SUMMATION ADDRESS ¹

By GEORGE TUNSTELL ²

I have been requested to summarize the papers and discussions on the subject of Forestry Commissions which have featured this 50th annual meeting of the Canadian Institute of Forestry.

The papers themselves are summaries of rather lengthy reports, so that, in boiling these down further, I feel that I should present only some of the outstanding features which are common to all or most of them. This will leave out many important points which are regional in their application and other points which, although widespread in their application, are not of such outstanding significance.

The one outstanding and predominant point to record is that full recognition is now given to the fact that forests are a growing crop and should be treated as such. The days of forest exploitation are nearing an end and the era of planned forest management has started.

The industrial expansion of the wood-using industries explains the reason for this change from exploitation to planned management. It was not many years ago that the demand for wood as a raw material for industry was less than half of what it is today. The demand some years ago could be met by cutting from the readily accessible areas. There was also the comforting thought that when these areas were cut out there was plenty of wood further back. With the great expansion of the wood-using industries problems of supply arose. To meet current demands for wood a much greater area had to be worked and it soon became evident that to continue to supply wood for future years required a fuller utilization of the growth capacity of the forest and also the preparation of long-term plans. This, very briefly, was the genesis of planned forest management for sustained yield.

Today we have heard a great deal about sustained yield, continuous crop production, regeneration, reforestation, growth rates, inventories, yields, volumes of wood cut for use, losses by fire, insects and diseases, the balance between growth and depletion. These, and other factors, are all vital to the development of plans for the wise utilization of our forest resources.

It has been pointed out that the next big step is the development and implementation of plans to bring our unregulated forests under management for sustained yield. This is going to involve more personnel, a great increase in the costs of operating the forests and will take time. It would be wishful thinking to accomplish this in one rotation. Several will be required and, due to many factors which upset the best laid plans, the task is never quite completed. If the job is reasonably complete in two centuries, that would represent good progress. The important point is that a start has been made.

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The papers and discussions have drawn attention to many things recommended by the Forestry Commissions. Some of these are regional in scope or of only minor importance, but there are others which are of vital importance and of widespread significances. These may be considered the highlights and I will refer to a number of them quite briefly.

LAND USE PLANNING

Attention has been directed to the need for land-use planning, not only to assure that land is utilized to its best advantage, but also because a growing crop of trees takes a long time to mature and a constantly changing policy in the use of land does not fit in with forestry.

FOREST INVENTORIES

More complete information is essential on the extent of the forest with maps showing distribution by types and age classes, notes on condition and tables showing volumes. These and other relevant data on growth rates and growth potential are a prerequisite to the preparation of forest management plans. Fortunately this job is already well advanced at one level of intensity thanks to Federal assistance granted to the provinces under the provisions of the Canada Forestry Act.

FIRE PROTECTION

Although much progress has been made in this field, the losses are still too great to be acceptable. There are normal years and then the exceptional one comes along when the problem becomes greater than the protection forces can cope with. Encouraging progress has been made in the past and it is reasonable to assume that improvements will be made in the future to further reduce losses from this source.

LOSSES FROM FOREST INSECTS AND DISEASES

All reports draw attention to the extent of losses attributed to insects and tree diseases. Control measures have been taken in several cases, the most notable being the budworm spraying in New Brunswick. The Science Service of the Federal Department of Agriculture has a staff working on this problem and is in a position to offer advice on what measures, if any, can be taken to stamp out an infestation or minimize its effect.

REGENERATION OF LOGGED AREAS

It has been pointed out that if continuous crops are to be harvested from any given area, then, a new stand must replace the one being harvested. Emphasis has been placed on regeneration because it is the core of continuous crop production.

REFORESTATION OF WASTE LANDS

Attention has been drawn to the fact that considerable forest land has gone out of production because of repeated fires which have denuded the area, failure of regeneration following cutting, or the area has been usurped by worthless shrubs. For the maximum use of forest land, these areas must be brought back into production by planting or seeding.

ACCESS ROADS

It has been pointed out that for forest management on a sustained-yield basis, to be practiced on a management unit, all parts of that unit must be accessible. Many miles of access roads are required for this purpose. With adequate accessibility a proper regulation of the cut can be initiated. The over-mature stands, which no longer produce any net increments, can be cut first bringing these areas back into production. At the same time the pressure to cut more accessible and merchantable stands, still growing at a satisfactory rate, is relieved.

FOREST VALUES OTHER THAN WOOD

All Commissions have recognized the multiple-use value of forests. Wood is only one of the values, albeit a very important one. Other values to which attention has been drawn include:

(a) **Watershed Values**

The role of the forest in regulating streams and in feeding water into the soil to replenish groundwater supplies is now better understood and appreciated;

(b) **Recreational Values**

Many reports refer to the increasing use by the public of forest areas for recreation. All available statistics on persons entering the forest for recreational purposes show astonishing increases in recent years;

(c) **Wildlife**

The forest provides the environment required for many species of fish, game and fur bearing animals. The management of this wildlife resource is now recognized as part of the job of management of the forest;

(d) **Grazing**

In most forests there are more or less extensive areas of grassland which can be utilized for the grazing of domestic animals.

EDUCATION

All Commissions recognize that planned forest management will require more personnel at both the Ranger and Forester levels. Recommendations have been made for expansion of existing Ranger Schools and Faculties of Forestry.

RESEARCH

Reference has been made to the need for more research work. In the past, considerable research has been carried out, both by industry and government, in the field of forest products. Some work has been done in the fields of silviculture, fire protection, forest entomology and forest pathology. The need for research, particularly in some of the fields, becomes much more evident and much more essential now that we have entered into the era of planned forest management. Research in other fields such as forest management and forest economics must be initiated or expanded. Funds currently spent on forest research are out of all proportion to the values involved and should be multiplied several times.

EXPENDITURES ON FORESTRY

All authorities agree that planned forest management is going to involve a much higher expenditure of money than under the old regime of forest exploitation. In other words, it will cost more to grow timber as a crop than it did to merely harvest what nature had provided. They feel that more of the money received by governments from the forest resource must be plowed back into the forest. Most of the Forestry Commissions are none too specific as to how these additional funds are to be raised, but there seems to be general agreement that the Federal government is getting a major portion of the revenue and is reinvesting too little. However, this criticism has been alleviated to some degree through the financial assistance given to the Provinces under the provisions of the Canada Forestry Act.

In closing I would like to make one observation. It is now 50 years since the Institute was founded. At its inception even the word "forestry" was hardly known to the man on the street. In one half century the impact of foresters on the forest activities of this country has been outstanding. The profession has been instrumental in the adoption by governments of the principle of sustained-yield forest management. It is now the responsibility of our foresters to formulate and carry out plans based on this principle which will convert our unregulated forests into unit areas under planned management.