

## SOUTHERN FOREST TREE IMPROVEMENT COMMITTEE

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The present chairman of the Committee on Southern Forest Tree Improvement is Clem Kaufman, Director of the School of Forestry at the University of Florida. Dr. Pauley has for the record a statement from Dr. Kaufman, which is the official statement of the committee in the South. I can tell you informally about the committee, although I am no longer a member of it through a shift in membership. The aim of our committee, our general objective, was to foster and encourage the advancement of Southern forest tree improvement. More specifically, our first objective was to assist in coordinating Southern forest tree improvement activities, both in research and the application of research. The second purpose was to act as a clearing house for information. Now as to organization, the committee was set up by the co-chairmen of the First Southern Forest Tree Improvement Conference, held in January 1951. Present membership is as follows: State forest services 2, forestry schools 3, pulpwood industry 2, pine lumber industry 1, hardwood luniper industry 1, Tennessee Valley Authority 1, Division of Forest Pathology 1, Region 8 of the Forest Service 1, and 1 from each of the Southeastern and Southern Forest Experiment Stations.

Now, there is an interesting point about how the membership is handled. The committee asks the respective associations, the Association of State Foresters, the Southern group of the Forestry School Executives, the Southern Pulpwood Association, and the Pine and Hardwood Lumber Associations to nominate members to the committee. The committee appoints these nominees for a 2-

year term. The term is renewable at the option of the association or agency. As to the activities of the committee, the first thing we did was to set up subcommittees to do the work, and this worked out very well. It appeared that without certain subcommittees to take on definite phases of the work we wouldn't get much done. We had 4 subcommittees: one on tree selection and breeding, one on racial variation, one on progeny testing, and one on genetic control of seed, that is, the application of genetics to the collection of seed for forest planting.

The first direct activity of the committee was to set up a large study of racial variation in the 4 major southern pines. Fortunately, we had Phil Wakeley who has devoted more than 25 years of his life to the regeneration of southern pines. He had some previous experience with seed-source studies and knew the pitfalls of that kind of work. Since 1951 he has given nearly all of his time to the establishment of a comprehensive study of racial variation in the 4 major southern pines. He has had very good cooperation from people all over the South. About 200,000 seedlings for the study were raised in 19 nurseries in 15 states and are now growing in 55 different test plantations from New Jersey to Texas. Wakeley tells us that the establishment of those plantations was something like 98 percent successful, which is better than we hoped.

The second major activity of the committee was to write up various publications in the form of guides to answer the questions, who? what? and how? in a program of Southern forest tree improvement. The "who" was answered by a directory of genetics activities in the South prepared by Keith Dorman. The "what" was covered in a publication of the committee, entitled "Suggested Projects in the Genetic Improvement of Southern Forest Trees." It doesn't pretend to give the whole array of priorities and time schedules because each participating agency knows best what it wants to do, what are its skills and facilities. Rather, this publication is an inventory of the forest tree improvement work that should be done, so that any particular group wanting to participate in the South-wide program could have a number of suggestions on what to do.

Then the third type of guide told how to do tree improvement research. For example, one is a recommended sample working plan for local studies of seed source. This guide is designed for use by any person who wants to conduct such a study. The second was a rather comprehensive 88-page guide to selection, entitled "Hereditary Variation as the Basis for Selecting Superior Forest Trees." A simplified guide to selection was also proposed, but was later rejected. The geneticists said selection could not be reduced to a cook-book basis. Then, a guide to progeny testing of forest trees was prepared by the Progeny Testing Subcommittee, and published by the TVA. It presents guidelines to methodology, in order to help insure comparability in different progeny tests and to prevent costly mistakes in design and procedure.

Those three guides cover research. Now for the practitioner, a guide is being prepared on the application of genetics to the collection of seed in a planting program --for example, the types of trees to collect seed from and the separation of seed origins in the nursery, which New York State started back in 1935. There will also be a guide or series of publications on the application of genetics in silviculture.

A final and continuing function of the committee is to bring about better coordination among the many people working in the whole field. That's done first by a genetics Newsletter which the committee gets out every 6 months or so. It's also done directly through the semi-annual meetings of the committee, because on that committee are represented a good share of the people who are doing genetics research in the South. Just through getting together in the meeting and after the meeting they do much of the coordinating right there. Furthermore, every so often the committee will foster or call a South-wide open meeting. The second such conference was held in January 1953. Those conferences, of course, accomplish coordination and help to stimulate interest in tree improvement activities. They also help to get the results of research across to forest managers and to men who are in the regeneration business.

Pauley Mr. Paul O. Rudolf has sent us a statement on the Lake States Committee which I would like to read.