



Environment
Canada

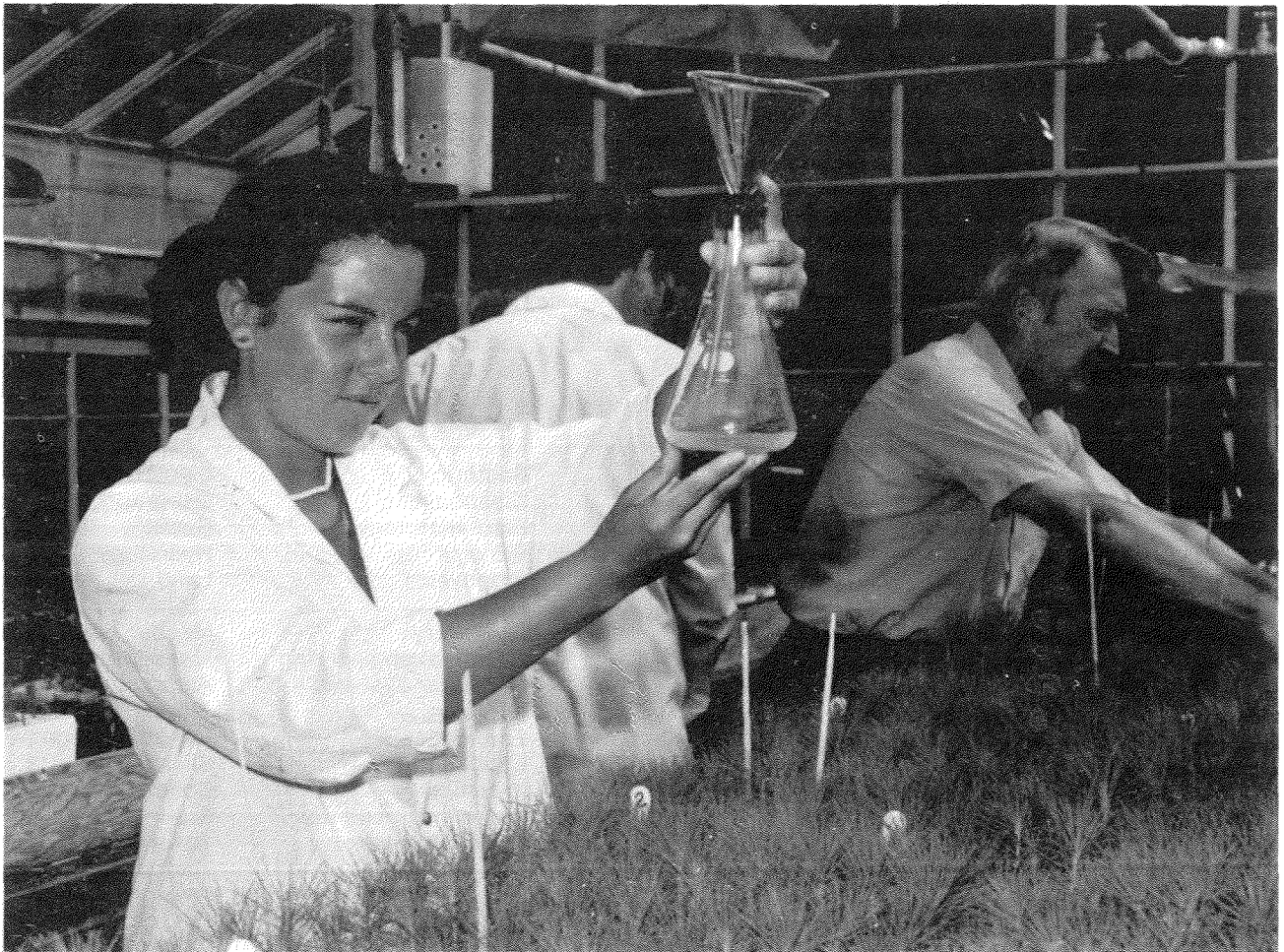
Environnement
Canada

Canadian
Forestry
Service

Service
canadien des
forêts

Canadian Forestry Service

CAREERS IN FORESTRY



Forestry student working on tree genetics.

Because the forest industry plays such an important role in the Canadian economy, the development of human resources in the forest sector is essential. This means the education and training of professional foresters, forestry engineers, technicians and tradespeople, both men and women, to meet increasing demands.

Compared with other countries having important forest-based industries, Canada employs fewer professional foresters. In Norway, for instance, there is one forester for every 11 000 hectares of forest, in Sweden one per 19 000, in the United States one per 13 000, while Canada has only one per 50 000 hectares. The figures reflect the fact that forest man-

agement in this country has, up to now, been much less intensive than in the other three.

The federal government's Forest Sector Strategy for Canada, published in 1981, stresses the urgent need for more intensive forest management and renewal, and better utilization of existing forests. Its implementation will call for a considerable increase in the more than 100 000 people now working in the forest industry, government forest agencies and educational institutions.

In forestry, as in most fields of employment, jobs are more readily available to applicants who have completed training courses, with preference given to those who have also worked seasonally in the field between semesters.

Most seasonal openings are for students of relevant courses in technological institutes and university forestry faculties, or those in senior high school who are planning to take university training in forestry or allied disciplines.

At whatever level one expects to be employed, qualification is the key word; just as the professional in forestry will be a university graduate, so the technician must have a diploma or certificate from a technological institute or college. Similarly, appropriate qualifications are required in many of the general trades and forestry worker categories.

People employed in forestry may be grouped in three main categories, as follows:



Forest of the future — raising seedlings in a research greenhouse.

(B.C. Ministry of Forests)

PROFESSIONAL FORESTERS

Working for the federal and provincial governments, and for the forest industry, in such fields as silviculture, timber harvesting, forest protection and forest research.



(MacMillan Bloedel Ltd.)

Re-planting cut-over forest, essential to meeting Canada's demand for wood.

TECHNICIANS

May be involved in timber management, forest protection, logging operations and supervision, fish and wildlife management, parks management or forest research.

Following are some of the specialities in which people with professional or technical qualifications may be employed:

Forestry and Forest Protection

Bacteriology	Genetics
Biochemistry	Geography
Bioclimatology	Geology
Biology	Hydrology
Biophysics	Land use (engineering, planning)
Botany	Mechanical engineering
Chemistry	Mensuration
Chemical engineering	Pathology
Computer systems	Photogrammetry
Ecology	Range management
Economics	Silviculture
Education	Soils
Entomology	Statistics
Fire control and use	Taxonomy
Forest harvesting	Toxicology
Forest engineering	Tree physiology
Forest management	Wildlife biology
	Wildlife management

Wood Products Research and Development

Adhesives	Veneer and Plywood
Composite Products	Wood Anatomy
Drying Procedures	Wood Engineering
Packaging	Wood Protection
Paints and Coatings	Wood Technology
Preservatives	Wood and Pulp
	Chemistry and Physics

TRADESMEN (WOODSWORKERS)

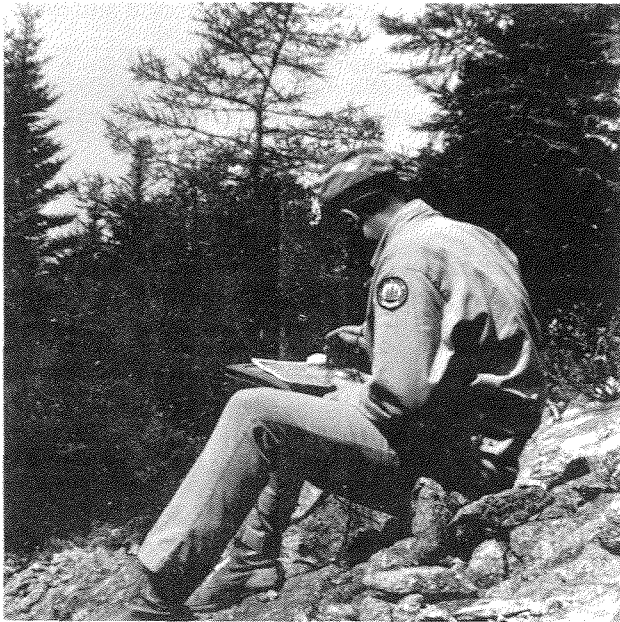
This category includes a wide range of forest occupations, including the following:

Woods foreman	Trucker
Heavy equipment operator	Scaler
Cutter / faller	Lumber grader
Tree planter	Sawyer
Nursery worker	

In addition, there are opportunities in forestry and the forest industries for trained people in many general trades and occupations. These include carpenters, cartographers, cooks, darkroom technicians, draftsmen and women, electricians, graphic artists, machinists, mechanics, millwrights, painters, plumbers, photographers, toolmakers and many more.

Professional Training

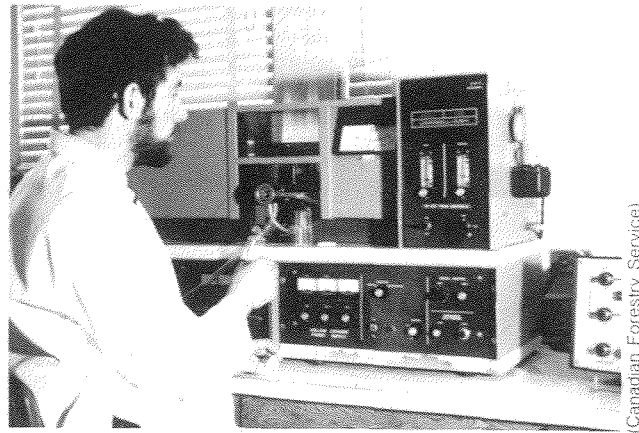
Degree courses in forestry are available at the following Canadian universities:



Forestry can provide a healthy, outdoor life.

(Newfoundland Dept. of Forest Resources & Lands)

The University of New Brunswick, Fredericton, N.B. E3B 5A3 offers degree programs in Forestry (B.Sc.F.) and Forest Engineering (B.Sc.F.E.). In Forestry, areas of concentration include Forest Resource Management, Forest Environment, Forest Tree Biology, Forest Wildlife and Entomology, and Wood Science. The Forest Engineering Program provides the academic requirements for a university graduate qualified to deal with the engineering and industrial-production aspects of forestry. Graduate programs leading to M.F. or M.Sc.F. degrees are available in most fields; and to M.F.E. and M.Sc.F.E. degrees in Forest Engineering programs. Ph.D programs are



Forest scientist using chemical analysis equipment.

(Canadian Forestry Service)

available in selected fields related to the ecological foundations of forest management.

L'Université Laval, Québec, Qué. G1K 7P4. La faculté de foresterie et de géodésie de l'Université Laval est constitué de cinq départements : écologie et pédologie forestière, aménagement et sylviculture, exploitation et utilisation des bois, géodésie et cartographie, photogrammétrie. Au premier cycle, deux programmes sont offerts aux étudiants, conduisant au Baccalauréat ès sciences appliqués en génie forestier ou arpentage. Les diplômés de la Faculté peuvent s'inscrire à l'École des gradués pour l'obtention d'une maîtrise ou d'un doctorat dans de nombreuses disciplines relevant des sciences forestières, des sciences géodésiques, de la photogrammétrie et de la cartographie.

The University of Toronto, Toronto, Ont. M5S 1A1 offers undergraduate degree programs (B.Sc.F.) in forestry and in wood science. The four-year program normally qualifies the graduate for membership in the Ontario Professional Foresters' Association as a graduate forester. A post-baccalaureate diploma course in resource management is also available, as are postgraduate programs leading to M.Sc.F. and Ph.D. degrees in most areas of forest management and wood science.

Lakehead University, Thunder Bay, Ont. P7B 5E1. The School of Forestry offers a four-year professional forestry program leading to a B.Sc.(F) degree, and providing the academic qualifications for registration in the Ontario Professional Foresters' Association. The program emphasizes forestry in the Boreal region of Canada. Graduate studies leading to an M.Sc. in silvicultural practice are available.

The University of Alberta, Edmonton, Alberta T6G 2H1. A four-year degree program (B.Sc. in forestry) in forest resource management is offered, with special emphasis on the ecology and integrated management of forest resources in the Boreal, Montane and Subalpine forest regions of Canada. Faculty expertise is available in most fields of forestry and related areas, and graduate programs leading to degrees of M.Sc. and Ph.D. are offered.

The University of British Columbia, Vancouver, B.C. V6T 1W5 offers four-year programs leading to a B.Sc.F. (forest resource management or forest harvesting) or a B.Sc. (forest sciences or wood science and industry). In addition to a basic common core, students must choose electives in interest areas or areas of concentration within each of the four major curriculums. The faculty also offers programs leading to M.Sc., M.A.Sc., M.F. and Ph.D. degrees in most fields of forest and wood sciences.

Technical Training

Technical training in forestry and allied subjects is available at the following institutions:

NEWFOUNDLAND

College of Trades and Technology, Box 1693,
St. John's, Nfld. A1C 5P7.

NEW BRUNSWICK

Maritime Forest Ranger School, R.R. 5, Fredericton,
N.B. E3B 4X6 (Le même programme est offert en
français à l'École des Gardes Forestiers, 725 rue
du Collège, C.P. 1, Bathurst, N.B. E2A 3Z2).

QUÉBEC

CEGEP John Abbott College, Ste-Anne de Bellevue,
Qué. H9X 3L9

Collège du Nord-Ouest, 425 rue Gagné, C.P. 1500,
Rouyn, Qué. J9X 5E5

Collège de Sainte-Foy, 2410 Chemin Ste-Foy, Sainte-
Foy, Qué. G1V 1T3

Collège de Gaspésie, Rue Jacques-Cartier, C.P. 590,
Gaspé, Qué. G0C 1R0

Collège Hauterive, 537 Boul. Blanche, Hauterive,
Qué. G5C 2B2

Collège de Chicoutimi, 534 rue Jacques-Cartier Est,
C.P. 1148, Chicoutimi, Qué. G7H 5G4

Collège de Rimouski, 60 rue de l'Évêché Ouest,
Rimouski, Qué. G5L 4H6

ONTARIO

Algonquin College of Applied Arts and Technology,
Pembroke, Ont. K8A 3K2

Lakehead University School of Forestry, Thunder Bay,
Ont. P7B 5E1

Sault College of Applied Arts and Technology, P.O.
Box 60, Sault Ste. Marie, Ont. P6A 5L3

Sir Sandford Fleming College, School of Natural
Resources, P.O. Box 8000, Lindsay, Ont. K9V 5E6

SASKATCHEWAN

Kelsey Institute, P.O. Box 1520, Saskatoon, Sask.
S7K 3R5

ALBERTA

The Northern Alberta Institute of Technology,

Edmonton, Alta. T5G 2R1
Lethbridge Community College, Lethbridge, Alta.
T1K 1L6

BRITISH COLUMBIA

British Columbia Institute for Technology, 3700

Willingdon Avenue, Burnaby, B.C. V5G 3H2

College of New Caledonia, 3330 - 22nd Avenue,
Prince George, B.C. V2N 1P8

Malaspina College, 900 - 5th Street, Nanaimo, B.C.
V9R 5S5

Selkirk College, Castlegar, B.C. V1N 3J1

For information on any of the above programs,
please write directly to the school in question.

Employment

Opportunities for employment in forestry are to be found in a variety of areas, details of which may be obtained from any Canada Manpower Centre. Among potential employers are:

Industry (operational and research): lumbering and logging companies; pulp and paper companies; forestry consultants; sawmill consultants; forest industry equipment manufacturers and distributors.

Education (instructional and research): universities and technical schools are listed above; also, agricultural departments of some universities and colleges.

Government (federal, mainly research; other, mainly operational): forestry, parks and wildlife services of federal and provincial governments; some municipal parks and recreation departments.

When choosing a career, students should always consider its effect on their personal lives, as well as the professional and technical aspects.

This is especially important in careers such as forestry, where the work may often be in small, isolated communities or areas where normal family life would be difficult or impossible.

On the other hand, forestry offers a wide range of possible activities, with a proportion of healthy, outdoor life and the satisfaction of contributing to the well-being of the community.

For further information

Enquiry Centre,
Department of the Environment,
Ottawa, Ontario.
K1A 0H3.
997-2800

Cette publication est disponible en français sous le titre *Carrières en foresterie*