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REPORT OF THE PRESIDENT

OF THE UNIVERSITY OF BRITISH COLUMBIA

FOR THE ACADEMIC YEAR ENDED

AUGUST 31st, 1940.

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REPORT OF THE PRESIDENT

I GENERAL:

To the Board of Governors and the Senate of The University of British Columbia.

Gentlemen:

I have the honour to submit the following report on the work of the University for the academic year ended August 31st, 1940:

Teaching Staff:

The numbers in the teaching staff for the academic year 1939-40, were as follows:

Deans of Faculties	908 913 136 131
Assistants TOTAL 22	
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New Appointments:

Wilbert A. Clemens, M.A. (Toronto), Ph.D. (Cornell), F.R.S.C., Professor and Head of the Department of Zoology. David H. Russell, B.Sc., M.Ed. (Sask.), Ph.D. (Columbia), Associate Professor of Education.

John C. Berry, M.S.A. (Brit.Col.), Ph.D. (Iowa State College), Assistant Professor of Animal Husbandry.

Francis E. L. Priestley, M.A. (Alberta), Ph.D. (Toronto), Assistant Professor of English.

Miss Mary Dorothy Mawdsley, B.A. (McGill), M.A. (Brit.Col.), Ph.D. (Chicago), Assistant Professor of English.

George M. Volkoff, M.A. (Brit.Col.), Ph.D. (California), Assistant Professor of Physics.

Thomas G. Wright, B.F. (Pennsylvania State Forest School), M.F. (Duke), Special Lecturer in the Department of Forestry.

Wilbur H. Goss, B.S., Ph.D. (Washington), Lecturer in the Department of Physics.

C. Rulon Jeppesen, Ph.D. (California), Lecturer in the Department of Physics.

Miss Geraldine Homfray, R.N., B.A.Sc. (Brit.Col.), M.A. (Peabody), Instructor in the Department of Nursing and Health (under the Rockefeller Foundation Grant).

F. M. Clement, B.S.A. (Toronto), M.A. (Wisconsin), relinquished the Headship of the Department of Horticulture and was appointed Professor and Head of the Department of Agricultural Economics.

Promotions:

Dr. Alden F. Barss from Professor to Professor and Head of the Department of Horticulture.

Mr. John A. Irving from Professor to Professor and Acting-Head of the Department of Philosophy and Psychology.

Dr. David G. Laird from Associate Professor to Professor of Agronomy.

Dr. Joseph A. Crumb from Lecturer to Associate Professor in the Department of Economics, Political Science and Sociology.

Mr. Frank A. Forward from Assistant Professor to Associate Professor of Metallurgy.

Dr. J. Allen Harris from Assistant Professor to Associate Professor of Chemistry.

Dr. Harry V. Warren from Assistant Professor to Associate Professor of Mineralogy and Petrography.

Dr. Braham G. Griffith from Instructor to Assistant Professor of Forestry.

Dr. Alexander Hrennikoff from Instructor to Assistant Professor of Civil Engineering.

Mr. Edward S. Pretious from Instructor to Assistant Professor of Civil Engineering.

Mr. Archie Peebles from Instructor to Assistant Professor of Civil Engineering.

Miss Olga Okulitch from Assistant to Instructor in the Department of Dairying.

Resignations:

Ira Dilworth, B.A. (McGill), A.M. (Harvard), Professor of English. Oscar E. Anderson, M.A. (Brit.Col.), Ph.D. (California). Assistant Professor of Physics.

Miss Fyvie Young, R.N., B.A.Sc. (Brit.Col.), M.A. (Columbia), Instructor in the Department of Nursing and Health (under the Rockefeller Foundation Grant).

Leaves of Absence:

Walter H. Gage, Associate Professor of Mathematics, from

September 1st, 1939, to June 30th, 1940.

Alexander Hrennikoff, Instructor in the Department of Civil Engineering, for the Session 1939-40.

Capt. J. F. Bell, Assistant Professor in the Department of Mechanical and Electrical Engineering, from March 16th to August 1st, 1940.

Appointment Necessitated by Leave of Absence:

J. Maurice Kingston, M.A. (Western Ontario), Ph.D. (Toronto), Lecturer in the Department of Mathematics during the absence of Mr. W. H. Gage.

Retirements under the Annuity Plan:

Dr. H. T. J. Coleman.

Dr. H. T. J. Coleman, Head of the Department of Philosophy and Psychology, and for a number of years Dean of the Faculty of Arts and Science, retired upon the completion of twenty years of service to the University. Shortly after the Summer School was organized, Dr. Coleman was appointed Director. Here his wide experience in summer schools elsewhere was of great assistance to the University in determining the range and content of the courses offered. The good wishes of his former associates go with Dr. Coleman as he enters upon his retirement which, all hope, will afford him ample leisure for the exercise of his literary talents.

Dr. C. McLean Fraser.

In the retirement of Dr. C. McLean Fraser from the Headship of the Department of Zoology, the University lost the services of an efficient departmental administrator, an unusually wellinformed and inspiring lecturer, and a productive scholar whose

numerous scientific publications have done much to enhance the reputation of the University of British Columbia, not only in Canada, but throughout the English-speaking world and beyond. His many friends in the University wish him continued good health that he may pursue, unhampered by administrative and lecture-room duties, his scientific investigations in those fields in which he has long been the recognized authority.

Dr. Paul A. Boving.

Another distinguished Professor who was lost to the University during the year through superannuation was Dr. Paul A. Boving who, for many years, was Professor and Head of the Department of Agronomy until ill health forced him to relinquish part of the duties of this dual position. A human, friendly man, at home in any company, he has made friends for the University in nearly every town and hamlet in the Province of British Columbia, while his breadth of scholarship, range of interests and brilliance as a lecturer have gained for him within the University a host of friends who wish for him in his retirement many years of joyous, creative living.

Mr. John Ridington.

In August, 1940, Mr. Ridington retired from the librarian-ship of the University. The library in its many developments, in its organization, its administration and, in fact, the building itself, bears witness to the foresight, the energy and the wisdom of the man who for more than twenty-five years devoted himself with such singleness of purpose to its balanced expansion and to increasing its usefulness to the staff and students. The good wishes of the entire University community follow Mr. Ridington in his retirement.

Lieut, - Colonel F. A. Wilkin.

A highly-regarded associate professor to join the ranks of those who retired during the year was Lieut.-Colonel F. A. Wilkin, who served the University long and acceptably as a member of the Department of Civil Engineering and who for several years was Acting-Head of the Department. During his period of service in the University, Colonel Wilkin endeared himself alike to students and to colleagues, all of whom wish him many years of pleasure and satisfaction in the less strenuous life which retirement imposes.

Captain J. F. Bell.

Captain J. F. Bell, who, under the annuity plan was due to retire in August, was recalled to the Royal Canadian Navy in March. The Board of Governors, in granting Captain Bell leave of absence to re-enter this branch of the nation's service for which

he is so eminently fitted by virtue of his past training and experience in the Royal, and Royal Canadian Navies, conveyed to him their thanks for his long and efficient service to the University.

Appointment of Emeritus Professors:

As indicated above, the year 1939-40 witnessed the retirement of several members of the professorial and administrative staffs. For distinguished services rendered to the University over a period of twenty or more years, Dr. C. McLean Fraser, upon reaching the retirement age, was made Emeritus Professor of Zoology, and Dr. Paul A. Boving was made Emeritus Professor of Agronomy. Mr. John Ridington, who had been given several terms of re-appointment after he had reached the superannuation age, was made Emeritus Librarian.

Re-appointments Following Attainment of Retirement Age:

Dr. H. T. J. Coleman, Professor and Head of the Department of Philosophy and Psychology, was re-appointed from the date of his retirement on February 1st, 1940, to May 15th, 1940.

The appointment of Mr. John Ridington, Librarian, who had been re-appointed upon reaching the retirement age in 1936, was further continued from April 18th to August 31st, 1940.

Obituaries:

Dr. Henry Esson Young.

On October 24th, 1939, there occurred the death of one who had played an important part in the early history of the University - Dr. Henry Esson Young. At the time of his death, Dr Young was Director of the Provincial Board of Health.

The Board of Governors, in recording their deep sense of loss at his passing, paid tribute to his vision, his energy and his zeal for education in planning the University of British Columbia which, in large measure, owes to him its very founding; for it was during Dr. Young's tenure of office as Minister of Education that the University Act was passed, that a land endowment for the support of the University was set aside, that the present site for the University was selected, the first President appointed and a beginning made for the erection of buildings at Point Grey.

Mr. Walter B. Bishop.

By the sudden passing of Mr. Walter B. Bishop on June 20th, 1940, the University suffered a distinct loss. Mr. Bishop had for many years served the University as Instructor in Metallurgy, and his death was deeply regretted by many students and colleagues who esteemed him highly for his many sterling qualities.

Dr. John Gerald FitzGerald.

In recording the losses sustained by the University during the year, mention must be made of the passing of Dr. John Gerald FitzGerald who was, for many years, the kindly and efficient Director of the Connaught Laboratories at the University of Toronto.

Although not officially connected with the University of British Columbia, Dr. FitzGerald nevertheless made a distinct contribution to its efficiency when, through his efforts, there was established on this campus the Western Division of the Connaught Laboratories,— an achievement which will remain a memorial to his interest in Medical Research and to his fine spirit of interuniversity co-operation.

Honorary Degrees:

The degree of LL.D. (<u>Honoris Causa</u>) was conferred upon the Honourable Eric Werge Hamber, Lieutenant-Governor of the Province of British Columbia, at the Twelfth Autumn Congregation on October 25th, 1939.

At the same Congregation Professor Paul Axel Boving, Emeritus Professor of Agronomy, also received the degree of LL.D. (Honoris Causa).

Election of Representatives of Senate on the Board of Governors:

On October 5th, 1939, the following members of Senate were elected as representatives of the Senate on the Board of Governors:

Mr. Sherwood Lett Miss A. B. Jamieson Dr. Evlyn F. Farris

Resignations of Members of the Board of Governors:

During the year the University lost the services of three valued members of the Board of Governors. General Victor W. Odlum and Colonel Sherwood Lett resigned as members of the Board to take

up military duties. Mr. Lett, however, retained his connection with the University through his elective membership on Senate. The Board expressed its deep appreciation of the efficient service rendered by these two gentlemen and extended best wishes for their success and safe return.

The third member of the Board to tender his resignation was Mr. Samuel H. Shannon. Mr. Shannon had served as a Governor since his appointment to this important position in 1935.

Appointments to the Board of Governors:

In July, 1940, Mr. William George Murrin was appointed as a member of the Board of Governors to complete the term for which General Victor W. Odlum had been appointed, namely, until August 27th, 1943.

Following the resignation of Mr. Sherwood Lett, Mr. Arthur E. Lord was elected to succeed him as representative of the Senate on the Board of Governors for the remainder of the time of Mr. Lett's appointment, namely, until September 13th, 1941.

Recognition of the Chancellor's Fiftieth Anniversary in the Practice of the Medical Profession:

On April 29th, 1940, the Chancellor, Dr. R. E. Mckechnie, celebrated his fiftieth anniversary in the practice of medicine. To the scores of congratulations received by Dr. Mckechnie on this occasion, the Board of Governors were happy to add their tribute of respect and admiration for one who, while rendering distinguished service to his profession, had always given freely of his time to the unhurried consideration of the affairs of the University.

II THE YEAR WITHIN THE UNIVERSITY:

Retirement Age for Members of the Staff:

Although the practice of the Board of Governors in retiring professors upon the attainment of the retirement age was generally understood by members of the staff, the Board of Governors, to prevent any possible misunderstanding, passed the following resolution on February 26th, 1940:

"RESOLVED, That all members of the staff be advised in writing that the policy of the Board of Governors with respect to the retirement of staff members is as follows:

- 1. "The retiral age for all members of the staff (other than those certain members who were with the University at the time the plan of annuities and insurance was adopted, and whose retiral age was then set at 68, 67 or 66) is 65.
- 2. "The appointment terminates, and the payment of salaries is discontinued, when the retiral age is reached."

Compulsory Retirement Age for Employees:

few of the older members of the present staff.

As participation in the annuity plan, which came into operation in 1939, was optional for members of the clerical and mechanical staffs, and as no retirement age had been set for members other than those participating in the superannuation scheme, the Board of Governors adopted as its policy the compulsory retirement of employees at the age of 65, except for a

Accrediting of High Schools:

Nursing; or Agriculture.

For the year 1937-38, as recorded in the President's Report for that year, approval was given by the Faculties and the Senate, without prejudice, to the accrediting of High Schools for University Entrance in a limited and experimental form as proposed by the High School Accrediting Board. The University was represented on this Board by two members of Faculty.

During the intervening period an exhaustive study was made by this Board on the matter of accrediting with respect to the requirements of University Entrance. In October, 1939, the scheme finally recommended by the Accrediting Committee for the accrediting of High Schools was adopted by Senate.

Science Courses for University Entrance:

Another matter which was given careful consideration by a group of representatives of the University in co-operation with representatives of the Provincial Department of Education was that pertaining to requirements in Science for University Entrance and Senior Matriculation.

on the recommendation of the Joint Committee, "General Science" was adopted by Senate on May 8th, 1940. By this regulation, credit in the First Year in the University can be given for Senior Matriculation "Physical Sciences", but this credit does not meet the Science requirements for students proceeding to courses in the

University in Arts and Science, Science Majors; Applied Science;

Establishment of a Department of Agricultural Economics:

During the year the Department of Agricultural Economics in the Faculty of Agriculture was established. The constitution of this Department did not involve the offering of new courses, or a change in lecturers; but existing courses in Agricultural Economics, which were formerly under the Department of Economics, Political Science and Sociology, were given the status of a Department under the Headship of Dean F. M. Clement.

Action on Requests for the Establishment of New Units of Instruction:

During the period under review very considerable progress was made in determining the wishes and requirements of the University's constituency for the establishment of new major divisions of instruction. Numerous fairly exhaustive reports were prepared which were based on requests received from learned societies and from representative groups of citizens asking that the Senate and the Board of Governors establish new faculties, schools, institutes, departments or courses. Specific requests were made for the establishment of a Faculty of Law; a College or School of Pharmacy; an Institute for Research in the Social Sciences; a Pre-Medical Course; and the re-establishment of the course in Home Economics.

establishment of a Faculty of Law, second in priority among the five courses considered, if and when funds permit."

With respect to the request for the establishment of an Institute for Research in the Social Sciences, for the establishment of a School of Pharmacy and for the extension of the Pre-Medical courses as at present set out in the calendar, the Senate recommended

Board of Governors that, "if and when funds are available, the course in Home Economics be re-established prior to the establish-

ment of any other course". The Senate also recommended "the

that these be not established at the present time.

After careful consideration the Senate recommended to the

When the matter was placed before the Board of Governors, the recommendations of Senate were laid on the table until the Estimates for 1941-42 were being prepared. While the Board's further action does not come within the period of this report, it might be recorded that, at the time of writing, funds for the proposed courses in Home Economics and Law were not available.

Workers' Educational Classes:

During the year 1939-40, through special grants provided by the University and the Provincial Department of Education, Workers' Educational Classes were offered under the direction of the Department of University Extension. Members of the Vancouver District Workers' Educational Association expressed deep appreciation of these courses.

Comment on the Report of the Director of University Extension:

As in previous years, this report recorded so many important developments in the field of Adult Education that the Board of Governors authorized its being printed separately for general distribution. On pages 41 - 44 of this report appear four of the sixteen divisions which comprise the original report of the Director. Of these, two are of outstanding importance, namely: the Educational Programme for British Columbia Fishermen, and the Rural Leadership School.

Educational Programme for British Columbia Fishermen:

During the past year the Department of University Extension, in co-operation with the Dominion Department of Fisheries, inaugurated a programme of adult education for British Columbia fishermen. St. Francis Kavier University generously loaned to the Extension Department for a period of several months, two of its ablest and most experienced extension lecturers to organize this educational service for those of the fishermen who were desirous of improving their standard of living through co-operative action.

The response on the part of the fishermen was immediate and the interest so sustained as to constitute one of the outstanding achievements of the Department of University Extension. A more extended statement of the methods employed and of the results achieved will be found on pages 42 and 43 of this Report.

Rural Leadership School:

This school, which was conducted on the basis of a modified form of the Danish "folk school", was held at the Forestry Camp, University Hill, from January 16th to March 16th, 1940. The experiment, though undertaken with some misgivings, proved an unqualified success. This form of instruction is of undoubted educational value to young men and women from the rural districts, more particularly for those who, by reason of their geographical location, have not easy access to high schools. Details concerning this school will be found on pages 43 and 44 of this Report.

Expiration of the Rockefeller Foundation Grant for Nursing and Health:

In 1937 the International Health Division of the Rockefeller Foundation made a grant of \$7,500.00 to the University for the Department of Nursing and Health for a three-year period beginning in October, 1936. The last instalment of this grant was expended during the year under review. The assistance which the grant has

made possible in providing the services of a Field Work Supervisor has been of great value, and again the University desires to place on record its appreciation of this gift from the Rockefeller Foundation.

Projects Under the Special Grant for Research:

At a meeting of the President and the Deans the following research projects were unanimously agreed upon for the fiscal year 1940-41. As in previous years, the grants for these investigations were not made, as a rule, to individual departments nor yet to single faculties, but were voted for projects which, in a number of instances, involved work in two or more faculties:

The Selective Flotation of Nonsulphide Minerals; Gold Research; Spectroscopic Analysis; Undulant Fever: Effect of Thymus Extract; Genetics of Economic Plants; Preservation of Fishing Nets:. Solvent Extraction of B.C. Coal and Shale: Superactive Charcoal; Surface Reaction of Minerals: Reduction of Native Ores by Natural and Coal Gases: Catalytic Dehydrogenation of Hydrocarbons: Removal of Sulphur - and Increase in Quality of Gasoline from Canadian Ores; Preparation of Organo-Metallo-Compounds: Quantitative Determination of Molybdenum, Vanadium and Tungsten; Separation of Less Common Metals from Each Other; Lignin Investigation; Refractive Indices in Minerals: Application of Raman Effect to Problems of the Oil Industry; Electron Refraction of Minerals; Ecology of Insects; Causes of Raspberry Failure; B.C. Fish Oils; Activators for Enzymes; Fowl Paralysis; Surface Taint Butter; An Economic Study of Standards of Living on Some Subsistence Farms; Calfhood Vaccination for Bang's Disease.

Dominion-Provincial Youth Training Plan Bursaries:

To assist needy students to attend the University for the year 1939-40, a grant of \$5,000.00 was received under the Dominion-Provincial Youth Training Plan. The programme was based upon a three-year schedule in which the percentage of the contribution of the Dominion Government to the scheme was to increase slightly each year. The fund was administered by a special committee composed of the President, the Chairman of the Joint Faculty Committee on Prizes and Scholarships, the Director of University Extension, and the Provincial Director of Technical Education, who was in charge of the educational aspects of the Youth Training Project.

On the basis of scholarship and need, out of 140 students who applied for assistance from this source, 35 were recommended for grants ranging from \$40.00 to \$185.00. Of these students, 20 were from the Greater Vancouver Area and 15 were from other parts of the Province. Over half of the students had 80 per cent. or better in scholarship standing, and the majority were students entering the University for the first time. The Committee were impressed by the high calibre of the students applying and by the proof of genuine need presented.

Opening of the Brock Memorial Building:

On January 31st, 1940, the students' union building, named "The Brock Memorial Building", was dedicated to the memory of the late Dean Reginald W. and Mrs. Brock, and was formally opened by His Honour the Lieutenant-Governor of British Columbia, Dr. Eric W. Hamber.

Though at first conceived as a memorial to the 21st anniversary of the opening of the University, - its "coming of age", - the building was actually completed in the year which marked the University's 25th anniversary.

On this occasion, a message of congratulation was received from His Excellency, Lord Tweedsmuir, the Governor-General of Canada, who had the previous year graciously accepted the Honorary Degree of LL.D. from the University.

Regulations Governing Limitation of Attendance, Waived:

For the session 1939-40, the Board of Governors again waived the regulations which were adopted in 1938 for the purpose of limiting the attendance at the University.

Registration and Accommodation:

Registration figures for the Session showed an increase over all previous years. The difficulties arising from insufficient accommodation, with the consequent congestion in class rooms and laboratories and in the Library, were thus further accentuated. A report prepared by the Visiting Governors and submitted to the full Board stated, "The problem of overcrowding is the gravest one now confronting the University."

It had been hoped that the proposed building to house the Department of Bacteriology and Preventive Medicine, the Western Division of the Connaught Laboratories and the Provincial Board of Health might be erected, as was planned. The construction of such

a building would have reduced overcrowding materially, more particularly in some of the science departments. Owing to the war, these plans had to be abandoned for the present.

III THE UNIVERSITY IN WARTIME:

The Policy of the University an Evolving Policy:

At the opening of the session there existed a feeling of uncertainty amongst the staff and students as to what they could do towards the war effort. The policy of the University, therefore, became an evolving policy,— a policy determined by the needs of the Empire and her Allies as these were made known to the University authorities through the Government at Ottawa or through the National Research Council.

As a result of the adoption of this policy, existing degree courses were revised and new ones were included in the curriculum; new investigations were undertaken and the immediate objectives of researches under way were modified; registration in the Officers' Training Corps increased markedly; compulsory military training for all physically-fit male students was advocated; sentiment in favour of discontinuing inter-collegiate athletics for the duration of the war became more pronounced, and the curtailment of social activities on the Campus was urged - all with a view to enabling the University to make a greater contribution to the successful prosecution of the war.

Co-operation with Government Departments:

Immediately upon the outbreak of the war, Departments in Arts and Science, in Applied Science and in Agriculture
offered their fullest co-operation with the Departments of the
Dominion Government, particularly in the matter of training
students in the methods of preparing war chemicals, and in the
prosecution of other pure or applied science research projects
directly bearing on the nation's war effort.

The work of assisting the Dominion and the Provincial Departments of Agriculture, especially to increase the food supplies of the Empire and her Allies, was accepted by the Faculty of Agriculture as its special task. In the furtherance of this policy certain researches which were under way at the outbreak of hostilities were expanded and a number of new ones planned in co-operation with the Dominion and Provincial Governments, were undertaken.

Courses in Home Nursing and First Aid:

As a war service, members of the Department of Nursing and Health gave courses in Home Nursing and First Aid. These classes were open to a limited number of senior students, to members of the University staff, and to students in the first year of the Nursing course.

War Courses:

To assist in meeting the demands for special instruction created by the war, a number of new courses were included in the curriculum, and modifications of existing courses were made in many of the departments, more particularly those of Chemistry, Physics, and certain of the Applied Science departments.

Increased Activities of the Canadian Officers' Training Corps:

The opening of the war saw a marked quickening of interest and activity in the Canadian Officers' Training Corps. The strength of the Corps was greatly increased, and for the first time graduates of accredited institutions were permitted to enlist. An important feature of the year's programme was the training of teachers who desired to qualify as cadet instructors in the schools where compulsory training had been inaugurated.

The Report of the Officer Commanding, which appears on pages 56-62 of this Report, gives some indication of the greatly increased activities of the Corps during the year.

Credits for Canadian Officers Training Corps Work, and for Men who Enlist for War Service:

In response to requests for academic credits for Canadian Officers' Training Corps work, the Senate, for the Session 1939-40, approved the recommendation of the Faculties that an exemption or credit of three units be given to members of the Canadian Officers' Training Corps who passed the regular military examination, theoretical portion, provided that no exemtpion be given in a required subject without the approval of the Faculty Committee on Courses.

The purpose of this resolution was, during the present emergency, to relieve certain students from taking prescribed courses which were not considered absolutely essential to their professional careers. In adopting this policy it was distinctly understood that no concessions would be made for which in later life a student might pay a penalty as the result of impaired professional qualification.

Compulsory Military Training Advocated:

Early in July, representatives of the Canadian Universities met in Ottawa with representatives of the Department of National Defence to discuss the question of compulsory military training for all physically-fit male students in the Universities. Following the decision of the Conference to recommend to the Universities the adoption of such a policy, the Senate and the Board of Governors of the University of British Columbia passed a regulation, shortly after the close of the year under review, requiring all such students to take six hours of military training per week during the session.

Conclusion.

For the past few years the President's report has concluded with a statement on the needs of the University, particularly with respect to the urgently-required increase in accommodation and equipment. These needs are still insistent: in fact, with a further increased enrolment, and the adoption of the policy of compulsory military training, they are even more acute than formerly.

But in these stern days when the needs of individuals and institutions must give place to the greater needs of the Empire and of humanity itself it would ill become the University to press its claims importunately, urgent though they be.

Respectfully submitted.

LEONARD S. KLINCK, President.

Vancouver, B.C. June 18th, 1941.

REPORT OF THE REGISTRAR

Registration

Faculty of Arts and Science	Women	Men	Total	
First Year Second Year Third Year Fourth Year Graduates Social Service Teacher Training Course. *Directed Reading Courses. *Extra-Sessional Classes. *Double Registrations.	227 138 117 112 33 36 40 26 14	334 259 173 170 110 29 110 51	561 397 290	1934
Faculty of Applied Science Second Year	- - -	138 115 90 77 14		
Faculty of Applied Science (Nursing) Second Year	15 16 12 8 14 11	-	15 16 12 8 14 11 -1 77	511
Faculty of Agriculture First Year	6 5 2 5 1	43 25 20 14 18 9	49 30 22 19 19 10	
TOTAL Evening Class in Botany Summer Session (1940) (Faculty of Arts and Science)	7 186	23 401	30 587	2594

Nationalities of Students (exclusive of those taking the Teacher Training Course, Extra-Sessional Classes, Directed Reading Courses and Public Health Nursing Course):

British 2331; American 36; Japanese 55; Swedish 21; Chinese 19; Norwegian 15; Italian 11; Greek 7; Hebrew 7; French 6; Austrian 6; others 80.

Geographical Distribution of Students:

From From From	New We other other	ver and riaestminster Province Province countries	r Lal poi	nts.	• • • • •		• • • •	1546 115 126 696 93 18
						TOTAL		2594

Occupations of Parents

(exclusive of those taking the Teacher
Training Course, Extra-Sessional Classes,
Directed Reading Courses and Public Health
Nursing Course):

Accountant 49; Agent 14; Banker 18; Barrister 23; Broker 32; Business man 14; Carpenter 35; Civil Servant 25; Clergyman 35; Clerk 20; Contractor 33; Dentist 19; Doctor 63; Druggist 12; Engineer 115; Farmer 93; Foreman 22; Grocer 14; Inspector 20; Insurance 40; Lawyer 31; Lumberman 32; Machinist 17; Manager 57; Merchant 95; Professor 21; Rancher 15; R.R. Employee 41; Salesman 62; Superintendent 21; Teacher 57.

Location of Graduates:

Number in,-

	Vancouver Other parts of British Columbia Other parts of Canada British Isles Other parts of British Empire United States of America Other countries	2605 1455 345 44 23 241 56
Number Number	deceased whose address is unknown	98 508

TOTAL	5375

Comparative Statement of Attendance Sessions 1930-31 to 1939-40

Session	Arts and Science	Applied Science	Nursing	Agricul- ture	Teacher Training Course	Total Winter Session	Summer Session	Short Courses	Grand Total
1930-31	1580	289	41	63	71	2044	455	401	2900
1931-32	1477	284	44	75	109	1989	441	342	2772
1932-33	1269	288	47	71	64	1739	404	181	2 324
1933-34	1147	287	48	63	61	1606	370	124	2100
1934-35	1238	320	5 7	71	66	1652	377	165	2294
1935-36	1337		5 7 68	80	62	1883	464	278	2625
1936-37	1499	336 366	47	95	42	2049	566	306	2921
1937-38	1590	416	5Ò	100	67	2223	650	279	3152
1938-39	1634	419	59	117	57	2286	659	290	3235
1939-40	1664	434	65	139	69	2371	715	253	3339

Comparative Statement of Degrees Conferred

						0-31 to 19	<u> 39-40</u>			
				M.Sc.or	B.Sc.or	B.A.Sc.				Grand
Year	$\underline{\mathbf{M}}.\underline{\mathbf{A}}.$	B.A.	B.Com.	M.A.Sc.	B.A.Sc.	Nursing	$\underline{M.S.A}$.	B.S.A.	Total	Total
1930	10	175	ı	1	27	6	1	7	228	2161
	2	24	_		3		. 1	1	31	2192
1931	20	211	14	2	39	7	2	13	308	2500
••	4	31	1		5		•••	-	41	2541
1932	17	201	15	2	37	4	9	6	291	2832
	_6	36	1	=	6	-	_	-	49	2881
1933	19	215	22	8	44	7	4	12	331	3212
	4	46	_5	3	5	desir	<u></u>	1	64	3276
1934	IJ	204	31	3	<i>37</i>	5	4	12	307	3583
2075	6	36	5	1	. 5		1	3	57	3640
1935	14	196	23	8	57	13	2	19	332	3972
207/	12	45	25	-	5	• 🚗	-	1	68	4040
1936	15	175	21	6	50	7	5	16	29 5	4335
	10	38	1	2	3	~	3	2	59	4394
1937	21	190	28	4	48	2	7	14	314	47Ó8
	9	54	8	*	6	1	1	1	80	4788
1938	20	204	31	6	56	7	3	19	346	5134
	10	53	_3	2	4	-		5	77	5 2 11
1939	19	217	22	7	71	8	4	22	370	5581
	5	63	6	**	9	-	1	2	86	5667
1940	30	212	37	4	71	13	3	18	388	6055



Comparative Statement of Diplomas Issued Sessions 1930-31 to 1939-40

Year	Teacher Training	Public Health Nursing	Social Service	Occupational Course in Agriculture	TOTALS
1930	54	1	. ·	3	58
1931	58	11	- -	3	7 2
1932	85 12	8	2 11	7	102 24
1933	58 -	13 1	4 5	-	75
1934	61 3	10	3	<u></u>	71
1935	65 1	15	3 7	<u>3</u>	86 8
1936	60	15 -	12	<u>-</u>	75 12
1937	39 1	16 5	19	4 -	59 25
1938	65 -	18 2	1 15	<u>3</u>	87 17
1939	54 1	14 1	2 24	<u>4</u>	74 26
1940	66	12	3	5	86

Scholarships, Fellowships and Bursaries Awarded to Graduates
During the year many scholarships, fellowships and bursaries have been won by
graduates of the University. The following list does not include awards which
have been made in The University of British Columbia.

Name	Award	Value	Subject	Where Tenable
 Barss, Walter	Teaching Assistantship	\$800	Physics	Purdue University
Bjarnason, Emil	Assistantship	\$605	Economics	Queen's University
Brewer, Charles	National Research Council			
220	Studentship	\$650	Chemistry	Cellulose Research
				Laboratories, McGill
Cameron, Ian T.	Scholarship	\$300	Forestry	Yale University
Campbell, John J.R.	Industrial Fellowship	\$9 00		Cornell University
Chapman, Arthur	Austin Fellowship	\$250	Commerce	Northwestern University, Evanston, Ill.
Chodat, Isabella	Rockefeller Fellowship in			•
Onodao, ibabella	Nursing	\$2,000	Nursing	Rockefeller Foundation
Christy, Robert F.	Whiting Fellowship	\$650	Physics	University of California,
difficult in the second of the	2		-	Berkeley
Cook, Francis	Teaching Fellowship	\$800	Chemistry	University of Toronto
Corbould, Iris	Scholarship	\$600	Biochemistry	McGill University
Covington, Arthur E.	Teaching Assistantship	\$6 50	Physics	University of California, Berkeley
Dale, Ursula	National Research Council			·
	Scholarship	\$ 650	Physiology	University of Toronto
Davenport, Charles	Fellowship	\$1,200	Chemistry	Massachusetts Institute of Technology
Davis, Edwin P.	Assistantship	\$250	Geology	University of Arizona
Detwiller, Lloyd F.	Scholarship	\$650	Economics	University of California,
(Voluntarily reli	nquished by Mr. Detwiller t	to join		at Los Angeles
Royal Canadian		•		
Dill, Charlotte	Graduate Instructorship	\$70 0	Plant	
· •	-		Pathology	Cornell University
Eastham, Arthur	Scholarship	\$60 0	Chemistry	Cellulose Research
,	•			Laboratories, McGill
Fisher, John H.	Post-doctorate fellowship	\$1,200	Chemistry	Cellulose Research
		,		Laboratories, McGill
Fitch, Fred	Teaching Fellowship	\$600	Chemistry	Purdue University
Guthrie, Andrew	Teaching Assistantship	\$800	Physics	Purdue University
a a cuit to britant ou	Townstrip Hongrooming Hith	4000	~1130100	I ar a de currer sir à

Name	Award	Value	Subject	Where Tenable
Herd, Harold H.	Teaching Fellowship	\$800	Chemistry	California Institute of Technology
Kidd, George P.	Fellowship	\$50 0	Economics	University of Illinois
Kusaka, Shuichi	Teaching Assistantship	\$6 <i>5</i> 0	Physics	University of California,
•				Berkeley
Lacey, Oliver L.	Senior Teaching Fellowship	₽675	Psychology	Cornell University
Leslie, John D.	Shell Oil Scholarship	\$500	Chemistry	University of British
	N. A. C. J. W. M. A. M.			Columbia
Lew, Hin	National Research Council	⁸ 050	Dhangi a a	The improvement was the interest
	Bursary	\$250	Physics	University of British Columbia
Lips, Alair	Teaching Fellowship	\$600	Chemistry	Macconald College
Lovell. Edwin P.		1,200	Chemi stry	Cellulose Research
Tovett, Eduti 1.	1000-400001400 10110		one but y	Laboratories, McGill
Mead, Bruce	Scholarship	\$600	Chemistry	Cellulose Research
	-		•	Laboratories, McGill
Menzies, James D.	Research Assistantship	\$700 \$800		Washington State College
Montgomery, Richard	Assistantship	₽800	Physics	Dartmouth University
MacKenzie, Kenneth R.	Research Fellowship in	0 000	751	TT 1
	Radiation	2,000	Physics	University of California,
Nesbitt, Bertram I.	Teaching Assistantships	\$ 2 25	Mineralogy)	Berkeley
Mesbroo, Deroram 1.	and	\$225	Draughting)	Queen's University
Muffield, Edward W.	Scholarship	\$700	Geology	Stanford University
Patterson, Ralph F.	National Research Council			
•	Studentship	\$650	Chemistry	Cellulose Research
		н .	-	Laboratories, McGill
Perkins, Maurice F.	Teaching Fellowship	\$60 0	Economics	University of California,
During Throughou	Manahima Wallawahim	8650	There is 20 12 12 13	Berkeley
Price, Frampton	Teaching Fellowship	\$6 <i>5</i> 0	Psychology	University of California
Pyle, Donald G.	Teaching Fellowship	\$650	Economic Hist.	at Los Angeles
Tyre, bonard G.	reacuting retrowanth	V OJO	ECOHOMIC MISC.	University of California, Berkeley
Retallack, James G.	Teaching Assistantship	\$650	Physics	University of California.
, ·		1070	-11,010	Berkely
Robertson, Struan	Teaching Fellowship	\$975	Statistics	University of California,
•	-			Berkeley
Robinson, Basil	Rhodes Scholarship (3 years			N
	per year	£4 00	French	Oxford University

Name	Award	Value	Subject	Where Tenable
Sage, W. Donald M.	Scholarship	\$25	History and International	
			Relations	Clark University
Sibley, William M.	Teaching Fellowship	ှိ900	Philosophy	Brown University
Smith, Ronald	Teaching Assistantshi	p3800	Physics	Purdue University
Stewart, Donald	Teaching Fellowship	\$600	Chemistry	University of Toronto
Stuart, Frank A.	Teaching Fellowship	\$ <i>7</i> 00	Chemistry	University of Iowa
Veitch, William	Fellowship	-	Economics	Princeton University
Wellwood, Robert W.	Graduate Fellowships			
, io Landou, and Double and	(2 years) per year	\$600	Forestry	Duke Forest School, Duke University
West, Kenneth A.	Scholarship	\$600	Chemistry	Cellulose Research Laboratories, McGill
Www.ite, William H.	Scholarship	~	Geology	University of Toronto
Wright, Frances	Teaching Fellowship	\$60 0	Chemistry	University of California, Berkeley

NOTE: In many cases these scholarships and fellowships carry with them free tuition or exemption from fees (or travelling expenses) in addition to their monetary value.

Respectfully submitted.

STANLEY W. MATHEWS, Registrar.

REPORT OF THE DEAN OF THE FACULTY

OF ARTS AND SCIENCE

The War.

The most outstanding event occurring in the year under review was of course the outbreak of war. At the opening of the term scores of students sought advice and guidance as to whether they should enlist or should continue with their studies. It was decided to advise these students to register as usual, particularly in the field of the sciences, in the hope that some authoritative statement would appear giving proper direction. It was not long before such a statement was issued by the National Research Council of Canada confirming the advice which had been given. Thus were avoided some of the mistakes of the early days of August, 1914, when much talent was made secondary to physical fitness.

Two new courses were begun which would be of value in certain spheres of war activity. One was a course in Chemistry dealing with new explosives and gas masks. This course was taken largely by graduate and senior students in Chemistry. The other course was one in Physics dealing (a) with the elementary principles of electricity and acoustics which would be valuable in the communication and detection branches of national defence units, (b) with the use of optical units, and (c) with elementary hydro-dynamics, aero-dynamics and ballistics.

During the year a limited amount of academic credit (three units) was granted to students who completed the C.O.T.C. examinations. Students were allowed to substitute the C.O.T.C. work for one subject which they would normally be taking provided that subject was not a pre-requisite for subsequent work. For example, a Second Year student could omit the Second Year language provided he was not proceeding with language studies. The number of credits actually granted was very small.

During the year several students enlisted in the Active Services. Consideration as to the standing of each student was given, and in a few cases, particularly where the student had attended most of the session but could not take the final examinations, the year was granted. No specific formula had been worked out but each case was considered on its merits. Two members of the Faculty left the University at the close of the academic year and joined the Active Services. They were Dr. W. G. Black, who is giving military instruction, and Mr. F. J. Brand, who is now Pilot-Officer with the Air Force at Trenton.

Retiring Professors.

Upon the completion of twenty years of service with University, Dr. H. T. J. Coleman and Dr. C. McLean Fraser were superannuated on reaching the retiral age.

Dr. Coleman came from the staff of Queen's University as Head of the Department of Philosophy and Dean of the Faculty of Shortly after his arrival, the Faculty of the Arts and Science. University, which had been meeting in one group was divided into the present three existing faculties. Later the Teacher Training Course was begun providing professional training for teachers, with especial emphasis upon High School work. Courses in Education were also started under the Department of Philosophy, and later a separate Department of Education was established. More recently, owing to the development of the work in Psychology, the title of the Department was changed so as to include Psychology. For several years after his arrival Dr. Coleman acted as Director of the Summer Session. In 1927 he gave up this directorship, and in 1928 he relinquished the deanship.

Dr. Coleman is widely known throughout the City and the Province both for his platform ability and for his delightful verse. His many friends wish him, in his retirement, happiness and contentment with his books, his poems, his pipe and, not least, his fishing rod.

In 1920 Dr. C. McLean Fraser came from being Director of the Biological Station at Nanaimo to accept the Headship of the newly established Department of Zoology. He is an internationally known figure in the field of Science. He has attended all the meetings of the Pacific Science Congress, wherever they were held, and contributed largely to the success of each. He was the leader of the Canadian Delegation at the Fourth Congress held in Java in 1929. He is a Fellow of the Royal Society of Canada, to the Proceedings of which he contributed largely, and is also a member of numerous other learned scientific societies.

In 1934 he was a member of the Allan Hancock Expedition to the Galapagos Islands and other regions along the western shores of South America visited by Darwin just one hundred years earlier.

He has contributed over one hundred articles in Marine Zoology and Oceanography. His most important work was his book "Hydroids of the Pacific Coast of Canada and the United States" (207 pages, 44 plates), and four papers making up volume 4 of the Allan Hancock Pacific Expeditions.

In his twenty years of active service at the University, Dr. Fraser was never late for a class or for a committee meeting and never missed a lecture through illness. He took a very active interest in the athletic activities of the University, and as an appreciation of this interest he was granted the Big Block, Honorary Award, in April, 1940.

It is Dr. Fraser's intention to continue his research work at the University, and we are most fortunate in being able to reserve for him laboratory and office space where he may continue to classify his Hydroids uninterrupted. by class instruction or attendance at committees.

It is with sincere regret that we record the premature retirement of Dr. S. J. Schofield on account of illness. Dr. Schofield came to the University from the Geological Survey of Canada and was appointed in 1915. He gave the first lectures in Geology in the institution. In 1916 he enlisted with the 196th Battalion and after serving overseas returned to the University in 1919. He was an authority in his field of Structural Geology and a great tower of strength to the Department. It is most unfortunate that illness forced him to retire many years before the normal time.

He had been very active in the scientific field contributing largely to the Royal Society of Canada and to the Geological Society of America. His most outstanding work was his book, "The Geology of British Columbia".

It is the wish of his many friends that he may be restored once again to a full measure of health.

Extra-Sessional Classes and Directed Reading Courses.

Below are listed the Extra-Sessional Classes and the Directed Reading Courses together with their instructors and the registration.

Class	<u>I</u>	nstructor		Registration
Extra-Sessional English Psychol	19 M:	rs. J. H. r. J. E.	Creighton Morsh	15 49
<u>Directed Reading</u> History	13 M		cia M. Johnson	113
Economi	cs 4 D	(Assist r. J. A.		26

It is with pleasure that we record our appreciation of the high standard of work carried on in all these classes. Directed Reading Courses were established there was some doubt as to whether the standards attained by intra-mural work could be maintained in the Directed Reading Courses. A discussion with the instructors who directed these courses or with the students who took them, or an examination of the character of the work, will convince the most skeptical. In History 13, for example, 113 registered and 91 took the final examination with a median mark of 71.3 per cent. Each student received 23 pieces of mimeographed material including (1) letters containing assignments and instructions, (2) notices regarding the use of the University and Provincial libraries and (3) outlines of the course, general and detailed, together with questions and topics for consideration and review. Two essays and three shorter reports were required from each student. total of 460 essays and reports were marked with individual criticism and comment.

In Economics 4 there were 26 registered. Three withdrew before Christmas and the remaining students completed the course with an average just short of 70 per cent. A detailed outline of the course was sent out along with considerable original lecture material not available in textual form,— in all, 65 pages of mimeographed material. Each student was required to prepare and submit a note book in which were combined in topical form the elaboration of the outlines supplied by the instructor and the results of his readings. An average of seven books during the year was supplied to each student. The instructor in charge comments as follows:

"This course was a revelation to me. People outside the University appear to be more thirsty for knowledge than many in it. Their maturity makes possible the bridging of the gap between lecture room and library.... The difficult problem of adequate access to books should be given some more thought. An instructor dislikes filling the library with duplicate copies unless the class is to be repeated several times, and the student dislikes waiting until spring for a book which he needs to complete his fall notes."

Researches in the Sciences.

While it is not possible to refer to all the researches carried out by the members of the Faculty, reference will be made to some of the more outstanding as reported by the Heads of Departments in their annual reports.

Department of Bacteriology and Preventive Medicine.

Dr. Dolman continued his researches into the various toxigenic and antigenic components of staphylococcus filtrates.

Dr. Duff investigated the filtrable forms of B.Salmonicida, E. coli and S. aertrycke, also the immunization of cutthroat trout and the testing of the acriflavine treatment for fish eggs on behalf of the Fisheries Research Board of Canada.

Dr. Ranta accumulated data bearing on the cultural, toxigenic and immunological properties of haemolytic streptococcus strains isolated in Vancouver.

Mr. Mathias continued experiments bearing on the infectivity and antigenic properties of B. abortus, the cause of undulant fever.

Reference is made here to the co-operation existing between this Department and the Western Division of Connaught Laboratories. As an indication of the recognition accorded the research work of the Department and of the valuable co-operation between the Department and the Connaught Laboratories, the University of Toronto accepted the work done by Mr. Marvin Darrach under Dr. Dolman's direction as an appropriate subject for a Ph.D. thesis.

Department of Botany.

Dr. Hutchinson, with the co-operation of Dr. Moe and Miss Helen Farley, continued investigation on the genetics of economic plants, especially alfalfa.

Dr. Dickson is pursuing his studies on fungi and Mr Davidson his investigations in Taxonomy.

Dr. Allardyce carried on the problem of obtaining evidence for or against the thymus gland acting as an endocrine gland. By injecting thymus extracts of calves into several generations of rats it was found that there was a complete absence of the phenomenal speeding up in the rate of development from the third to the fifth generation as reported by Rowntree of Philadelphia. He also continued with his investigations as to the effect of radiation upon animal growth, behaviour, development and vision. White rats were selected as the test animals. Somewhere, and sometime, someone should pay tribute to these creatures for what they endure in the interests of humanity!

Department of Chemistry.

Certain researches completed are as follows:

- l. Human beings fed intravenously on certain salts and glucose, the only materials so far injected, decline fairly rapidly. An investigation on the intravenous feedings of animals on a mixture of amino acids from hydrolyzed casein supplemented with tryptophane and vitamin A showed that the animals lost practically no weight over a period of two weeks.
- 2. In the investigation of lignin constituents it was found by ethanolysis of Western Red Cedar, Douglas Fir, and Western Hemlock that the phenolic constituents were the same as in the Eastern soft woods.
- 3. Results of analyses of the iodine and phosphorus content of B. C. fish oils are ready for publication.
- 4. An investigation carried on jointly by the Departments of Chemistry and of Poultry Husbandry showed that the claims regarding the efficacy of cow excreta as a preventive of coccidiosis, a disease resulting in high mortality among growing chicks, were not substantiated.
- 5. Sections of fishing nets, chemically treated according to formulae originating in the Department, have been inserted into some twenty nets used by B. C. fishermen. Reports from the fishermen are being collected and tabulated to determine whether the increased strength shown to exist by laboratory mechanical tests increases the life of the nets under actual fishing conditions.

- 6. Results are ready for publication dealing with the preserving of piling in bridges and docks by forcing toxic salt solutions under pressure.
- 7. Investigations are being continued dealing with the absorbing power of various charcoals, the knowledge of which is of the utmost importance at the present time owing to the extensive use of charcoal in gas masks. The Department has been assigned (October, 1940) an important investigation in this connection by the National Research Council of Canada.
- 8. An investigation has been concluded on the mechanism of xanthates as a collector in the flotation of galena and sphalerite ores.
- 9. An improved method of preparing the Yttrium Group Bromates has been determined and a study of the effect of temperature on the separation of rare earth bromates by fractional crystallization is being carried on.
- 10. Quantitative reduction of lead sulphide to metallic lead by passing coal gas over a sample heated in a rotating cylindrical furnace is being investigated.

Department of Geology and Geography.

Dr. Williams spent the summer as consultant for the B. C. Department of Mines on a further investigation of the petroleum possibilities of the Peace River area of British Columbia.

Dr. Swanson acted as consultant for the Canadian Consolidated Mining and Smelting Company during the summer.

Dr. Davis was employed by the B. C. Department of Mines as Chief Instructor in the Dominion-Provincial Youth Mining Training Plan.

Special investigations were carried out in Petrology, Palaeontology and Metallography. The most outstanding results were obtained in Metallography where Dr. Warren, under the special grant from the Board of Governors and aided by a group of students, some of whom had scholarships from the Britannia Mining and Smelting Company and from the Cariboo Gold Quartz Company, carried on investigations as to the occurrence of gold, cobalt, telluride, antimony and bismuth in various parts of British Columbia. The mines from which samples were analysed were Britannia, Cariboo Gold Quartz, Hedley, Highland, Surprise and Dividend. Gold losses were also investigated in the tailings of Hedley Mascot and Surf Inlet.

Appreciation is here expressed to Dr. Warren for the valuable collection of minerals for research and class room use which he has made during several summers. Some of these are exchanged for minerals from other institutions.

Of the various donations to the Department mention will be made of only two: One was a collection of more than 100 catalogued Indian artifacts collected by the late R. A. Cumming from the Great Fraser Midden at Marpole. This was donated by the Vancouver Natural History Society. The other was the library and palaeobotanical notes of the late Dr. Roy Graham, who, prior to his accidental death, had been connected with the Department. This donation was made by Dr. Graham's parents in memory of their son.

Department of Physics.

Research investigations in the Department of Physics were carried on in the following fields:

- 1. Polarimetric Measurements on Specific Rotations.
- 2. The Characteristics of Geiger Counters.
- 3. Term Analysis of the Spectra of Iodine.
- 4. Spectroscopic Determination of the Composition of British Columbia Ores.
- 5. An Investigation of the Optical Properties of the Principal Points of Electrostatic Lens Systems. (Completed).
- 6. Development of a New Type of Electron Diffraction Scattering Chamber.
- 7. Absorption Spectra in the Extreme Ultraviolet by the Use of the King Carbon Tube Furnace.
- 8. The Excitation of the Extreme Ultraviolet Spectrum of D₂ by Argon.
- 9. The Effect of Electrode Geometry on the Shape of Measured Energy Distribution Curves for Field Current Electrons.
 - Investigation of Cosmic Rays by the Direct Photographic Process.
 - Raman Spectra of Cis and Trans Decahydronaphthalene. (Completed)

Department of Zoology.

Dr. C. McLean Fraser presented papers and presided over certain meetings of the A.A.A.S. at Stanford (June) and at the Sixth Pacific Science Congress at Berkeley and Stanford (July and August). During the year he made good progress in examining the large U.S. National Museum collection of hydroids.

Mr. G. J. Spencer spent the summer of 1939 continuing his researches upon the grasshoppers in the Kamloops and Nicola cattle ranges. Control efforts in the Nicola resulted in the annihilation of the devastating swarms that were building up in 1938 in certain egg beds of one species. Reports on the work were submitted every fortnight to the Division of Entomology, Science Service, Ottawa.

Dr. G. M. Watney continued her work on Amphibians, paying particular attention to those found in British Columbia.

Other Researches.

An idea of the researches carried on in the non-science Departments may be formed by a perusal of the list of publications. Special mention will be made of only two of these. The first is the valuable report of the Royal Commission on Dominion-Provincial Relations, containing two volumes and 30 appendices. Professor H. F. Angus was a member of this Commission. The report is considered to be a real contribution towards the solution of Canada's national problems.

The other publication is Dr. A. F. B. Clark's new book "Jean Racine". This book has been most favourably commented upon by those most competent to judge literary worth.

The Dean hopes it will not be unpardonable to refer to the completion of one of his own researches on Trojan Satellites (Limiting Case) upon which he had been working for four or five years. It was submitted for publication to a mathematical journal of high international repute published in a country which has since become belligerent. The article has not yet appeared and it may be banned if or when it does appear.

Accommodation.

Over-crowding, like the biblical poor, seems to be with us always.

Conclusion.

The Dean wishes to express his appreciation of the whole-hearted way in which the members of the Faculty carried on their work.

Respectfully submitted,

D. BUCHANAN, Dean.

OF APPLIED SCIENCE

During the session for which I have the honour to report. several adjustments were made in the curriculum. content of certain courses in Metallurgy was revised in order to deal more directly with the metallurgical aspects of strategic minerals necessary to the successful prosecution of the War. This year the course in Forest Economics was given for the first time. In the Department of Nursing and Health. the course previously named "Communicable Diseases" was absorbed with the course on Preventive Medicine, and an entire reorganization of the content of the combined course was made. Two courses, one in Home Nursing and one in First Aid, were established as special war-time efforts to provide training to extra-departmental students. In the Department of Mechanical and Electrical Engineering, the members of the staff responded to the request to place special emphasis on radio work and short wave studies in order to provide men well trained in these subjects for the active forces. Some changes in the courses in Structural Design, Water Power Development, Surveying and Mapping in the Department of Civil Engineering were made with the same purposes in view.

Many research investigations undertaken by members of the teaching staff had a direct bearing on Canada's War efforts. Molybdenum is one of the key metals necessary for the manufacture of certain special alloy steels. There are a few deposits of this metal found in Canada, although ninety per cent. of the world's supply comes from the United States of America. Increased Canadian production will affect favourably Canada's position in regard to foreign exchange. Accordingly, the Department of Mining and Metallurgy under the direction of Professor George A. Gillies undertook a series of investigations on ores mined by Regnery Metals Limited, whose concentrates are unmarketable because of an excess of copper content. A satisfactory process was obtained for separating the copper from the molybdenum in the ore, and a concentrate was made containing 92.5 per cent. of the molybdenum and rejecting 98 per cent. of the copper, obtaining a reduction ratio of 1 to 500.

Antimony is another metal of strategic importance. In normal times 80 per cent. of the world's supply came from China, whose shipments are now greatly restricted. The Fort St. James Antimony Company has a deposit containing antimony and gold. The Department of Mining and Metallurgy under the direction of Professors George A. Gillies and Frank A. Forward has developed a separation process by which a satisfactory antimony concentrate can be obtained, and investigations are being continued on methods of recovering the gold from the antimony flotation tailings. Some work has also been done on the determination of the amount of selenium contained in the ore.

Professor Gillies continued his researches on new flotation reagents, one of the approved projects under the special grant for research. His problem was the selective flotation of quartz, barite and calcite in a synthetic ore. He produced a series of curves which will enable mining engineers to determine the correct quantity of a specific reagent necessary to give the maximum recovery, and which will reduce the amount of experimental testing now required in all flotation plants. One of the operating results of his discoveries may be the removal of the control from the flotation mill to the office of the metallurgist in charge of operations.

Professor Forward has been investigating the recovery of cobalt from concentrates from the mill of Kelowna Exploration Company. He has drawn up a tentative flow sheet for a process which has good prospects of successful operation. The management of the Company has contributed to the funds of the Department a sum of money sufficient to pay all expenses incurred in special investigations of the problem.

In the Department of Forestry, Professor Knapp has been engaged on the compilation of statistics on the operation of the University Forest and on the investigation of other problems. Dr. Griffith has commenced a series of experiments to determine the effects of temperature in storage on the viability of Douglas fir seeds. Professor W. O. Richmond of the Department of Mechanical and Electrical Engineering is studying the rate of growth of fatigue cracks in metals. In addition to researches undertaken by members of the teaching staff, several informal investigations and a few formal research projects were carried out by undergraduate and graduate students. Some additional equipment was added to the laboratories of all Departments during the year.

I record with deep regret the sudden death on June 20th, 1940, of Mr. Walter B. Bishop, Instructor in Metallurgy since 1925. Mr. Bishop brought to the Department of Mining and Metallurgy a wide and exact knowledge of metallurgical problems. He was an instructor of unusual ability and he exerted a marked influence on the students who attended his classes.

The close of the academic year marked the retirement of two very popular and efficient members of the teaching staff. Lieutenant-Colonel Francis A. Wilkin, M.C., B.A.Sc., joined the staff of the Department of Civil Engineering in 1921, and for many years conducted important classes in a most acceptable From 1931 to 1936 he served as Acting Head of the Departmanner. Captain John F. Bell, O.B.E., R.N., has been an efficient instructor, lecturer and assistant professor in the Department of Mechanical and Electrical Engineering since 1924. Captain Bell, who would have reached the retiral age on August 1st, 1940, was granted leave of absence on March 16th, 1940, in order to enable him to return to the Royal Canadian Navy, in whose service he spent many years prior to his appointment to the post at the University. I desire to place on record my sincere appreciation for the outstanding services rendered to the University by these courteous gentlemen.

I acknowledge with thanks the gift of a large number of Mr. Bishop's professional books, which was generously made to the Faculty of Applied Science by Mrs. Bishop. Thanks are due also to the Caterpillar Tractor Company for the loan of a tractor, one of the latest models, to the Department of Forestry.

It is a renewed pleasure to be able to give expression to my sense of gratitude to the governing bodies, the staff and the students for many courtesies extended to me during a busy session.

Respectfully submitted,

JOHN N. FINLAYSON, Dean.

REPORT OF THE DEAN OF THE FACULTY

OF AGRICULTURE

During the academic year ended August 31st, 1940, the work of the Faculty of Agriculture was carried out according to Calendar and budget. (Detailed reports with regard to the various Departments are being submitted.)

Co-operation in Dominion and Provincial War Policies.

The members of the Faculty have co-operated fully with the Dominion and Provincial Departments of Agriculture in activities related to the war effort. This co-operation has included membership on various committees and adaptation of student and departmental research problems to the requirements of the existing situation.

Registration.

The total student registration of all grades was 146, as compared with 123 the previous year. This increased enrolment accentuated the difficulties of finding accommodation for classes. For instance, the large number of students registered for Agriculture 1, a required subject of the First Year, necessitated the division of the class into two sections for laboratory periods.

Calfhood Vaccination for Bang's Disease.

On recommendation of the Department of Animal Husbandry, the Board of Governors authorized a change in policy with regard to the control of Bang's disease in the Ayrshire herd. A programme of calfhood vaccination was inaugurated on May 1st, 1940, to supplement the monthly blood-testing of cattle and segregation of reactors.

Poultry Blood-Testing.

Blood-testing work for the detection and elimination of pullorum disease in poultry was carried on by the Department of Animal Husbandry at the University, under the direction of Dr. S. N. Wood. During the period from September 5th, 1939, to January 26th, 1940, the laboratory tested a total of 196,565 blood samples. Of these, 189,433 were initial tests (approximately 30,000 more than in the preceding year), 1,833 were re-tests, and 5,499 were check tests. Of the 189,433 initial tests, 74,739 were from flocks entered in the Dominion Department of Agriculture Record of Performance, with 1,098 or 1.53 per cent. reactors and suspects removed; and 114,694 were from flocks entered under the Provincial Department of Agriculture policy for Flock Approval, with 2,119 or 1.93 per cent. reactors and suspects removed.

Department of Agricultural Economics.

On recommendation of the Senate, a Department of Agricultural Economics in the Faculty of Agriculture was established by the Board of Governors on October 30th, 1939. Dean F. M. Clement was appointed Professor and Head of the Department in January, 1940.

Research.

Progress was made in the following researches administered by the Dean of the Faculty:

Activators for Enzymes.

B. C. Fish Oils.

(c) Calfhood Vaccination for Bang's Disease.

Causes of Raspberry Failure.

(e) Economic Study of Standards of Living on Some Subsistence Farms.

Fowl Paralysis.

Surface Taint Butter.

In addition, some research was conducted in the various Departments as follows:

Department of Agronomy.

Study of Chromosome Numbers in Alfalfa, and Associated Sterility.

(2) Co-operative Experiments: two tests on corn and soybeans in co-operation with the Provincial Department of Agriculture; two tests with sugar beets for the Plant Products Division, Vancouver; oat variety tests for the Dominion Experimental Farms, Agassiz.

Department of Animal Husbandry.

(1) Steer Feeding Trials. (In co-operation with the Agricultural Marketing Bureau.)

Department of Dairying.

(1) Carrying of Starters.

Study of the Influence of Lactic Acid Rod Forms on Flavour Development in Cheddar Cheese.

(3) Study of Factors Responsible for the Development of "Feathering" in Cream.

Department of Horticulture.

- (1) Renovation of a Run-down Orchard.
- (2) A Comparison of Methods of Making Artificial Manure.
- (3) The Effect of Boron on Plant Growth.
- (4) Studies in Growth-promoting Substances.
- (5) Agrobiology: its Application to the Raspberry.
- (6) Hydroponics.
- (7) Strawberry Experiment. (In co-operation with South Fraser Valley Berry Growers' Union.)

Department of Poultry Husbandry.

- (1) Breeding:
 - (a) Meat Type and Egg Production, or Dual-Purpose Strains of Poultry.
 - (b) Auto-sexing Breeds.
 - (c) Egg Quality.

(2) Nutrition:

- (a) Detailed Study of the Vitamin D Content of Salmon Oil. (This work was carried out at the request of Dr. C. R. Elsey, of the B. C. Packers, Ltd., Vancouver.)
- (b) Extracting and Concentrating Vitamin D from Low-Potency Oils. (In co-operation with Dr. W. Chalmers, Western Chemical Industries, Ltd., Vancouver.)
- (c) Fish Meals. (A study of the biological value of the protein of British Columbia fish meals, and their vitamin G content. Undertaken at the request of Mr. C. Hedreen, of the Canadian Fishing Company, Vancouver.)
- (d) Dehydrated Grasses. (Tests to determine the nutritive value of certain dehydrated grasses.)

Details regarding all these research projects and the results obtained are included in the Departmental reports.

Alfalfa Project.

The Alfalfa Project conducted by the Department of Agronomy received a serious check during the season of 1940 through discontinuation of the grant from the Dominion Experimental Farms. Two donations, however, have since been made for this work - one by an anonymous donor, in the amount of \$500.00, and the other by the Provincial Department of Agriculture, of a similar amount. These sums are being held in a special fund to be used for the propagation of stocks in 1941.

Elite Seed Project.

The Department of Agronomy co-operated with the Provincial Department of Agriculture to extend the Elite Seed Project. A Field Day was held in July, 1940, and was attended by over 100 farmers and representatives of allied agricultural industries.

Vegetable Seed Trials.

Under a plan instituted by the Dominion Department of Agriculture and approved by the University, the Department of Horticulture for the fourth consecutive year conducted a series of vegetable seed trials. Three hundred and sixty vegetable seed samples were tested, most of them in duplicate.

Some financial assistance was also provided by the Agricultural Marketing Bureau for the vegetable seed trials and for the re-establishment of Elite Vegetable Seed work. A start was made on Foundation stock of five vegetable varieties.

Soil Samples.

During the year, 161 soil samples were examined by the Department of Agronomy and detailed reports were forwarded to those submitting the samples.

Respectfully submitted,

F. M. CLEMENT, Dean.

REPORT OF THE DEAN OF WOMEN

During the year ended August 31st, 1940, the work among the women students did not differ in any marked respect from that of previous years. Because of the restrictions placed by the Students' Council upon the use of the Brock Memorial Building, the facilities provided in the building were not available for the use of the organizations of the women students to the extent that had been expected. As a consequence, the activities of the women proceeded in the main along the lines previously followed.

As usual, very few of the women students failed to seek from the Dean of Women advice or assistance of one kind or another. Students were given help in the choice of vocations and in the selection of appropriate courses of study to be followed either in the University of British Columbia or, if not available here, in other Universities. An increasing number of women asked for information concerning Household Science, Physical Education, Library Science and Journalism — courses which, unfortunately, the University of British Columbia does not provide. The traditional fields of teaching, nursing, and clerical work are evidently not as attractive to the students of today as to those of earlier years, and the idea is growing among students that the University course should provide some preparation for self-support.

Many students were helped to obtain part-time work, vacation work, and loans to make possible their continuance at the University.

The matter of room and board presented a new difficulty owing to the fact that a number of the rooms formerly on our list were taken by members of the Air Force. Thus the need for residence accommodation under the control of the University made itself felt even more than in previous years.

Innovations in the sorority system called for a great deal of attention and brought about a much more desirable condition than prevails in many Universities. Other organizations, such as the Women's Undergraduate Society and Phrateres, listened patiently to expositions by the Dean of Women on their various duties, and gave evidence of attempting to move in the directions suggested.

Because the college year was too far advanced before the definite need was known, no war work was undertaken by the women's organizations as a definite project. Considerable work, however, was done by individual students, and plans were made for activity on the part of various groups during the following year.

The social welfare work carried on for a number of years by some twenty groups, and intended especially to bring cheer to children at Christmas and at vacation Fresh Air Camps, was entered into with even more than the usual activity. In this connection a number of students took the course in Recreational Leadership offered by the Instructor in Physical Education for Women.

Respectfully submitted,

MARY L. BOLLERT

Dean of Women.

REPORT OF THE DIRECTOR OF THE

SUMMER SESSION

The twenty-first Summer Session of the University of British Columbia opened on July 3rd and closed August 16th, 1940.

The enrolment for the Session, classified by college years, follows. (For purposes of comparison the corresponding figures for the three years immediately preceding are given in parallel columns.)

	<u>1940</u>	1939	1938	1937
Partial First Year Second Year Third Year Fourth Year Graduates Auditors	11 62 186 83 75 159	11 65 211 100 92 209 25	74 231 80 90 179 41	18 89 202 74 73 183
Total	587	713	700	639

Perhaps a clearer view would be obtained by omitting the auditors and setting the totals at 576, 688, 659, and 639.

The curriculum covered 44 full three-unit courses (40 in 1939) and 1 half course (2 in 1939). Of these two full courses (Music and Physical Education) and one half course (Librarianship) were given not for University credit but to meet the wishes of the Department of Education. The one real departure was the introduction of a course in Agriculture, a step made desirable by the growth of Junior High Schools in the country districts of British Columbia.

The staff as in previous years was drawn in great part from the other Canadian Provinces and from the United States.

A year ago reasons were given for thinking that the growth of the Summer Session would be less rapid in the future; war conditions have made this forecast a good deal more than true. There has been a decided falling off in the enrolment and it will be well in making financial provision for 1941 to anticipate a further falling off.

I have to express once more my gratitude to all concerned, the President, colleagues, students and office staff, for they have all conspired to make my work not only agreeable but joyous.

Respectfully submitted,

LEMUEL ROBERTSON,
Director of Summer Session.

EXCERPTS FROM THE REPORT OF THE DIRECTOR OF UNIVERSITY EXTENSION.

Introduction.

A considerable development and expansion of the work of the Department of University Extension has occurred in 1939-40. New services have been inaugurated, and those already established have been extended. In addition, the facilities of the Department have been made available to communities not previously reached, and many more citizens have received some educational service from the University. The number of written and oral expressions of appreciation which the Department has received from those who have benefited from the Extension programme is convincing evidence that the University's efforts in this direction are genuinely appreciated. Despite the inevitable distractions contingent upon a war period, adult education in this province has made notable advances.

The extent of the work carried on by this Department may be realized when it is pointed out that 2,431 persons registered for Extension courses, and 21,845 attended various lectures, demonstrations and other programmes. Ninety-eight groups made use of the Play Lending library, and the total Extension library circulation reached 6,128 volumes. The Visual Instruction service made 3,128 loans to 118 groups, and motion pictures and slides were shown to more than 100,000 persons. In the past year the Department conducted 62 short courses and 7 evening classes.

Policy.

There have been few important changes in policy during the past year. The Department continues to provide as comprehensive an adult education service as its financial resources will permit. It continues, also, to stress the importance of giving the maximum possible assistance to the more remote areas where fewer educational opportunities are available.

One change in emphasis in departmental work might, however, There has been a decreasing stress in recent years on be noted. occasional Extension lectures given by members of the University staff. The Department has stressed instead short courses lasting usually two or three days, study groups, and occupational schools of two or three weeks' duration. In this way it is felt that a more lasting contribution can be made to the educational development of a community. The occasional lecture undoubtedly serves a useful purpose. It stimulates interest in the community in the subject being discussed by the lecturer, and it affords a valuable contact between the University staff and the people of the Province. It is because of these advantages that the Department has no intention of eliminating altogether this phase of Extension work. But the experience of the past few years has shown that where more intensive study is given to a subject, more lasting results are achieved.

From the University's point of view there is a further advantage to be gained from this type of work. Since the short courses and schools are given by instructors engaged specifically for this purpose, the Department is required to make fewer demands upon the time of staff members during the short university term and consequently there are fewer interruptions in course work.

Educational Programme for British Columbia Fishermen.

During the past year a programme of adult education for British Columbia fishermen has been inaugurated by the Department of University Extension. This programme had its origin in the enthusiasm aroused among the fishermen by the short course on co-operation given by the Rev. J. D. N. MacDonald in January, 1939. As a result, a definite grant was made by the Dominion Department of Fisheries for a programme of work in the field of co-operation. The aim of the work was to provide a sound educational basis for fishermen anxious to raise their standard of living by means of co-operative endeavour.

In engaging a staff, it was felt advisable to obtain field workers who had had experience in the successful programme sponsored by St. Francis Xavier University in the Maritime provinces. Mr. Norman H. MacKenzie and Mr. Alexander S. MacIntyre, both of whom had been attached to the Extension Department of that University, were brought to the Pacific Coast, the former for the seven-month period, September to April, the latter for three months, January to March.

A brief examination of conditions at specific points along the Coast was undertaken by one of the men, after which it was decided that an intensive programme in restricted areas would be more effective than any attempt to meet the needs of the entire Coast. The West Coast of Vancouver Island, for example, received comparatively little attention from the field workers. On the other hand, the Queen Charlotte Islands and Prince Rupert were given a great deal of assistance in the organization of study clubs, with the result that five credit unions were incorporated in this area alone.

In the first year of operation, it was considered advisable to stress the credit union as the most suitable form of co-operative organization with which to begin. The credit union should help to meet the immediate credit needs of the fishermen, and as it is one of the simplest forms of co-operation, it provides valuable experience for later co-operative activities. Moreover, in the newly-formed study clubs, the members become acquainted with the technical details of the operation of a co-operative, and gain an understanding of the basic philosophy of the whole movement. The credit unions encourage thrift, and eventually will supply the needed capital for other co-operative undertakings.

The attitude of the Department of Fisheries towards the work accomplished may be judged from one striking fact: despite the general war policy of the Dominion Government of enforcing rigorous economy in all non-military expenditures, and despite the fact that the total budget of the Fisheries Department was reduced by approximately 36 per cent, the grant for the cooperative work in British Columbia was renewed on the same basis

The Director of the American Association for Adult

In the opinion of those connected with the work, a

sound educational foundation has been laid during the past year

is keen in most districts in which the work has been carried on. This is a war-time programme that is contributing to increased

for the development of a vigorous co-operative movement.

Education has shown a special interest in the report covering this work, and has asked permission to publish it in the next issue of the Journal of Adult Education.

The Rural Leadership School.

as for the preceding year.

efficiency and improved civilian morale.

The Rural Leadership School held at the Forestry Camp. University Hill, was an educational event of considerable significance. An attempt was made to use a modified form of the Danish"folk school"for the purpose of training rural youth in

community leadership. There is every indication that the

experiment was an unqualified success. The purpose of the school was to give those students who had shown promise of leadership while attending the two and three weeks' schools further training so that they might be better

able to help carry on the work in their own communities. After the first year's work with Rural Occupational Schools it was clearly shown that the work would not have permanent value unless there was a continuation of interest after the short course school had left the district. The course in leadership was planned so that there might be someone in each community with training in leadership who had some idea of the problems facing the rural

community and of ways of attacking them. Ninety-one students were brought from fifty-four communities in the Province. Forty-six of the students had attended Rural Occupational Schools in their own communities and the remainder of the students were selected from areas in which schools had not yet been held.

A wide variety of courses were given, with three purposes in mind: (1) to give practical instruction in those techniques which are necessary in the daily life on the farm; (2) to help the students understand some of the privileges and responsibilities of citizenship and to study ways in which they might contribute to their own communities; (3) to give a general picture of agriculture and its place in our present complex society and to show that farming may be a desirable occupation.

Instruction was given by members of the Youth Training staff, faculty members, and outside lecturers. Full co-operation was received from all sections of the University in making available to the students the resources of the institution. Since many of the students had not previously visited Vancouver, the best possible use was made of points of educational interest in the city.

It is a conviction very strongly held by those who have taken part in the schools or watched their work, that after two years of operation, they now deserve recognition as an essential feature of rural life. During the war period in particular it is felt that they may play an important role. The encouragement of progressive rural citizenship will prove a valuable aid in the maintenance of civilian morale: the introduction and explanation of the latest agricultural methods will be an important factor in increasing the efficiency of production. Later these schools may provide an excellent basis for post-war reconstruction.

An annual report covering this work received special commendation from the Dominion Department of Labour, and at its request copies were sent to all Ministers of Education and Directors of Youth Training in Canada.

Respectfully submitted,

GORDON M. SHRUM,

Director of University Extension.

REPORT OF THE DIRECTOR OF THE UNIVERSITY HEALTH SERVICE

(Numerous tables and charts, which formed a part of the original report, have not been included in the following statement)

We have the honor to present the Thirteenth Annual Report of the Health Service of the University of British Columbia. While the sum total of activities has increased and some innovations have been inaugurated, we are pleased to feel that the Health Service is becoming more firmly established in the life of the University and the quality of the work is keeping pace with the quantity.

A student on entering University receives a physical examination. This examination, however, is but the first step in the health programme. Defects are often found, some trivial, and others of such a degree that may conceivably provide a handicap to the successful completion of a strenuous academic programme. Our purpose, however, is not to debar students with obvious defects from embarking upon an academic career, unless the degree of defectiveness is extreme, but rather to suggest ways and means whereby such students may carry on to the best of their abilities.

Many defects are open to correction and students are advised as to remedial measures, and the probable effect such correction may have on future health. Students with non-remedial defects, such as organic heart lesions, are encouraged and the pitfalls which they must avoid are pointed out. Particular attention is given to students suffering from conditions such as tuberculosis, and in this regard every attempt is made to have the student carry on unless the disease is advanced and active. Follow up is an integral part of the health programme and preliminary examinations are supplemented by consultations whenever necessary. When this programme is carried through it becomes a powerful instrument in health education, guiding the student along correct scientific health channels. He may learn to discriminate between health fact and fallacy and be in a position to advance personal and community health when he takes his place in the workaday world. We are pleased to consider the medical office of the University as a centre for such health information and advice.

During the Session 1001 physical examinations were completed. This is the largest number on record, the former high being 854 in 1937-38. Examinations were conducted on all first year students, students of other years returning after an interval of at least four years, graduate students, all first string athletes, and the Cafeteria staff. Reciprocal arrangements were made with Dr. Lamont, who examined 74 students in connection with C.O.T.C. examinations, the Health Service performing other tests on this Group, such as urinalysis and tuberculin testing.

To prevent students from entering into physical activity which would menace health, the Department of Physical Education was immediately notified regarding the physical rating of each student examined with

recommendations for exercise. If improvement subsequently occurred in a student's physical capacity for exercise, the Department was so notified. Seventy-three male athletes were given special examinations before engaging in major sports. Women athletes were also routinely examined. It is felt that this is a most necessary precaution as 17.2 per cent. of students examined were found to have a reduced capacity for exercise at the time of initial examination.

With the co-operation of the Division of Tuberculosis Control, Provincial Board of Health, new students were given the Tuberculin Test and the positive reactors were given a chest X-ray by the Travelling Chest Clinic under Dr. Kincaide which operated from the Office of the Health Service at the University. Certain other students were tested during the term and were referred either to the private physician or the Division for further examination. Careful check was kept on several healed cases of Tuberculosis during the year and arrangements made for the observation of contacts and suspects. A total of 631 students were given the Tuberculin Test and 381 were X-rayed. This is the highest number on record. The proportion of positive reactors showed an increase over last Session, and, as previously, the urban rate was higher than the rural.

In spite of the increased tuberculin positive rate, an actual increase in the number of cases was not apparent. In addition to the four diagnosed cases, ten were classified for observation and further check.

Student examinations revealed many defects, some serious and others not. It is of interest that 44.5 per cent. of students examined required follow up for correction of defects or further investigation. Some of the commoner defects are shown as follows:

Percentage of Students

Eyes Skin		Faulty vision represents the defective condition most
Genito-Urinary		commonly found and accounts
Feet	15.1	for 97 per cent. of all eye
Upper Respiratory		defects. It is encouraging
Spine (mostly postural)	10.1	that the majority of students
Teeth	9.5	with feulty vision had received
Functional Disorders of the	•	correction prior to examination
Nervous System (Psychiatrical	1) 3.9	

This year particular attention was paid to the skin of the extremities and 4.7 per cent. of students showed evidence of epidermophyton (athlete's foot). This condition, while not serious, is contagious and students were instructed in prophylactic measures to prevent the spread of the infection.

Abnormalities and chronic infections of the nose and throat were common, and the need for corrective measures was pointed out.

Abnormalities of the Genito-Urinary Systems were also apparent including both functional and organic defects, most of which were amenable to treatment. Students were advised how to proceed to obtain necessary treatment.

Structural deformities of the lower extremities were noted in 15.1 per cent. of students and postural and structural deformities of the spine were not uncommon. Many of these conditions may be reasonably corrected by appropriate exercises with subsequent

benefit to health. Prophylactic measures along these lines, which should start from birth, will prevent, in many cases, the occurrence

of deformities and disabilities in later life.

That only 3.9 per cent. of students examined were found to have functional disorders of the nervous system is probably an understatement. This figure refers only to those students who manifested signs of functional nervous disorder and personality defects, and ignores a large number of minor disorders which may be quite easily missed during the course of a rather speedy examination. The total number of visits to the Health Office has increased

greatly this year. Total visits are all inclusive and include visits for purposes of examination, other tests, consultations, first aid and health advice, certification for re-admission following illness, also for purposes of observation of contacts of communicable disease. Visits regarding Communicable Disease, including the Common Cold, were prominent, but happily the year ended without a major outbreak of communicable disease.

Table 6. (not included in this report), shows the number of students attending the University who are potentially susceptible to some of the commoner Communicable Diseases. These figures are obtained by including those students who gave no history of previous disease and who had received no preventive inoculations. observed that 17.6 per cent. of students are potentially susceptible to Smallpox. In other words, these students have never had Smallpox or been vaccinated. In the case of the students examined this year it is interesting to note that more students from the Greater Vancouver area were found to be successfully vaccinated against Smallpox, than from the rural areas. The proportion is almost two to one. Provincial Regulations require that all persons resident in the Province be vaccinated. The alternative to this is that they submit evidence of insusceptibility to vaccination, or that they may be exempt on account of illness. Those who, on conscientious grounds, oppose vaccination must produce an affidavit to this effect sworn to before a Magistrate or Commissioner for Taking Oaths. Students on entering University are required under this provision to show evidence of previous successful vaccination or to be vaccinated if not already done, or to produce an affidavit as a conscientious objector. measures are necessary to protect not only the individual but also

the University. One hundred and forty-seven vaccinations against Small-pox were performed this year, as against 115 the preceding year. Twenty-six students were immunized against Diptheria, 23 against Scarlet Fever and 17 against Typhoid Fever. There is approximately a 75 per cent. increase in the number of immunizations performed over last. As prevention of disease is an integral part of our Health Programme, we are glad to provide this service and to discuss with any student the value of such procedures.

The Health Service has taken an interest in Campus Sanitation. The Director, during the Christmas vacation, in company with Mr. Lee, made an inspection of University huildings. Visits were also made during the course of the year by the Inspectors from the Division of Food Control and Sanitary Engineering, Metropolitan Health Committee.

From January to March 1940 part-time Services were devoted to the Training School for Rural Leadership, under the Department of University Extension. All students were given a physical examination. Tests including the Tuberculin Test, Chest X-ray, and Kahn Tests were performed with the co-operation of the Provincial Departments of Venereal Disease and Tuberculosis Control and the Division of Laboratories. Toward the latter end of the school period the services of Miss Lucille Malkin, a nurse trained in Public Health, were utilized part time, and opportunities were afforded for instruction in Hygiene, First Aid and Home Nursing. A separate report of our Services on behalf of this School has been forwarded to the Director of University Extension.

From November to April, Miss Upshall, in co-operation with the Department of Nursing and Health, conducted classes in Red Cross Home Nursing. A total of 24 students were in attendance.

The Director was pleased to co-operate with various Departments of the University in the giving of lectures. Nine lectures on Sanitation were delivered to the class of Final Year Nurses in the Department of Nursing and Health, and four lectures on Communicable Diseases and one on Municipal Public Health Administration were given to Social Service Students in the Department of Sociology. One talk was also given to the Munro Pre-Medical Club.

Dr. Gundry, the Director of the Division of Mental Hygiene, Metropolitan Health Committee, delivered one lecture to the Students of the Teacher Training Course and Dr. D. H. Williams, Director of the Division of Venereal Disease Control, Provincial Board of Health, addressed the students of the Rural Training School. Dr. J. S. Cull, Assistant Provincial Health Officer, gave one lecture to the Social Service Students in the Department of Sociology.

With the assistance of Dr. Dolman plans for new quarters to be devoted to Health Services in the proposed Institute of Preventive Medicine were submitted.

We were pleased to have the services of a full-time Clerical Assistant in the Office from September 1st, 1939 to May 31st, 1940. With the increased load the Department has been carrying this assistance has been invaluable.

In the Annual Reports of the past few years it has been noted that a considerable number of psychiatric difficulties became apparent in the course of the routine work of the Health Service and the advisability of adding to the staff of the Medical Service a physician whose training would enable him to deal with emotional problems was suggested. An attempt was made this year to initiate such a service.

It has been noted that 39 students (3.9 per cent.) presented evidence of functional nervous disorder at the time of initial examination. Twenty-five students with symptoms referable to the nervous system were seen during the course of the year, of whom 13 presented evidence of neurotic manifestations. We were fortunate in having the services of Dr. C. H. Gundry, Director of the Division of Mental Hygiene, Metropolitan Health Committee, for consultation in many of these cases. In psychiatrical work the same distinction should be maintained between prevention and treatment which is adhered to in other branches of the Service. Our objective is primarily prevention and so our interest must, in future, centre on those students who evidence what might be termed minor personality changes, rather than upon the student whose neurotic tendencies are immediately apparent and for whom immediate psychiatric treatment is necessary. Mental Hygiene is different, it seeks out the mild case, and by helpful advice develops a special insight into personal problems and maintains the individual on the road of mental stability.

Apart from the figures presented above, we know there are many more cases showing mild personality difficulties. Work that has been done in other Universities indicates that a much greater percentage of students have problems severe enough to warrant thorough investigation and advice. Furthermore, we know that among welleducated adults there is a rather disturbing amount of neurotic illness. At the University of Pennsylvania in the year 1937-38, it was found that 16.4 per cent. of the total number of freshmen had fairly severe personality problems. It was recently stated by the Surgeon General of the United States that nervous and mental disorders presented the largest unsolved problem in medicine. One thing we know about this problem is that the definite mental disabilities that affect such a large proportion of the total population are of very gradual development and that in most cases people who ultimately become disabled as a result of mental illness present symptoms of poor personality adjustment by the time they are of university age. It is thus clearly of great importance that well-educated members of the Community should have some knowledge of the problems of mental illness in general and should have help in dealing with their own emotional difficulties in particular.

Next year an attempt will be made to detect a greater number of cases by means of an improved questionnaire which freshmen will be asked to fill in. This will not be set up in such a way as to create an artificial contrast between the mental and physical aspects of health. It has been the custom to take a short health history of entrants to the University and this is to be extended in the hope that some clues may be obtained about personality adjustment. This may be a means of bringing more of the unknown poorly-adjusted students to our attention.

The co-operation of the Faculty is requested in this regard. It is often difficult for an Instructor to judge the severity of emotional problems of College students, problems which can often be brought to light and solved by discussion with a trained psychiatrist.

Academic achievement is not a good index of mental health; in fact, the drive which makes for high scholastic standing may be neurotic in origin. There may be opportunities to discuss the problems of student mental health with members of the Faculty, either individually or in groups, and the Health Service will be very glad to take part in such discussions.

The small beginning that has been made this year in connection with Mental Hygiene should not be considered discouraging. It is much better to have a programme like this grow slowly and unostentatiously than to have it display a precocious growth that is not healthy.

The problem of overcrowding is ever present. Temporary facilities provided for the Fall Examinations have proved reasonably satisfactory, but the small quarters of the Medical Office are often taxed to capacity and it is felt that much good work may be partially undone by the difficulty in obtaining satisfactory privacy during many consultations. The use of quarters adjoining the Medical Office would be greatly appreciated.

Summer Session

By arrangement with the Directors of the Summer Session and the Metropolitan Health Committee, Health Services were continued for the Summer Session. Miss Upshall was present in the Medical Office, mornings only, for First Aid, Student Consultation and Health Advice. The Director was available for examination and consultation purposes.

Increased student interest in these Services is evidenced by the increased attendance at the Medical Office. For the Session 1938, 35 individuals reported to the Office, and a total of 99 visits were made. The figures for 1939 indicate a gratifying increase.

Owing to the short summer session, the Health Services are only carried on in a modified form. To date, students are not required to register at the Medical Office and there is no provision for the examination of new students, apart from University Registrants who are routinely checked during the regular Fall and Winter Sessions. The service, therefore, has been on a voluntary basis. That is, any student has the privilege of visiting the Medical Office for Health reasons. That this programme is open to criticism is proven by the chance finding of an open case of Pulmonary Tuberculosis toward the end of the Session. This case should have been diagnosed earlier and the danger to contacts would have been eliminated if the student in question had contacted the Health Service early in the Session.

Plans have been laid and provisions made for all new students attending the Summer Session 1940 to fill out a Health Questionnaire and submit this form in person to the Medical Office. In this manner personal

health may be discussed frankly with members of the Staff and such recommendations made as suit the individual case. Physical examinations and other tests may be required when the Health Question-naire and interview indicate a suspected pathological condition. The objectives of this Service, as with the University Health Service are, Health Education of the student and prevention of spread of disease amongst the student body.

There have been many contacts with members of the University Staff during the Year and we appreciate the kindly criticism, helpful advice, and co-operative spirit which have been manifest in our mutual associations. It is felt that progress has been made and it is our hope that continued effort may be maintained.

We are also indebted to the various Divisions of the Provincial Board of Health, namely Laboratories, Tuberculosis Control and Venereal Disease Control, for extending their services to include a large portion of our diagnostic work.

Respectfully yours,

J. S. Kitching, B.A., M.D., D.P.H., Director, University Health Services.

M. Upshall, P.H.N., Nurse-in-Charge.

REPORT OF THE INSTRUCTOR IN PHYSICAL

EDUCATION FOR MEN

A Required Programme

Recent changes in the gymnasium and stadium facilities have made it possible to accommodate enough men to carry on a required programme for all first year students and at the same time provide recreational opportunities for other students interested in more advanced work.

The benefits of physical education at the University of British Columbia should be extended. As a form of health insurance for future graduates, there should be a required programme for all first and second year students, so that every man registered at the University could learn at least one "carry over" sport.

Reorganization of Equipment and Facilities

During the session 1939-40 an additional grant of \$1,000.00 to Physical Education made it possible to move the students' athletic equipment to the stadium, leaving the southeast room in the gymnasium available for the men's Physical Education office, and a small reading room. At the same time an equipment room for the men was constructed in the north dressing room and the former men's Physical Education office made over into a women's equipment room. This arrangement makes it possible to conduct all the men's administrative routine on the east side of the gymnasium and greatly facilitates both the men's and the women's programme.

A basket system was inaugurated during this session with the construction of racks and the purchasing of 350 baskets. Since that time the purchase of an additional 600 baskets has made it possible to accommodate 950 men in the gymnasium.

Some changes have also been made in the inner room of the stadium to supplement the gymnasium and also to provide space and equipment at all hours of the day. The stadium is now equipped with a boxing ring, punching bags, weight-lifting apparatus, and ping pong facilities. A certain amount of floor space is also available for other activities.

Registration

The number of men registering early in the session was rather small (250), but a new system of rating the students physically, devised with the co-operation of the Health Service, built this total up to nearly 400. Most of the additional group was composed of men who were in special need of some type of Physical Education.

Programme

The programme remained very much the same as in the previous session with the exception of special activities provided for the classes developed from the group recommended by the Health Service.

Intramurals

The intramural programme consisted of twelve teams competing in twelve different sports. There was a total participation of approximately 900 men representing 425 different individuals. If it were possible for all men to be free for the same late afternoon hours twice a week, a programme of twenty different sports would allow every man in the University to take part in some athletic activity.

Respectfully submitted,

M. L. VAN VLIET.

Instructor in Physical Education for Men.

REPORT OF THE INSTRUCTOR IN PHYSICAL EDUCATION FOR WOMEN

Registration.

Women's registration for Physical Education activities in the Session 1939-40 remained approximately the same as in former years - between 450 and 500. The work was enthusiastically supported by women in the upper years and it was through their efforts that registration of women in the first year was very satisfactory.

Programme.

The programme was carried out on the same basis as in former years. The majority of women's classes were held in the morning. Afternoons were given to informal activities - organizing, student meetings and interviews.

Classes

Gymnasium classes included informal talks on posture with related Keep-Fit exercises. Tumbling, light apparatus and group games were also taught in these periods.

Material in the Dancing classes consisted of fundamental rhythms, folk, national and tap dancing. Lessons were given in Archery, Badminton, Tennekoit, Ping-pong, Volleyball and lead-up games for the various team sports.

A course in Recreational Leadership covered the theory of play and play leadership, - material to be used in all types of recreational activity and practice teaching of these activities.

The women in attendance at the Rural School Course under the Department of University Extension were given assistance through the class in Recreational Leadership by being admitted for instruction during the time they were at the University. This class was found to be useful for women in schools, playgrounds and social service work.

Sports.

A women's Archery team competed with eleven other teams across Canada in universities and colleges and won second place.

Badminton for men and women was organized and supervised throughout the year for one afternoon a week.

Women's teams in Volleyball and Badminton from Western Washington College were invited to our campus for a Guest Tournament. Several weeks later our teams were guests on their campus. This proved to be a very happy innovation, affording our women their first opportunity to meet other University women in sports and to compete in a friendly manner.

(c) Intramurals.

Tournaments were organized for women's class teams in Volleyball, Basketball, Badminton, Tennekoit, Ping-pong and Archery. Seven teams were entered for competition. Tournaments for mixed teams from the various classes were also conducted. There were five teams competing in Volleyball.

(d) Education Class.

The women in the Education Class were given instruction in dances which might be used in school programmes.

The Instructor in Physical Education for Women assisted in:-

- 1. The re-organization within the Women's Athletic Directorate.
- 2. The training of coaches for intramurals.
- 3. The giving of co-operation and counsel in all activities of the Women's Athletic Association.
- 4. The giving of evening classes for students in the Rural School Course under the Department of University Extension in recreation and in the organizing and conducting of recreational activities in rural communities.
- 5. The giving of lectures to the Social Service class on group work in recreation.
- 6. The charting of women students for posture, and the giving of counsel in matters concerning professional standards and opportunities in Physical Education and Recreation.

Respectfully submitted,

GERTRUDE E. MOORE, Instructor in Physical Education for Women.

REPORT OF THE OFFICER COMMANDING CANADIAN OFFICERS' TRAINING CORPS UNIVERSITY OF BRITISH COLUMBIA CONTINGENT

INTRODUCTION.

This is the first Annual Report on the work of the University of British Columbia Contingent, Canadian Officers' Training Corps, to appear since the outbreak of war. Because the date of commencement of the Contingent's training year coincided closely with that of Canada's entry into the war, the report gains added interest as a record of the enthusiasm with which the Unit has faced the problems arising during the Corps' first year as a supplying unit to the Canadian forces on active service.

Two important innovations affecting the general policy of the Contingent were made this year. This was the first year in which graduates of accredited Universities have been permitted to enlist as cadets, and this was the first year in which undergraduates were granted academic credits for passing the C.O.T.C. qualifying examinations. These innovations necessitated a new and increased establishment.

Another result of the war has been that nearly all those cadets who qualified for commissions during the year have received appointments as officers either in the C.A.S.F. or in the more recently organized units of the N.P.A.M. In addition to those posted to the various military units, a number have been commissioned in the naval and air services.

Another important innovation this year was the organization of a training course during the months of July and August. This step was taken because of the recently inaugurated system of compulsory cadet training in the schools, and the course was designed primarily in order to enable those teachers who wished to qualify as cadet instructors in the schools to do so.

It is gratifying to record here also the fact that on instructions from N.D.H.Q., Ottawa, June 12th, 1940, all C.A.S.F. and N.P.A.M. units are now required to select 50 per cent. of their junior officer personnel from the qualified C.O.T.C. Cadets.

TRAINING.

The syllabus and method of training were altered radically this year. The War Office examinations for Certificates "A" and "B", which had been the qualifying standard in former years, were abandoned by the Department of National Defence in favour of the Canadian standards as laid down in the manual,

but courses were made available in several branches of the service, namely, Infantry (Rifle) Infantry (Machine Gun), Artillery (Mobile), and Engineering, an arrangement which entailed a considerable increase in the number of courses offered as compared with the number in previous years. This year, for the first time, candidates were eligible to sit

"How to Qualify, 1938". Members of the Contingent were restricted to qualifying only for the rank of Lieutenant,

for their examinations during their first year of training, in stead of the second as had formerly been the rule. The training of the unit was divided into four parts. as follows:

Fall Term (Sept.19, 1939 to Nov. 30, 1939.) Spring Term (Jan. 8, 1940 to April 30, 1940.) (i) (ii) Summer Camps: (iii)

(i)

(ii)

Fall Term.

(iv) Summer Session (July 8 to August 15, 1940.)

(a) Vernon Camp, (May 13-20, 1940.)
(b) Steveston Camp, (July 8-20, 1940.)

Because of the greatly increased strength of the Unit, it was found necessary to divide the Contingent into two training groups. Each paraded twice a week at the University,

of British Columbia Gymnasium was used as a temporary drill-hall The work covered at this time was the subject-matter of the

part of the course was written on December 16th, 1939. Spring Term.

"First Paper, Common to all Arms". The examination for this

At the beginning of the Spring Term the use of the Stanley Park and Bessborough Armouries was arranged. Thos

received practical instruction at the Stanley Park Armoury on Monday nights. The Infantry group also attended lectures at the University on Wednesday evenings. Infantry candidates unable to attend on Monday nights were enabled to take the same training on Tuesday evenings at the Bessborough Armoury. The Engineer candidates received theoretical instruction from officers and warrant officers of the 6th Field Company, R.C.E. on Tuesday evenings at the Bessborough Armoury. The Artillery candidates took their lectures at the University on Monday evenings and their practical work at Bessborough Armoury on Tuesday evenings. During both Fall and Spring terms undergraduates in all branches

except Engineering had the option of taking the theoretical part of the courses in four noon-hour lectures a week at the

University, instead of attending the evening classes.

taking Infantry (Rifle and Machine Gun), and Engineering

as no armoury was available. Group A paraded on Mondays and Wednesdays, and Group B, on Tuesdays and Thursdays, repeated the work covered by Group A. During the Fall the University

The second paper (Special to Arm) was written by candidates in all branches on March 16th, 1940. Those who failed the First Paper, written the previous Christmas, were given the opportunity of writing a supplemental examination on March 17th, 1940.

(iii) Summer Camps.

(a) Vernon Camp.

A camp for members of the Contingent specializing in Infantry (Rifle and Machine Gun) and Engineers was held at Vernon, B.C. from May 12th to May 20th, 1940. The camp allottment of 100 all ranks was filled. Practical examinations for 48 eligible candidates were held at the conclusion of the camp. Of the total of 48, 44 were successful. These practical examinations completed the qualifications of the Infantry candidates, but the Engineers required further practical training in bridging, to be taken in Vancouver at a later date. Three of these have since taken the practical examination at the Armouries in North Vancouver and all were successful.

(b) Steveston Camp.

A camp for members of the Contingent specializing in Artillery was held at Steveston from July 8th to July 20th, 1940. Eighteen men all ranks attended. Qualifying examinations were held at the conclusion of the camp and all eighteen candidates were successful.

(iv) Summer Session.

Approximately 175 men took the Summer Course (July 8th to August 15th, 1940), most of them being teachers. The work of the Theoretical Examination, Common to All Arms, was completed. The examination is to be taken in December.

Two hours a day, five days a week, were devoted to lectures. On Saturday afternoon voluntary parades were held for the purpose of carrying out tactical exercises.

After the close of the course, about forty of the teachers who had taken it continued in training until the opening of the school term. Additional work was undertaken to help them to qualify as cadet instructors for the school.

The instructional work during the summer was carried out entirely by the personnel of the corps. In this connection the work of Captain Topping and of 2/Lts.Spring, Bergklint, Harris, and Black deserves special mention.

3. TRAINING, SPECIAL

(a) Small Arms.

A total of 250 all ranks were exercised in the miniature range on the University Campus with .22 calibre rifles during noon-hours and on Saturday afternoons. Of this total of 250, 135 were given the miniature range classification. All junior officers were exercised with the .22 pistol.

Members of the Contingent also carried out the practices prescribed for classification in Rifle and Light Machine Gun (IMG) on Blair Rifle Range, North Vancouver, B.C., during the Spring of 1940.

Infantry (M.G.) candidates were exercised with the Vickers Medium Machine Gun.

A summary of the results obtained during the year is appended.

(i) Miniature Range.

Number Exercised	250
Number Classified:	
lst Class	
2nd Class	42
3rd Class	7
Total Classified	135

No. of Officers exercised in .22 pistol 12

(ii) Outdoor Range.

Rifle

Number Exercised	264
Number Classified:	
lst Class	76
2nd Class	24
3rd Class	$\frac{9}{109}$
Total Classified	109

L.M.G.

Number Exercised	221
Number Classified:	
lst Class	63
2nd Class	22
Total Classified	85

Vickers M.M.G.

Number Exercised	36
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(b) Anti-Gas Training.

In spite of the shortage of respirators and lack of facilities and equipment, 260 all ranks were passed through the instructional gas chamber, and a large number of these were given instruction in the principles of defence against gas and in the use of the respirator.

c) Tactical Training.

Saturday afternoon parades were held weekly during the Spring months. A large number of tactical exercises were carried out, giving all members of the unit who attended an opportunity to handle troops in the field.

4. ANNUAL INSPECTION

The Annual Inspection of the Contingent by the District Officer Commanding M.D. No. 11, Brigadier C. V. Stockwell, D.S.O., and his staff, took place on the afternoon of April 27th, 1940, at the University Stadium. The total parade strength was as follows:

Officers and attached Officers	
Other Ranks	201
<u>Total All Ranks</u>	219

The Inspecting Officer commented very favourably on the smartness of the men and on their efficiency in Drill, Small Arms Training, and the other branches of their work.

5. INSTRUCTIONAL AND ADMINISTRATIVE STAFF

Because of the great increase in enrolment and the fact that the training course was compressed into a one-year period instead of the two years as before the war, the size of the instructional staff was enlarged considerably.

Major E. J. D. Edmonds, lst Anti-Aircraft Regt., R.C.A., was posted to the Unit in October as Chief Instructor. He was assisted by Q.M.S.I.A.A.Smith, P.P.C.L.I. (I.C.), and by Sgt. A. Hamon, lst A.A.Regt., R.C.A., who was loaned until Christmas to help prepare instructional precis. During the Christmas vacation Q.M.S.I.Smith left the Contingent after ten years' service as its instructor, to be commissioned in his own unit, the P.P.C.L.I. His work with the Contingent has always been outstanding.

In January, Capt. C.A.Baker, 1st Searchlight Regt., R.C.A., and C.S.M. A. E. Jones, B.C.Regt.(D.C.O.R.), were detailed as instructors to assist Major Edmonds. These instructors carried on until the conclusion of the Corps' regular activities at the end of March. Capt. Baker and C.S.M. Jones also helped in the training of the Contingent

while at Vernon Camp in May.

On July 10th, Sergeant H. A. Harcourt, No. 11, "A" Company, Veterans' Guard, was posted to the Unit as Instructor. Sergeant Harcourt is still with the Contingent.

6. SOCIAL ACTIVITIES.

The first Banquet of the Contingent since 1928 was held at the Hotel Vancouver, December 16th, 1939. Members of the Military Committee, officers of the Vancouver Garrison, and others were the guests of the Unit on this occasion.

The tenth annual ball was held in the ballroom of the Brock Memorial Building on the University Campus, March 19th, 1940. Officers of the General Staff in Victoria, of the Vancouver Area, and Members of the Military Committee were guests of the Contingent on this occasion.

7. GENERAL COMMENTS.

(a) <u>Training</u>.

The many problems which had to be overcome in the successful completion of the year's training threw a heavier load than ever before upon the officers and non-commissioned officers of the Unit. Although their duties were onerous they were carried out with unfailing enthusiasm.

(b) <u>Discipline</u>.

There were no breaches of discipline during the year.

Ordnance Inspection.

There was no Ordnance Inspection this year, pressure of work in connection with the prosecution of the war having prevented the District Inspecting Officers from carrying out such imspection.

(d) Annual Audit.

The Annual Audit of Regimental Funds was carried out on 20th October, 1939, by a Board appointed for the purpose. The books and accounts of the Contingent were found correct.

8. ALTERATIONS TO QUARTERS.

In addition to the improvements listed in last year's report, the room formerly used by the Students' Book Exchange was taken over by the Contingent and altered for use as a meeting and reading room.

9. NOTE OF APPRECIATION BY THE COMMANDING OFFICER.

The Commanding Officer wishes to record his thanks and appreciation for the assistance and co-operation afforded him by the Chancellor, the President, the Board of Governors, the Committee on Military Education, the District Officer Commanding Military District No. 11, and Staff, the Officers Commanding the Vancouver Units of the C.A.S.F., and the N.P.A.M. the Officer Commanding the Vancouver Defence Forces, and all others who have contributed to the success of the Contingent.

Respectfully submitted,

G. M. SHRUM,
Lieutenant-Colonel,
Commanding U.B.C. Contingent, C.O.T.C.

PUBLICATIONS

FACULTY OF ARTS AND SCIENCE

DEPARTMENT OF BACTERIOLOGY AND PREVENTIVE MEDICINE:

Dr. C. E. Dolman:

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"Samuel Bennett, Seth Alden and the Lag", Canadian Nurse, Vol. 35, No. 11, November, 1939.

Article: "Pasteurization Makes All Milk Safe", Vancouver Daily Province Health Supplement, November 28th, 1939.

Dr. D. C. B. Duff:

Abstract: "The Filtrable Forms of Bacterium salmonicida and of Other Species", Proceedings, Third International Congress for Microbiology, New York, 1940, pp. 164-165.

Dr. D. C. B. Duff, Miss M. I. MacArthur and Miss H. G. Thompson:

"Observations on the Viability of Bacterium salmonicida", Journal of Fisheries Research Board of Canada, Vol. 5, No. 1, 1940, pp. 1-7.

Dr. L. E. Ranta:

Abstract: "The Role of Vitamins in Nutrition", Publication of the Health Education Group of Vancouver, issued by the B.C.Board of Health, Vol. 6, April, 1940, pp. 8-15.

"The Modern Conception of Scarlet Fever", The Canadian Nurse, June, 1940, Vol. 36, pp. 355-358.

DEPARTMENT OF BOTANY:

Dr. A. H. Hutchinson:

"Life's Processes" - An Outline of a Course in Basic Biology - 34 pages, The University of British Columbia, June, 1940.

DEPARTMENT OF CHEMISTRY:

Dr. R. H. Clark:

"The Intravenous Feeding of Amino Acids", American Journal of Digestive Diseases, Vol. VI, 3, May, 1939. Republished by the Vancouver Medical Association, March, 1940.

Dr. William Ure and Dr. J. A. Harris:

"Experimental Chemistry for Colleges", (New Edition), McGraw-Hill Book Co., July, 1940, 123 pages.

Dr. M. J. Marshall and Mr. Robert A. Findlay:

"The Equilibrium Pressures of Oxygen on Activated Charcoal", Canadian Journal of Research, B. 18, 35, 1940.

DEPARTMENT OF CLASSICS:

Dr. O. J. Todd:

"An Inelegant Greek Verse", The Classical Quarterly, Vol. XXXIII, Nos. 3 and 4, July-October, 1939, pp. 163-165.

DEPARTMENT OF COMMERCE:

Dr. A. W. Currie:

"Freight Rates on Grain in Western Canada", The Canadian Historical Review, XXI, March, 1940, pp. 40-55.

"Corporation Law before 1840", The Canadian Chartered Accountant, XXXVI, May, 1940, pp. 321-327.

DEPARTMENT OF ECONOMICS, POLITICAL SCIENCE AND SOCIOLOGY:

Mr. H. F. Angus:

"An Analysis of the Report of the Royal Commission on Dominion-Provincial Relations", Industrial Canada, XLI, No. 4, August, 1940, pp. 34-37.

Book Reviews in Canadian Political Science Journal and Pacific Affairs.

Department of Economics, Political Science and Sociology (continued):

Mr. H. F. Angus - continued, -

Editor: Institute of Pacific Relations, Inquiry Series.

Mr. G. F. Drummond:

Article: "The Relation between Changes in the Rural Population and the Trend of Agricultural Production in British Columbia", Scientific Agriculture, September, 1939.

Article: "Variations in Cost", Canadian Journal of Economics and Political Science, November, 1939.

Article: "Financing War is Huge Problem", Vancouver Daily Province, January 27th, 1940.

Article: "Economics of War. Britain to use up Foreign Investments to pay her Way", Vancouver Daily Province, January 28th, 1940.

Article: "National Financing in War: Wartime Control of Trade", Vancouver Daily Province, January 30th, 1940.

Article: "Economic Co-ordination Vital", Vancouver Daily Province, February 1st, 1940.

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DEPARTMENT OF EDUCATION:

Dr. M. A. Cameron:

Article: "The Spens Report", The School, September, 1939.

Dr. D. H. Russell:

Article: "The Prevention and Remedy of Reading Difficulties in Smaller Schools", The School, XXVIII, January and February, 1940, pp. 387-392; 485-489.

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Dr. D. H. Russell, Dr. A. I. Gates and Dr. G. L. Bond:

"Methods of Determining Reading Readiness", Bureau of Publications, Teachers College, Columbia University, New York, 1939, 55 pages.

DEPARTMENT OF ENGLISH:

Dr. D. Blakey and Mr. A. C. Cooke: (See Department of History)

Pamphlet: "The Preparation of Term Essays", The University of British Columbia, Vancouver, 1939, 18 pp.

DEPARTMENT OF GEOLOGY AND GEOGRAPHY:

Dr. C. O. Swanson:

Article: "The Use of the Dip Needle in Mapping Structure", The Miner, November, 1939, pp. 54-58.

Dr. H. C. Gunning and Dr. J. W. Ambrose:

"The Timiskaming-Keewatin Problem in the Rouyn-Harricanaw Region, North-Western Quebec", Trans. Royal Society of Canada, Section IV, 3rd Series, Vol. 33, 1939, pp. 19-50.

Dr. W. C. Gussow, Dr. J. W. Ambrose and Dr. H. C. Gunning:

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Dr. J. W. Ambrose and Dr. H. C. Gunning:

Preliminary Map "La Pause Area, Quebec", Paper 39-12, Report of the Canadian Geological Survey, 1939.

Dr. H. C. Gunning and Dr. J. W. Ambrose:

"Malartic Area, Quebec", Memoir 222, Report of the Canadian Geological Survey, 1940, 142 pages, 4 maps, 8 plates, 8 figures.

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Dr. H. V. Warren and Mr. A. G. Lyle:

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DEPARTMENT OF HISTORY:

Dr. W. N. Sage:

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Article: "Hitler's War on Christianity", The Canadian Churchman, Toronto, May 9th and May 16th, 1940, pp. 294; 311-12.

Dr. W. N. Sage and Mr. A. S. Morton:

Review: "The Canadian West to 1870-71",
B. C. Historical Quarterly, October, 1939, pp. 301-304.

Mr. F. H. Soward:

"Moulders of National Destinies", Second Edition, November, 1939, revised and enlarged, 239 pages, Oxford University Press, Toronto; Oxford University Press, New York.

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Mr. F. H. Soward:

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Mr. A. C. Cooke and Dr. D. Blakey: (See Department of English)

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DEPARTMENT OF MATHEMATICS:

Dr. D. Buchanan:

"A Transformation to the Normal Form", Rendiconti del Circolo Matematico di Palermo, February, 1939, pp. 1-3.

Dr. R. Hull:

"The Representation of Integers in Forms", National Mathematics Magazine, Vol. XIV, No. 5, February, 1940, pp. 1-18,

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Dr. A. F. B. Clark:

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Mr. R. Hilton-continued, -

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DEPARTMENT OF PHILOSOPHY AND PSYCHOLOGY:

Mr. J. A. Irving:

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DEPARTMENT OF PHYSICS:

Dr. H. D. Smith and Mr. J. K. Marshall:

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"The Oppenheimer-Phillips Process", The Physical Review, Vol. 57, No. 10, May 15th, 1940, pp. 866-876.

Dr. R. F. Christy and Dr. J. M. Keller:

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Dr. W. H. Goss:

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