through this work a number of borrowers have been helped in paying off or greatly reducing their debts. Others have been assisted in selecting timber to build better farm homes and other buildings.

#### Contribution to the Postwar Period

The contribution of the forestry extension work to the postwar period has consisted largely of two phases: Education and action.

##### 1. Education:

###### a. North Carolina Rural Industries Conference

In response to a request by the State Planning Board, Honorable R. Gregg Cherry, Governor of North Carolina, called a conference of interested organizations, firms, and agencies to consider plans for promoting small rural industries throughout the state. The extension forester participated in this general conference, also as a member of a special committee on forests in relation to rural industries. After much preliminary work and planning a series of meetings was held throughout the state. The extension forester participated in four of the district conferences. Some results of this work are showing up in the development of local industries. One in particular is small plants for treating fence posts and building material.

###### b. GI on-the-Job Training

Many young farmers are taking advantage of on-the-job training under the GI program. We have assisted the vocational

teachers and special GI instructors in giving lectures and on-the-ground demonstrations in timber thinning, timber scaling, timber harvest, and the use of new types of woods equipment for the benefit of these veteran groups. Good interest and response was shown.

2. Action:

There was and still is a hue and cry for housing, homes, apartments, cabins, etc. Housing means lumber. Lumber means timber must be harvested. If future needs are to be met, timber harvests today must be taken cautiously. The Extension Service has aided in a program to cut farm timber carefully to help meet the lumber requirements, both through education and action. The extension foresters and farm foresters gave assistance to 425 farmers in selecting, marking, and scaling or otherwise estimating 79,525,000 board feet of saw timber, 828,000 board feet of veneer timber, 15,605 cords of pulpwood, 25,000 poles, 1,000 ties, 1,757 cords of fuel wood. During the current year sales consummated by 264 farmers amounted to \$893,017 and covered the following timber volumes: Saw timber - 56,994,000 board feet, veneer timber - 1,452,000 board feet, poles - 25,000, ties - 1,000, fence posts - 500, pulpwood - 17,199 cords, fuel wood - 1,221 cords, and other minor products.

County Agents in 58 counties report giving assistance to 1,867 farmers in the sale or purchase of forest products, amounting to \$1,563,526.

We would estimate that fully 90 per cent of the lumber harvested from farms went directly into home building and repairs.

### Plan of Work

At the beginning of the Extension year we prepared a detailed plan of work covering various phases of farm forestry practices as a basis for promoting greater interest in forestry among timber owners, operators, and users. This plan included a compilation of practices and goals from the various county plans of work. See Plan of Work on file in Raleigh and Washington offices.

While an effort was made to adjust plans of work to postwar conditions, some modification was necessary as work proceeded during the year. In spite of the changing conditions the county agents' reports show a good portion of their forestry plans carried out, especially in the major phases of: timber thinning and stand improvement, forest planting (short due to shortage in supply of tree seedlings), timber estimating and scaling, and marketing.

See data from annual reports of county agents.

### Results

The body of this report is being prepared under three main heads:

- I STATISTICAL DATA
- II PROJECTS AND RESULTS
- III GENERAL

I  
STATISTICAL DATA

A summary giving statistical data covering the year's activities will visualize the scope of work undertaken and accomplishments achieved.

A. Data from the Office Records of the Extension Forester

	Graeber	Gray	Total
1. Number of days spent in field .....	116.0	187.5	303.5
2. Number of days spent in office .....	172.5	102.0	274.5
3. Number of days annual leave .....	11.5	14.5	26.0
4. Number of holidays taken .....	9.0	9.0	18.0
5. Number of days sick leave .....	5.0	0	5.0
6. Number of visits to - County agents ....	120	91	211
Demonstrations .....	154	44	198
Others .....	82	267	349
7. Number of meetings held or participated in at demonstrations or in otherwise promoting the program of forestry....	91	101	192
Attendance .....	9,066	2,117	11,193
8. Number of counties visited by extension foresters .....	56	54	
Eliminating duplications .....			83
9. Miles traveled by extension foresters -			
Automobile .....	13,216	17,464	30,680
Bus .....		680	680
Railroad .....	1,438		1,438
Total all travel .....	14,754	18,144	32,798
10. Number of interviews in office and field .....			1,419
11. Number of official individual letters written .....			2,009
12. Number of circular letters prepared .....			53
Copies sent out .....			3,235
13. Number of subject matter mimeographs written .....			11
Copies sent out .....			6,900
14. Literature distributed through the mail, at meetings, demonstrations, through county agents, 4-H Clubs, etc. - Pieces .....			231,810
a. Bulletins .....	3,012		
b. Leaflets .....	16,201		
c. Folders .....	34		
d. Bookmarkers .....	200,000		
e. Posters .....	12,300		
f. Charts .....	23		
g. Reprints .....	240		
15. Articles written for the press - news and subject matter .			8
16. Number of tree and log scale sticks placed - Sets .....			103
17. Number of radio talks .....			1

	<u>Total</u>
18. Number of woodland examinations made, with advice given on management, harvest, sale, etc. ....	196
19. Number of visits to timber operators .....	16
20. Timber selected, marked, and scaled by extension foresters	
a. Projects .....	31
b. Volume - board feet .....	5,230,515
21. Timber estimated by extension foresters - Projects ...	16
Volume - board feet .....	4,459,000
22. Number of forest plantings inspected .....	42
23. Number of farmers and 4-H Club members planting forest trees .....	262
a. Number of counties in which plantings were made ..	55
b. Number of tree seedlings planted .....	563,050
24. Number of counties in which farmers and 4-H Club members planted cork oak acorns .....	33
a. Number of individuals participating .....	1,905
b. Acorns planted - pounds .....	797.5
25. Number of 4-H Club camps given forestry instruction ..	17
26. Number of special forestry camps for farm boys .....	1

B. Data from Annual Reports, 1946, of White County Agents

Forestry Activities and Accomplishments

	<u>Results</u>	<u>Number of Counties Reporting</u>
a. <u>Forest Conservation</u>		
1. Days devoted to line of work by:		
(a) Home demonstration agents .....	7.0	3
(b) Agricultural agents .....	2,482.9	99
(c) State extension workers .....	165.7	66
2. Number of communities in which work was conducted this year .....	981	99
3. Number of voluntary local leaders or committeemen assisting this year ...	1,068	75
4. Number of farmers assisted this year:		
(a) In reforesting new areas by planting small trees .....	815	70
(b) In making improved thinnings, weedings or pruning of forest trees ..	2,164	82
(c) With selection cutting .....	1,385	85
(d) With production of naval stores ..	29	2
(e) In timber estimating and appraisal .....	902	83
5. Number of farmers cooperating this year in preventing forest fires .....	30,509	65
b. <u>Forest Marketing and Distribution</u>		
1. Days devoted to line of work by:		
(a) Agricultural agents .....	531.9	71
(b) By state extension workers .....	19.5	13
2. Number of communities in which work was conducted this year .....	579	71





	Results	Number of Counties Reporting
4. Number of farmers assisted this year:		
(a) In reforesting new areas by planting small trees .....	29	9
(b) In making improved thinnings, weedings or pruning of forest trees .....	166	23
(c) With selection cutting .....	337	32
(d) With naval stores production .....	6	2
(e) In timber estimating and appraisal.	173	27
5. Number of farmers cooperating in prevention of forest fires .....	3,112	28
b. <u>Forest Marketing and Distribution</u>		
1. Days devoted to line of work by:		
(a) Agricultural agents .....	31.5	13
(b) State extension workers .....	2.0	1
2. Number of communities in which work was conducted this year .....	33	13
3. Number of voluntary local leaders or committeemen assisting this year ....	62	13
4. Number of farmers or families (not members of cooperatives) assisted during the year .....	135	10
5. Value of products sold or purchased by farmers or families involved in the preceding question .....	\$27,584	10
c. <u>Forestry with 4-H Clubs</u>		
1. Number of boys - Enrolled .....	69	10
Completing projects ...	49	9
2. Number of girls - Enrolled .....	79	2
Completing .....	67	1
3. Number of acres involved in completed projects .....	60	10

Comment: Thirty-six Negro farm agents and two home agents report some forestry work in 1946, devoting 200.9 days to this phase of extension work, or an average of approximately 5.5 days per county reporting. In addition these agents had the assistance of forestry specialists for 8 days.

#### Distribution of Work

County agents (white) in 98 of the 100 counties and 27 Negro agents out of a total of 43 included one or more phases of forestry extension in their 1946 plans of work. At the end of the year white agents in 99 counties and Negro agents in 36 counties gave reports on work accomplished. This represents a combined total of 99 counties reporting. The results in the various counties were in keeping with the interest of the agents, the farmers, with the forest conditions, and



with the amount of time each agent devoted to the forestry phases of his program.

During the year the extension foresters made one or more personal visits to a total of 83 counties. Graeber visited 56; Gray, 54. Twenty-eight counties were visited by both Graeber and Gray. See Map I attached. These visits to the various counties were made for the purpose of contacting county agents, farmers, timber operators, and others in the interest of farm forestry problems.

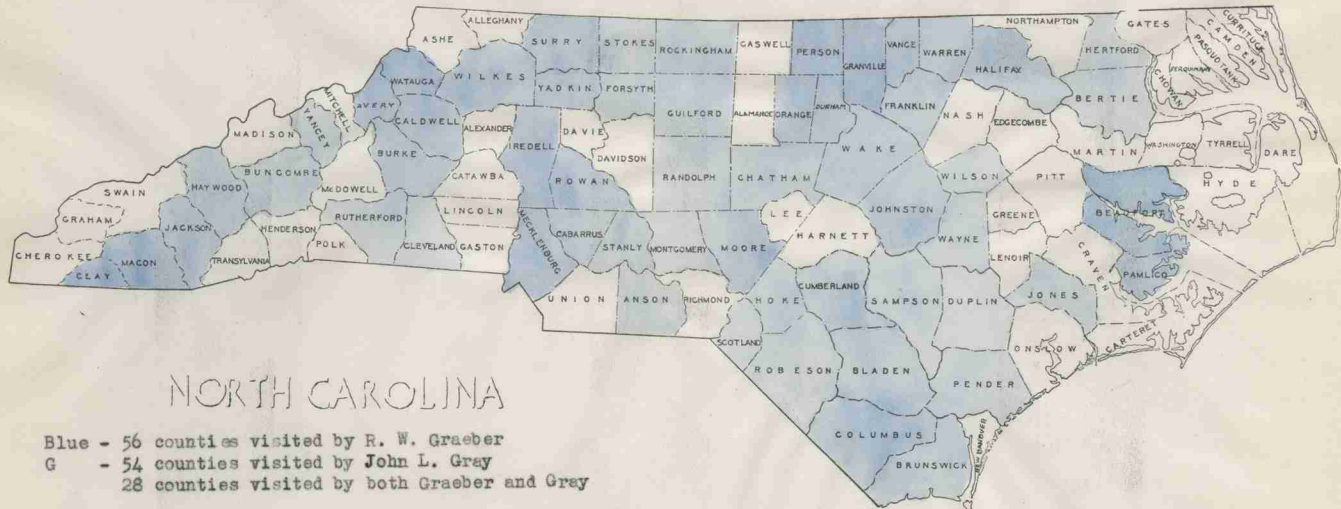
The farm foresters served 30 counties as their regular assignment. However, during the year they handled certain requests on timber marketing work in 12 additional counties. See Map II attached.

The extension foresters spent a total of 303.5 days in the field, making 211 visits to county agents, 198 visits to demonstrations, and 349 visits to other farmers or interested persons. One hundred ninety-two meetings were held or participated in with a total attendance of 11,193. See statistical section for more details.

Map I

Counties in Which Field Contacts Were Made - 1946  
By Extension Foresters - R. W. Graeber and John L. Gray

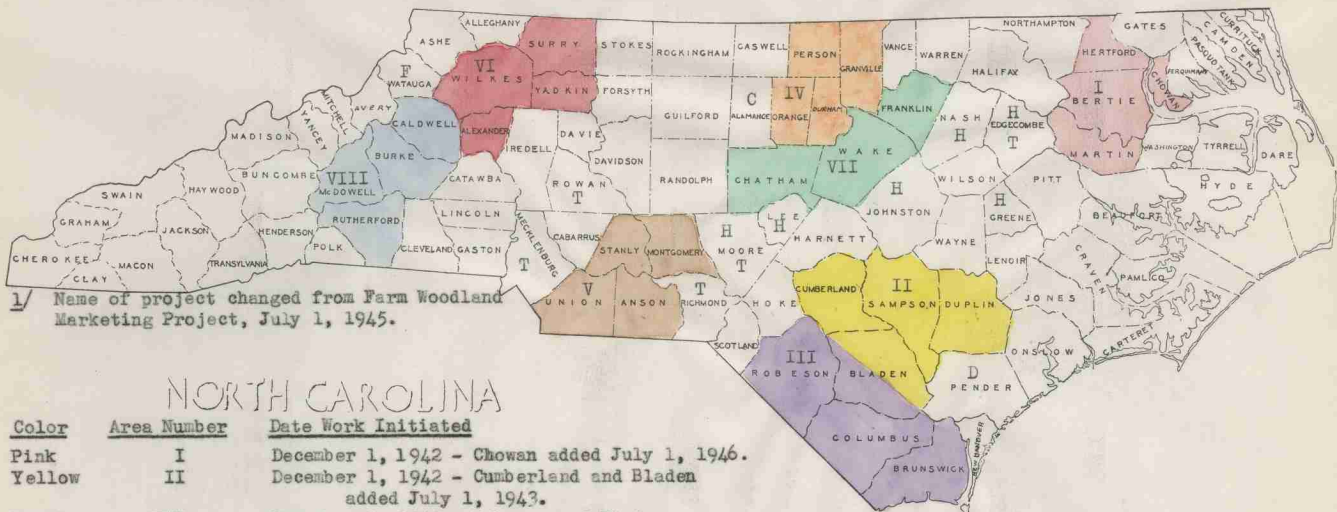
All Phases of the Forestry Extension Work



Map II

Farm Woodland Management Project<sup>1</sup> - 1946

North Carolina Agricultural Extension Service  
U. S. Forest Service, Cooperating



1/ Name of project changed from Farm Woodland Marketing Project, July 1, 1945.

## NORTH CAROLINA

Color	Area Number	Date Work Initiated
Pink	I	December 1, 1942 - Chowan added July 1, 1946.
Yellow	II	December 1, 1942 - Cumberland and Bladen added July 1, 1943.
Purple	III	December 1, 1942 - Robeson and Bladen added July 1, 1943.
Orange	IV	December 1, 1942.
Brown	V	December 1, 1942 - Montgomery added July 1, 1944.
Red	VI	December 1, 1942 - Alexander added July 1, 1945.
Green	VII	October 1, 1943.
Blue	VIII	November 1, 1943.

Out-of-Area Assignments

C. Cook - Alamance  
D. Douglass - Pender  
F. Ford - Watauga  
T. Traylor - Edgecombe, Mecklenburg, Moore, Richmond, Rowan  
H. Hobbs - Edgecombe, Greene, Johnston, Lee, Moore, Nash

Total counties reached by farm foresters - 41

## II PROJECTS AND RESULTS

Recognizing extension work as a type of practical education, we think the best approach is through educational demonstrations to encourage farmers and 4-H Club members and others to learn and apply new or improved methods of doing a definite job. In applying this basis we developed and aided in carrying out a program in forestry built around seven major activities: A. Timber Management, B. Forest Planting, C. Forest Protection, D. Erosion Control, E. Timber Scaling, F. Marketing, G. 4-H Clubs.

With this guide and through the use of maps, tables, etc., we will present a picture of the work in operation throughout the state and give some of the methods used and results accomplished.

### A. Timber Management:

We include under this heading such phases of management as thinning and stand improvement, selective cutting, pruning, management plans, woodland examinations.

1. Thinning and Stand Improvement: In their 1946 plans of work agents (white) proposed to assist 2,333 farmers and 140 4-H Club members with this type of work, largely visual or method type. The purpose was to show how to do the job and to induce farmers to make it a regular practice. The combined statistical report shows 82 counties with 2,164 farmers making improvement cutting, weeding, or pruning of forest trees. Also, Negro agents planned to assist 114 adult farmers and 5 4-H Club members with similar projects. Reports from 23 Negro agents show 166 farmers making improvement cutting, weeding or pruning of forest trees as a result of their efforts.

The above type of work is available to and is recommended for every farmers - landlord or tenant - who owns or operates a farm with woodland. Such work can be handled without extra expense. It provides a good method of harvesting fuel wood for the home and tobacco barns. Too many farmers cut the best for fuel. The records show that for one year North Carolina farmers cut for fuel wood timber of lumber size and quality to the amount of 481,600,000 board feet. This, if cut into lumber, would have been sufficient to build 21,404 standard six-room houses, while timber thinning and improvement cuttings would have supplied all fuel needs and pulpwood requirements with a 45 per cent margin.

Subject matter outlines and materials, bulletins, instruction sheets, etc., pertinent to this type of work were furnished to all county agents as needed. Extension foresters assisted county agents on the ground with many demonstrations of this type.

2. Selective Cutting: The 1946 plans of work for white agents called for assistance to 1,555 farmers and 219 4-H Club members in selective cutting of timber of merchantable size and quality. Eighty-five white agents report giving assistance to 1,385 farmers in this type of work. Likewise, Negro agents planned to assist 142 farmers, and 32 report having assisted 337. This is a good example of agents doing a lot more than originally planned for.

In spite of the high stumpage prices many farmers and mill operators are falling in line on the matter of selective or partial cutting and are trying to leave a reasonable growing stand. Since the war the pulp mills are putting foresters back into the woods to promote more careful cutting. Yet there are too many farmers who are eager to get the last dime out of their timber today while prices are high. In areas served by the farm foresters, where more definite assistance and some supervision and guidance could be given, much good work in selective cutting has been accomplished. The demand for assistance in selecting, marking, and scaling timber has spread throughout the state, as evidenced by the fact that the two extension foresters have given assistance on this type of work to 33 farmers, for whom 5,230,500 board feet of timber was marked and scaled. Estimates totaling 4,459,000 board feet were made for 16 farmers. In these cases partial cutting to a high diameter limit was recommended. The work of the farm foresters on this type of project will be given under Marketing.

3. Pruning: This type of work has been limited very largely to demonstrations to create interest among farmers. It has been almost impossible to get pruning equipment. However, as you drive the highways, you will see here and there a job of pruning of young pines in planted stands when they have reached 3 to 5 inches D.B.H. Thirty demonstrations in pruning were given this year.
4. Management Plans: Due to the time required in making a complete management plan for the woodland on a farm we have had to limit this work for this year in the face of the heavy demand for other assistance where immediate results could be secured. John L. Gray did make a rather complete inventory and management plan for a 200-acre woodland farm in Rockingham County, to be used as a model for further development.
5. Woodland Examinations: At the request of woodland owners and county agents the extension foresters made 196 woodland examinations for the purpose of analyzing the problems and determining the possibilities of a management program. These cases are in addition to farms on which some definite project was carried out. Many of these will develop into future working projects.

#### B. Forest Planting:

North Carolina has approximately 4,000,000 acres of forest land and idle cropland which are not restocking and will not restock naturally in a reason-



able time. For that reason artificial planting of forest trees is an essential practice on many farms, especially in reclaiming idle, eroding land, also in growing specialized tree crops and converting stands of poor species to a more desirable kind. Planting becomes more important as the process of land stripping continues, with the leaving of no seed trees. The amount of planting necessary can be limited by greater cooperation with nature by cutting timber at time of seed fall, leaving seed trees, and more efficient fire protection.

1. Planting Forest Trees for Timber: We have the cooperation of other public agencies in the planting of forest trees for timber purposes, especially in the growing and distribution of trees to farmers. The county agents have the contacts; they encourage the farmers to reclaim idle, eroding land, and supply information on species of trees to plant, when and how seedlings should be planted, source of planting stock, and furnish application blanks. Applications for trees are sent to the forestry extension office for checking and recording and are then forwarded to the nursery furnishing the particular species or kind of trees. During the planting season of 1945-46, 195 individuals in 57 counties planted a total of 562,800 forest trees under the supervision and cooperation of the Extension Service. This shows a less number of individual plantings, but more trees, than in the previous year. The above does not include black walnut, which is reported separately. Many applications went unfilled due to shortage of trees at the nurseries. One and one-half million trees would have been planted by farmers if trees had been available. See Table I.

The state nurseries operated by the Department of Conservation and Development, through our office furnished 536,600 trees - pines, yellow poplar, and black locust - to 174 farmers in 48 counties. See Map III. This was approximately double the previous year both in plantings and number of trees. Had a full supply of trees been available, this could have easily been trebled.

The Tennessee Valley Authority furnished trees primarily for erosion control in the drainage area of the Tennessee River or its tributaries. However, the ultimate result will be timber production. The supply of trees from this nursery was very limited. Only 21 farmers in 8 counties received a total of 26,200 trees. See Table II and Map IV.

The total forest planting by farmers greatly exceeded the above. Many farmers sent applications direct to the state forester's office. Also the Soil Conservation Service distributed large quantities of trees to farmers who are cooperating with Soil Conservation Districts. We were not able to get a complete report from all agencies for this year.

The county agents cooperate with all agencies. The combined reports of 70 white agents show assistance to 815 farmers in reforesting new areas by planting small trees. Nine Negro agents report assisting 29 farmers with forest planting. These combined results show only 73 per cent of the previous year, but again the supply of trees was the controlling factor.

Table I

Farm Forest Planting - Season 1945-46

Through Cooperation  
of North Carolina Agricultural Extension Service

Source of Planting Stock<sup>1/</sup>

<u>Nurseries</u>	<u>Number of Seedlings</u>	<u>Number of Individual Plantings</u>
N. C. State Forest Nurseries	536,600	174
T. V. A. Nursery - Erosion control	26,200	21
- Tree crop tests	250	67
<hr/>		
Totals	563,050	262

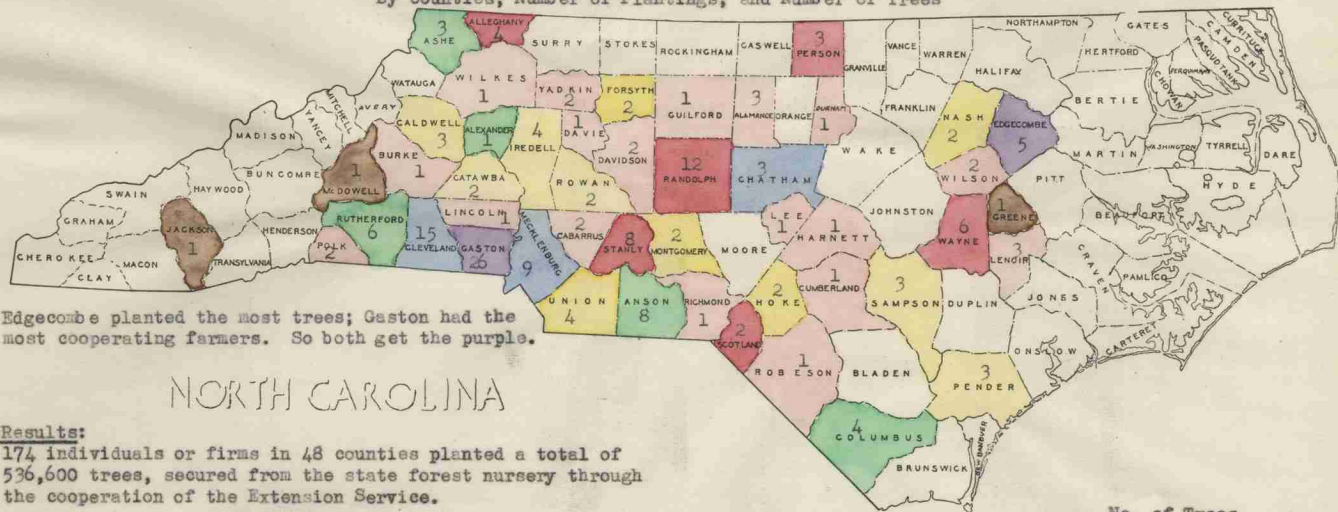
<sup>1/</sup> Applications for trees shown above were received by county agents and passed through the Forestry Extension office for record and transmission to nurseries furnishing the trees.



Distribution of Forest Trees from State Nursery - Season 1945-46

Through Cooperation of North Carolina Agricultural Extension Service

By Counties, Number of Plantings, and Number of Trees



Edgecombe planted the most trees; Gaston had the most cooperating farmers. So both get the purple.

## NORTH CAROLINA

Results:

174 individuals or firms in 48 counties planted a total of 536,600 trees, secured from the state forest nursery through the cooperation of the Extension Service.

Loblolly pine	- 367,750	Black locust	- 17,500
Shortleaf pine	- 53,250	Yellow poplar	- 15,000
White pine	- 41,100		
Slash pine	- 31,500		
Longleaf pine	- 4,000		

The figures in counties indicate the number of individual plantings in each county represented.

Color	No. of Counties	No. of Trees Planted per County
Purple	2	Above 50,000
Blue	3	30,000 - 40,000
Red	6	20,000 - 29,999
Green	5	10,000 - 19,999
Yellow	11	5,000 - 9,999
Pink	18	1,000 - 4,999
Brown	3	Less than 1,000
<b>Totals</b>	<b>48</b>	<b>536,600</b>

Table II

Forest Trees Planted on Direct Cooperating Projects  
in North Carolina

North Carolina Agricultural Extension Service  
Tennessee Valley Authority, Cooperating

Planted by Farmers  
on Private Land

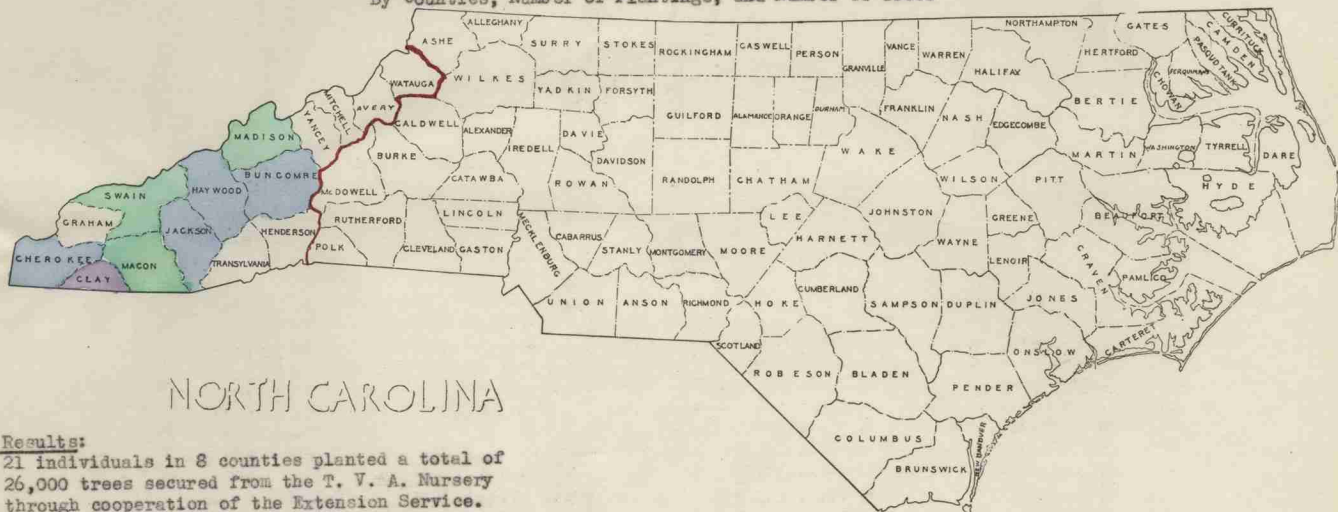
Spring of 1946					
County	Number Projects	Number of Trees by Species			Totals
		Black Locust	Shortleaf Pine	Yellow Poplar	
Avery					
Buncombe	2		1,500		1,500
Cherokee	3		2,000		2,000
Clay	7	1,300	6,100	1,000	8,400
Graham					
Haywood	2	300	2,000	1,200	3,500
Henderson					
Jackson	4		3,500	1,000	4,500
Macon	1		4,000		4,000
Madison	1			1,300	1,300
Mitchell					
Swain	1		500	500	1,000
Transylvania					
Watauga					
Yancey					
Totals	21	1,600	19,600	4,000	26,200

Note: The supply of trees was very limited; many applications were unfilled, and as a result seven counties made no plantings. No white pines were available. Approximately 500,000 trees would have been planted if trees had been available.

Map IV

Forest Trees Planted on Tennessee River Watershed - Season 1945-46  
Through Cooperation of North Carolina Agricultural Extension Service  
and Tennessee Valley Authority

By Counties, Number of Plantings, and Number of Trees



Results:

21 individuals in 8 counties planted a total of 26,000 trees secured from the T. V. A. Nursery through cooperation of the Extension Service. Clay County had the largest number of plantings and the greatest number of trees.

The supply of trees was very limited, hence the small amount of planting.

Color	County	No. of Plantings	No. of Trees
Purple	Clay	7	8,400
Blue	Jackson	4	4,500
	Cherokee	3	2,000
	Haywood	2	3,500
	Buncombe	2	1,500
Green	Macon	1	4,000
	Madison	1	1,300
	Swain	1	1,000
Totals	8	21	26,200

2. Black Walnut Planting: The state nurseries had no black walnut seedlings; so the general planting of this tree was out of the question.

Through the cooperation of the Tennessee Valley Authority under a program of "Tree Crop Field Tests and Demonstrations," we furnished 250 budded black walnut trees (Thomas variety) to 67 farmers in Avery, Buncombe, Haywood, Madison, and Swain Counties for planting as a demonstration in better nut production. See Table III and Map V.

3. Cork Oak Planting: Through the cooperation of the Crown Cork and Seal Company and the Extension Service the project in planting cork oak acorns was continued from the previous year. The Crown Cork and Seal Company furnished acorns from California upon application of county agents. Twenty-eight county agents received 759 pounds of acorns and distributed them in small lots of from a half dozen acorns to one pound, to 1,897 individual club boys and girls. See Table IV and Map VI. In addition to acorns distributed by county agents, 8 individuals in 8 counties received 38.5 pounds of acorns direct from the Crown Cork and Seal Company.

We consider this work largely experimental. The first purpose is to determine if the cork oak tree can be grown successfully under general farm conditions. This work has been centered largely in the eastern half of the state. We have four large trees growing - one at Tarboro, two in Bertie County, and one near Southern Pines.

#### C. Forest Protection:

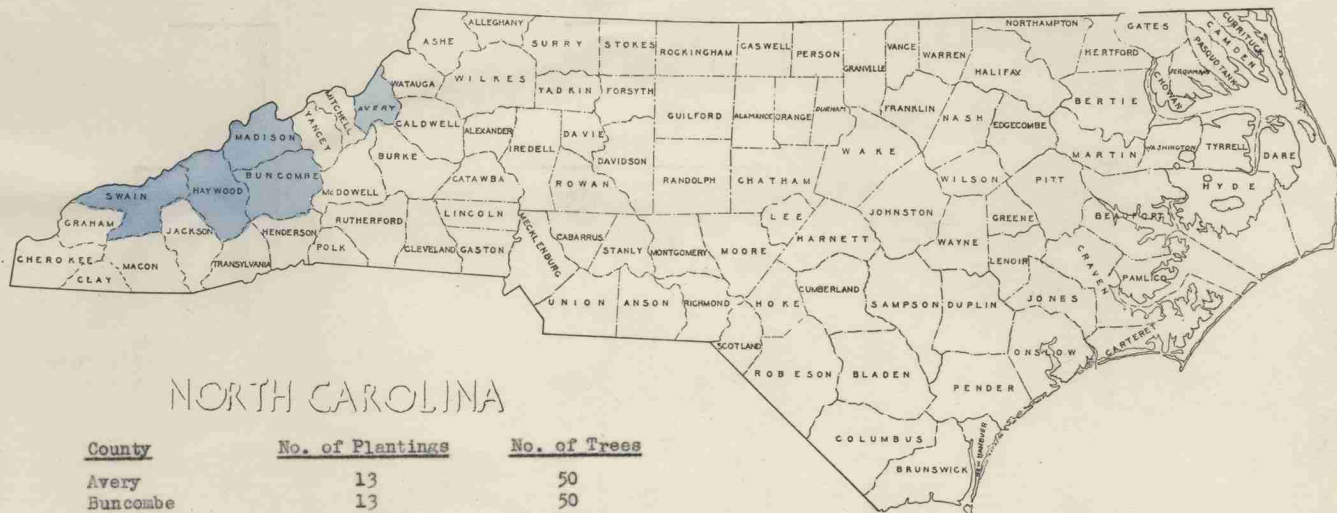
Protection of the forests from fire, disease, and insects is of prime importance. The average timber owner can take care of the usual insects and diseases through practicing systematic cutting of affected trees. Fire is more of a neighborhood problem, requiring cooperation.

1. Diseases and Insects: Our work on this problem has been confined largely to identification of the particular disease or insect and then providing the farmer with information as to controlling same. This work is handled from day to day in both the field and office. No record of requests or service is kept.
2. Fire Prevention: Recognizing fire prevention as the first step in the development and management of our farm forests, we have endeavored to support the program of the State Division of Forestry in its fire control work. This has been done in the following manner:
  - a. Encouraged farmers to plow or rake firebreaks as a protection to their own woods. Suggestions were made to farmers in news articles, through literature, at meetings, and by letters. This matter was followed up by a number of county agents and farm foresters, who cooperated with the county forest wardens in developing a program of fire-line plowing with special equipment provided by the State Division of Forestry. The cooperating farmers paid for this work at a certain price per mile according to the width of the lines plowed.

Map V

Budded Black Walnut Trees - Tree Crop Test - T. V. A. Nursery, 1945-46  
 Distributed under Supervision of North Carolina Agricultural Extension Service

By Counties, Number of Plantings, and Number of Trees



# NORTH CAROLINA

<u>County</u>	<u>No. of Plantings</u>	<u>No. of Trees</u>
Avery	13	50
Buncombe	13	50
Haywood	13	50
Madison	15	50
Swain	13	50
<b>Totals</b>	<b>67</b>	<b>250</b>



Table III

Black Walnut-Tree Crop Field Tests and Demonstrations

North Carolina Agricultural Extension Service  
Tennessee Valley Authority, Cooperating

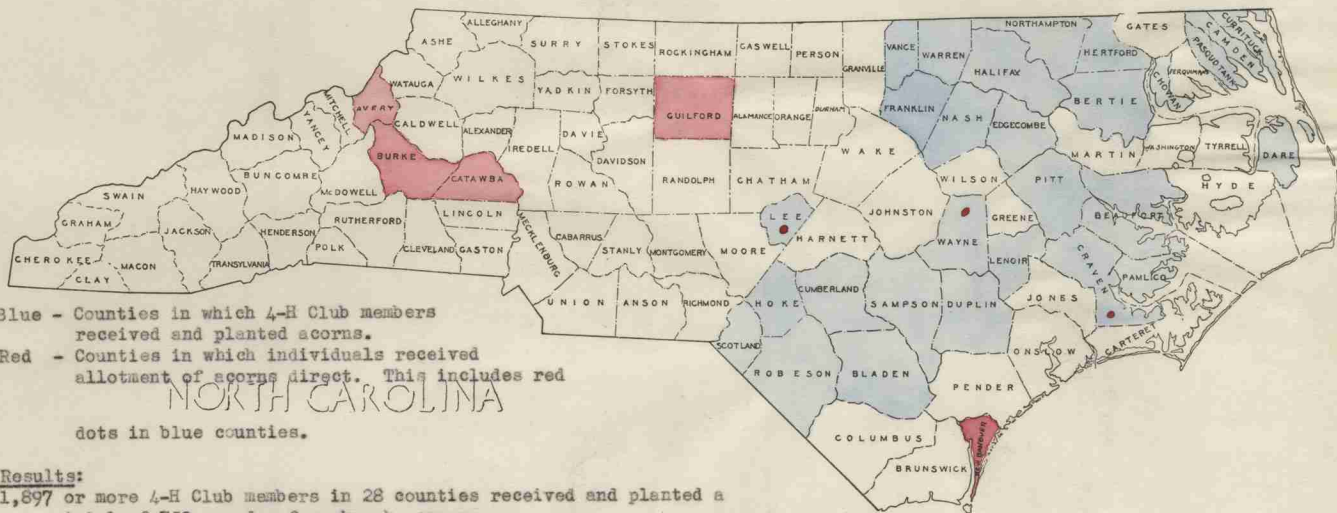
Spring of 1946

County	Number of Plantings	Number of Trees Budded Black Walnut
Avery	13	50
Buncombe	13	50
Haywood	13	50
Madison	15	50
Swain	13	50
Totals	67	250

Map VI

Cork Oak Plantings - Season 1945-46  
Under Supervision of North Carolina Agricultural Extension Service  
and Crown Cork and Seal Company, Cooperating

By Counties



Blue - Counties in which 4-H Club members received and planted acorns.

Red - Counties in which individuals received allotment of acorns direct. This includes red

dots in blue counties.

Results:

1,897 or more 4-H Club members in 28 counties received and planted a total of 759 pounds of cork oak acorns.

8 individuals in 8 counties were given allotments of cork oak acorns (direct by Crown Cork & Seal Company) amounting to 38.5 pounds.



Table IV

Cork Oak Acorn Distribution<sup>1/</sup>

North Carolina Agricultural Extension Service  
Crown Cork & Seal Company, Cooperating

County	Acorns Distributed by County Agents (Pounds)	Season 1945-46
		Number of 4-H Club Members Receiving Acorns
Beaufort	30	57
Bertie	20	30
Bladen	15	46
Camden	30	73
Chowan	15	70
Craven	15	13
Cumberland	30	61
Currituck	35	85
		Estimated - No report
Dare	30	163
Duplin	30	55
Edgecombe	25	54
Franklin	30	200 plus
Halifax	15	30
		Estimated - No report
Hertford	30	15
Hoke	30	21
Lee	15	27
Lenoir	15	36
Nash	39	60
Northampton	30	21
Pamlico	15	24
Pasquotank	30	165
Pitt	45	125
		Estimated - No report
Robeson	15	31
Sampson	100	300
		Estimated - No report
Scotland	15	22
Vance	30	44
Warren	15	29
Wayne	15	30
Totals - 28	759	1,897

1/ Twenty-eight county agents received and distributed 759 pounds of cork oak acorns to 4-H Club members and a few adults.

In addition to acorns distributed by county agents acorns were sent direct to individuals in the following amounts: Mrs. R. J. Bundell, Wilmington - 10; Lionel Weil, Goldsboro - 5; Charles H. West, Greensboro - 10; W. B. Wessell, Banner Elk - 2; Owens H. Browne, Hickory -  $\frac{1}{2}$ ; Clara L. McCombe, Morganton -  $2\frac{1}{2}$ ; Jean Lemon, Lemon Springs - 1; Henry R. Doby, Havelock -  $7\frac{1}{2}$ .

- b. Through literature and news articles presented the over-all program of rural fire protection, both for a community and for individual protection.
- c. Distributed through county agents, neighborhood leaders, and 4-H Clubs large quantities of literature furnished by the U. S. Forest Service (Forest Fire Prevention Program) and the U. S. Extension Service in support of the nation-wide Fire Prevention Week Program.

As a result of the efforts of the Extension Service in fire prevention we report the following: Sixty-five white agents report 30,509 farmers cooperating this year in the prevention of forest fires. Likewise, 28 Negro agents make similar reports with 3,112 Negro farmers cooperating in this effort.

#### D. Erosion Control

Farmers in the Piedmont and Mountain areas are recognizing more each year the ghost of dead agriculture facing them on every side. These hard-ribbed clay hills are really ghosts, but farmers have found out that these ghosts can be conquered. With the many examples of successful tree plantings and their help in tying down these wandering soils, farmers are becoming vitally interested in reclaiming their wasteland. We faced two drawbacks this year: First, a short supply of trees; second, lack of labor to do the necessary land preparation and planting.

- 1. Piedmont Area: The control of erosion in the Piedmont area is a job in which the Extension Service and the Soil Conservation Service cooperate. Terracing and tree planting are the two main methods of fighting this menace. We cannot get a complete report of results by both agencies. But through the assistance of the Extension Service many farmers planted trees on eroding land. In this area Gaston County leads with 26 farmers planting 56,300 trees; Cleveland - 15 farmers planted 37,000 trees; Mecklenburg - 9 farmers planted 34,000 trees; and Randolph - 12 farmers planted 28,000 trees, with 21 other Piedmont counties having plantings made for erosion control.
- 2. Mountain Area: The erosion control work in this area has been sponsored jointly by the Extension Service and the Tennessee Valley Authority, but due to the lack of a supply of trees only 21 farmers in 8 counties planted 26,200 trees during the 1945-46 planting season. Clay County had 7 plantings totaling 8,400 trees; Jackson - 4 plantings totaling 4,500 trees, with less in 6 other counties. See Table II and Map IV.

Over a period of nine years the accumulative totals for this work in the 15 counties draining into the Tennessee River show 2,431 plantings on 6,118 acres using 6,456,735 trees furnished by the T. V. A. Some additional plantings have been made with trees from the state forest nurseries and the Log Cabin Association.

#### E. Timber Scaling

What's my timber worth? How much timber do I have? These are the two questions uppermost in the minds of farmers who have timber of merchantable size. We

have stressed the fact that timber scaling (measuring, if you please) takes the guesswork out of buying and selling. The Farm Woodland Management Project and the work of the two extension foresters, as well as the service of the county agents, are giving farmers a very definite idea as to the volume and value of their standing timber before attempting to make sales. Our past efforts in demonstrations of timber scaling are beginning to bear fruit. Farmers are now convinced that you can scale timber as well as weigh cotton or tobacco. We have continued to place tree and log scale sticks (both Doyle and International) with farmers, timber operators, county agents, and anyone interested. These sticks scale either logs or standing timber. The sticks are placed in pairs for comparison and educational value. During the year 1946 we placed 103 sets or pairs of these sticks. We have tried to steer the timber owner away from the idea of estimating and cutting to a low-diameter limit, which, at best, is only guessing and a short step in leaving a small amount of growing stock, sometimes only culls. Instead, we have stressed selection and scaling timber, largely on a tree-by-tree basis, especially with farmers who have comparatively small areas and often mixed stands of timber. We consider this method best in most farm cases, especially on tracts of less than 100 acres or lots of timber with less than 500,000 board feet.

During the year 1946, the extension foresters conducted many demonstrations in scaling standing timber. Many county agents carry their scale sticks in the car and show farmers how to scale at every opportunity. The extension foresters assisted 31 farmers in selecting, marking, and scaling 5,230,500 board feet of timber in 1946. Timber estimates were made for 16 farmers covering 4,459,000 board feet. These estimates were made on basis of ocular examinations combined with scaling on one-fourth acre sample plots well distributed on the entire area, and in some cases systematic cruises.

The farm foresters working under the Farm Woodland Management Project assisted 376 farmers in selecting, marking, and scaling, or in some cases cruising timber, on 23,528 acres totaling 69,836,000 board feet of saw timber, 828,000 board feet of veneer stock, 15,430 cords of pulpwood, and 1,738 cords of fuel wood. See Table V for more details.

County agents (white) in 83 counties report giving assistance to 902 farmers during 1946, on timber estimating and appraisal. In the same manner 27 Negro agents report giving such assistance to 173 Negro farmers.

#### F. Marketing

Selling at a profit determines the feasibility of any enterprise. Farmers to become timber growers must of necessity realize a profit from the sale of their forest products. Selling timber at its full market value after determining the volume is an important factor in convincing farmers that timber-growing can be made a definite part of their farm enterprise. We have endeavored to assist farmers in meeting their market problems by supplying market information, sales agreements, and through assistance on timber sales.

1. Timber Market Information: We endeavor as near as practical to maintain an up-to-date file of information on North Carolina and near-by markets for various types of farm forest products. In addition to markets for pine and hardwood timber for lumber, poles, and pulpwood, this information includes markets for miscellaneous species - such as ash, beech, birch,



Table V

## FARM WOODLAND MANAGEMENT PROJECT

North Carolina Agricultural Extension Service  
U. S. Forest Service, Cooperating

December 1, 1945 - November 30, 1946

Area	Farm Forester	Months Employed	Farmers Given Assistance		Timber Marked and Scaled or Cruised						Reported Sales of Stumpage or Products											
					Number of Owners	Number of Acres	Volume				No. Sales	Volume				Value					Totals Dollars	
			No.	Acres Involved			Saw Timber M B. F.	Veneer Logs M B. F.	Pulp- wood Cds.	Fuel- wood Misc. Cds.		Saw Timber M B. F.	Veneer Logs M B. F.	Posts, Ties Poles Pcs.	Pulp- wood Cds.	Fuel- wood Misc. Cds.	Saw Timber Dollars	Veneer Logs Dollars	Posts, Ties Poles Dollars	Pulp- wood Dollars		Fuel- wood Misc. Dollars
I	E. J. Sylvester	12.0	44	2,818	40	2,617	24,265		396	44	24	5,567	910		210	44	53,831	7,587		637	132	62,187
	R. E. Reed	1.0)																				
	W. G. Davis	4.5)																				
II	Ross S. Douglass	5.0)	149	11,324	48	1,949	7,567				24	8,828	252			8	120,279	3,800			8	124,087
	H. E. Blanchard	1.0)																				
III	W. W. Barnes	9.0)	69	22,360	45	3,153	11,230	828	103		23	18,980	283		6		232,305	5,400		13		237,718
	F. J. Cook	11.0)																				
IV	V. G. Watkins	1.0)	51	1,805	26	765	3,510		86		29	5,123		500 <sup>1/</sup>	3,500		95,453		175 <sup>1/</sup>	7,300		102,928
V	W. H. Wheeler, Jr.	12.0	109	16,154	73	11,102	10,581		13,575	1,070	42	4,221		26,000 <sup>2/</sup>	13,355	300	78,895		25,500 <sup>2/</sup>	29,000	1,000 <sup>3/</sup>	134,395
VI	John E. Ford	12.0	105	15,003	104	1,761	5,319		450	518	47	3,826			450	65	50,607			450	137 <sup>4/</sup>	51,194
	James E. Hobbs	8.5)																				
VII	D. F. Traylor	3.0)	75	5,497	21	1,082	3,813		260	35	21	3,617			18	400	62,563			63	850	63,476
VIII	A. H. Maxwell	12.0	57	4,876	19	1,099	3,551		560	70	38	3,290	7		620	404	38,581	75		1,860	827	41,343
Totals		92.0	659	79,837	376	23,528	69,836	828	15,430	1,737	248	53,452	1,452	26,500	17,159	1,221	732,514	16,862	25,675	39,323	2,954	817,328
Gen- eral	John L. Gray <sup>5/</sup>	12.0	148		35		7,131		135		14	2,932					60,369					60,369
	R. W. Graeber <sup>6/</sup>	12.0	137		14		2,558		40		2	611			40		15,200			120		15,320
Grand Totals		116.0	944	79,837	425	23,528	79,525	828	15,605	1,737	264	56,994	1,452	26,500	17,199	1,221	808,083	16,862	25,675	39,443	2,954	893,017

1/ Fence posts.

2/ 25,000 poles and 1,000 ties.

3/ Includes 100 Christmas trees.

4/ 50 Christmas trees and 4 tons rhododendron burls.

5/ About 25 per cent of Gray's time devoted to this type of work.

6/ About 10 per cent of Graeber's time devoted to this type of work.

cedar, dogwood, gum, hickory, locust, maple, poplar, walnut, etc. - with a list of dimension plants, shuttle-block mills, veneer mills, etc. This type of information is furnished to farmers, county agents, vocational teachers, and others. We try to avoid giving definite information on prices, since prices vary widely according to conditions, type and quality of timber, logging conditions, and shipping facilities. However, we do often find it necessary to give some idea as to range of prices under varying conditions.

2. Assistance to Farmers on Timber Sales: Most farmers make few timber sales during their active business life and, therefore, lack experience. Too, they often lack confidence in their own judgment in making trades with experienced timber operators. To aid them we furnish farmers with sample contracts for selling standing timber for saw timber, poles, piling, veneer logs, pulpwood, etc., as the individual case may require. In numerous cases we have assisted farmers and timber operators in preparing specific contracts after seller and purchaser have agreed on terms, fitting details to the conditions of the timber, land, and type of product to be harvested. This type of assistance is especially given in cases in which farmers are having their timber cut selectively. We endeavor to make these contracts short, clear, and understandable to both parties. Several lawyers have asked for assistance in preparing contracts.

We try in every way possible to build a mutual understanding and working relationship between the timber grower and the timber purchaser or operator. Information is supplied to timber buyers on source and types of timber available, and we solicit their cooperation in doing a selective or conservative job of cutting. This has resulted in securing the cooperation of many lumbermen, sawmill operators, and pulpwood contractors. Quite a few lumbermen have become convinced that our foresters are making a real effort to scale timber in keeping with what it will actually saw out. Therefore, in numerous cases the buyer and timber owner decide on a price per thousand based on the forester's scale; and sale is made accordingly.

Definite reports on sales with which extension foresters gave assistance show 16 sales - 3,543,000 board feet with stumpage value of \$75,689. We have reason to believe many other sales of timber which we scaled have been made, but reports have not been made. Some farmers refuse to give information on sales, considering such as private information. See Table V.

The Farm Woodland Management Project, under which eight farm foresters are employed cooperatively by the Extension Service and the U. S. Forest Service, served 30 counties for a total of 92 man-months. See Table V and Map II. In addition to the above these farm foresters handled special marketing problems assigned to them in 12 additional counties. During the year this group of foresters assisted 248 farm timber owners in making sales as follows: Saw timber - 53,452,000 board feet, veneer timber - 1,452,000 board feet, 25,000 poles, 1,000 railroad ties, 500 fence posts,

17,159 cords of pulpwood, 1,221 cords of fuel wood, and some miscellaneous products, with a stumpage value of \$817,328. See Table V. In many cases farmers made additional income by using farm labor and equipment in cutting and hauling logs, pulpwood, and other products.

Under the heading "Forest Marketing and Distribution," 71 white county agents report devoting 531.9 days in aiding farmers with their timber marketing problems, with 45 of these agents showing assistance to 1,732 farmers in selling \$1,535,942 worth of timber products. In like manner, 13 Negro agents spent 31.5 days in aiding farmers with timber marketing work, and 10 gave direct assistance to 135 farmers in making sales amounting to a total of \$27,584.

#### G. 4-H Clubs

Sixty-three white county agents and 3 home agents report 628 boys and 16 girls enrolled in forestry projects, while 55 county agents and 2 home agents report 443 boys and 5 girls completing their projects, with 1,016.2 acres of land involved. Ten Negro agents and 2 home agents report 69 boys and 79 girls enrolled in forestry projects, while 10 Negro county agents and 1 home agent report 60 boys and 67 girls completing their projects, with 60 acres of land covered in completed projects.

4-H Club members participated in timber thinning, forest planting, fire protection, and tree study projects. Planting projects were largely cork oak acorns, with a few pine plantings. We had a big demand for black walnut and red cedar for 4-H plantings, but trees were not available.

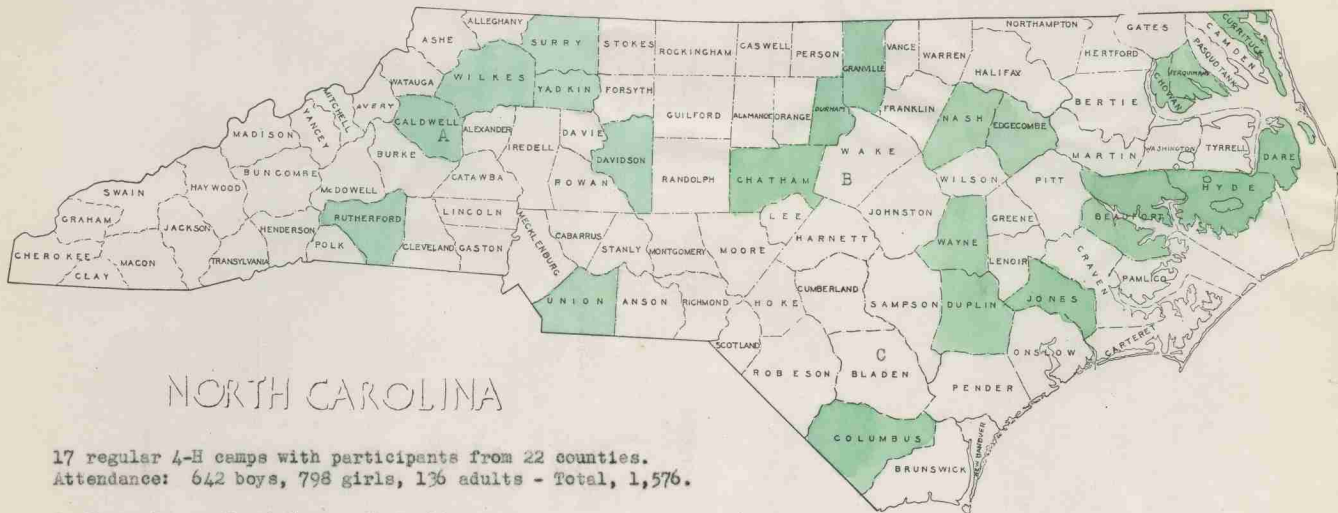
The extension foresters and farm foresters participated in 17 4-H Club camps for white boys and girls. These camps served groups from 22 counties, with an attendance of 642 boys, 793 girls, and 136 adults - total attendance, 1,576. See Map VII. Instruction was given in tree identification, timber thinning, timber scaling, leaf printing, with talks and motion pictures on fire prevention and other forestry subjects.

Three camps of a more or less state-wide nature were participated in:

- (a) A camp for Grange youth was held at Patterson School, Caldwell County, with 15 boys, 20 girls, and 6 adults in attendance. One of our farm foresters gave instruction at this camp.
- (b) A wildlife and conservation camp for Negro 4-H Club members held at Camp Whispering Pines, Wake County, gave us an opportunity of giving forestry instruction to a group of Negro boys and girls, with a total of 44 in attendance.
- (c) The Forestry Camp for Farm Boys, held at Lake Singletary, was a cooperative project between the Agricultural Extension Service and the State Division of Forestry, with the Southern Pulpwood Conservation Association and two member mills covering the cost of this camp. While not considered strictly a 4-H camp, the 48 boys selected by county agents to attend the camp were all active club

4-H Club Camps - 1946

At Which Forestry Instruction Was Given



NORTH CAROLINA

17 regular 4-H camps with participants from 22 counties.  
Attendance: 642 boys, 798 girls, 136 adults - Total, 1,576.

- A State Grange Youth Camp - Statewide
- B Wildlife and Conservation Camp for Negro 4-H Club - Statewide
- C Forestry Camp for Farm Boys - Statewide



members. Four full days and five nights of intensive training in forest practices were given these boys, with enough play to keep up spirits. Instruction was furnished by the State Forest Service and the Extension Service.

This office supplied much literature for boys and girls who were interested in preparing papers, talks, etc., in connection with their school work on the state-wide essay contest sponsored by the North Carolina Forestry Association. Literature was furnished science teachers who requested help in preparing a teaching unit on forestry for their science classes.

### III GENERAL

#### A. Cooperation with Other Agencies

We have had the cooperation of and have cooperated with numerous groups and agencies during the year. At this point we will list these agencies, firms, or organizations in a group:

1. Other divisions of the North Carolina Extension Service.
2. Agricultural Extension Service, U. S. Department of Agriculture.
3. Forest Service, U. S. Department of Agriculture.
4. Soil Conservation Service, U. S. Department of Agriculture.
5. Forestry Division, North Carolina Department of Conservation and Development.
6. North Carolina Soil Conservation Districts.
7. U. S. Farm Security Administration (now Farmers Home Administration).
8. U. S. Production and Marketing Administration.
9. Department of Forestry Relations, Tennessee Valley Authority.
10. Southeastern Forest Experiment Station.
11. Forest Products Laboratory.
12. North Carolina Department of Agriculture.
13. North Carolina Agricultural Experiment Station.
14. American Forestry Association.
15. American Forest Products Industries, Inc.
16. Forestry School, N. C. State College.
17. Forestry School, Duke University.
18. North Carolina Pulp Company.
19. Champion Paper and Fibre Company.
20. Southern Pulpwood Conservation Association.
21. North Carolina State Grange.
22. North Carolina Farm Bureau.
23. State Planning Board - Committee on Rural Industries.
24. North Carolina Press

Special items under this heading would include:

Work with the Agricultural Experiment Station, the Southeastern Forest Experiment Station, and the Forest Products Laboratory in developing an automatically controlled wood furnace for curing tobacco. In this case the extension forester served as instigator or promoter, getting the other agencies to do the work.

We cooperated with the State Planning Board through its Committee on Rural Industries in planning for and conducting a series of district conferences in the interest of developing small rural industries.

The Forestry Camp for Farm Boys held with the cooperation of the county agents, who selected the boys, the State Division of Forestry, the Southern Pulpwood Conservation Association, North Carolina Pulp Company, and Champion Paper and Fibre Company.

The North Carolina Forestry Association was assisted in the selection of three timber owners to be awarded a certificate as "Timber Farmers."

The Extension Service through the county agents and the farm foresters cooperated with the State Division of Forestry in a program of fire line plowing in a number of eastern counties.

#### B. Outlook for 1947

The demand for lumber for house construction will be heavy. Indications are that there may be a slight leveling off in prices of certain items, but stumpage prices for pine timber will show little or no decline. Hardwoods of low quality will be harder to sell, but prices will hold up fairly well.

The demand for pulpwood will continue high, with a probable slight increase in stumpage prices. Labor is a little more plentiful but not eager to work in the woods.

Farmers will want to sell timber for fear price may drop. High prices are a temptation to oversell small, young, standing timber which should stand for another 10 to 15 years.

Farmers will want to plant trees on idle land, since labor is more plentiful, but the nurseries will be short on supply of trees; so no great increase in reforestation for 1947 will be possible.

The demand from farmers for assistance, especially with their timber scaling and marketing problems will be heavy in 1947, even greater than can be served with the present personnel of foresters available.

More farmers will be interested in timber thinning and stand improvement than during the war period.

The demand for fire line plowing in the eastern counties will increase in proportion to the amount of equipment which the State Division of Forestry can secure.