

IV. NEED AND OPPORTUNITIES FOR  
CLOSER COORDINATION AND -COOPERATION

Chairman: Scott S. Pauley

Pauley Although we have discussed reproduction of various kinds during this conference, both sexual and asexual, it now seems advisable to see how the good work that has been started here can be perpetuated. For this purpose I'm going to appoint a Resolutions Committee with Mr. Cook as Chairman and with Mr. Recknagel, Mr. Farnsworth, Mr. Baldwin, and Mr. Sims as members. We'd like to request you gentlemen to get together and to consider any resolutions that you might ask this body to pass.

The next items on the program are summaries, based on the discussions at this conference, of the possibilities for closer cooperation in this region. These will be presented by the chairmen of Sections II and III.

NEED AND OPPORTUNITIES FOR COOPERATION ON SELECTION OF WILD TYPES

H. I. Baldwin

I wondered why I should be selected to summarize yesterday's discussion. I think you have all heard it and have it in mind. We had evidence of the interest of wood-using industries by the representation here and by the remarks that were made in the first section. It seemed to be the consensus of opinion that any trees with exceptionally good growth, and as Charlie Lockard pointed out, good growth in height and diameter was desirable, would find favor with industry. It's presumable that industrial methods are perhaps more plastic than some of our native wild trees and might be able to adapt themselves as they have in the past to changing supplies of different kinds of trees; if we have something which can be grown rapidly and meet the minimum requirements for wood quality there will be a use found for it, especially if the wood can be harvested at lower cost than some of the small sizes and scattered trees in our native northeastern stands.

The selection of wild types of native species involves better knowledge of racial variation and how to recognize it in the woods. Along that line I might remind you again of the desirability of having virgin untouched areas where we could be sure of having a population which would grow up naturally on a site. It was also pointed out that selective cutting, by selecting larger trees, may destroy or reduce the population of naturally rapidly-growing individuals. The tendency to cut the largest and best trees without definite is of racial variations would be a dangerous practice to pursue indefinitely. Insect and disease resistance of course goes hand in hand with rapid growth since clones which might be selected and propagated by various means would be of little value if they could not resist insects and disease, or at least if they were more susceptible than the present mixed populations.

We need basic knowledge of the wild types to guide our silvicultural practice. I believe that if there was more fundamental knowledge available among the foresters, as to what they were doing when they cut in a certain way from the standpoint of long range tree improvement, it would improve practice. That would be an immediate benefit and would be an indispensable guide in future management. We also had an illustration of how vegetative propagation can furnish the means of multiplying the best clones and what improvement in quality and quantity can be made by mechanical selection or mechanical improvement, so-called, in handling woodlands. I am always glad to hear from people like Bill Bramble and Cliff Foster, with his contagious enthusiasm for better, more photogenic trees, as he remarked today, which I think is a term the geneticists could include among the more technical ones.

Passing to planting versus natural reproduction of selected wild types, it would seem in the northeast that we must have rather exceptional trees if widespread planting is to take the place of natural regeneration and natural selection of wild types. In other words, the planting problem is not quite as acute, I would judge, as it is in the south, the Lake States, and possibly the Far West. But planting certainly has a place, a very definite place, if we can obtain stock with improved characteristics. I need hardly mention that the planting stock we've been using in the past leaves much to be desired from the standpoint of tree improvement.

Regarding geographic races it has been pointed out yesterday and today that it is possible that some other race may be superior to the native race of trees where you can get a rapidly growing tree due to photoperiodism, better soil or climate for its inherent characteristics. There was some demonstration of the material which we have available in plantations both in exotics and in the native species in regard to these geographic races. There is a wide variety and large amount of material already growing, and even if no origin appears now fully satisfactory, these plots may still furnish guidance on where to look for better seed sources. This material is available for further measurements and tests which we hope may sometime be made; it becomes more valuable as time passes. Rather than start new tests of this nature it would seem desirable to make use of what we have with several years growth. Information on what has been done and what is available may reduce the need for duplications. I think that's about all I need to say on that subject. I think it has been a very helpful and stimulating conference and I hope we can carry on. We have all learned a lot about work that is going on that we did not know about before.