

THE WESTERN GULF FOREST TREE IMPROVEMENT PROGRAM, HISTORY AND ORGANIZATION

J. P. van Buijtenen

Principal Geneticist, Texas Forest Service

and

Professor, Texas A&M University

College Station, Texas

The following remarks are primarily an account of the experience of the Texas Forest Service in organizing the Western Gulf Forest Tree Improvement Program (WGFTIP) and the philosophy that went into its development. The program of the Texas Forest Service has had two very distinct phases, although in both phases it was a cooperative effort. The initial phase lasted from the organization of the program in 1951 until the middle 1960's. Initially the program was supported by a combination of State and industrial funds, with the State of Texas providing the lion's share of the cost, but with several industries giving additional financial support. At this time the program was mostly research-oriented. Practical experience in tree improvement was largely lacking and most of the effort went into developing techniques for selection, grafting, seed orchard management, and progeny testing. The results were generally available and advice was given to other organizations, but the basic philosophy of the program at that time was one of research rather than service.

The second phase of the program became effective in 1969, with the organization of the Western Gulf Tree Improvement Program. The outlook of this organization is considerably different and I will spend the remainder of my talk on this and similar tree improvement programs.

OBJECTIVES OF THE WESTERN GULF FOREST TREE IMPROVEMENT PROGRAM

Looking at such different organizations as the Western Institute of Forest Genetics, the Lake City Genetics Project, the North Carolina State Cooperative Program, and the Spruce-Fir Program in New

England, it is clear that the objectives of a tree improvement program can vary greatly. At this point I would therefore like to be specific and quote you the objectives of WGFTIP as adopted at its organizational meeting.

“The objective of the Western Gulf Forest Tree Improvement Program is to provide sustained and co-ordinated leadership and technical assistance in the selection, propagation and genetic testing of desirable clonal lines of southern pine and hardwood species. Further objectives are to promote cooperation in the area of forest genetics through the exchange of information, data, assistance and plant materials between and among members, as well as the promotion of pertinent research.”

There are two key phrases in this lofty prose: (1) technical assistance and (2) cooperation through the exchange of information and plant materials among members. These two ideas — technical assistance and cooperation — are the essence of a cooperative program, although indeed a great number of other ingredients are necessary to make one operate smoothly.

MEMBERSHIP

Membership of the WGFTIP organization is open to all interested organizations within its geographic area. The organization started with 13 charter members, including two State organizations, three organizations with primary interest in lumber and/or plywood, and eight organizations with primary interest in pulpwood. Since then two additional State organizations and three industries have joined the program, making the total membership 18. The above grouping is some-

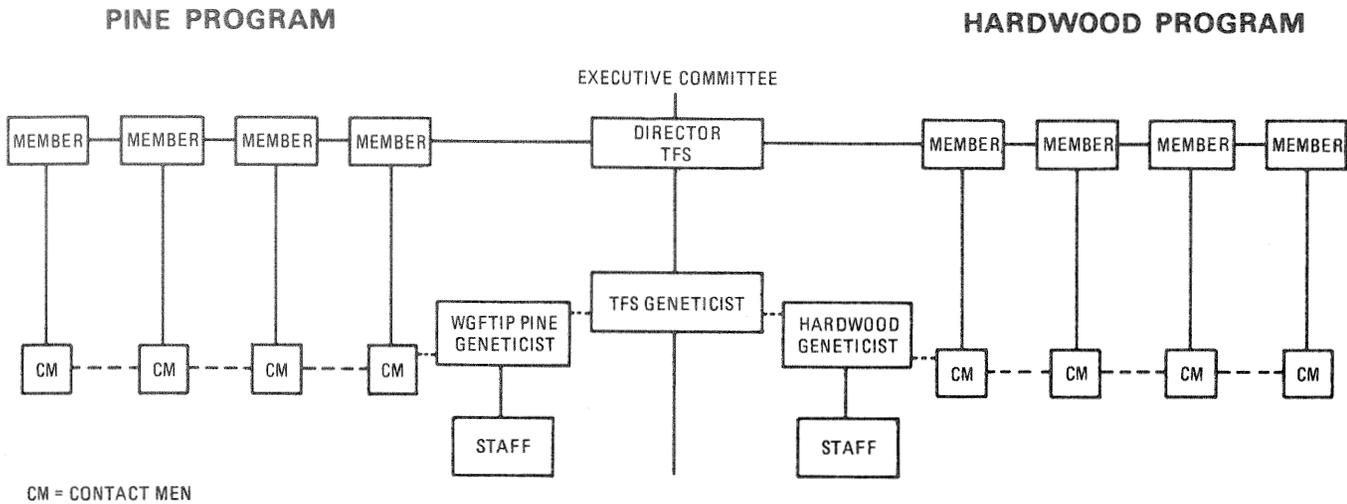


Figure 1. - Organization chart of the Western Gulf Forest Tree Improvement Program.

what arbitrary, because the larger organizations especially are interested in a wide spectrum of forest products. Although there are not strict requirements for membership, it is felt that to justify its own seed orchard program an organization should be managing a minimum of 200,000 acres of forest land.

ORGANIZATION

Most of the cooperative tree improvement programs are rather similar in organization, although names and titles may differ. The WGFTIP is governed by an executive committee consisting of one representative of each of the member organizations (fig. 1). The representative on this committee is one of the higher executives, capable of making policy decisions for the organization he is representing. In addition, each member organization appoints a contact man, who is responsible for the day-to-day operation of the company's tree improvement program. All arrangements for fieldwork, such as tree grading, grafting, progeny testing, and cone collection, are made through him. There are two scheduled meetings per year, one for the executive committee and one for the contact men.

Initially the program was limited to the genetic improvement of pine, but starting January 1971 a hardwood program was added. It is organized as a hardwood committee consisting of the WGFTIP members interested in hardwood improvement. Currently the hardwood committee has seven members.

SERVICES PROVIDED

Generally speaking technical assistance to the members is limited to those aspects of tree improvement work that the members are not well equipped to handle themselves. Following is a quote from the WGFTIP organizational meeting:

"The services and assistance provided members of the program will include, but not be confined to, the following:

- (a) Establishment of criteria for selecting superior trees.
- (b) Final grading of superior trees.
- (c) Training in grafting.
- (d) Selection of nursery and orchard site.
- (e) Assistance in orchard design and management.
- (f) Design of progeny tests.
- (g) Data analysis.
- (h) Record keeping and data retrieval on clone performance.
- (i) Availability of clonal material of proven genetic quality developed by Texas Forest Service.
- (j) Arrangement for exchange of plant material between members."

The activities in effect have varied a great deal from member to member. It seems that especially in

the early phases of the program most time is spent on training and on superior tree selection. Training has taken various forms. So far we have taught two short courses. These are designed to give a general background in forest genetics to people who have never been exposed to it before. This is followed up by smaller training sessions, usually held for one or two companies at a time, in a specified area of work. John Robinson, for instance, has conducted a number of sessions in grafting. As time goes on we can expect that the emphasis will shift considerably to seed orchard management and progeny testing. At the moment data analysis has not been a major activity, but this again will be one service many of the members will take advantage of once progeny test results become available.

FACTORS NEEDED TO MAKE A COOPERATIVE PROGRAM SUCCESSFUL

There are a number of factors that contribute to the success of a cooperative tree improvement program. First of all, the time has to be right for it. This means that in the region under consideration there should be an intensive planting program underway or it should be clear that such a program will be started in the very near future. There should be some aggressive industry or state organizations, who are 100 percent behind the idea and are willing to engender a similar interest in other organizations in the area. And lastly there should be enough potential financial support to carry such a program.

Once the program is underway there are two other

factors that can make or break a program:

1. There should be a clear understanding, that it is the program of the cooperators. It is done 100 percent for them and most of the work is done by them. The work done by the professional staff employed by the cooperative is only the top of the iceberg. The bulk of the work will have to be done at the grass roots level by the individual members. This should work both ways. In other words, since the members are doing most of the work, they are also the ones that deserve the credit for what is accomplished. It is important that this is made clear whenever possible.

2. There should be a truly cooperative spirit among the members. Only through willingly shared experiences and exchange of selected materials and proper techniques quite often learned the hard way can a program advance. If any of the members become proprietary about techniques and improved clones a cooperative program will lose its viability.

CONCLUSIONS

These are some of our experiences and our philosophy on cooperative tree improvement. The road that has been taken in the South has certainly been highly successful, but it doesn't mean that it is the only way to do it, nor that it might even be appropriate under different circumstances. I do believe, however, that no matter what the circumstances are, a cooperative program cannot succeed unless it is built around a program of service to its members and intensive participation by its members, and unless there is a truly cooperative spirit among the participants.