THE WESTERN GULF FOREST TREE IMPROVEMENT PROGRAM, HISTORY AND ORGANIZATION

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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-
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 back-
ground 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 or-
chard 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 pro-
gram. 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 experi-
ences and exchange of selected materials and proper
techniques quite often learned the hard way can a pro-
gram advance. If any of the members become pro-
prietary about techniques and improved clones a co-
operative program will lose its viability.

CONCLUSIONS

These are some of our experiences and our philoso-
phy 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 par-
ticipation by its members, and unless there is a truly
cooperative spirit among the participants.