# Forestry Education in Canada



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#### PREFACE

The Canadian Institute of Forestry has been vitally interested in forestry education since Dr. Bernard Fernow, Dean, Faculty of Forestry, University of Toronto, became its first president in 1908. The need to evaluate forestry education in Canada was first formalized at the 1946 annual meeting in a resolution that led to K. G. Fensom being assigned to review and analyze the status of Forest Education in Canada. In a subsequent report presented at the 1947 annual meeting in Vancouver he recommended that such a study be undertaken, but the proposal was not implemented because the necessary funds were not available (Forestry Chron. 23(1):107-117. 1947).

At the annual meeting of 1962, the matter was again brought before the Institute in the form of a resolution (Forestry Chron. 38(4):542-543. 1962). At the 1963 annual meeting, the President of the C.I.F. requested the deans of the four Canadian forestry schools to form a committee to examine the proposed study and make recommendations relative to it. The report of this Special Committee on Forestry Education was submitted to the 1964 annual meeting by the chairman, Dean J. W. B. Sisam, and accepted by the membership (56th Annual Report of the Canadian Institute of Forestry, 1964, pp. 27-31). The report presented the basic objectives of the proposed study as follows:

(a) to define the scope and responsibilities of professional forestry in Canada, and to determine the objectives and needs of education and training for this profession over the next fifteen to twenty years in relation to apparent trends in technology, economic development, and our society in general;

(b) to appraise the interrelations of function and responsibility as between professional, technological, and technical levels of forestry;

(c) to estimate the numbers of personnel and the kind and range of qualifications to be required in each of these categories in the future; (d) to consider the interrelations of education in forestry and associated disciplines involved in the complex of natural resource management and utilization.

In 1965, funds to support a study were obtained through a special committee chaired by K. Hearnden, and Dr. George A. Garratt, Dean Emeritus, Yale University School of Forestry, accepted the responsibility of conducting the study. To provide guidance for Dr. Garratt, the C.I.F. executive established an Advisory Committee, with the membership shown at the end of this preface.

The Canadian Institute of Forestry is indebted to the following organizations, alphabetically listed, for the funds that made this project possible: Abitibi Paper Co. Ltd.; Bathurst Paper Ltd.; Bloedel Foundation; Bowaters-Mersey Co., Ltd.; B.C. Forest Products Ltd.; Canadian Forest Products Ltd.; Canadian Johns-Manville Co. Ltd. (North Bay); Canadian National Sportsman's Show; Consolidated Paper Corporation; Crown Zellerbach Canada Foundation; Domtar Ltd.; E. B. Eddy Co. (Hull); Great Lakes Paper Co. Ltd.; Imperial Life Assurance Co.; Kamloops Pulp and Paper Co. Ltd.; Kimberly-Clark Pulp and Paper Co. Ltd.; Mac-Millan, Bloedel, and Powell River Ltd.; Minas Basin Pulp and Paper Co. Ltd.; Northern Plywoods Ltd.; Northern Wood Preservers Ltd.; Nova Scotia Pulp Co. Ltd.; Ontario-Minnesota Pulp and Paper Co. Ltd.; Ontario Paper Company Foundation; Rockefeller Foundation; Spruce Falls Power and Paper Co. Ltd.; Tahsis Company Ltd.; and Weldwood of Canada Ltd. The Institute gratefully acknowledges the assistance given by the Canadian Forestry Service in contributing towards the cost of publishing this report.

New visions, directions, methodology, and techniques will need to be introduced into forest school curricula (as into other educational disciplines), and hopefully this report will help to motivate improvements and innovations in current professional and technical programs. While a major responsibility rests with the schools, individually and collectively, employers in both the public and private sectors will need to adopt policies to complement education. Further, the Advisory Committee urges the Canadian Institute of Forestry to provide leadership that will encourage appropriate adoption of the study recommendations and to maintain continuing interest in promoting sound and progressive educational programs.

> Lowell Besley H. W. Blenis K. G. Fensom J. A. F. Gardner H. J. Hodgins J. W. Ker Edgar Porter J. W. B. Sisam V. J. Nordin, Chairman ADVISORY COMMITTEE

### **AUTHOR'S FOREWORD**

In conformity with the basic objectives of the proposed study of Forestry Education in Canada, as stated in the preface, this report has been concerned primarily with the following aspects of the subject:

1. Reviewing the development of professional education in forestry and related fields since its inception in 1907. Pertinent to this review has been a survey of the history of forestry in Canada, the public policies and economic factors that influenced its development, and the importance of forests and related resources to the provincial and national welfare. This appraisal was needed to determine the present status and responsibility of the forestry profession in Canada, and whether progress in education has been adequate in the light of the national and provincial economic and social dependence on the forest resource and its products and services.

2. Assessing the current status of education and associated research in forestry and related fields (wood technology, forest-wildlife management, resource management, forest recreation, and other areas) offered in the four established forestry schools, as well as the training provided at the increasingly numerous institutions engaged in technological training, and the instruction offered in those colleges and universities concerned with education in areas closely allied to forestry. This aspect of the study sought to identify areas of strength and weakness and to define the problems requiring solution (i.e., adequacy of existing schools, curricula, faculties, recruitment of students, etc.).

3. Setting goals for professional and technical education in forestry and related fields during the next 10 to 20 years, based on available estimates of probable needs for wood, forage, wildlife, water, soil conservation, and recreation, and the resultant potential demand for personnel trained at these two educational levels. As the forestry profession matures and attempts to discharge its responsibilities to society, the associated education must be appraised as to "how good" as well as "how much".

As stated in the 1964 report of the Special Committee on Forestry Education (cited in the preface), it should be emphasized that the object of such a broad, national study as is proposed here will not be uniformity in forestry education, philosophy, or practices across the country, but rather to ensure the best possible background of relevant information both national and regional on which to base forestry education programs in the future.

The nine members of the Advisory Committee for this study, listed at the end of the preface, have rendered invaluable assistance during the five years it has taken to complete the project, as have also the members of successive C.I.F. Executive Committees, including Messrs. W. G. Burch, D. I. Crossley, E. S. Fellows, and François Matte. In addition, a special group of readers has also been extremely helpful in reviewing the drafts of the individual chapters of the report; special acknowledgement is due to Messrs. A. J. Herridge, G. F. Weetman, and H. I. Winer.

The study involved the distribution of a series of questionnaires directed to the individual professional forestry schools and the institutions offering technical training in forestry, to their faculty members, to the graduates of the professional schools, and to various public agencies and industrial organizations employing professional foresters and forest technicians. It also entailed many conferences with individuals and groups concerned with the administration, management, and utilization of Canadian forests and associated natural resources. The author is most grateful to all the individuals, groups, and organizations, far too numerous to list here, who cooperated so wholeheartedly throughout the entire period of the study. Such constructive results as the study may have attained are due in large measure to the assistance so freely given by everyone associated with it.

My special gratitude for assistance far beyond the call of duty goes to Miss Marilyn E. Feldman, my former secretary, for her most efficient "spare time" handling of all the typing and checking involved in the voluminous study-related correspondence, the preparation of questionnaires, and the seemingly unending task of preparing the various preliminary drafts of the study report and the final manuscript copy.

Hamden, Connecticut June 1971

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