

Opening Remarks¹

Peter Ackhurst²

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Good morning ladies and Gentlemen.

I appreciate the opportunity to take part in the combined meeting of these two organizations, whose work is so important. As nurserymen, you play a crucial role in the reforestation process, which is essential to the future of forest management.

To those of you from other Regions of Canada, the United States and elsewhere, I would like to welcome you to British Columbia. While your agenda over the next three days is a busy one, I trust you will be able to enjoy Vernon and the Okanagan Valley.

Before going any further, I would like to make a few comments for the benefit of any of you not familiar with the forestry and nursery situation in British Columbia. We have 54 million hectares (134 million acres) of forest land in British Columbia and 95 percent of that 54 million hectares is still publicly owned by the people of British Columbia. The Federal Government has one percent of the forest land holdings and the private sector has the remaining four percent. In the past the cost of reforestation on Crown land, including the cost of seed and seedlings, was typically paid by the Crown in the past through credits to stumpage.

The Forest Act was amended on December 17, 1987, to state explicitly that basic silviculture is the duty of both the Crown and the forest industry. The amendments are based on the principle that the process and cost of reforestation are responsibilities which are directly related to the privilege of harvesting timber from Crown land. Fully productive forests in the future are the aim of a newly strengthened commitment to reforestation.

Basic silviculture ensures the establishment of a free growing crop of commercially valuable trees. Detailed requirements for basic silviculture will be enforced with new regulations which apply to both government and industry.

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²Peter W. Ackhurst, Acting Director, Silviculture Branch, Ministry of Forests, Victoria, B. C.

The government's funding requirements for basic silviculture will decrease as remaining obligations on past harvests are met. With the exception of some residual maintenance activities, all these remaining obligations will be addressed during the current five year program. Beyond this, the government's funding requirements for basic silviculture will depend primarily on fire and pest damage.

The cost of basic silviculture on Crown land harvested under the Small Business Forest Enterprise Program (SBFEP) will be covered by the price industry pays for the timber harvested. The government will continue to administer basic silviculture required under the program on behalf of small business operators.

The forest industry is responsible, as of October 1, 1987, for reforesting areas harvested under major licenses. As mentioned previously, in the past, the cost of reforestation on Crown land, including the cost of seed and seedlings, was typically paid by the Crown through credits to stumpage. This cost is now borne fully by industry. The trees established on Crown land are the property of the Crown. The Ministry of Forests audits industry's silviculture performance and has authority to penalize licensees for non-compliance under the Forest Act and regulations.

Before harvesting timber under a major license, the forest industry is now required to submit a pre-harvest silviculture prescription. This prescription must comply with the regulations under the Forest Act and be sufficient to ensure basic silviculture.

Our first forest nursery was established in 1927, but by 1938 only 526 hectares (1300 acres) had been planted, the program expanded during the war years and by the end of 1945 we were operating three nurseries. By 1976, in response, particularly from 1965, to pressure from the forest industry and the public, the reforestation program had expanded. Nine nurseries were now in operation, with the capability of producing in excess of 80 million bareroot seedlings and 20 million container seedlings.

In 1980 the government started a program of contracting out the growing of seedlings. The Ministry of Forests tree nurseries produced about 100 million seedlings in recent years, or

about half of the provincial seedling requirements. Some of these nurseries have been instrumental in the development of techniques recognized world wide for their ability to grow superior seedlings. By 1987 some 40 nurseries, including 11 Ministry of Forests nurseries, were producing seedlings for reforestation in British Columbia.

In September, 1987 the government announced plans to sell nine of the eleven Ministry nurseries to the private sector, as part of the government's efforts to reduce direct involvement in the production and delivery of goods and services. In the private sector, the nurseries will have greater incentives and opportunities to expand their markets and develop further efficiencies.

At this time seven of the nine nurseries put up for sale have been sold or are in the final negotiation stage for turnover on September 1, 1988. Studies are now being carried out for disposition of the remaining two nurseries offered for sale.

The Surrey Nursery and the Skimikin Nursery near Salmon Arm will continue to be operated by the Ministry of Forests. These will enable the Ministry to continue experimenting with new nursery techniques, and to grow seedlings for SBFEF and areas denuded by fire and pests.

So much for the forestry and nursery situation in British Columbia.

This is the fourth time that the Western Forest Nursery Council is meeting in British Columbia. Previous meetings were held in 1952, 1962, and 1976. The Forest Nursery Association of British Columbia was organized in the early 80's. Many members of each organization have been attending each others meetings.

Looking over the agendas of past meetings held in British Columbia we find some of the same topics being discussed at all of the previous meetings. Cold storage is a subject which continually keeps appearing. Another subject that keeps repeating at meetings such as this is seedling quality and field results. Seedling quality is a decisive factor for the success of a plantation. There should be no need for, nor can we afford the cost of going back to, or back over an area, because of failure due to seedling quality.

Early in the century, Gifford Pinchot, predicting that the planting of forest tree seedlings would grow in importance, urged that forestry professionals accept the challenge of reforestation by learning not only where to plant but where not to plant, and how to select the right trees. I would not like to suggest that forestry professionals have not been doing that for some time, but let us say that they are starting to do it better. They have had to take

up the challenge, if for no other reason than to offset increased costs.

At the time, Pinchot's emphasis on the need for foresters to know how to select the right tree probably referred to species selection but now, with the variety of stock types that we can produce, the designation of stock type is an equally important part of any planting prescription. The nursery has traditionally been the scapegoat for plantation failures but we are now getting evidence of the importance of proper selection of the stock type to survival and its physiological conditioning as well as careful planting.

Morphological characteristics of the stock, its height, root collar diameter, top/root ratio, root system, can largely be determined by the cultural practices at the nursery. That is how we have defined stock quality to date. Is it unfair to say that we have been content to ship out what our experience told us were nice looking tree seedlings? How often did we carry out the destructive sampling that is necessary if we are to be reasonably sure that those nice looking seedlings are not dead.

We know now that it is the seedling's potential for achieving a satisfactory growth rate that will determine the success or failure of plantations and it is not possible to make that judgment just from the appearance of the stock.

Besides destructive sampling to check on the quality of stock classified by its morphological characteristics, if we are to be able to satisfy the requirements of the foresters as they become more specific in their prescriptions, we will have to develop a better understanding of seedling physiological processes, particularly the induction of dormancy and the factors controlling the root regeneration process. Most nurseries today use cold storage units. This is a useful tool for balancing nursery workloads and is essential with the large nursery operations that have developed to secure the benefits of mechanization. To be used effectively however, we will have to be able to induce specific seedling physiological states prior to cold storage, such as root regeneration potential, and we have to be able to maintain physiological vigor during the storage process. There is still a lot of work to be done by the tree physiologists before we can feel secure.

We must be able to define quality standards on both a morphological and physiological basis.

The changes in the technology and economics of forest nursery operation and seedling production over the past decade exceed that of any previous period, and the pace of change appears to be accelerating.

Meetings such as this provide the opportunity for people from different regions to come together, to compare experiences and solutions of similar problems, to exchange information and ideas, and to consider new concepts.

In closing I would like to emphasize that your contributions as nurserymen are key to the future of forest productivity. Through application of your skills and dedication to the task

of producing quality seedlings, coupled with tree improvement programs, and the tools of the silviculturist, we can expect the future forest resource to become increasingly productive on those areas that are intensively managed for timber production. In so doing, we can offset the inevitable loss of parts of the commercial forest land base to wilderness, environmental restrictions, urbanization, etc., and thereby fulfill society's increasing demand for the full range of forest resources.