



REFERENCE PAPERS

INFORMATION DIVISION
DEPARTMENT OF EXTERNAL AFFAIRS
OTTAWA - CANADA

No. 98 ADMINISTRATION OF CROWN FORESTS IN CANADA

Ninety-five per cent of the forests of Canada are owned by the people and are administered by either the Federal or Provincial Governments. In the Maritime Provinces, however, most of the forest has been retained under private ownership. In Prince Edward Island practically all the forest is in private holdings, chiefly farmers' woodlots. In Nova Scotia 73 p.c. of the forest land is privately owned, made up generally of areas exceeding 1,000 acres in extent. Forty-eight per cent of the forests of New Brunswick are owned by individuals and corporations. The remaining provinces have the following proportions of forest under private ownership: Newfoundland, 2 p.c.; Quebec, 6 p.c.; Ontario, 8 p.c.; Manitoba, 4 p.c.; Saskatchewan, 5 p.c.; Alberta, 3 p.c.; and British Columbia, 3 p.c.

The major proportion of the Crown forests are owned and administered by the provincial governments. The Federal Government administers the forest lands of the Yukon and Northwest Territories and all other federal lands such as the National Parks and forest experiment stations. Most of the provinces have established forest reserves, and seven provinces also maintain Provincial Parks. Forest reserves are set aside either as a source of supply of forest products for industry, or as protection to prevent soil erosion. In both instances, controlled logging operations are carried on and particular care is taken to prevent harmful depletion of the forest resources at any time. In the case of protection forests, the decision as to whether any particular area can be logged in a given year depends on its effect on erosion. No logging would be allowed on a hillside, for example, no matter how desirable from a commercial point of view, if it is likely to interfere with the control of streamflow.

Federal Administration

In 1949 the Canada Forestry Act was passed enabling the Governor-in-Council and the Minister of Northern Affairs and National Resources to carry out the following:

To establish and maintain national forests and forest experimental areas;

To establish and maintain forest products laboratories;

To assist any province or forest owner in the protection and development of forest lands with a view to conservation and advantageous utilization of the forest resources;

To enter into agreements with provinces for the protection, development and utilization of forest resources;

To make arrangements with other federal agencies for carrying out the purposes and provisions of this Act, and to enter into agreements with any persons providing for economic studies of forest resources or forest industries, forest research and demonstrations, and the operation of forest products laboratories.

The first federal-provincial agreements entered into under the Act in 1951 concern federal participation in payments for forest inventories and reforestation. The Federal Government agreed to pay half the cost to the provinces for completing and maintaining forest inventories during the next five years and to pay a proportion of the cost to the provinces of reasonable programs of reforestation on unoccupied provincial Crown lands. In addition, the Federal Government undertook to pay part of the cost of establishing new forest nurseries during the same period.

By March 31, 1956, the Federal Government had contributed \$5,240,434 to these eight provinces of which \$4,561,511 was for forest inventories and \$678,922 was for reforestation. By this date, on the average, 82 per cent of the forest inventory programs had been completed. Reforestation projects included the planting of 59,283,000 trees, the seeding of 6,751 acres, and the establishment of four provincial tree nurseries. On the expiration of these agreements in 1956 the Federal Government offered to renew financial assistance to the provinces for completing their inventories for a further two-year period, and for inventory maintenance, together with reforestation on the same basis as previously, for a period of five years.

Under the Act, the Federal Government in 1957 entered into agreements with several provinces to provide federal financial assistance in the field of forest fire protection. The federal aid will provide more fire protection facilities and equipment such as portable pumps, fire hose and tools, vehicles, communication systems, fire towers, roads and trails specifically required for forest fire protection purposes. Generally, federal contributions will cover 50 per cent of the cost of items provided under the agreements.

A further provision of the Canada Forestry Act was implemented in 1954 when the federal Forestry Branch assumed responsibility for forest fire protection and forest management on the military training area of Camp Gagetown, N.B. The Branch also carries out forestry work at the request of the Department of National Defence on other military areas in Canada.

Federal Forestry Branch

The chief functions of the Forestry Branch of the Department of Northern Affairs and National Resources are to provide information and assistance, in forestry matters of national importance, to the provincial authorities, who administer the publicly owned forests lying within provincial boundaries, and to the industries who depend on the forests for their raw materials. The Branch conducts research in forestry and in the utilization of forest products and provides financial help to the provinces in connection with the activities mentioned above.

The Forestry Branch organization comprises three Divisions concerned with Forest Research, Forest Products Laboratories and Forest Operations. A special Section concerned with Forest Economics constitutes a part of the Branch administration.

District Offices are maintained at St. John's Nfld.; Fredericton, N.B.; Valcartier, Que.; Winnipeg, Man.; and Calgary, Alta. A special research unit at the headquarters at Ottawa serves as a district office for Ontario so far as forest research work is concerned. Forest Experiment Stations are located at Acadia near Fredericton, N.B.; Valcartier, Que.; Petawawa, Ont.; Riding Mountain National Park, Man.; and Kananaskis, Alta. Forest Products Laboratories are located at Ottawa and Vancouver.

The Forest Operations Division is concerned primarily with the administration of federal-provincial forestry agreements under the Canada Forestry Act. The duties involved include examination of programs for forest inventory, forest fire protection and reforestation which are submitted annually by the provinces as a basis for federal participation in costs, and examination of work carried out in accordance with these programs prior to payment by the Federal Government under the terms of the agreements. A co-operative agreement between the Governments of Canada and New Brunswick, under which the Federal Government is paying one-third of the cost of an aerial spraying operation against the spruce budworm in northern New Brunswick, is also administered by the Forest Operations Division.

Forest Research

Research in silviculture and management has been concentrated since World War II upon problems of regeneration, growth and stand development, and on harvest cutting methods. A regeneration survey extending from the Rocky Mountains to the Atlantic Coast has provided information on the status of regeneration on cut-over and burned lands and has been followed by more intensive work to assess the factors responsible for the success or failure of regeneration and to devise practical methods of obtaining reproduction. Studies are made of growth and succession in the most important forest types and of development of a satisfactory basis for classifying forest sites for effective growth and productivity. Research in tree breeding is also carried on for artificial propagation by selection and development of superior strains. Research in forest management devises methods of applying the knowledge of silviculture, regulation of cut and protection in order to manage the forest at its highest production level.

In the field of forest-fire research, the Federal Forestry Branch is working towards full co-operation with the provincial forest services to achieve the best methods of forest-fire protection. The leading contributions of the Branch to date have been in the field of fire-hazard research and in the development of equipment and techniques for fire-fighting. Increasing attention, however, is being given to research in such fields as fire-control planning, visible area mapping, detection and communications equipment, and the training of fire crews. A number of provincial forest-protection services are also engaged in research activities. Notable advances have been made in several provinces in the development of forest communications equipment, the dropping of supplies to fire-fighters by parachute, and the design of mechanical fire-fighting equipment.

Research in forest inventory methods is of increasing importance because of the greatly expanded inventory programs being conducted in most provinces. Data from photographs are correlated with field work to develop new techniques of timber estimating. Various methods of sampling are being investigated and compared. Research is being continued in methods for measuring tree images and tree shadows to determine heights, crown widths, crown closure and other data from photographs taken in different seasons of the year under various conditions. Studies are also being made in the

identification of species and sub-types and the classification of forest sites by the use of air photographs. Construction of suitable photogrammetric and other scientific apparatus include the forestry tri-camera method of air photography, which has been developed to provide maximum forestry information at minimum cost, and the shadow height calculator, constructed to facilitate the determination of tree heights from shadows in air photographs.

The Forest Economics Section carries out research on problems concerning the development of Canada's forests and their relation to the forest economy of the North American continent; studies the economic implications of forestry legislation; compiles periodically basic data on Canadian forest resources; and analyses statistics relating to production, consumption and trade in forest products. It also prepares economic and statistical reports to international organizations, such as the Food and Agriculture Organization (FAO), and the British Commonwealth Forestry Conferences.

Forest Products Research

Two Forest Products Laboratories conduct forest products research, one at Ottawa, Ont., and the other at Vancouver, B.C. The purpose of this research is to supply the basic and practical knowledge required for the best possible utilization of Canada's forest resources and includes studies of the factors affecting the quality of wood and of manufactured wood products; the factors causing wood waste in logging and manufacturing; the mechanical, physical and chemical properties of wood and their relation to adaptability in use; the treatment of wood and its use in the manufacture of fibre products, alcohol, turpentine, etc.; new and more valuable uses for woods; and the application of laboratory findings to the standardization of lumber grades and the improvement of timber specifications in the building codes of Canadian cities. The Forest Products Laboratories co-operate with similar organizations in other countries, with the provinces and with industry.

The Pulp and Paper Research Institute of Canada at Montreal, Que., a corporation supported by the Federal Government, the Canadian Pulp and Paper Association and McGill University, carries out research in the field of pulps and papers. The program of work includes studies of the structure and properties of wood and bark and their chemical components; the improvement of pulping processes; studies for the improved utilization of waste products; and the improvement in the design of industrial equipment.

Department of Agriculture

Investigation of outbreaks of injurious forest insects and of tree diseases are carried on by the Forest Biology Division, Science Service, Federal Department of Agriculture, because these lines of work are closely allied with the larger fields of general entomology and plant pathology. This work is done in close co-operation with the federal and provincial forest services. The Department also maintains two tree-planting stations at Indian Head and Sutherland, Sask., which provide farmers in the three Prairie Provinces with planting stock for the establishment of windbreaks and shelter-belts.

Eastern Rockies Forest Conservation Board

This joint Board, supported by the Federal and Alberta Governments, is responsible for protecting the eastern slopes of the Rocky Mountains. Federal participation in this project is based on the fact that the Saskatchewan River has its headwaters in the Rocky Mountains and flows through the Provinces of Saskatchewan and Manitoba, as well as Alberta.

Federal funds have been provided to finance construction of roads and other improvements needed in the protection program, but forestry operations in the area are carried out by the staff of the Alberta Department of Lands and Forests.

Provincial Administration

The responsibility for forest administration in each province is centred in a department of government headed by a Minister, who is an elected member of the legislature and a member of the Provincial Cabinet. The permanent head of the department, the Deputy Minister, is responsible for the execution of approved policies and for departmental administration. The name given the forestry department varies with the province; also, there are considerable differences in organization and in the titles and duties of the principal officers. The similarities, however, are of greater importance than the differences, and the functions performed by each forest administration are virtually the same. Names of the departments responsible for forest administration and titles of chief forest officers, are as follows:

| PROVINCE | CHIEF FOREST OFFICERS | DEPARTMENT | ADDRESS |
|-------------------------|---|--------------------------------|--|
| Newfoundland | Deputy Minister Supervisor of Forestry | Mines and Resources | St. John's Nfld. |
| Prince Edward Island | Deputy Minister Chief Forester | Agriculture | Charlottetown, P.E.I. |
| Nova Scotia | Deputy Minister Provincial Forester | Lands and Forests | Halifax, N.S. |
| New Brunswick | Deputy Minister | Lands and Mines | Fredericton, N.B. |
| Quebec | Deputy Minister Director of Forest Service Chief of Forest Protection Service | Lands and Forests | Quebec, P.Q. |
| Ontario | Deputy Minister | Lands and Forests | Toronto, Ont. |
| Manitoba | Deputy Minister Provincial Forester | Mines and Natural Resources | Winnipeg, Manitoba |
| Saskatchewan | Deputy Minister Director of Forests Super- visor of Fire Control | Natural Resources | Regina, Sask. Prince Albert, Sask. |
| Alberta | Deputy Minister Director of Forestry | Lands and Forests | Edmonton, Alberta |

British Columbia Deputy Minister of Lands and Forests Victoria,
Forests and Chief B.C.
Forester

In each province, the department responsible for forest administration usually performs other duties in connection with lands, mines or other natural resources. In most cases a branch form of organization is used, with the senior forestry officer directly responsible to the Deputy Minister. In Quebec there are separate services concerned with forestry and forest protection, each having its own chief. In Nova Scotia, Ontario and British Columbia, a divisional form of organization is used in which the Deputy Minister is, in effect, in direct charge of forestry work.

In addition to Departmental headquarters, usually located at the provincial capital, each forest service maintains administrative districts with a district officer in charge of each. Large districts may be further divided into sub-districts, each in charge of a field officer or forest ranger. The district chiefs and their field staffs carry on the administration according to instructions issued from head office, and important questions outside the ordinary routine are referred to head office for consideration. Ordinary business, however, can be conducted more efficiently by district officials who are thoroughly familiar with conditions in their own localities.

Senior staffs of the forest services are made up largely of men who have received university training in forestry. However, during the past 20 years several provinces have established special ranger-training schools, which give systematic instruction in the many and varied tasks the field men are called upon to perform. Increase in facilities for ranger-training is one of the most important forestry developments in recent years.

Forest Protection

Protection of the forests against fire is the most urgent duty of any forest administration and, at the same time, the most difficult and costly. The vast extent of Canada's forests, lack of adequate access roads in many regions, and climatic conditions combine to make fire protection a problem of primary importance.

Although many improvements in fire-protection organization and methods have been effected over the past 30 years, the fire menace is still a major obstacle to the introduction of better forest management. Carelessness with camp fires and smoking materials, and improper burning of slash when clearing land, are still far too common in Canada. An average of over 5,000 fires are reported each year, almost 4,000 of which are known to be caused by human agency.

In Quebec and Newfoundland, forest protective associations have been formed to handle fire protection on licensed Crown lands. The other provincial fire-protection services provide protection for all forests except those lying within organized municipalities.

Field work in the provinces is controlled from District Offices, where these exist, or by district fire rangers. Subdivisions of districts are looked after by fire rangers, who may be assisted by lookout men and patrolmen. The observers in lookout towers report the appearance of smoke to a central office by telephone or radio. Patrolmen carry out regular patrols along roads or waterways and warn travellers against carelessness with fire, as well as suppress or report fires that break out. Special crews construct improvements needed for protection purposes, such as roads, trails, telephone lines, lookout towers and ranger cabins. Usually these crews are kept on duty throughout the fire season and are used as

stand-by fire-fighting crews. All fire-protection services possess modern equipment such as portable fire pumps and hand tools, special vehicles and effective communication systems. Aircraft are used extensively for fire detection and to carry men and supplies to the scene of a fire.

Assistance to provincial forest fire-protection services along railway lines is given under the Railway Act, administered by the Board of Transport Commissioners for Canada. The Board has wide powers relating to fire protection along railway lines under its jurisdiction. Certain officers of the various forest authorities are appointed ex officio officers of the Board of Transport Commissioners and co-operate with the fire-ranger staffs that the railway companies are required to employ under the Railway Act.

Fires that start must be put out as quickly as possible, but the objective of all protection services is to prevent them from starting. Means taken to reduce the number of outbreaks include posting of warning notices along roads and portages and in camps, restriction or prohibition of travel in forest areas during periods of exceptional fire danger, radio addresses and plays, articles in the press advocating care with fire in the woods, and specially prepared talks to school children. Settlers are required by law to obtain permits to burn slash and to conduct their burning under supervision at times of low fire hazard.

For protection of the forests against injurious insects and tree diseases, the provincial forest services co-operate with the Division of Forest Biology of the Science Service of the Federal Department of Agriculture.

Disposal of Crown Timber

The general policy in Canada is to maintain forest lands under public ownership. Industrial and private users of wood may be granted rights to cut standing timber under prescribed conditions, but title to the land itself remains with the Crown.

Many timber users need only relatively small quantities of timber from time to time. Others, including the larger lumber companies and the great pulp and paper concerns, must be assured of adequate supplies of wood for long periods in the future. Without this assurance they could not secure the huge capital investments essential to provide modern manufacturing plants.

Holders of timber-leases must pay annual ground rents for forest land, running from \$5 to \$20 per sq. mile east of the Rockies, but amounting to \$140 per sq. mile on the west coast of British Columbia. Lease holders must also pay fire-protection taxes or other protection charges, the basis for which differs according to province. Standing timber is usually paid for shortly after it has been felled and scaled. Rates are on a unit volume basis--so much per thousand board feet, cord, cunit (100 cubic feet); linear foot, or by the piece, such as a railway tie.

Prices paid for Crown timber are frequently made up of different kinds of charges--Crown dues, royalties and stumpage--depending on usage in a particular province. Payments of the kind described as Crown dues are officially called royalties in British Columbia and stumpage in New Brunswick. Charges described as stumpage are known in Ontario as bonus dues.

Crown dues are rates of payment for timber, established by statute or by Order in Council, and apply uniformly throughout whole provinces or in large regions. Varying rates are set for different species and, in British Columbia, for different grades of logs of the same species. They are, in effect, minimum prices for Crown timber and are not affected by such factors as extra high quality of timber, or very easy accessibility, which might justify higher prices for particular stands.

Stumpage (as the term is used here), when paid for Crown timber consists of charges additional to Crown dues. Such charges reflect the difference between the real value of a particular stand of timber and the Crown dues rates. This additional value may arise from exceptionally high quality, easy accessibility, and a number of other factors. Stumpage charges may not be finally determined until a sale is completed. For example, the government of a province where Crown dues for white pine are set at \$2.50 per M ft.b.m. may consider that a certain lot of better-than-average timber located near a good road is really worth at least \$10. The block may then be offered for auction at an "upset price" of \$10, made up of \$2.50 for Crown dues and \$7.50 for stumpage. If the timber is put up for auction and no bid as high as the upset price is received, there will be no sale. On the other hand, competition among bidders may force the final price up to \$12. The selling price then represents Crown dues of \$2.50 and stumpage of \$9.50 per M ft.b.m.

There are a number of different ways of disposing of Crown timber which are reviewed briefly in the following paragraphs under the designations: timber berths, forest-management licences, pulwood berths, timber sales and timber permits.

Timber berths are areas of Crown timber-lands held under lease by operators in the forest industries. It is customary to make berths renewable for a specified number of years, and many of the older berths were renewed for as long as 99 years. Annual renewals are granted if the holder takes out an annual licence to operate, pays his ground rent and timber charges, and observes the conditions relating to methods of operation, filing of returns, and so forth, under which the berth was granted. In several provinces, the maximum size of a single berth is limited by law. Timber berths are disposed of by public competition, the successful bidder usually paying a lump sum for the right to occupy the berth. Crown dues are payable as the timber is cut. Boundaries of timber berths are described in the leases.

Forest-management licences were established by the legislature of British Columbia in 1947 as a new form of tenure. Under the legislation, the Minister of Lands and Forests is authorized to enter into an agreement with any person whereby specified areas of Crown lands are reserved in perpetuity for the use of that person, provided he so manages the forests that a sustained-yield output will be assured. If the person already owns or holds certain timber-lands within the areas prescribed, they are automatically included in the license. The object is to ensure sufficient supplies of timber, in perpetuity, for established forest industries.

Royalties at regular rates are to be paid for all timber considered merchantable at the time the licence is issued. On all timber that attains merchantable size after the licence is issued, stumpage and royalty will be paid at the rate of 16 p.c. of the appraised stumpage value at the time of cutting. Land rental is at the rate of one cent per acre, one-sixth of the regular rate.

Pulpwood berths are large areas leased to pulp and paper companies. Erection of a pulp and paper mill requires a great deal of money. No company will build one unless assured of sufficient timber supplies to permit its operation for a considerable number of years. Thus, pulpwood berths are usually established by agreement between government and company. An important condition of such agreements is that the company must erect and operate a mill of specified size by a certain date or lose possession of the berth. Berths of this kind may be good for 21 to 50 years (99 years in Newfoundland), with renewal privileges at the end of the original agreement. Crown dues and ground rent are paid at stipulated rates.

Timber sales are made by public competition at upset prices per M ft.b.m., per cord, or other unit of measurement. Bidding above the upset price is also on a unit volume basis rather than in lump sums for the whole sale and is usually good for periods of one to five years. Ground rent may or may not be required on timber sales. Payment is made as timber is cut but the successful bidder may be required to furnish a guarantee deposit, a bond, or both at time of sale. The area of a timber sale is defined in the same way as that of a timber berth.

Timber permits give the holders the right to cut specified small quantities of wood from Crown lands, for their own use or for sale. Payment of dues for all the wood to be cut may be required when the permit is issued, final adjustments being made after the wood is scaled. Free permits are sometimes granted certain classes of people, such as settlers or non-profit organizations, to enable them to obtain building logs, saw timber or fuelwood, with the stipulation that it be for their own use.

The relative importance of these several methods of disposing of Crown timber differs in each province; and different names for the same sort of arrangement may be found in various parts of Canada.

Forest operators in Crown timber are required to observe certain regulations. Details vary from province to province and from time to time. The following are merely examples of the kind of requirements that might appear in a typical lease: the operator may be forbidden to cut trees of less than specified stump diameter; maximum stump heights may be prescribed; use of inferior kinds of timber in the construction of camps, culverts and bridges may be required; and burning of logging slash may be necessary. In addition, operators are required to keep book records that may be readily inspected and to maintain their camps in sanitary condition.

To ensure that operators comply with government regulations and any special conditions contained in a lease, logging operations on Crown lands are inspected periodically by officials of the Department. Definite evidence of failure to observe regulations may close down operations until the situation is corrected or, in extreme cases, the berth or sale may be cancelled.

Timber Scaling

Since payment of government dues is based on the amount of material scaled, it is of considerable importance to both the government and the operator that scaling be accurate. Scalers may be employed by the government or the operator and, in both cases, must take oath that the measurements are fair and just to both parties.

Men wishing to become scalers are required to serve a term of apprenticeship with qualified scalers. They must then pass examinations set by government boards before they can become licensed scalers. Those of more than average experience and ability are employed as check scalers to remeasure a sample of each scaler's work, thus checking his efficiency. Licences of those who fail to maintain the required standard are cancelled.

The cord of 128 stacked cubic feet, standardized under the Federal Weights and Measures Act, is established as a unit of measurement throughout Canada. The board-foot content of sawlogs is calculated according to different log rules in different provinces. New Brunswick, Ontario and British Columbia use rules named after the individual province: Alberta uses the Scribner Rule; Quebec the Roy Rule; and Manitoba and Saskatchewan the International $\frac{1}{4}$ " Kerf Rule.

Other Provincial Functions

Forest Surveys - Extensive forest inventory surveys on a large scale are being conducted by most provinces through special survey divisions. Mention has already been made of the financial assistance given for forest inventories and reforestation by the Federal Government under the terms of the Canada Forestry Act. Forest surveys, with the aid of air photography, provide the most economical and expeditious means of obtaining reliable information on the extent, character and volume of the forest resources.

Reforestation - Most of the forests of Canada reproduce themselves, after logging, by natural means. Securing new growth of the most desirable species is usually a matter of proper management of logging operations. There are areas, however, from which all possible sources of seed supply have been removed and the existing young growth destroyed by fire. Here, forests can only be re-established by seeding or planting. Planting may also be necessary to check drifting sand or provide shelter for farm buildings and fields. Several provinces maintain large forest nurseries where stock is grown both for forest plantings and for the use of farmers. Permanent nursery stations are also maintained. These employ small permanent staffs and provide considerable local employment during the transplanting seasons; the output of these stations runs into millions of small trees annually.

Farm Forestry - Farm woodlots are the most accessible of all forests. Although privately owned, their importance to the community justifies the advice and assistance to their owners provided by the provincial forest services. The latter are increasing their efforts to encourage farmers in improving the management of their woodlots. Most provinces employ qualified foresters for this purpose who also help in marketing forest products.

In British Columbia, legislative provision has been made for classifying as tree farms such privately owned land as the owner wishes to place under sustained yield. If a satisfactory working plan is submitted, the forest owner is given a preferred tax rate, which is approximately one-third of the rate that would apply if the land were held for liquidation purposes.

Wildlife Protection - In most provinces, administration of laws respecting hunting and fishing is carried out by staffs specially appointed for that purpose. In others, forest officers are required to act as game and fish wardens in addition to their other duties. Whether responsible for wildlife or not, the forest ranger must always take an interest in the movements of hunters and

fishermen in his district because their presence magnifies the danger of forest fires. The majority of men who go into the woods to hunt or fish are careful with their camp fires and with smoking, but there will always be a small number who may start conflagrations through ignorance or carelessness.

Education of the Public - The development of public understanding of all phases of forestry from forest protection to utilization of forest products is of paramount importance. The appalling losses caused by forest fires resulting from carelessness continue to be emphasized in educational programs by government agencies, companies, and associations such as the Canadian Forestry Association. The federal and provincial forest services carry on extensive programs of public education in forest-fire prevention with invaluable aid from the press, the radio, the motion picture of industry and many industrial organizations. The Federal Forestry Branch has distributed to schools more than 400,000 copies of The ABC's of Forest Fire Prevention, in English and French editions, as well as other publications for school and general use.

One of the most practical methods of adult education is the Tree Planting Railway Car of the Canadian Forestry Association, which has been operating its prairie shelter-belt campaign for over 30 years. Its purpose is to demonstrate and encourage tree planting around prairie homes. The results to date show over 250,000,000 trees distributed by Federal Government and other forest nurseries.

Through many other media, such as 4-H Forestry Clubs, Boy Scout forestry badge work, Royal Canadian Mounted Police handbooks and school science textbooks, public interest is stimulated in Canada's forest resources and the cause of forestry thereby promoted.

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