

CANADIAN INSTITUTE OF FORESTRY - CARIBOO SECTION

SUSTAINED YIELD DOES NOT EXIST
IN CENTRAL BRITISH COLUMBIA

March 1962

$$\text{INVENTORY} + \text{CONTROLLED HARVEST} + \text{FOREST REGENERATION} = \text{SUSTAINED YIELD}$$

These are 3 basic factors in good forest management.

SYSTEMATIC INVENTORY - has been completed and is being continuously revised and intensified.

CONTROLLED HARVEST - has been instituted by means of Tree Farm Licences (T.F.L.), Public Working Circles (P.W.C.), and Sustained Yield Units (S.Y.U.) over 77% of forest land in the Central Interior.

BUT !

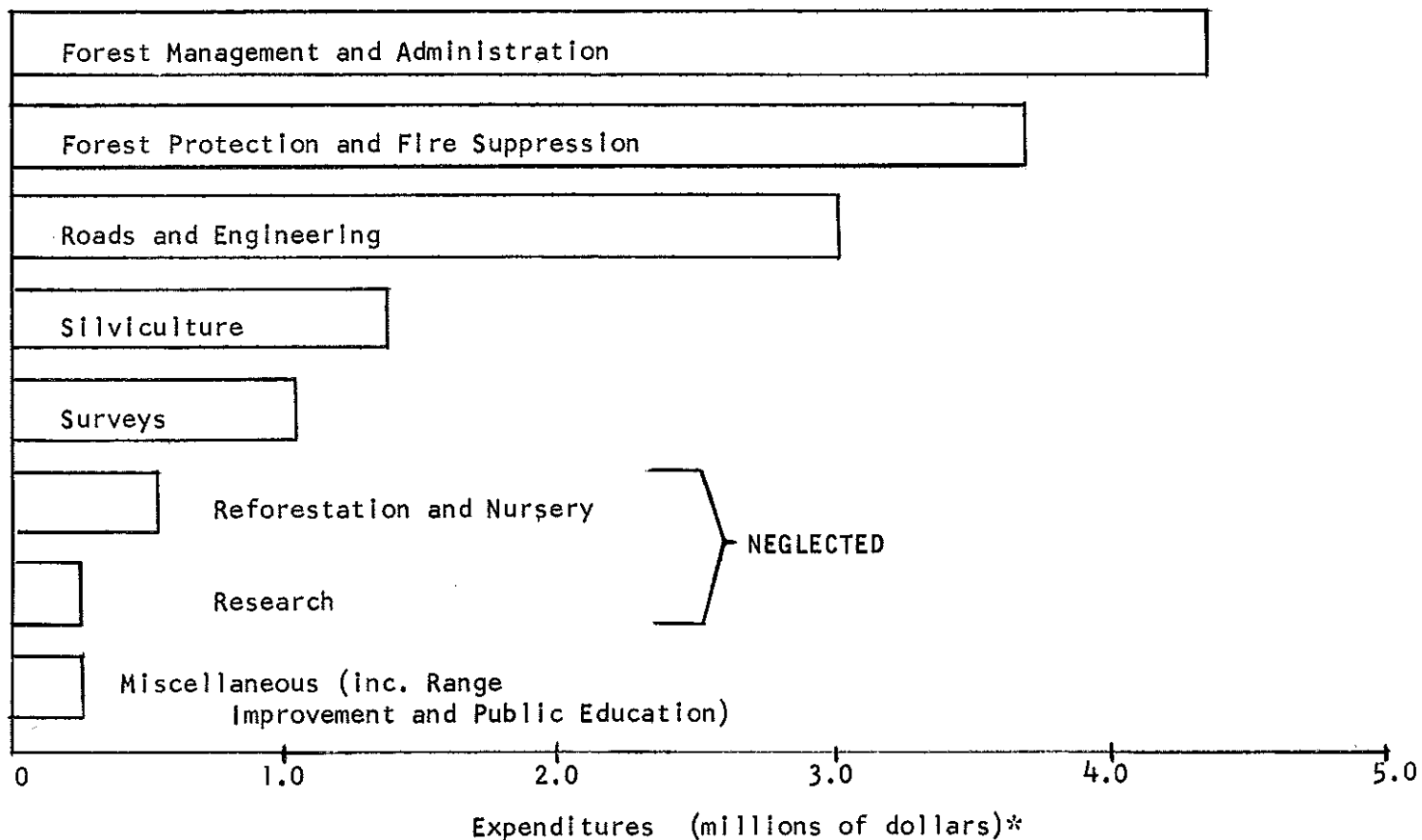
FOREST REGENERATION - is neglected. The Sustained Yield program is thus defeated.

The responsibility for solving the regeneration problem rests primarily with the owners of the land and receivers of the stumpage and tax revenues. The Federal Government should share costs but the Provincial Government must carry out any reforestation programs.

This report contains proposals which could effect an adequate regeneration program in the Prince George area.

Prior to 1956 partial cutting of each timber stand was used by the Forest Service as the means of maintaining the forests in a productive state. Finally being ruled unsatisfactory for blanket prescription, this method has given way to the use of clear-cutting in strips or the leaving of seed blocks and seed trees. This has been partially successful particularly where the seed bed has been scarified.

Experimental attempts have been made by the Forest Service to study techniques of direct seeding and planting. The limited nature of these efforts indicates no more than a token government interest in regeneration. For instance, Forest Service expenditures in 1959-60 totalled \$14 million distributed as shown in the following graph:



* From the Report of the Forest Service 1960 - Page 107.

Reforestation apparently accounted for 1/28th of the Forest Service expenditure.

Information available in 1958 indicated the presence of some 1 million acres of not satisfactorily restocked (NSR) forest land within 100 miles of Prince George alone. Approximately 600,000 of these acres have resulted from logging. This logged-over area is increasing at a rate of approximately 30,000 acres each year. The bulk of the old cut-over land is now in regions where the cut is unregulated, but approximately 25,000 acres are accruing annually within Crown owned sustained yield units of one sort or another.

Surveys within the vast areas of N.S.R. in the old cut-over indicate only 2% of past timber sales have attained even a minimum level of restocking. Under the closer management of present cutting practices it has been estimated that the 30,000 acre annual cut-over area can be regenerated as follows:

- 20% will regenerate naturally
- 30% can be scarified and seeded
- 50% must be planted

ECONOMIC SIGNIFICANCE

At a growth rate of 30 cubic feet per acre per year, 1,000,000 acres (of N.S.R.) represent an annual loss in net yield of approximately 30,000,000 cubic feet of useable wood products. If, in addition, we consider the fact that the productive area is decreasing at the rate of 1 - 2% annually, these figures indicate:

- (1) That the Central Interior economy suffers to the extent of \$10,000,000 annually (conservative estimate) in product value.
- (2) That the Central Interior economy, being based upon the remaining forested area, shall have to be reduced yearly by an unprecedented 1 - 2%.
- (3) That the Central Interior lumbermen shall be faced with a crippling 1 - 2% yearly reduction of quota. The myth of the sustained yield program will be exposed with these inevitable cut-backs in production.

A REGENERATION PROGRAM - VITAL TO OUR ECONOMY

A. NURSERY

An estimated 10,000,000 seedlings are required annually for filling in gaps on current logging where natural regeneration and direct seeding are not completely successful. An additional 25,000,000 seedlings will be required annually in outright reclamation of N.S.R. (old logging and burned areas) on a 10 year program. These figures prove conclusively that a nursery is urgently needed.

B. COLLECTION OF SEED

An estimated 250 pounds of spruce seed are required for the nursery each year, plus 1,000 pounds for direct seeding efforts. In good seed years - which appear to occur only once in every four years - 5,000 pounds of seed should be collected.

C. FORESTRY PERSONNEL

Fifteen Forest Service graduate foresters are normally in charge of 14,000,000 acres of P.W.C. and S.Y.U. in the Prince George Forest District. This is in sharp contrast to extensive management which requires the full time of a graduate forester for 50,000 acres.

RECOMMENDATIONS

The Cariboo Section of the Canadian Institute of Forestry concludes that:

TO ENSURE SUSTAINED YIELD FORESTRY IN CENTRAL BRITISH COLUMBIA THE FOLLOWING STEPS ARE ESSENTIAL:

- (1) Immediate establishment of a nursery to produce 10,000,000 seedlings annually for current needs on regulated lands and rapid expansion to allow production of an additional 25,000,000 seedlings per year for reclamation.
- (2) Collection of 5,000 pounds of spruce seed in every good seed year.
- (3) More realistic allocation of funds for regeneration and relevant research.
- (4) Expansion of forester staff to approach the extensive management stage of one forester for 50,000 acres of forest land.



CANADIAN INSTITUTE OF FORESTRY

Incorporated 1950 - successor to the Canadian Society of Forest Engineers - Founded 1908

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PLEASE ADDRESS REPLY TO
CARIBOO SECTION

105 Nechako Drive,
PRINCE GEORGE, B. C.

April 9th., 1962.

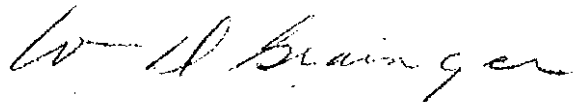
Dear Sirs:

We enclose herewith a copy of a report entitled "Sustained Yield does not exist in Central British Columbia". This report, prepared by the Cariboo Section of the Canadian Institute of Forestry, summarizes the findings of the Section's Committee on Forest Regeneration.

The membership of the Cariboo Section has brought this serious problem, which exists in Central British Columbia, to the attention of the Provincial Government. Also, copies of the report are being sent to various interested parties.

Yours sincerely,

CANADIAN INSTITUTE OF FORESTRY



Wm. D. Grainger,
Secretary - Treasurer
Cariboo Section