

Hoot's Message

J. M. G. has ably filled the position of Dean of Forestry since 1929. Originally a member of the class of 1915 Hoot took time out for the First World War and then came back here to U. N. B. to graduate in 1919. In 1929 while employed with the British Columbia Forest Service he was offered the position of Dean of Forestry here. Since leaving the B. C. Forest Service he has kept in touch with current industrial problems and practices of the forestry profession. He has been consulting forester to the Quebec North Shore Company as well as serving in various capacities with the Dept. of Lands and Mines of New Brunswick. In recognition of his outstanding civil defense work during World War II he was awarded the O. B. E.

May I draw to your attention the results of a "Foresters' Training Questionnaire" recently submitted to Government, Forestry Departments and to a good cross section of the Forest Industry.

It covers two major points: (1) the courses given, or which should be given, in relation to their usefulness to the employer, (2) the importance the employer attaches to training, experience, mental, moral and physical characteristics of the employee.

The most useful courses according to Government Forest Services are: First group—surveying, silviculture, mensuration, photogrammetry, forest protection, forest management, mathematics and English; second group—economics, wood technology, entomology, pathology; third group—Biology, logging and mechanical engineering.

These services recommend more report writing, and more work on soils and photo interpretation. The forest industry divides the usefulness of courses on the type of employment, whether in forestry or operating.

For the forester the most useful are surveying, protection, silviculture, mensuration, photogrammetry, management, mathematics and English, followed by entomology, pathology and economics, and laying less stress on logging, wood technology, biology and mechanical engineering.

For the logger the most useful courses in their opinion are surveying, logging mensuration, protection, mathematics, English and mechanical engineering, followed by photogrammetry, management, economics and silviculture, and laying less stress on entomology, pathology, biology and wood technology.

For both the forester and the logger, industry expresses the need of courses in report writing, public speaking, commercial law and accounting; and for the logger more work in engineering, in hydraulics, and construction of roads and structures.

Some of the courses that were suggested by the companies returning the questionnaire are now part of our five year curriculum, and I also wish to emphasize the importance given by both industry and government services to English, the medium by which you convey your ideas to others in either speaking or writing.

The questionnaire requested various factors to be assessed as "Very Important", "Important", "Useful" and "Not Important".

These factors and the grades received from the questionnaire are as follows:

School Training — About evenly divided between "Very Important" and "Important".

Previous Experience — Fifty per cent considered it "Useful", while the others classed it evenly between "Very Important" and "Important".

Dependability — All rated it as "Very Important".

Energy — 70% rate it as "Very Important" and the balance as "Important".

Persistence — 60% rate it as "Very Important", 25% "Important", and 15% as "Useful".

Ability to get along with Superiors — 75% "Very Important", balance "Important" or "Useful".

Associates — Over 80% rate as

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FORESTRY EDITION



MANAGING EDITOR
We couldn't find one

Editor-in-Chief.....Bill MacPherson (He'll take the blame)	Chief Editor.....Roy Wright (Ya, blame Bill)
Feature.....Babe Bailey (He's trying)	Double Feature.....Don Fowler (He tried)
Sports Editor.....Dingo Currie (Look out for that left)	Proof Readers..... (They wanted too much money, so...)
Business Manager.....Andy Anderson (We didn't need one but he wanted his name included)	
News Editor.....Don Hall (It was news to him)	Obituaries.....Bob Clouston (You dig this one up)

Foresters lead with Special Edition

At 3 a.m. this morning the peaceful silence of the campus was split by a lusty howl of TIMBER. The first Forestry issue of the Brunswickian printed by the five-year class, was born. This young fellow, equipped with the lungs of a future Bull of the Woods (or Paul Bunyan) insists on being heard.

He will speak with the tongue of Deans, Professors and scientists.

Students too will raise their shaky voices in writings, both serious and otherwise.

On this page you will find contributions written by members of the forestry faculty and by Dr. R. E. Balch. These articles deal with some of the many aspects of forestry and indicate the diversity of the forestry profession.

Elsewhere in this issue you will

find reports on forestry sports, dances, and field events. Considering his extreme youth this young Brunswickian chap has pronounced many words of wisdom. However, by next year he will have grown amazingly and you may expect much from him. His parents—the forestry students—guarantee that his education will not be neglected in the meantime.

Logging-Post-Graduate Course

This year the Faculty of Forestry has been honored by the addition of a new member to the staff. We are speaking of Louis R. Scheult who is conducting a post-graduate course in mechanical logging.

Mr. Scheult graduated from the University of Toronto in 1928 with a B. Sc. in Forestry. This was followed with a Master's degree in 1936 in which he specialized in mechanical logging. Mr. Scheult brings to the U.N.B. campus a wide understanding of his field gained through intensive research and his own professional experiences.

For three years he was with the Canada Power and Paper Corporation working on timber surveys. The next eleven years was spent as Wood's Manager for the Singer Manufacturing Co. in Quebec. The Finch Pryn and Co. of Quebec and New York then acquired his services as their Logging Superintendent.

ent. It is with great pleasure that we introduce Mr. Scheult to you and pass along his advice for specialization in logging.

Considered apart from the basic forestry concepts which are covered in the essential courses—logging deals with people, with large areas of land, with equipment of various kinds, with structures such as dams, flumes and loading plants, with transportation systems by rail, water, roadways and cableways, with the location, construction and operation of these systems.

It is essentially a production job and problems occur in job organization, personnel management, cost analysis and accounting, in the drawing up and execution of contracts, in the control of production over vast areas.

We thus have two broad groups of subjects or courses which would

be useful to anyone specializing in logging and which can be taken as optional courses from the second year onwards. The first group consists of mathematics and certain engineering courses which are offered, some specially designed for forestry students, others of a more general nature. These courses are useful in the many engineering applications in logging.

The other broad group deals with cost control, business organization, personnel management and contract law. Optional courses dealing with these subjects are listed in the fourth and fifth years.

While these are courses which are technically the most useful there are others which are equally important from the broader cultural point of view. The English and French courses offered should not be overlooked for very obvious reasons.

Silviculture

Prof. H. D. Long graduated in Forestry in 1934 following which he studied plant pathology at MacDonald Agriculture College and then spent a year at McGill University doing post-graduate work in ecology. Besides having spent four years with the Dominion Forestry Service Prof. Long was employed by the Canadian Pulp and Paper Institute for the two years preceding his joining the U. N. B. Forestry Faculty in 1947.

The training necessary for a student who wishes eventually to become a silviculturist may best be deduced from a consideration of the activities and responsibilities of the silviculturist.

Silviculture is concerned with the growing of forest crops. To the silviculturist, the forest is not an exploitable natural resource, but rather a crop which must be sown or planted, protected from destruction by insects, disease and other agents, carefully tended until it reaches maturity, and then harvested and reproduced immediately, to ensure the prompt establishment of a new crop. Delay in securing a new crop means time and money lost in the growing of timber. Probably the most important and the most difficult task of the silviculturist is that of obtaining an adequate stand of regeneration after the harvesting of the old crop.

The silviculturist is interested in logging (the harvesting of the timber crop) only to a certain degree. Whereas the logger thinks in terms of the present mature crop

of timber, the silviculturist must look ahead and consider the possible effects of the logging operation on the next crop. Certain logging methods are destructive to the new young timber crop, or create conditions unfavorable for its successful establishment, or impair the health and lower the quality of the new crop. The logging engineer and the silviculturist must work together in planning the logging operation so that a method both economically and silviculturally acceptable may be applied.

Since the growing of timber is dependent upon so many fundamental sciences, the silviculturist can not become proficient in all, but must enlist the aid of specialists in various fields. To grow healthy crops of timber, he must consult the pathologist and entomologist and weigh their recommendations against the economic and silvicultural factors involved in timber growing. He must consider the requirements of wildlife and the conditions necessary for the recreational use of the forest, when these uses are to be combined with the growing of a timber crop.

Success in growing and reproducing crops of timber, depends upon a thorough understanding of the fundamental principles involved, and a knowledge of the many environmental factors exerting an influence on the forest throughout its life. Thus the following courses may be considered essential for a proper understanding of silvicultural problems; elementary

botany; soil science; geology; dendrology; plant anatomy or wood technology; plant ecology & climatology, or silvics; plant physiology & silvicultural practice, or silviculture (theory and practice).

In addition, for the successful application of silviculture and for an appreciation of the problems of workers in related branches of forestry, the silviculturist should have an elementary knowledge of: logging methods, forest products, forest management, wildlife management, forest mensuration, forest entomology and forest pathology.

Above all, the student should realize that proficiency in silviculture can be gained not by the mere taking of courses, but through serious study and long experience.

H. D. Long

DEFINITIONS

Virgin timber—Ain't never been axe'd yet.

Twins—Womb mates.

Psychology—The science that tells you what you know in words you can't understand.

Nurse—Panhandler.

Blotter—Something you look for while the ink dries.

Simple Soul—Ore who starts out to build a \$7,500 house with \$7,500.

Dr. Balch's Message

Dr. R. E. Balch, officer in charge of the Dominion Entomology Laboratory in Fredericton, completed his under graduate studies at the Ontario Agriculture College, Guelph, Ont., where he graduated in 1923. Later he studied one year at the University of Toronto, and did post-graduate work at the New York State College of Forestry, in Syracuse, N. Y. He has had wide experience in many parts of the United States and Canada. At present Dr. Balch is national president of the Canadian Institute of Forestry.

You asked for a little "moralizing" on what the profession of forestry holds out for students. I would sooner turn the question around and ask what the present students hold out for forestry. Perhaps it is much the same thing, for progress in the practice of forestry and opportunities in the profession both depend on the quality of the men who go in for it.

The past history of forestry in Canada is the history of the gradual acceptance of the idea that "trees are a crop", that forests are a "renewable resource" which call for "proper use" based on knowledge and restraint. If these phrases are trite, it is because foresters have had to repeat them ad nauseam to get them accepted and they will have to go on doing so for we are only beginning to pass from the stage of exploiting the accumulated growth of centuries to the protection and management of the future crop. Fortunately, nature has been less resentful than she might and by good luck rather than good management we have a very fair second crop. But it is beginning to be realized that it is only a small part of what it can be if our forest land is treated with the respect and intelligence it deserves. In other words, if we practise forestry.

What is forestry? It is sometimes called a science, but it is as much an art as a science although, like all arts, its successful practice depends on knowledge and the use of the scientific method. It is based on many sciences, but is not a science in itself. The forester often finds he is dealing with conjecture as much as demonstrable fact. He is concerned with men as well as trees and is called upon to use his head as well as his textbooks.

What then should the forestry student aim at in his undergraduate work? For one thing he cannot afford to specialize too early, or too closely. He does not go to university to learn established techniques for growing and harvesting trees, but the principles on which these techniques must be based. Here he has the opportunity, which he may not have again, to learn something of the fundamentals of his sciences, and at the same time to develop his own powers of thought and expression. He will be forced to specialize soon enough—in some branch of research or teaching, in methods of logging, protection, or management. At university he should not be in too much of a hurry to climb some small pinnacle where, like Leacock's Ph.D., he can see nothing but his own feet.

Whatever his specialty there is one science in which I think every forester should be well grounded. I refer to ecology. Perhaps ecology is not yet a science so much as a point of view, but it will underlie all his work. If he does not have it, he will be in danger of many mistakes. The forest is an association of plants and animals, the association being the product of environment. The forester who cannot visualize it as such does not know his job. He has to work with nature and he will need to get something of her long term view. He cannot afford to be an opportunist looking for too quick results. If he is, he will be disappointed and will contribute little to the progress of his profession.

These homilies do not answer your question, but perhaps they suggest some of the ideas common to workers in forestry. The profession is young and growing. It holds out opportunities in many different fields, but they are all

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Forest

Prof. Rae Brown, tomologist, who hails from Ontario, came to U. N. B. to obtain his B.A. in 1943 from the University of Western Ontario. He spent his various field stations in Ontario and Quebec, the Department of Agriculture and Forestry, and the Division of Entomology and Plant Pathology, Marie, Ont.

Since the inception of the forestry course in Forestry, fusion has already a long series of students may elect to receive some degree of in entomology and forestry during their training. It is the brief outline to attend such confusion and to try to ensure that the possibility of Forestry course for the field. With this in mind, the present rector principally to second year students.

As a necessary course, Biology 220 (Zoology) must be taken before the student can be covered in the

With this basis, it then effect Forestry Morphology - Entomology 362 (Insect Morphology) in the third year, Biology 311-3 (Botany, and Plant Physiology) suggested. In the forestry 440 (Insect Taxonomy) then be elected and parried by another such as Biology 460 (Ecology). In the fifth specialized field of forestry is reached and forester are Forestry Entomology 532 (Entomology) and an course Forestry 533 (Entomology) Literatures.

Advice

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