

REPORT OF THE NORTHWEST FOREST GENETICS ASSOCIATION MEETING

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The first official meeting of the association was held at the Weyerhaeuser Timber Company offices at Centralia, Washington, on June 13, 1955. Twenty-one representatives of the industry, colleges, and state and federal research organizations attended.

Temporary chairman, Leo Isaac, covered the essentials discussed by a smaller organizing group at Portland in February. He reviewed the needs expressed there for an informal organization among workers in the field to exchange ideas and disseminate information but not to become a policy-making body.

First business was the nomination and unanimous election of J. W. Duffield as chairman.

A discussion of sponsorship for the association followed. Several members reviewed the experiences of the sponsorship of similar organizations such as the nursery, soils, and seed committee. Agreement was reached that the association should go unsponsored.

Next business was a long and lively discussion on setting up a central plus tree registry. Practically everyone participated. No formal motions were introduced, but some definite conclusions were agreeable to all. The discussion was very informal and is best summarized by subject matter.

DISCUSSION OF PLUS TREE REGISTRY

Location

This began as one of the major points of disagreement, but the problems ironed out in the discussion. General consensus was for each organization to keep its own registry, but that copies of the standard registration form be sent to the Experiment Station in Portland where a region-wide central registry would be kept,

Standard Report Form

Both Duffield and Isaac proposed detailed registration forms which they had independently developed. Isaac's stressed major tree characters, and Duffield's stressed location. Much general discussion on the need for a uniform system followed. Since both forms were essentially similar and

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not greatly different from an earlier published draft, it was agreed that Duffield and Isaac get together in providing the association with a standard form.

#### System of Reporting

Samples of the report form will be mailed to the membership. The procedure decided as most satisfactory was that each organization make copies of the form under its own letterhead, and set up administrative details of reporting. Enough copies of the report for each tree would be made to fulfill the needs of the organization and to send copies to the central registry.

#### Species

At least for the present, two registers, 1 for Douglas-fir and 1 for ponderosa pine, were set up. Registers for other species were considered, but no decision reached except that they would be added as demand for them grew.

#### Kind of Trees

It was generally agreed any tree having an unusual or plus character should be reported for the register, and not just the outstanding trees. The danger of too many trees being reported was subject to much comment, but the group seemed to favor not being too selective in the beginning. Isaac, with figures on possible workload, indicated that less than 400 trees have been registered to date in Sweden where such work is very advanced.

#### Vandalism

Question of protecting plus trees was brought up by several members. Opinions ranged from the belief that vandalism would never be a problem all the way to the suggestion that owners should not report trees that could not be protected. No agreement was reached.

#### Rating Schemes

Various possible tree character rating schemes were aired but nothing was settled. Dingle suggested application of the ratio of crown width to length of top 10 internodes. Isaac proposed a numerical rating scheme and produced drawings to illustrate some of the tree characters in the scheme. Cummings suggested studies of the variability of individual tree characters. Silen added the suggestion that such studies be started first on open-grown trees. This could serve as a yardstick for comparison with reported plus trees to see if they were doing better than could be accounted for by environment alone.

## Rating Boards

A board of association members for rating plus trees was suggested as desirable since seed and scions of such trees would begin to have enhanced value even before the progeny tests were made. Duffield illustrated a concept of this value as

X = value after registration as plus tree  
1 to 5 X = value after good performance as a clone  
10 to 50 X = value after good performance in progeny test

Isaac further amplified this by citing prices of \$100 per pound for seed from certain plus trees in Sweden.

Opinions varied greatly as to the desirability of taking on this service. Further discussion was tabled as a subject for some future meeting,

Chairman Duffield asked that the Oregon State Douglas-fir provenance study be moved forward on the agenda to allow ample time for a full discussion. He explained that the Oregon State Board of Forestry men had requested that time be set aside during the meeting since most of the agencies cooperating in the study were represented. The meeting was turned over to Dale Bever,

### OREGON STATE BOARD OF FORESTRY DOUGLAS-FIR PROVENANCE STUDY DISCUSSION

Bever first discussed the past work and present status of the study. Enough areas for starting the study have been provided by cooperators. Questions had arisen regarding details of seed collections this fall. Some cooperators had asked if collections from individual trees should be kept separate. This was not planned in the original study, Bever explained, The only restrictions on seed collections were that the sample come from a minimum of 50 trees within a radius of 25 miles and at the same elevational zone as the provenance plantation.

A main issue brought up by these rules was whether cone collections could be made at any point within the 25 miles, or if each must be spread over the 25 miles to meet the condition of homogeneity of variance within samples. A similar question arose as to whether seed could be collected from any slope and any type of tree, or must be collected from all slopes and types of trees. Whether or not seed from infected trees should be used was also asked. There was wide diversity of opinion over these points.

Questions also arose as to the location of the plantations. Discussions revolved around the arbitrary choice of north slopes which put the northernmost plantations out of the Douglas-fir type. A suggested alternative was to use very gentle slopes of any exposure to give more similar conditions. Needs for additional plantations to fill the gap between 600 feet and 1,800 feet elevation were discussed. Cornelius made a plea that

fencing of the plantations be undertaken by the cooperators wherever they were needed.

Concerning the analysis, a suggestion was made that the plan be reviewed by another statistician. The possible advantage of sowing part of the seed in another nursery was suggested also. Someone mentioned the precaution to avoid collecting seed from the study in old plantations. It was generally agreed that seed lots be stored until all collections were completed rather than start the study in parts.

Bever promised that a detailed set of instructions for seed collections and locating the plantations would be mailed to all cooperators this summer. He also asked for more cooperators in the study.

Chairman Duffield tabled the report of activities from each organization until the next meeting, and the meeting adjourned.

#### FIELD TRIP, JUNE 14, 1955

The genetics association met at the Forest Industries Tree Nursery at 9:00 a.m. for a brief showing of the nursery, rooting, and grafting tests by Duffield. Next stop was the McCleary Experimental Forest. The Swedish aluminum ladder and Swiss tree climbing gear were demonstrated. Group discussion centered around two candidate plus trees chosen prior to the meeting.

The group then went to the King Creek Tree Farm of the St. Paul and Tacoma Lumber Company. Highly successful outdoor grafting experiments were shown by Bent Gerdes. These tests extended over 3 seasons. Another area having a 30-year-old stand was displayed where maximum variability of tree form had been found. The group concluded the meeting by visiting a nearby candidate plus tree