

FORESTRY EXTENSION

PLAN OF WORK

For

Calendar Year 195~~6~~⁰Major phases of project
or subdivisions of
project covered

Name of Worker*

Percentage of time
devoted to entire
project by each worker

Statewide

Carl J. Holcomb

100

Statewide

C. E. Gill

100

Statewide

A. B. Lyon

100

Statewide

W. A. McElfresh

100

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Administrator, Federal Extension Work
U. S. Department of Agriculture* If phases of project are divided between two or more workers, indicate
assignment to each.

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APPENDIX

ANALYSIS OF PROJECT SITUATION

In 1959, a study and analysis of the forestry situation in Virginia was made for a study in the School of Agriculture entitled "Improving and Expanding V.P.I.'s Role in Virginia's Agricultural and Rural Life" (copy in Appendix). This study, based in part on the recent Forest Survey Inventory of Virginia's timber resources, presents concrete evidence of what has been generally believed in reference to our timber situation, namely, slowly.

Previous annual plans of work have been based on the assumptions now brought out in this study. The study may be summarized as follows:

1. The number of farms and farm acreage is decreasing. A large percentage of the farms in all sections of the State is decreasing at the rate of over 100,000 acres annually. There are trees which will never make sawtimber. The major portion of the merchantable sawtimber stand is in low grade tracts.
2. According to the Census of Agriculture, there are approximately 6 1/2 million acres of woodland at present. About 3/4 of the farms have wooded areas with an average acreage of 67 acres. Virginia is not only a forested state, a major portion of her industries use wood as the basic raw material. According to the Forest Survey the farm woods acreage is slightly over 10 million acres. Using industries account for about 1/3 of the total payroll, employment and value added to manufacture in all industries.
3. In comparison with the United States as a whole, Virginia is in contrast to a little less than 10% for the nation as a whole. Virginia is very favorably located with respect to such farm woods acreage. markets and transportation facilities.
4. Commercial forest area has increased a little over one million acres in the past 17 years (1940-1957). Agricultural land has decreased by 1 1/2 million acres in the same period. Progress in forestry has been very marked in the State since World War II. Fire Protection is excellent, tree planting and management practices are on the increase.
5. Farmers own 2/3 of the forest land. Absentee landowners have

As may be expected from the results of the forest inventory which shows that our pine sawtimber is being cut faster than it is growing, pine stumpage and prices are rising. Inefficient mills are unable to pay high

stumpage prices and survive. Higher stumpage prices, on the other hand, are an incentive to practice forestry.

Other studies have been helpful in developing new programs of work and in strengthening work already underway. A study of the utilization of wood waste in 1959 indicated that little has been done except in limited areas, to develop markets for the 40% of the sawlog material which ends up in burners or in sawdust or slab piles. A companion study indicated that there is a potential market for all of the wood industry waste that is now burned or left to rot.

A recent development in the wood utilization field is expected to have profound effects in the processing and marketing of timber in Virginia. The Federal Housing Administration announced that beginning April 1, 1960, all lumber going into FHA financed homes must be grade marked. For southern pine lumber this means that lumber going into FHA homes must conform to the standards of the Southern Pine Inspection Bureau. Since southern pine must have a moisture content of less than 19% to be grade marked, small mills which sell their lumber green will be denied this market. It is too soon to determine what adjustments will be made. One market has definitely been lost.

It is our belief that other lending agencies will follow the FHA with respect to housing loans. Small mills will have three alternatives.

- (1) Supply what markets are left at reduced prices for green lumber.
- (2) Sell their output to concentration yards as many are doing now.

(3) Go out of business.

A recent study of conservation knowledge of school children in Virginia, shows that conservation knowledge, including forestry, of pupils is very meager. It is doubtful whether the adult population could obtain much higher scores on the conservation test than school children did.

Forestry extension has been more restricted in its activities than other subject matter fields. In most extension activities attention is given to the growing, harvesting, processing, and consumption of products grown on the land. Thus each segment of the population receives help and assistance in many subject matter fields.

Forestry extension has been more limited in its activities. Country-wide, most of its attention in the past has been directed to the landowner and the improvement of his timberland. In limiting himself, the extension forestry specialist has been unable to achieve the progress made in other fields. With low stumpage values for timber, landowners have been reluctant to invest time and money in a forest enterprise.

With the increasing scarcity of good quality of timber and higher stumpage values for what is left, the climate is changing. With this change forestry extension needs to broaden the scope of its work. This has been done to some extent in Virginia as it has in other states. The expansion of activities into other segments of the timber economy needs to be more rapid and more concentrated. Without additions to staff this means a change in emphasis in some of the programs.

MAJOR PROBLEMS

- A. Timberland owners. - The problems confronting them has not changed materially over the years. They can get more for quality material than in the past. However, they have even less quality material to market. Their problems may be listed as follows:
1. Timberlands in poor growing condition.
 - a. Low growing stock levels.
 - b. Inferior growing stock.
 - c. Grazed woodlands.
 2. Lack of knowledge of
 - a. Timber values.
 - b. Cultural practices.
 - c. Harvesting methods.
 - d. Marketing.
 3. Insufficient help to establish, improve or harvest timber.
 4. Lack of equipment with which to carry out forestry work.
- B. Processors of timber. - Very little work has been done with those who harvest and process timber, especially sawtimber. Their problems are manifold.
1. Timber is not harvested in accordance with good forest practices. This is a most difficult problem because with inadequate capital, limited outlook, and the need to make a living, it is difficult for them to change.
 2. There is a lack of knowledge of how to harvest timber to obtain the best grades and products.

3. Sawsmling equipment is not adequate to turn out a quality product.
 4. Mill operators are not educated to keeping their equipment in good condition. They do not understand the best methods of sawing. They are frequently limited in their marketing experience.
- C. The public. - In general, the public believes that conservation, including, forest conservation, is good. This is the foundation on which an appreciation of the value of forests to Virginia and the nation can be built. However,
1. They do not appreciate the interrelation of forestry and soil erosion, watershed management, wildlife and recreation.
 2. They have had inferior wood used in the construction of their homes. Together with poor workmanship they are accepting wood substitutes - many of which do not have the good qualities of wood.

WORK TO BE DONE AND METHODS OF PROCEDURE

A. Work related to timberland owners.

1. Improvement of timberland. This has been the basis of past work of forestry extension. Many projects have as their objective the development of greater interest in woodland management and in teaching landowners how to improve, harvest and market their timber crops.

Two projects will be continued which are making progress in changing attitudes of woodland owners and are helping to improve forest management practices.

- a. Forestry contests. These contests, described in previous reports, have as their purpose the establishment of a series of woodland demonstrations in selected counties. Landowners carry out forestry practices of their choosing. These are judged and prizes given for outstanding work. After these contests have run for a few years a series of excellent forestry result demonstrations will have been established. Landowners will have learned timber management practices. A by-product is a basis for forestry publicity and greater interest in forestry in the county. Most of these contests have been in counties in eastern Virginia where the pine paper mills have been concentrated.

In 1960 it is proposed to establish forestry contests in the western part of the state where there is a growing market for

hardwood pulpwood. Amherst, Bedford and Nelson counties in the Piedmont with Lee and Scott counties in the Mountain will be selected.

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- b. Farm woodland demonstrations. Forestry result demonstrations in the past have usually been limited to an acre or so in size. These have had their limitations. They demonstrated one practice. Input and output data could not be obtained from them.

Two years ago a project to establish farm woodland demonstrations which took in the whole woodland and integrated its management with the rest of the farm management plan was inaugurated. Work on them will be continued and 10 new demonstrations will be established in 1960.

- c. County agents will be assisted in holding forestry field days at which time demonstrations of cultural practices will be given and the results of previous work reviewed. Forestry contest demonstration areas and the farm woodland demonstrations described in (b) above will be used.
- d. The dedication of a white pine tree farm in Floyd county and a symposium on the management of white pine will be held. Its purpose will be to encourage the planting of more white pine in the mountain section and the improvement of present stands.
- e. Continued encouragement will be given to the use of the ACP to establish forest plantings and to make woodland improvements.

The basis of this will be a new series of leaflets on ACP forestry operations. In addition the press and radio will be used to inform more landowners of them.

- f. Three publications will be prepared on the management of pine, hardwoods in general and yellow-poplar.
- g. A training school will be held for county agents to bring them up-to-date on current forestry developments and practices.
- h. Assistance will be given to Farm and Home Development and Rural Development workers. Special forestry programs will be encouraged.

B. Work related to timber processors

- 1. A series of schools is planned for sawmill operators, who are, for the most part, also the harvesters of timber.
 - a. Schools for lining up sawmills to saw a better product.
 - b. Schools for grade sawing lumber.
 - c. Schools for handling lumber.
 - d. Schools for the keeping of simple cost records.
 - e. Schools to teach proper cutting methods.

These schools will be conducted in cooperation with the Lumber Manufacturers' Association of Virginia. They cannot all be held in one year but will be held throughout the state on a progressive basis.

- 2. A sawmill and logging exposition will be held to exhibit and demonstrate up-to-date equipment. A symposium on wood utilization

will be held in connection with it. The exposition will be held in cooperation with the Lumber Manufacturers' Association of Virginia.

3. A service to sawmills and the wood-using industries will be inaugurated to inform them of the latest developments and methods in the industry. They will be informed of available studies, largely in the form of reports from the Forest Products Laboratory. As the need develops other information can be provided.
 4. A study will be made of markets and methods of processing wood waste for a variety of uses. This will be a cooperative effort of dairy extension, poultry extension, horticulture extension and agricultural engineering.
- C. Work related to the public. - Public acceptance of the values of forestry is a continuous process and one in which extension can play an exciting role. With the communications media open to it, extension has an opportunity open to few public agencies.
1. The press, radio and TV will be used to present educational information on forestry.
 2. Opportunities will be taken to talk before civic organizations, service clubs and others.
 3. Efforts will be put forth to establish forestry study groups in home demonstration clubs.
 4. 4-H club work. In this area lies one of the finest opportunities to teach a segment of the public an appreciation of forestry and how to carry out many forest practices. Much progress has been

made in 4-H forestry work. The emphasis in 1960 will be to improve and expand the work already underway. It will include:

- a. Development of project material for use by club leaders.
- b. Training of agents to use project material.
- c. Expansion of the awards program.
- d. Expansion of the forestry field day program to more counties.
- e. Expansion of the father and son 4-H forestry contest to more counties.
- f. Encouragement of the use of the 4-H forestry appreciation project as a county-wide project in more counties.
- g. Teach forestry in 4-H camps.

RESULTS EXPECTED AND METHODS OF MEASURING

Based on past experience progress will be slow for most of the objectives. Results will be difficult to measure. This is especially so because of the many agencies contributing to forestry education. No one group can determine the proportionate effect of his work on the overall program. There is some statistical evidence of progress which can be shared: (1) Acres of forest establishment or improvement under the ACP, (2) Management plans prepared and volumes of timber marked by service foresters, (3) number of trees planted and (4) acreage planted to trees under the Conservation Reserve of the Soil Bank program.

Within extension forestry's exclusive field the number of 4-H projects taken and completed, the number of 4-H camps attended and the number of participants in 4-H forestry demonstrations can be used to evaluate results.

On the county level encouragement given to forestry through extension forestry committees, development of forestry programs and participation by landowners can be used as a measure of progress.

The most tangible measurements, which must also be shared with other agencies, is the report of forest conditions as determined by reinventories by the National Forest Survey. These are expected to be made every eight or nine years in the future.

PROJECTED PROGRAM NEEDS

1. A program for Virginia forestry. - While Virginia foresters and forestry agencies are reputed to work together, and do, what is done together is apt to be superficial or of necessity. Each has his own program of work. These programs may overlap in some areas. In others there are gaps in the work that needs to be done.

There needs to be an analysis, not just of forestry extension work, but of the broad needs for action in all phases of forestry. Agency and organization programs need to be studied and evaluated in terms of needs. The many groups then should get together to develop a program which will more adequately attack each problem area. Means of making such a study should be explored.

2. Forestry techniques are advancing so rapidly that professional foresters can and many do become out-of-date rapidly. The most satisfactory way of keeping up-to-date is through conferences, seminars, short courses, and similar means. This has been done on a regional basis. Similar work needs to be done on a more local scale. Means of accomplishing this should be explored.

3. In 4-H club work there is a trend away from 4-H clubs in schools and more emphasis on community clubs. Community clubs require more leadership training. Forestry extension should develop training aids and work closely with these clubs.

4. A need exists to have a record of the wood-using industries, their locations, capacities, types of materials used, marketing methods, etc. Methods of making such a study will be explored.

A P P E N D I X