PROCEEDINGS

NORTHWEST NURSERYMEN'S ASSOCIATION COMMITTEE August 21, 1958

General Administration Building Olympia, Washington

The meeting was called to order at 9:00 A.M. by Chairman Homer S. Ward, Nursery Forester, State Department of Natural Resources, Olympia. He introduced Mr. L. T. Webster, Supervisor, State Department of Natural Resources, who welcomed the sixth biennial Nurserymen's meeting to Olympia, Washington.

<u>Chairman</u> Ward: Our first speaker **will** be a person who has had a great deal of experience in forest nurseries and in reforestation and all its aspects. I believe that this man will set the stage for a very fruitful meeting in his review of forest nurseries and related problems and progress. I know of no one more qualified to handle this assignment other than Mr. Charles Rindt.

A RESUME OF FOREST NURSERY PROGRESS by Charles A. Rindt

Chairman Ward, Ladies and Gentlemen. It is a privilege and a pleasure to talk to you today. I am glad to be here again to have the opportunity of visiting with friends that unfortunately I don't get to see often enough. I am especially pleased to see the people from British Columbia and the greater attendance from our neighboring states.

Homer asked me to give a resume of progress in nursery practices and suggested I pattern my talk after one I gave on tree planting last February. At that time, I pointed out that it might be said we knew little more about tree planting now than we did fifty years ago because the same questions are being asked. In recalling my experience and in review of files back as far as 1910, I find people were asking which age class of stock is best; is fall planting better than spring planting; what is a cull tree; what planting tools or planting methods are best; and many other questions about tree planting that were common then and are common now. This on the face of it indicates little has been learned over the years and that the work is going on the same as it did 50 or more years ago. This could mean that we haven't learned anything about tree planting or it could mean we have learned a great deal in recognizing there are no pat answers and each situation requires knowledge of the many factors that affect a planting job. Progress has been in acquiring better knowledge of these factors or conditions of nature and fitting the practices to meet them. The work Ed Stone is doing in California is an outstanding example of progress in that line. He will tell you about it later on in the program.

I don't believe nursery practice fits into the same approach, at least not to the same extent. We all know that nursery practices have changed quite drastically over the years. Many of us here remember when the only recognized nursery (Nurserymen's Meeting

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practices were built around the 4' by 12' seed bed. The soil was worked with a garden spade. The seed bed was prepared with a garden rake and it was shaped with a special board to give it a firm rounded surface. A wood and wire or a board frame was placed around each seed bed. Feed was broadcast by hand or placed by hand in small furrows made by the shaping board. Only the nurseryman or his trusted assistant would do the seeding. The seed was pressed into the soil with the shaping board and covered with sand or fine soil by sifting it evenly over the seed bed with a two-man hand-operated screen. Then a wire mesh cover was placed on the frame to keep out birds and rodents and over it a lath frame to furnish partial shade. Weeds were pulled by hand. Lifting and packing was done in the open nursery. This required special handling care in hot dry weather and iron constitutions **in** cold wet weather.

All along the way, nursery practices have progressed by taking advantage of new materials, new ideas and mechanical developments and in fact much special nursery equipment has been devised to meet special needs. Today there is little hand work done in large nurseries. Soil is worked, seed beds formed and seed is sown with special machines, many of which have been desi^gned by nurserymen here today. Weeding is largely done with chemicals and packing is done in comfortable buildings well heated and lighted. This use of machines and chemicals and keeping alive to new developments has not only made the work easier and more pleasant, but it has kept the cost of trees **down to** or below what it used to be when materials and services cost a fraction of what they cost today. That is real progress and a record you can all be proud of.

This does not mean, however, that trees produced by the old methods were not good trees. There are thousands of acres of plantations now 20 to 50 years old that prove otherwise. In fact there is sometimes a question that trees produced today are not giving us as good survival as trees that were produced by the old methods. This bears some looking into, perhaps from the standpoint of just what a nurseryman's job is. Production of large numbers of trees at low cost is part of it, but he must produce trees that **will** grow when planted on reforestation projects. They must be produced in quantity and on schedule necessary for the planting projects. In that respect a nurseryman is like a producer of any commercial product. To be successful, a commercial producer must supply the kind of product that will meet the customer's specifications and **in** quantity and on schedule to meet the customer's demand. He must always be looking for ways to put out a better product. If he fails in any of these, he goes out of business.

Our non-commercial nurseries that most of you operate are not faced with this drastic treatment. The nurseryman who operates a non-commercial nursery is faced with a moral responsibility to do what competition would force him to do in a commercial enterprise. This requires very special effort. He should follow some of his trees to the planting site each season to see if they are arriving on the job in good condition and he should be searching for ways to better their condition on delivery through improved handling, grading, packaging and shipping. Also he should not forget the purposes of the outmoded practices, the 4' x 12' beds, their side frames and covers. If birds, rodents, wind, sun or other preventable causes threaten quality of trees or production schedules, it is not enough to say that present nursery practices are not designed to cope with them. He would be guilty of retrogression if he took the easy way out and accepted lowered quality or losses

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have been tried and proved. The same thinking applies to the reasons why the nurseryman used to do the sowing himself. This was to assure an even stand of trees at a prescribed number on each square foot of seed bed. Seeding machines have done away with the hand work, but they have not done away with the nurseryman's responsibility to produce an even stand of trees at a prescribed number per square foot as prerequisite to good planting stock.

So, in summary, there has been great progress in nursery practices; facilities are at hand to do a better job faster, easier and cheaper. The product still is, trees of high quality, conditioned to grow, delivered on time and in specified numbers. This product should be continually improved. If it is not improved or if it has been degraded, then our improvements in nursery practices are not progress at all. The answer to how much has been learned and how much nursery practices have progressed rests squarely on each nurseryman. The answer depends on his knowledge and skill in using the improvements to produce a better product. If his product is substandard, there has been nothing learned and no progress in fact.

I want to close on the note of the nurserymen's importance to the reforestation program. He is a keystone in the entire effort. Dollar-wise, his trees are a small part of the total cost; but if they are substandard, the whole program is weak despite the quality or strength of every other phase.

Chairman Ward: We're indebted to Mr. Rindt for his very thought-provoking talk. I am sure it has brought back many memories.

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