May 4th, 1932.

The Honourable Major Robert Weir, P.C.,
Minister of Agriculture,
O t t a w a .

My dear Minister,

I have only time to enclose certain memoranda prepared by different departments with reference to proposed cuts in agriculture. I am sorry that I have no time to edit them, but I may say that I intended to use them as the basis of my conference with you. As I intimated to you this afternoon, there are certain sentences which will serve no useful purpose and these you will regard as eliminated. I was very glad indeed to hear from you that you contemplate no final reduction in the entomological services.

In conclusion may I give you the assurance that at any time you feel that the staff of McGill University can help you in any question pertaining to the service your department seeks to render to this country, you may count on our whole hearted co-operation and assistance.

Yours faithfully,

Principal.

PRINCIPAL AND VICE-CHANCELLOR:
SIR ARTHUR W. CURRIE, G.C.M.G., K.C.B.

FROM
THE PRINCIPAL AND VICE-CHANCELLOR,
McGILL UNIVERSITY,
MONTREAL.

M E M O R A N D U M

REGARDING THE REDUCTION OF GOVERNMENT APPROPRIATION FOR MARCH, 1932-33, for ADMINISTRATION OF DESTRUCTIVE INSECT AND PEST ACT.

PRESENTED BY McGILL UNIVERSITY ON BEHALF OF THE FOLLOWING UNIVERSITIES:

TORONTO UNIVERSITY
QUEENS' UNIVERSITY
UNIVERSITY OF MONTREAL
McGILL UNIVERSITY

APRIL 29,
1 9 3 2 .

MEMORANDUM

Re: Reduction of Government Appropriation for March 31, 1932-33, for Administration of Destructive Insect and P est Act.

The undersigned, viewing with a not inconsiderable degree of apprehension the reduction of appropriation for administration of Destructive Insect and Pest Act (Vote No.49) from the sum of $705,000 to $328,300, a reduction of somewhat less than half (Plant Pathology 49%, Entomology 45%), respectfully suggest that this drastic reduction may have a very untoward effect on the continuity of the work of these Scientific Departments, to the misfortune of our country at large, and we therefore submit for your consideration the following memorandum.

We realize fully the very great importance of measures of economy at the present time. There can be no question about that. It will, however, be conceded, we believe, that the more important services of the Government should be crippled the least, especially when such services are in themselves of the highest importance in saving money for the country. In such cases, a small economy is bound to result in a large loss, which, however, may not appear in the bookkeeping accounts.

1. We do not know on what grounds the axe of economy has been applied so severely to the Scientific Services, but, in case it be based on the theory that <u>overproduction</u> is one of our present evils and that this is fostered by research, we

respectfully submit our opinion that the question of whether or not there is real overproduction in the world to-day is beside the point, because the aim of scientific research is not necessarily greater, but cheaper and more efficient production, by which alone Canada can compete with other countries. A comparison of States which support research and those which do not is sufficient evidence of the value of such work. The present widespread fear of Russian competition in the world markets is based on the fact that, even in her hour of direst economic need, that country has been using every effort to increase research and its application to agriculture and industry. We cannot conceive that the Government of Canada will adopt a less far-sighted policy.

2. In case ~~that~~ the cut of appropriation to the Laboratories of Plant Pathology and Entomology indicates that they are not esteemed at their true value, we venture to point out:

(a) They protect against importation of diseases by inspection at ports (witness the country's freedom from black wart disease in potatoes).

(b) They assist export trade by inspection and certification of crops and products (for example, the potato, apple (and other crop) inspection service).

(c) They apply scientific research to the study and control of existing diseases and to the breeding of disease-resistant varieties of crop plants.

It would seem that few of these activities can be even temporarily reduced and few even of the smaller laboratories closed without loss to the country.

Of particular value, for example, at the present time, in view of the need of diversification of Western agriculture, is the work being carried on with clovers and other forage crops in the Dominion Plant Pathology Laboratories at Saskatoon and Edmonton. The growing of clover and other legume crops, so necessary in any system of diversified agriculture has never been satisfactorily established on the prairies, due chiefly to excessive "winter killing". At these laboratories it has recently been found that much of the so-called winter killing is really due to disease, the organism of which flourishes at low temperatures. With this knowledge available, progress can now be made in the production of resistant varieties. On the other hand, there are proposals to use this knowledge for exactly the opposite purpose. It is believed that it would be possible to infest certain species of noxious weeds with this disease and thus have a biological method of weed control.

Vigilance in the inspection of imports cannot safely be relaxed.

Inspection and certification of exports cannot be abandoned without sacrifice of trade! Indidentally, its abandonment would seem to annul any prospect of removal of the British embargo on potatoes from Canada.

3. Especially important with regard to the future is the fact that interruption in the training of a technical staff would result from cessation of temporary employment of students during the summer, which would have disastrous results. The demand has been for better trained specialists. Universities and Agricultural Colleges have attempted to meet this demand in Entomology, Plant Pathology, Genetics, etc.: but with their accustomed means of support, namely, summer work, discontinued, the students in question will abandon their careers, the investment in their training will be sacrificed and many years will have to elapse before a supply of well trained men can again be available.

It might be pointed out that the summer employment of senior and graduate University students is the most efficient and economical means of obtaining high grade assistance in seasonal agricultural work. Without such assistance the permanent and higher paid officials must be severely handicapped and a large part of the irreducible expenditures wasted.

4. In view of the fundamental nature of the Scientific Services and of the general excellence of the personnel thereof, it would seem wiser to economise in the secondary services, dependent on the Scientific Services and employing a less highly trained staff.

It is a matter of common knowledge that great economies could be made in the governmental expenditures on agriculture without loss of efficiency. Whether or not this is the time to tackle that larger problem is another question.

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There is, for example, in the matter of "Illustration Farms" and "Experimental Farms" much duplication of Provincial and Dominion effort. Further, part of the experimental work at the latter is, in our opinion (based on the personal experience of one of us), of an obsolete type, valuable in pioneer days but of very little value to the present-day farmers. Many examples could be given.

It is a fact that the Divisions which have received the heaviest cuts (Entomology and Plant Pathology) are just the divisions which are doing work of the most vital importance and work which does not duplicate Provincial effort. Further the standard of technical training and efficiency is very much higher in these divisions than in the Agricultural Services generally. "Politics" have never entered into their work as they have into some of the Agricultural Services. The value of many phases of their work is to-day receiving wide recognition, outside of Canada as well as within the Dominion.

The question of curtailing expenditures on Illustration Farms, etc. is fraught with political difficulties. If, however, the present Government is prepared to face such difficulties for the general good of Canada, this might be a very opportune time to undertake the reorganization of the entire agricultural services of the country. Criticism of the present system is not confined to those outside of it, and

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4a. We make our plea for reconsideration of the estimates the more hopefully because of the insignificant saving which this reduction affords. The amount assigned, for example, to the protection of the crops, pastures and forests of the country from disease and insect pests is only $325,000 (reduced from $700,000), a mere bagatelle compared with the values at stake.

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The Listener, February 10, 1932.

PRINCIPAL AND VICE-CHANCELLOR:
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FROM
THE PRINCIPAL AND VICE-CHANCELLOR,
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M E M O R A N D U M

RE THE PROPOSED REDUCTIONS IN THE AGRICULTURAL SERVICES OF THE DOMINION OF CANADA FOR THE YEAR 1932-33.

PRESENTED BY McGILL UNIVERSITY

ON BEHALF OF

MACDONALD COLLEGE
McGILL UNIVERSITY

April 29,
1 9 3 2 .

"Of the whole agricultural produce of our Empire, the insect army destroys at least one-tenth every year:- Canada in field and fruit crops and in timber loses thirty million sterling annually; Australia loses twenty million". These words were broadcast just a year ago by Sir Walter Morley Fletcher, who, surveying the resources of the Empire and the natural forces of insects, plagues and disease which continually threaten them, gave as his conviction that "of all the nations in the world none has so great a need as England of bringing biology into her statecraft".

MEMO: Re Proposed Reduction in Agricultural Services.

The efforts of the Government to effect economies in governmental services and departments are admittedly essential to the present situation and deserving of the utmost sympathy and support. The curtailment of merely routine or clerical work, or the postponement of projected public works will have no permanent effect upon the future development of the country. On the other hand, the most careful discrimination as affecting vital services is essential, to ensure that the basic framework of our organizations and the machinery necessary for future progress is not irreparably injured. It may be that reorganization is called for, but it must be recognized that readjustment of such intricate and interdependent units must be an exceedingly delicate task and probably could only be safely undertaken after much expert thought and advice, such as could only be given in some cases by a properly qualified independent commission.

It would appear that the sudden and drastic cuts proposed in certain of the public services, and notably in agriculture, are likely seriously to disorganize and unbalance the machinery that has been built up over a period of years in response to definite needs, to terminate established work of proven value, to disrupt the progress of promising investigations now in process of development and to prevent the inception of further needful work. Everyone recognized that never in the present century has agriculture been in such sore distress. The progress made during this century is due, in no small measure, to these very services, which, apparently are now to be seriously curtailed. However sympathetic and earnest a government may be in advancing the interests of agriculture, it is extremely doubtful if any form of assistance can

equal scientific service. Every country in the world recognizes that this is the best contribution that can be made to agriculture and even those in much greater distress than ourselves continue to build and extend this service.

It is too often erroneously believed that the benefit from the sums expended on scientific service for agriculture are enjoyed by the farming population alone. The fallacy of this can be seen in the fact that in all countries where the services of scientific agriculture have been enhanced, the proportion of income expended on food is rapidly declining, while at the same time the quality of food has been greatly improved. Nor is it to be supposed that this service has been limited to the field of agricultural production alone; nor, in addition, has it merely had to do with the marketing of farm products. Its ultimate effect may be most apparent in the sound development of the country's trade and commerce. Canada's position in the export trade for farm products has never been more critical than it is today. She finds herself with a surplus quantity of a larger number of products than ever before. It is imperative that they be sold abroad, but, with all of these she has to face the most formidable kind of competition. Behind every single product that is now in a position to command consideration in the export trade is to be found a network of services, including education, regulation and research, based largely on government services.

The seed potato industry of Canada is an excellent example of this fact. The research that determined the cause of the various diseases and the remedies, the educational work that resulted in the widespread adoption of such remedies, the organization that placed

the work on a sound business basis, the inspection that enables this business to be maintained and that keeps the established standards intact, are all the creation of scientific service. Thus an entirely new industry representing the product of 40,000 acres of intensively cultivated land owes its existence to the activities of the Department of Agriculture. The Canadian apple trade is an equally appropriate example. The research on which the pest control schedules employed by our fruit growers is based, is the work of trained specialists. Fifteen years ago only a fraction of the orchards were sprayed while today no commercial orchard is possible without spraying. The advanced cultural methods followed, even many of the superior varieties grown, the organization of the growers and the inspection of the product.have again, to a great extent, been dependent upon scientific service and official regulation. The result is only too clear at the present time. While neither potatoes nor apples command a high price, certified seed potatoes are now being sold at a premium of fifty per cent, and quality apples are among the few farm products that can be sold at a profit. We might equally well take any other agricultural product from wheat to eggs to illustrate the dependence of agriculture upon such service.

Our position with any of these productd is not yet so secure that we can afford to diminish our efforts in any way. Certain agricultural industries may be temporarily distressed and their product may now be of low value in the world's markets, but to relinquish their position might mean a great sacrifice ultimately and the services upon which they depend, once discontinued, or too drasticqlly curtailed, cannot be readily brought back again with the retutrn of more normal conditions.

Of late years, work of much potential value in certain fields has been undertaken and, indeed, has reached a point where returns of value are to be anticipated. It does not seem good business, therefore, to lose irrevocably all that has gone into this work in trying to tide the country over an admittedly serious temporary situation. In the present struggle for world markets our scientific services are the weapons upon which we must depend to enable us to overcome the competition we are compelled to face.

The severest blow that will be dealt by the proposed reductions, however, is to the human material, i.e. to the technical personnel. We do not refer to the personal effect upon the men themselves, but the effect on the future development of Canada. For years it has been urged that Canada lacked a sufficient body of trained men, that, in spite of what was being accomplished, a different and more thorough training, a new view-point and a different method of approach was necessary to enable us to meet modern competitive methods. This challenge was accepted by the universities, which, at considerable cost to themselves and with no appreciable assistance from the government, built up an organization capable of meeting these supposed needs. As a result, there is now available a more adequate force of competent young Canadians trained and equipped in Canada to solve Canadian problems.

The proposed sudden cessation of activities means that these men must find employment elsewhere and, not only that, but it will force others in a less advanced state of training to look elsewhere for their life work. The result will be that when this time of stress is over we shall neither have these same men nor others to take their places. These men will be irrevocably lost to us; the care

and effort that went into their training will be lost; the money that they and the country have spent oh their special education will be lost. A geneticist, a plant pathologist, a chemist, or an entomologist is not something that can be improvised in a few months or years, for the fact should not be lost sight of that those who are now completing their work, or have but recently completed it, are not only the result of a long and more careful process of training, but also of a more rigid system of selection than ever before. The country needs their services now e en more than in prosperous times, when wastefulness is less harmful.

One effect of the proposed action is the elimination of large numbers of the so-called temporary staff. Many of these are the very men who by virtue of their training are ca able of rendering a very special service and many of them constitute the connecting link between the farmer and science. Temporary helpers are the cheapest and most effective type of assistance available to enable the work of the higher bfficers to find expression in field service, without which the farmer contact is largely lost. Moreover, it is from this group that many of the effective workers of the future should come. Would it not therefore be sounder policy in these trying times to take stock of the situation with a view to determining not only what services should be eliminated or curtailed but also those that should be conserved and even strengthened?

In addition to the foregoing, a serious blow is struck at the morale of the remaining staff, who see the efforts of years brought to nothing. The spirit of an organization is not something that can be built up at a moment's notice and it

is this factor that will bear most heavily on the most efficient and valued members of departments. If we have faith in the future of our country, may we not well question whether we are justified in paying so heavy a price to tide us over a merely temporary emergency?

Comments on Proposed Reduction in Dominion Grant
for Agriculture.

In considering the reduction in the Agricultural Grant for the Dominion Department of Agriculture for 1932-33, one is confronted with the difficulty of not knowing exactly how it will apply within the various branches. It would appear, however, that for the department as a whole the cut of some 33% in the appropriation is one of the largest proposed in the Government Service.

With some of the proposed reductions one cannot disagree in these times, in fact one might be tempted to make them larger did circumstances permit. The grant of $150,000 for a World Grain Congress under present conditions would be hard to justify were we not committed to it. The reduced assistance to Fairs will not be popular but it is possible that this form of agricultural assistance may have been overdone in the past. In any case, it can well be reduced now and Exhibitions can find various ways of making the necessary adjustments.

One finds in the estimates that one important branch, namely, Live Stock, is cut less than 10%, while another, Administration of Destructive Insect and Pest Act, considered vital from a crop production standpoint is cut over 50%. The certified seed potato business, the production of quality fruit, and farm crop protection against injurious insects depend directly upon this service. A fifty percent service will certainly involve grave risks.

The Experimental Farms Branch is cut some $800,000, or approximately 39%, the Health of Animals Branch, a like amount, or

35%. By limiting the area of Tuberculosis eradication work it would seem that with the amount allotted to the Health of Animals Branch might carry on its important health protective service without undue disturbance. But in the case of the Experimental Farms which constitute the major investigation and related services of the department, such a substantial cut is likely to cripple the work as a whole, if the reduction is to take the form of general curtailment. It is believed by many familiar with the work that the effect of such a drastic cut can only be met satisfactorily by the elimination of a number of farms. Such a course naturally would be unpopular with those immediately affected, including the representatives of the constituencies in which farms might be discontinued, but such opposition should not be allowed to jeopardize the value of the work as a whole.

Farm Economics is a new branch and represents a type of work not sufficiently developed in Canada. It is being greatly stressed in other countries where information regarding types of farm organization, operation costs, production and marketing trends, and the commercial relations of agriculture is proving of great value, not only to farmers but to business men and Governments as well. It is regrettable that such a small appropriation should be reduced 28%, or from $12,000.00 to $8,600.00, and with two men on the present staff with salaries of $7,620.00 it is difficult to understand how they can function effectively.

It is understood that all employees of the department who are classified in the category known as "Temporary" have been notified that their services would not be required after March 31st.

This is a more drastic step than it might seem because many of those affected, while classed as "Temporary" have actually been employed in the Service for a considerable period and are doing extremely valuable and highly specialized work, not to mention that many of them are married men with families. I t may be said that these so-called temporary men constitute largely the front line Service, in that they are field operators in immediate contact with farm conditions, and farm people. They add tremendously to the value of the permanent staff because much of the work, while planned and directed by the permanent staff is given effect through those in the "Temporary" category. Young men, with the most recent and the best training, are to be found in this category, and incidentally are receiving the lowest rate of pay in the department.

The Dominion Government carries the largest single share of agricultural work in Canada. This Service is the greatest contribution the Government makes to agriculture, and the Government, thanks to the Universities, is now in a position to find highly trained young Canadians for that service. To drop all the younger men in the way proposed must mean not only serious disorganization in many of the Services, but also the loss for all time of a number of the best trained young men in it, and the discouraging of others who contemplate entering it. It is therefore not only the immediate but the ultimate effect as well that should be considered.

PRINCIPAL AND VICE-CHANCELLOR:
SIR ARTHUR W. CURRIE, G.C.M.G., K.C.B.

FROM
THE PRINCIPAL AND VICE-CHANCELLOR,
McGILL UNIVERSITY,
MONTREAL.

M E M O R A N D U M

RE THE PROPOSED REDUCTIONS IN THE AGRICULTURAL SERVICES OF THE DOMINION OF CANADA FOR THE YEAR 1932-33.

PRESENTED BY McGILL UNIVERSITY

ON BEHALF OF

MACDONALD COLLEGE
McGILL UNIVERSITY

April 29,
1932.

"Of the whole agricultural produce of our Empire, the insect army destroys at least one-tenth every year:- Canada in field and fruit crops and in timber loses thirty million sterling annually; Australia loses twenty million". These words were broadcast just a year ago by Sir Walter Morley Fletcher, who, surveying the resources of the Empire and the natural forces of insects, plagues and disease which continually threaten them, gave as his conviction that "of all the nations in the world none has so great a need as England of bringing biology into her statecraft".

MEMO: Re Proposed Reduction in Agricultural Services.

The efforts of the Government to effect economies in governmental services and departments are admittedly essential to the present situation and deserving of the utmost sympathy and support. The curtailment of merely routine or clerical work, or the postponement of projected public works will have no permanent effect upon the future development of the country. On the other hand, the most careful discrimination as affecting vital services is essential, to ensure that the basic framework of our organizations and the machinery necessary for future progress is not irreparably injured. It may be that reorganization is called for, but it must be recognized that readjustment of such intricate and interdependent units must be an exceedingly delicate task and probably could only be safely undertaken after much expert thought and advice, such as could only be given in some cases by a properly qualified independent commission.

It would appear that the sudden and drastic cuts proposed in certain of the public services, and notably in agriculture, are likely seriously to disorganize and unbalance the machinery that has been built up over a period of years in response to definite needs, to terminate established work of proven value, to disrupt the progress of promising investigations now in process of development and to prevent the inception of further needful work. Everyone recognized that never in the present century has agriculture been in such sore distress. The progress made during this century is due, in no small measure, to these very services, which, apparently are now to be seriously curtailed. However sympathetic and earnest a government may be in advancing the interests of agriculture, it is extremely doubtful if any form of assistance can

equal scientific service. Every country in the world recognises that this is the best contribution that can be made to agriculture and even those in much greater distress than ourselves continue to build and extend this service.

It is too often erroneously believed that the benefit from the sums expended on scientific service for agriculture are enjoyed by the farming population alone. The fallacy of this can be seen in the fact that in all countries where the services of scientific agriculture have been enhanced, the proportion of income expended on food is rapidly declining, while at the same time the quality of food has been greatly improved. Nor is it to be supposed that this service has been limited to the field of agricultural production alone; nor, in addition, has it merely had to do with the marketing of farm products. Its ultimate effect may be most apparent in the sound development of the country's trade and commerce. Canada's position in the export trade for farm products has never been more critical than it is today. She finds herself with a surplus quantity of a larger number of products than ever before. It is imperative that they be sold abroad, but, with all of these she has to face the most formidable kind of competition. Behind every single product that is now in a position to command consideration in the export trade is to be found a network of services, including education, regulation and research, based largely on government services.

The seed potato industry of Canada is an excellent example of this fact. The research that determined the cause of the various diseases and the remedies, the educational work that resulted in the widespread adoption of such remedies, the organization that placed

the work on a sound business basis, the inspection that enables this business to be maintained and that keeps the established standards intact, are all the creation of scientific service. Thus an entirely new industry representing the product of 40,000 acres of intensively cultivated land owes its existence to the activities of the Department of Agriculture. The Canadian apple trade is an equally appropriate example. The research on which the pest control schedules employed by our fruit growers is based, is the work of trained specialists. Fifteen years ago only a fraction of the orchards were sprayed while today no commercial orchard is possible without spraying. The advanced cultural methods followed, even many of the superior varieties grown, the organization of the growers and the inspection of the product have again, to a great extent, been dependent upon scientific service and official regulation. The result is only too clear at the present time. While neither potatoes nor apples command a high price, certified seed potatoes are now being sold at a premium of fifty per cent, and quality apples are among the few farm products that can be sold at a profit. We might equally well take any other agricultural product from wheat to eggs to illustrate the dependence of agriculture upon such service.

Our position with any of these products is not yet so secure that we can afford to diminish our efforts in any way. Certain agricultural industries may be temporarily distressed and their product may now be of low value in the world's markets, but to relinquish their position might mean a great sacrifice ultimately and the services upon which they depend, once discontinued, or too drastically curtailed, cannot be readily brought back again with the return of more normal conditions.

Of late years, work of much potential value in certain fields has been undertaken and, indeed, has reached a point where returns of value are to be anticipated. It does not seem good business, therefore, to lose irrevocably all that has gone into this work in trying to tide the country over an admittedly serious temporary situation. In the present struggle for world markets our scientific services are the weapons upon which we must depend to enable us to overcome the competition we are compelled to face.

The severest blow that will be dealt by the proposed reductions, however, is to the human material, i.e. to the technical personnel. We do not refer to the personal effect upon the men themselves, but the effect on the future development of Canada. For years it has been urged that Canada lacked a sufficient body of trained men, that, in spite of what was being accomplished, a different and more thorough training, a new view-point and a different method of approach was necessary to enable us to meet modern competitive methods. This challenge was accepted by the universities, which, at considerable cost to themselves and with no appreciable assistance from the government, built up an organization capable of meeting these supposed needs. As a result, there is now available a more adequate force of competent young Canadians trained and equipped in Canada to solve Canadian problems.

The proposed sudden cessation of activities means that these men must find employment elsewhere and, not only that, but it will force others in a less advanced state of training to look elsewhere for their life work. The result will be that when this time of stress is over we shall neither have these same men nor others to take their places. These men will be irrevocably lost to us; the care

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MINISTER OF AGRICULTURE
CANADA

S

Ottawa, May 17th, 1932.

Sir Arthur W. Currie, G.C.M.G., K.C.B.,
Principal and Vice-Chancellor,
McGill University,
Montreal, Quebec.

Dear Sir Arthur:

I appreciate very much receiving your letter of 4th May, together with memoranda in connection with the proposed reduction in agricultural estimates.

Yours very truly,

R. Weir.

May 19th, 1932.

Honourable Robert Weir,
Minister of Agriculture,
O t t a w a .

My dear Minister,

I hope that some time after the session closes and before the Economic Conference begins, you may find time to spend half a day at Macdonald College. There is a good deal of useful work in progress there which would interest you, and you know that we regard one of our duties to be giving what help we can to you to improve the condition of agriculture in this Province.

I know that you have many worries, but perhaps we can be of some real assistance. If you find you can come, please let me know, giving me what warning you can.

Ever yours faithfully,

Principal.

MINISTER OF AGRICULTURE
CANADA

D.

Ottawa, 23rd May, 1932.

Sir Arthur W. Currie, G.C.M.G., K.C.B.,
Principal and Vice-Chancellor,
McGill University,
Montreal, Que.

Dear Sir Arthur ,-

I thank you for your very kind letter of the 19th instant.

I assure you that it would please me very much to accept your invitation to visit MacDonald College. Immediately following prorogation of Parliament I expect to leave for Western Canada and as yet cannot say how long I will be in the West, and, therefore, am unable to make any definite plans before the Economic Conference. However, I shall certainly keep this invitation in mind and hope the opportunity will present itself for me to make this visit.

Yours very truly,

R. Weir.

May 28th, 1932.

Honourable Robert Weir,
Minister of Agriculture,
Department of Agriculture,
O t t a w a .

My dear Minister,

Let me thank you for your letter of the 23rd of May. I am most happy to think we may have the pleasure of seeing you at Macdonald College.

Regarding the change in the grants for Agriculture, will you please ask your Secretary to let me know just exactly what the final allighment was.

With all kind wishes,

I am,

Ever yours faithfully,

Principal.

Canada

OFFICE OF THE
Live Stock Commissioner

NM

Department of Agriculture
Ottawa

June 21, 1932.

Dear General Currie:-

In the absence of the Honourable Mr. Weir in Western Canada, the paragraph from your recent letter, reading as follows, has been referred to me by the Assistant Private Secretary to the Minister:-

> "Regarding the change in the grants for Agriculture, will you please ask your Secretary to let me know just exactly what the final allignment was."

I am not just clear as to the meaning of the above quotation, but I am assuming that you have reference to federal assistance to fairs and exhibitions.

Previous to the present year, "A" or the larger fairs in Canada received from this Department a flat grant of $5,000, and, in addition, building grants were made to several exhibitions. "B" or the smaller fairs received a flat grant of $1,500, and winter & spring shows received a grant of up to $5,000, based upon the expenditure in prize money in the utility classes of live stock and poultry. In the case of winter fairs, a number of building grants were also made in addition to the regular grants.

This year, due to curtailed appropriations available for exhibitions, the grants to "A" fairs and to winter & spring shows were reduced to $2,500. "B" grants remained the same, namely $1,500, although it was necessary to eliminate several which had previously received a grant.

For your information, I am attaching a list of all fairs in Quebec which will receive financial assistance from this Department this year.

I trust that the information given is what you require. If I have misinterpreted your request, I shall be very pleased to give any further information you require.

Yours sincerely,

Geo. B. Rothwell,
Live Stock Commissioner.

General, Sir Arthur W. Currie,
Principal and Vice-Chancellor,
McGill University,
MONTREAL, P.Q.

QUEBEC

"A" Fairs

Canada's Great Eastern Exhibition,
Secretary, Colonel S. E. Francis,
Sherbrooke.

Provincial Exhibition of Quebec,
Secretary, Geo. Morisset,
Quebec.

St. Lawrence Valley Exhibition,
Secretary, Dr. J. Vigneau,
Three Rivers.

Valleyfield Exhibition,
Secretary, J. Malouin,
Valleyfield.

"B" FAIRS

Shefford County Agricultural Exhibition,
Secretary, H. B. McDonald,
Waterloo.

St. Scholastique Exhibition,
Secretary, J. L. Beaudet,
St. Scholastique

St. Hyacinthe Agricultural Exhibition,
Secretary, A. R. Demers,
St. Hyacinthe.

Stanstead County Exhibition,
Secretary, H. G. Curtis,
Ayer's Cliff.

WINTER FAIRS & SPRING SHOWS

Ormstown Exhibition,
Secretary, W. G. McGerrigle,
Ormstown.

Canada's Great Eastern Winter Show,
Secretary, Sydney E. Francis,
Sherbrooke.

Lachute Spring Fair,
Secretary, Alex.Bothwell,
Lachute.

June 30, 1932.

George D. Rothwell, Esq.,
Live Stock Commissioner,
Department of Agriculture,
O t t a w a .

Dear Mr. Rothwell,

Thank you for your letter of June 21st, but the matter about which I was enquiring was not specially the grant for Fairs and Exhibitions.

I was in correspondence with the Honourable Mr. Weir about the reductions in the grant for the Dominion Department of Agriculture for 1932-33, particularly as they would affect the scientific services.

What I would really like to know is the amount of the appropriation for the Department of Agriculture for 1932-33, as finally passed by the House, and how it has been sub-divided.

Yours faithfully,

Principal

MINISTER OF AGRICULTURE
CANADA

RL.

Ottawa, July 8th, 1932.

Sir Arthur W. Currie, G.C.M.G., K.C.B.,
Principal and Vice-Chancellor,
McGill University,
Montreal, P.Q.

Dear Sir,

Your letter of the 30th ultimo, addressed to the Live Stock Commissioner, and having reference to grants to agriculture has been referred to me for attention.

I am including herewith a copy of the Estimates for the fiscal year ending March 31st, 1933, and would call your attention to votes numbered as follows:

#3 on page 8 of the Main Estimates
#39 - 54 on page 20 of the Main Estimates
#327 - 336 on page 2 of the Supplementary Estimates

I trust that this will give you the information you require.

Yours very truly,

acp

D. L. Burgess
Private Secretary.

DOMINION GRANTS FOR AGRICULTURE

	1932-33	1931-32	1930-31	1929-30	1928-29	1921-22
	$ ¢	$ ¢	$ ¢	$ ¢	$ ¢	$ ¢
Dairying	231,300.00	295,000.00	295,000.00	295,000.00	265,000.00	175,000.00
Cold Storage Warehouses	200,000.00	453,708.08	500,000.00	467,837.00	30,000.00	26,000.00
Fruit	390,200.00	502,200.00	506,000.00	336,000.00	290,000.00	145,000.00
Seed, feed & fertilizer control, Seed Fairs, etc.	413,200.00	573,000.00	573,000.00	625,000.00	375,000.00	260,000.00
For Exp't's in dehydration of fruits & vegetables -	10,000.00	20,000.00	20,000.00	29,000.00	10,000.00	
Live Stock	1,380,000.00	1,530,000.00	1,630,000.00	1,530,000.00	1,480,000.00	1,000,000.00
Experimental Farms	1,492,000.00	2,325,000.00	2,150,000.00	2,050,000.00	1,900,000.00	1,272,639.50
Assistance to Fairs & Exhibitions	350,000.00	650,000.00				
Health of Animals	1,654,000.00	2,550,000.00	2,850,000.00	2,950,000.00	2,270,000.00	1,710,000.00
Entomology	25,000.00	35,000.00	30,000.00	25,000.00	25,000.00	26,000.00
Administration of Destructive Insect & Pest Act	328,300.00	705,000.00	675,000.00	580,000.00	530,000.00	194,000.00
Publications	7,500.00	38,000.00	31,000.00	23,600.00	24,000.00	34,500.00
International Institute of Agriculture	10,000.00	13,500.00	13,500.00	13,500.00	13,500.00	10,000.00
Farm Economics	8,600.00	12,000.00	12,000.00	10,000.00		
Contributions to Empire Bureaux	21,000.00	25,000.00	25,000.00	25,000.00		
Grant to World's Grain Congress	150,000.00	200,000.00	100,000.00	100,000.00		
Other Appropriations		41,163.66				
Salary & Expenses of Agr. Produce Marketing Agent in Great Britain			15,000.00	15,000.00	15,000.00	
Grant to World's Poultry Congress			35,000.00	25,000.00	25,000.00	
Grant to Dept. Agr. of N.B. on acct. of Short Course debt, Fredericton			9,295.24		5,000.00	
For Pre-cooling Warehouse facilities			20,000.00	25,000.00	15,000.00	
To enquire into Live Stock Industry of Canada through Co-optve.Marketing			25,000.00			
Special Compensation for Diseased Animals			548.20	4,390.46	1,770.99	
Grant to Dept. Agr. Nova Scotia				8,389.08	20,000.00	
Testing Cows, destroying diseased animals					100,000.00	
Administration, Agr.Instruction Act						10,000.00
Purchase of Seed Grain						500,000.00
Stock grazing & feeding						50,000.00
Agr. Instruction Act - 3-4 Geo. V.						1,104,569.85
TOTAL	6,671,100.00	9,968,571.74	9,515,343.44	9,137,716.54	7,394,270.99	6,517,709.35

Dominion Grants for Agriculture.

	1932-33. $ c	1931-32. $ c	1930-31 $ c	1929-30. $ c	1928-29. $ c	1921-22. $ c
Dairying	231300 00	295000 00	295000 00	295000 00	265000 00	175000 00
Cold Storage warehouses	200000 00	453708 08	500000 00	467837 00	30000 00	26000 00
Fruit	390200 00	502200 00	506000 00	336000 00	290000 00	145000 00
Seed, feed & fertilizer control, Seed Fairs, etc. -	413200 00	573000 00	573000 00	625000 00	375000 00	260000 00
For Expts. in dehydration of fruits & vegetables -	10000 00	20000 00	20000 00	29000 00	10000 00	
Live Stock	1,380000 00	1,530000 00	1,630000 00	1,530000 00	1,480000 00	1,000000 00
Experimental Farms	1,492000 00	2,325000 00	2,150000 00	2,050000 00	1,900000 00	1,272639 50
Assistance to Fairs and Exhibitions -	350000 00	650000 00				
Health of Animals	1,654000 00	2,550000 00	2,850000 00	2,950000 00	2,270000 00	1,710000 00
Entomology	25000 00	35000 00	30000 00	25000 00	25000 00	26000 00
Administration of Destructive Insect & Pest Act -	328300 00	705000 00	675000 00	580000 00	530000 00	194000 00
Publications	7500 00	38000 00	31000 00	23600 00	24000 00	34500 00
International Institute of Agr.	10000 00	13500 00	13500 00	13500 00	13500 00	10000 00
Farm Economics	8600 00	12000 00	12000 00	10000 00		
Contributions to Empire Bureaux	21000 00	25000 00	25000 00	25000 00		
Grant to World's Grain Congress	150000 00	200000 00	100000 00	100000 00		
Other Appropriations		4116366				
Salary & Expenses of Agr. Produce Marketing Agent in Gt. Britain			15000 00	15000 00	15000 00	
Grant to World's Poultry Congress			35000 00	25000 00	25000 00	
Grant to Dept. Agr. of N.B. on acct. of Short Course Debt, Fredericton			9295 24		5000 00	
For Pre cooling warehouse facilities			20000 00	25000 00	15000 00	
To enquire into Live Stock Industry of Canada thru Co-optve. Marketing			25000 00			
Special Compensation for Diseased Animals -			5482 0	43904 6	1770 99	
Grant to Dept. Agr. Nova Scotia - Testing Cows, destroying diseased animals -				8389 08	20000 00	
					100000 00	
Administration Agr. Instruction Act.						10000 00
Purchase of Seed Grain -						500000 00
Stock grading & feeding -						50000 00
Agr. Instruction Act - 3-4. Geo. V.						1,104569 85
Total	$ 6,671100 00	$ 9,968571 74	$ 9,515343 44	$ 9,137716 54	$ 7,394270 99	$ 6,517709 35

SUPPLEMENTARY ESTIMATES

FOR THE FISCAL YEAR ENDING MARCH 31, 1933

No. of Vote	Service	$ cts.	$ cts.	$ cts
	CHARGES OF MANAGEMENT			
318	Printing, advertising, inspection, express, etc.—Further amount required	.....	.....	60,000 00
	CIVIL GOVERNMENT			
319	*Auditor General's Office*— Contingencies— Clerical and other assistance—Further amount required	.....	5,000 00	
320	*Post Office*— Salaries— To provide for the appointment of Arthur Lalonde as Solicitor, Post Office Department, at $4,320 per annum, effective April 1, 1932...	4,320 00		
	Less ten per cent	432 00		
			3,888 00	
321	*Secretary of State*— Contingencies— Printing and Stationery—Further amount required	.....	1,592 00	
				10,480 00
	ADMINISTRATION OF JUSTICE			
322	Grant to Charles Morse, K.C., Registrar, Exchequer Court of Canada, of the difference between his superannuation allowance and his salary for a period of six months	.....	.....	750 00
	PENITENTIARIES			
323	Cost of administration, construction, purchase of land, supplies and equipment, maintenance and discharge of inmates of penitentiaries—Further amount required	.....	100,000 00	
	Additional gratuity to J. C. Ponsford, late Warden, Kingston Penitentiary	.....	1,326 12	
				101,326 12
	LEGISLATION			
	THE SENATE			
324	To provide for the payment of the full sessional indemnity for the session of 1932 to members of the Senate for days lost through absence due to public business, by illness, or on account of death. Payment to be made as the Treasury Board may direct	10,540 00		
	To provide for further expenses on account of the Beauharnois Special Committee of the Senate...	12,127 15		
	Salaries and contingent expenses—Further amount required	2,000 00		
			24,667 15	

No. of Vote	Service	$ cts.	$ cts.	$ cts.
	LEGISLATION—*Concluded*			
	HOUSE OF COMMONS			
	Publishing debates—Further amount required	20,000 00		
325	To provide for the full sessional indemnity to Members of the House of Commons—days lost through absence caused by illness, official public business, or on account of death during the present session—notwithstanding anything to the contrary in Chapter 147 of the Revised Statutes, 1927, An Act respecting the Senate and House of Commons, or any amendments thereto. Payments to be made as the Treasury Board may direct	25,000 00		
	To purchase, for the use of Senators and Members of Parliament, 360 copies of the Canadian Annual Review, edition of 1931-32	2,340 00		
	Estimates of the Sergeant-at Arms—Further amount required	7,574 25		
			54,914 25	
	GENERAL			
326	Printing, printing paper and binding—Further amount required	.....	20,000 00	
				99,581 40
	AGRICULTURE			
327	For the erection of an onion warehouse at Kelowna, B.C. (Revote)	.....	30,000 00	
328	Experimental Farms—Further amount required	.....	50,000 00	
329	Administration of the Destructive Insect and Pest Act—Further amount required	.....	315,000 00	
330	Assistance to Fairs and Exhibitions—Further amount required	.....	90,000 00	
331	Health of Animals, administration of the Animal Contagious Diseases Act and the Meat and Canned Foods Act—Further amount required	.....	250,000 00	
332	Fruit—Further amount required	.....	31,000 00	
333	Grant to the Canadian Horticultural Council	.....	5,000 00	
334	Farm Economics—Further amount required	.....	1,000 00	
335	For the payment of grants on account of cold storage warehouses approved for subsidy under the Cold Storage Act, by the Governor General in Council, but afterwards found not to comply with all the provisions of that Act	.....	125,000 00	
336	Compensation for animals tested under the Animal Contagious Diseases Act, and dying before it was possible to slaughter them, under the provisions of the Act, as follows:—			
	Carlyle, Walter, Morewood, Ont	38 00		
	Beauregard, Emile, St. Christine, Que	30 00		
	Gauvin, Mrs. Elisee, St. Edwidge, Que	4 00		
	Whattam, Harry, R. 4, Picton, Ont	36 00		
	Ladouceur, Jos., St. Edwidge, Que	4 00		
	Madore, Georges, St. Edwidge, Que	6 00		
	Proulx, Leo., St. Edwidge, Que	20 00		
	Chapdelaine, Lionel, St. Edwidge, Que	6 00		
	Scalabrini, Jos., St. Edwidge, Que	4 00		
	Boisvert, Jos., St. Hermenegilde, Que	14 00		
	Gagne, Sylva, St. Edwidge, Que	20 00		
	Fecteau, Leandre, St. Edwidge, Que	6 00		
	Marquis, Julien, St. Edwidge, Que	6 00		
	Gaulin, Edouard, St. Edwidge, Que	34 00		
	Chapdelaine, Albert, St. Edwidge, Que	18 00		
	Grandbois, Louis, St. Edwidge, Que	6 00		
	Lemieux, Jos., Embrun, Ont	44 00		
	Lynch, W. J., Chesterville, Ont	38 00		
	Kelly, Murray, Chesterville, Ont	32 00		
	Eby, Irwin, S. R. 2, Kitchener, Ont	76 00		
	Strachan, J. F., Miniota, Man	26 00		
	Scalabrini, Alf., St. Edwidge, Que	32 00		

No. of Vote	Service	$ cts.	$ cts.	$ cts.
	AGRICULTURE—*Concluded*			
	Bell, E. L., Peterboro, Ont.	94 00		
	Gunter, A. L., White's Cove, N.B.	20 00		
	Douglas, Jas. & Son, Caledonia, Ont.	88 00		
	Omichinski, J. A., Kawende, Man.	26 00		
	McMillan, Ford, Finch, Ont.	38 00		
	Gagnon, Jos., St. Henri de Taillon, Que.	32 00		
	Lachance, Horace, St. Thomas Didyme, Que.	32 00		
	Chaloux, Arthur, St. Edwidge, Que.	18 00		
	Scalabrini, Alf., St. Edwidge, Que.	28 00		
	Crete, Moise, St. Malo d'Auckland, Que.	6 00		
	Moreau, Florent, St. Malo d'Auckland, Que.	20 00		
	Chaloux, Philias, St. Edwidge, Que.	10 00		
	Crete, Donat, St. Malo d'Auckland, Que.	40 00		
	Brule, Odilon, Rigaud, Que.	20 00		
			972 00	
				897,972 00
	IMMIGRATION AND COLONIZATION			
337	Immigration salaries and contingencies—Further amount required		48,000 00	
338	Chinese Immigration, salaries and contingencies—Further amount required		3,300 00	
339	Relief of distressed Canadians outside of Canada—Further amount required		1,000 00	
				52,300 00
	SOLDIER AND GENERAL LAND SETTLEMENT			
340	To provide for such advances as may be approved by the Director of Soldier Settlement for the payment of arrears of 1931 taxes on Soldier Settlement properties occupied by soldier settlers, British family settlers or other settlers and on reverted properties leased during the year 1931, pursuant to agreement with the Unions of Municipalities of Alberta, Saskatchewan and Manitoba dated March 29, 1930			394,497 00
	PENSIONS			
341	Salaries and contingent expenses of the Board of Pension Commissioners for Canada—Further amount required			40,000 00
	NATIONAL DEFENCE			
	Militia Services—			
342	Cadet Services—To meet balance of commitments.	260,000 00		
343	Non-Permanent Active Militia—Further amount required	50,000 00		
			310,000 00	
	General—			
344	Miscellaneous: To authorize refund to the widow of the late Sergeant-Major Henry Hinde of his contributions to the militia pension fund		919 32	
				310,919 32
	PUBLIC WORKS—CHARGEABLE TO CAPITAL			
	HARBOURS AND RIVERS			
345	Fort William and Port Arthur Harbours—Further amount required			11,000 00

No. of Vote	Service	$ cts.	$ cts.	$ cts
	PUBLIC WORKS—CHARGEABLE TO INCOME			
	PUBLIC BUILDINGS			
	Quebec			
346	Montreal—Postal Station at Rosemount, to purchase site	15,000 00		
	Ste. Anne de Bellevue—Public Building—Under Contract—Further amount required—Revote	8,000 00		
			23,000 00	
	Ontario			
347	London Armouries—Government's share of cost of local improvements—Further amount required		2,600 00	
	Manitoba			
348	Brandon Public Building—Fittings, alterations and improvements—Revote		2,000 00	
	Saskatchewan			
349	Qu'Appelle—To purchase Union Bank Building for Postal purposes		3,000 00	
	Alberta			
350	Calgary—Public Building—Under Contract—Revote		7,000 00	
	British Columbia			
351	Vancouver—Site for public building addition—To provide for payment of $100,000 of which $49,484.76 is to be made payable to the Montreal Trust Company and C. M. O'Brian, agent of the Minister of Justice, and the balance payable jointly to Victor Spencer and C. M. O'Brian, agent of the Minister of Justice		100,000 00	
	Public Buildings Generally			
352	Ottawa—Photographic accommodation for the Royal Canadian Mounted Police	1,500 00		
	Ottawa—Paving roadways, etc	5,000 00		
	Ottawa—C. Jackson Booth, for restoration of Transportation Building	19,925 00		
	Ottawa—Laboratory for Department of Mines, Booth St., and alterations—Revote	4,000 00		
	Ottawa—Central Heating Plant—Improvements and repairs	7,700 00		
	Ottawa—Connaught Building—Alterations and improvements	3,000 00		
			41,125 00	
	Rents, Repairs, Furniture, Heating, Etc.			
353	*Ottawa Public Buildings and Grounds*			
	Departments Generally—Char Service—Further amount required to provide for taking over Char Service at the Geodetic and Observatory buildings formerly paid by Interior Department	3,500 00		
	Telephone Service—Further amount required	7,500 00		
	Heating, including salaries of engineers, firemen and watchmen—Further amount required	10,000 00		
	Dominion Public Buildings			
	Salaries of Caretakers, Engineers, Firemen, etc.—Further amount required	40,000 00		
	Light and Power—Further amount required	33,500 00		
			94,500 00	

No. of Vote	Service	$ cts.	$ cts.	$ cts.
	PUBLIC WORKS—CHARGEABLE TO INCOME—*Concluded*			
	HARBOURS AND RIVERS			
	Nova Scotia			
354	Little Anse—Breakwater—Under contract—To complete payments	3,200 00		
	Lunenburg—Dredging	17,000 00		
	Malagash—Wharf improvements—Revote	5,000 00		
			25,200 00	
	Prince Edward Island			
355	Cardigan—To provide wharf accommodation		6,000 00	
	New Brunswick			
356	Dredging Miramichi River		12,000 00	
	Quebec			
357	Beauharnois—Wharf reconstruction—Under contract—Revote	2,000 00		
	Temiskaming Dam—Reconstructing Quebec side	70,000 00		
			72,000 00	
	Ontario			
358	Byng Inlet—Dredging—Further amount required to complete payments on contracts	500 00		
	Toronto—Harbour improvements—Revote $12,000	24,000 00		
			24,500 00	
	British Columbia			
359	Arrowhead—Extension of landing slip	5,000 00		
	Fraser River—Repairs to protection work at Rosedale, the Provincial Government and Municipality of Chilliwack each to contribute a like amount	800 00		
	Fraser, Skeena and Naas Rivers—Operation and maintenance of snagboats	25,000 00		
	Ganges—Wharf improvements	1,800 00		
			32,600 00	
	DREDGING			
360	Dredging—Ontario and Quebec—Further amount required		50,000 00	
	TELEGRAPH AND TELEPHONE LINES			
	Nova Scotia			
361	Telephone line from Cain Mountain to Estmere	860 00		
	Purchase of telegraph pole line between Troy and Seaside	1,200 00		
	New Brunswick			
362	Telephone line from Middle Caraquet to St. Simon	950 00		
	Saskatchewan and Alberta			
363	Pelican—Building for Telegraph Service	900 00		
	Building for Telegraph Service on Fort McMurray line	900 00		
	British Columbia			
364	Telephone line from Fort St. John to Montney	3,500 00		
			8,310,00	
	MISCELLANEOUS			
365	Surveys and Inspections—Further amount required		15,000 00	
				518,S35 C0

No. of Vote	Service	$ cts.	$ cts.	$ cts.
	MAIL SUBSIDIES AND STEAMSHIP SUBVENTIONS			
366	Additional amount required to provide, as authorized by the Governor in Council, for coastal subsidies and to meet obligations under existing contracts			82,497 50
	OCEAN AND RIVER SERVICE			
367	Hydrographic Survey—To provide for the balance of advance, unaccounted for, to the late G. A. Bachand, Officer-in-Charge of C.G.S. *Cartier* and Gulf of St. Lawrence Hydrographic Survey, who was drowned while on duty on June 8, 1931		899 61	
368	Radio Service—Further amount required		500,000 00	
369	Amount to provide for expenses in connection with the representation of Canada at the International Radio Conference at Madrid, Spain, in September, 1932		15,000 00	
				515,899 61
	LIGHTHOUSE AND COAST SERVICE			
370	Maintenance and repairs to wharves—Further amount required			5,000 00
	SCIENTIFIC INSTITUTIONS			
	DEPARTMENT OF MARINE			
371	Meteorological Service, including Magnetic Observatory—Further amount required			100,000 00
	STEAMBOAT INSPECTION			
372	Steamboat Inspection—Further amount required			15,080 00
	MINES AND GEOLOGICAL SURVEY			
373	Geological Survey— For publications of English and French editions of reports, maps, illustrations, etc.—Further amount required		10,000 00	
374	Mines Branch— For publications, English and French, purchase of books, instruments, miscellaneous assistance and contingencies—Further amount required		10,000 00	
				20,000 00
	LABOUR			
375	Annuities Act—Further amount required to provide for commissions for sale of Annuities		25,000 00	
376	To reimburse the Dominion Government Annuities Fund to cover amounts misappropriated by Annuity Agent C. G. Beveridge, Vancouver, B.C.		42,000 00	
				67,000 00
	PUBLIC PRINTING AND STATIONERY			
377	Printing and binding official publications for sale and distribution to departments and the public—Further amount required			7,500 00
	INDIANS			
378	To provide for expenses connected with the administration of Indian Affairs, including salaries, supplies, relief, medical attendance, hospitalization, dwellings, agricultural activities, surveys, roads, bridges, irrigation, dyking, education, etc.—Further amount required			219,100 00

No. of Vote	Service	$ cts.	$ cts.	$ cts.
	ROYAL CANADIAN MOUNTED POLICE			
379	Maintenance—Further amount required			200,000 00
	GOVERNMENT OF THE NORTHWEST TERRITORIES			
380	Radio Services—For the maintenance and operation of the Northwest Territories Radio System—Further amount required			33,000 00
	DOMINION LANDS, PARKS, ETC.			
381	To cover professional assistance engaged by the Governor in Council to assist Departmental officers who are advising *re* International and Boundary Waterway questions		5,000 00	
	To provide for the expenses incurred under the Lake of the Woods Control Board Act, 1921, and under the agreement between the Dominion, Ontario and Manitoba, confirmed by the Lac Seul Conservation Act, 1928, for the construction of a dam at the outlet of Lac Seul and its operation by the Lake of the Woods Control Board, money expended to be reimbursed to the Dominion by the Province of Manitoba under the terms of paragraph 8 of the Manitoba Transfer Agreement		21,000 00	
	Advancement of forest conservation in Canada—Further amount required		12,000 00	
	Amount required to cover the payment of retiring leave to officials other than those on Civil Government		11,000 00	
				49,000 00
	PENSIONS AND NATIONAL HEALTH			
382	Grant to Last Post Fund—Further amount required		5,000 00	
383	War Veterans' Allowances—Further amount required		200,000 00	
				205,000 00
	MISCELLANEOUS			
384	Grant to Executive of the World's Postal Union towards their expenses when they meet in Canada in 1933		25,000 00	
385	To provide for the expenses of the Royal Commission on Transportation		50,000 00	
386	To provide for payments in connection with movements of coal under conditions prescribed by the Governor in Council and for the cost of administration thereof—Further amount required		650,000 00	
387	To provide for expenses in connection with the Imperial Economic Conference and to authorize employment of staff, notwithstanding anything to the contrary in the Civil Service Act—Further amount required		100,000 00	
388	To provide for expenses of representation at the Disarmament Conference		30,000 00	
389	To provide for Canada's contribution to the International Wheat Information Service		7,300 00	
390	To provide for an honorarium to Chief Justice Brown, notwithstanding anything to the contrary in the Judges Act		500 00	
391	To provide for grants to veterans of the North West Mounted Police, who served in the North West Rebellion of 1885, in lieu of scrip, $300 each, as authorized by the Governor-in-Council		37,500 00	
392	Public Archives—Further amount required		3,000 00	
393	Federal District Commission—To provide for maintenance and improvement of properties under the control of the Federal District Commission		55,000 00	

No. of Vote	Service	$ cts.	$ cts.	$ cts.
	MISCELLANEOUS—*Concluded*			
394	Grant to John Thomas Miner (Jack Miner) to assist him in his wild life conservation work		2,500 00	
395	To provide for the Book of Remembrance of members of the Canadian Forces, and Canadians in the Forces of the British Empire, who lost their lives in the Great War		10,000 00	
396	Grant to the National Council of Education		5,000 00	
397	Pending the establishment of a Trust Fund of $25,000, as an expression of the friendly interest of Canada in the celebration in 1930 of the 1000th Anniversary of the establishment of the Icelandic Parliament, to pay to the Government of Iceland the sum of $1,250, being one year's interest at the rate of 5 per cent per annum on the said sum of $25,000		1,250 00	
398	To provide for the Administration of the Bankruptcy Act—Further amount required		25,000 00	
				1,002,050 00
	NATIONAL REVENUE			
399	To provide for Collection of the Revenue—Further amount required to supplement item No. 277 in the Main Estimates			789,811 65
	POST OFFICE—OUTSIDE SERVICE			
400	Salaries and Allowances—Further amount required		200,000 00	
	Miscellaneous Expenditure—For manufacturing postage stamps, post cards, envelopes, post bands, etc.—Further amount required		66,000 00	
				266,000 00
	TRADE AND COMMERCE			
401	Commercial Intelligence Service, including miscellaneous expenditure in connection with Canada's trade—Further amount required		10,873 35	
402	Dominion Bureau of Statistics—Further amount required for census		35,000 00	
				45,873 35
	ADJUSTMENT OF WAR CLAIMS			
403	To provide for the payment of claims for compensation for loss sustained by the civil population and prisoners of war of Canada during the late war, interest thereon and cost of administration			500,000 00
				6,620,472 95

SUMMARY

Chargeable to Consolidated Revenue Fund Account	$ 6,109,472 95
Chargeable to Capital Account	11,000 00
Total Consolidated Revenue and Capital Accounts	$ 6,120,472 95
Chargeable to Adjustment of War Claims	500,000 00
	$ 6,620,472 95

II—CHARGES OF MANAGEMENT

Amount to be voted.....$826,628 00

No. of Vote	Details	1932-33	1931-32	Compared with Estimates of 1931-32	
				Increase	Decrease
		$ cts.	$ cts.	$ cts.	$ cts.
	Offices of the Assistant Receivers General—				
	Salaries and Contingencies.....	128,722 00	140,000 00	.....	11,278 00
	Printing, signing, sealing and macerating Dominion Notes.....	458,537 00	475,000 00	.....	16,463 00
	Printing, advertising, inspection, express, etc.....	119,679 00	125,000 00	.....	5,321 00
	Commission for payment of interest on public debt, purchase of sinking funds, auditing.....	100,000 00	100,000 00		
	English bill stamps, postage, etc.....	2,500 00	2,500 00		
1	To provide for temporary clerical work in connection with the transfer and registration of bonds, etc., and the flotation of loans, and authority for these purposes to employ a temporary staff, fix their rates of remuneration and otherwise wholly regulate their services without reference to and notwithstanding anything in the Civil Service Act.....	17,190 00	45,000 00	.....	27,810 00
	Appropriation not required for 1932-33.	.....	1,500 00	.....	1,500 00
		826,628 00	889,000 00	.....	62,372 00

III—CIVIL GOVERNMENT

Amount to be voted.....$11,083,193 10

No. of Vote	Department	Details on page No.	1932-33	1931-32	Compared with Estimates of 1931-32	
					Increase	Decrease
			$ cts.	$ cts.	$ cts.	$ cts.
2	Office of the Secretary to the Governor General—					
	Salaries	65	29,322 00	34,500 00	.....	5,178 00
	Contingencies, including house allowance of $1,500 per annum to the Secretary to the Governor General	.....	70,500 00	72,500 00	.....	2,000 00
3	Agriculture—					
	Salaries	65	771,543 00	938,285 00	.....	166,742 00
	Contingencies	.....	150,000 00	165,000 00	.....	15,000 00
4	Auditor General's Office—					
	Salaries	68	325,638 00	390,825 00	.....	65,187 00
	Contingencies	.....	60,000 00	55,000 00	5,000 00	
5	Civil Service Commission—					
	Salaries	69	204,930 00	239,740 00	.....	34,810 00
	Contingencies	.....	67,000 00	77,000 00	.....	10,000 00
6	External Affairs—					
	Salaries	70	87,678 00	105,940 00	.....	18,262 00
	Contingencies	.....	67,000 00	69,000 00	.....	2,000 00
7	Finance—					
	Salaries, including appointment of Miss M. Guthrie, B.A. as a Secretary to Executive at $1,980	71	412,542 00	506,140 00	.....	93,598 00
	Contingencies	.....	38,000 00	40,000 00	.....	2,000 00
	Inspector General of Banks—					
	Salaries and contingencies	.....	23,340 00	30,000 00	.....	6,660 00
8	Fisheries—					
	Salaries	72	139,410 00	167,860 00	.....	28,450 00
	Contingencies	.....	40,000 00	45,000 00	.....	5,000 00
9	Immigration and Colonization—					
	Salaries	73	260,766 00	312,555 00	.....	51,789 00
	Contingencies	.....	30,000 00	40,000 00	.....	10,000 00
10	Indian Affairs—					
	Salaries	74	162,454 50	182,420 00	.....	19,965 50
	Contingencies	.....	23,000 00	23,000 00		
11	Insurance—					
	Salaries	75	84,762 00	95,710 00	.....	10,948 00
	Contingencies	.....	69,000 00	74,000 00	.....	5,000 00
12	Interior—					
	Salaries	75	686,015 00	950,000 00	.....	263,985 00
	Contingencies	.....	40,000 00	80,000 00	.....	40,000 00
13	Justice—					
	Salaries	78	221,128 00	272,123 33	.....	50,995 33
	Contingencies, including the Solicitor General's Office	.....	40,000 00	40,000 00		
14	Labour—					
	Salaries	80	224,802 00	271,715 00	.....	46,913 00
	Contingencies	.....	30,000 00	30,000 00		
15	Marine—					
	Salaries	81	367,137 00	441,417 74	.....	74,280 74
	Contingencies	.....	70,000 00	70,000 00		
16	Mines—					
	Salaries	82	541,224 00	647,485 00	.....	106,261 00
	Contingencies	.....	15,000 00	15,000 00		
17	National Defence—					
	Salaries	84	667,035 00	762,230 00	.....	95,195 00
	Contingencies	.....	60,000 00	70,000 00	.....	10,000 00
18	National Revenue—					
	Salaries	86	956,772 00	823,310 00	133,462 00	
	Contingencies	.....	50,000 00	40,000 00	10,000 00	
19	Office of the Prime Minister—					
	Salaries	87	24,817 50	31,595 00	.....	6,777 50
20	Pensions and National Health—					
	Salaries	87	189,468 00	229,610 00	.....	40,142 00
	Contingencies	.....	70,000 00	87,000 00	.....	17,000 00

VI—LEGISLATION—*Concluded*

Number 1932-33	Number 1931-32	Details	Salaries 1932-33	Salaries 1931-32
			$ cts.	$ cts.
		DEPARTMENT OF THE SERGEANT-AT-ARMS		
	1	Stenographer, Grade 3	.....	1,380 00
1	1	Chief Parliamentary Messenger and Housekeeper	2,220 00	2,220 00
1	1	Assistant Chief Parliamentary Messenger and Housekeeper	1,440 00	1,440 00
	1	Manager of Joint Parliamentary Restaurant	.....	3,060 00
2	2	Parliamentary Doorkeepers: 1 at $1,440; 1 at $1,200	2,640 00	2,610 00
3	4	Confidential Messengers: 1 at $1,620; 1 at $1,440; 1 at $1,260	4,320 00	5,400 00
1	3	Parliamentary Messenger	1,260 00	2,700 00
2	2	Chiefs of Pages: 1 at $1,080; 1 at $4. per diem	1,680 00	1,920 00
		Pages as required	5,100 00	5,141 25
2	2	Repair Men: 1 Chief at $5.50 per diem; 1 at $4.50 per diem	3,700 00	3,700 00
		Sessional Messengers: Temporary Messengers and Protective Service; Sessional Book-keepers	70,737 50	74,965 00
1	1	Chief of Protective Service	2,190 00	2,190 00
1	2	Supervisor of Char Service	1,440 00	2,640 00
		Charwomen and Temporary Charwomen as required	23,225 00	24,331 25
		Temporary Servants as required	43,000 00	45,039 00
		Joint Parliamentary Restaurant	15,000 00	20,000 00
		Tradesmen and others	13,000 00	15,000 00
		Housekeeper's Contingencies	500 00	500 00
		Transportation—Motor Services: Messenger service between House and Government Printing Bureau, etc.	1,800 00	1,800 00
		Unforeseen Expenses: By Order of the Board of Commissioners (Gratuity to retiring sessional messengers, etc.)	1,000 00	1,000 00
		To provide for the payment of an allowance to the Acting Deputy Sergeant-at-Arms	500 00	500 00
		To provide for an amount for the Sergeant-at-Arms in lieu of residence	600 00	600 00
14	20		195,352 50	218,136 50
		Less ten per cent of salaries	16,252 50	
			179,100 00	218,136 50
		LIBRARY OF PARLIAMENT		
2	2	Joint Librarians, 2 at $6,000	12,000 00	12,000 00
1	1	Assistant Librarian	4,140 00	4,140 00
1	1	Assistant Librarian, to authorize payment of M. C. MacCormac from April 1, 1932	4,140 00	6,221 50
1	1	Chief Reference Clerk	3,720 00	3,720 00
1	1	Reference Clerk	3,000 00	2,970 00
2	2	Cataloguers, 2 at $2,400	4,800 00	4,800 00
1	1	Library Clerk-Bookkeeper	1,860 00	1,830 00
1	1	Clerk of Periodicals	1,920 00	1,920 00
1	1	Senior Library Assistant	1,800 00	1,800 00
1	1	Registry and Shelving Clerk	1,560 00	1,560 00
4	4	Library Assistants: 1 at $1,620; 2 at $1,560; 1 at $1,260	6,000 00	6,000 00
	1	Messenger	.....	720 00
1	1	Senior Bookbinder	2,280 00	2,280 00
	1	Clerk, Grade 3	.....	1,380 00
17	19		47,220 00	51,341 50
		Less ten per cent	4,722 00	
			42,498 00	51,341 50
		Books—		
		For General Library, including Binding	15,000 00	18,000 00
		For Library of American History	1,000 00	1,000 00
		Contingencies	12,000 00	12,000 00
		To provide for cost of Printing Reports	1,000 00	1,000 00
			71,498 00	83,341 50

VII—AGRICULTURE

Amount to be voted.....$6,671,100 00

No. of Vote	Details	1932-33	1931-32	Compared with Estimates of 1931-32	
				Increase	Decrease
		$ cts.	$ cts.	$ cts.	$ cts.
39	Dairying	231,300 00	295,000 00	.....	63,700 00
40	Cold Storage Warehouses	200,000 00	453,708 08	.....	253,708 08
41	Fruit	390,200 00	502,200 00	.....	112,000 00
42	Seed, feed and fertilizer control, including grants to Seed Fairs, etc., also grant of $18,900 to the Canadian Seed Growers Association	413,200 00	573,000 00	.....	159,800 00
43	For experiments in dehydration of fruits and vegetables	10,000 00	20,000 00	.....	10,000 00
44	Live Stock	1,380,000 00	1,530,000 00	.....	150,000 00
45	Experimental Farms	1,492,000 00	2,325,000 00	.....	833,000 00
46	Assistance to Fairs and Exhibitions, including the Royal Agricultural Winter Fair	350,000 00	650,000 00	.....	300,000 00
47	Health of Animals, administration of the Animal Contagious Diseases Act and the Meat and Canned Foods Act	1,654,000 00	2,550,000 00	.....	896,000 00
48	Entomology	25,000 00	35,000 00	.....	10,000 00
49	Administration of Destructive Insect and Pest Act	328,300 00	705,000 00	.....	376,700 00
50	Publications	7,500 00	38,000 00	.....	30,500 00
51	International Institute of Agriculture	10,000 00	13,500 00	.....	3,500 00
52	Farm Economics, including agricultural co-operative marketing	8,600 00	12,000 00	.....	3,400 00
53	Contributions to Empire Bureaux	21,000 00	25,000 00	.....	4,000 00
54	Grant to Executive Committee of the World's Grain Congress	150,000 00	200,000 00	.....	50,000 00
	Appropriations not required for 1932-33	.....	41,163 66	.....	41,163 66
		6,671,100 00	9,968,571 74	.....	3,297,471 74

May third,
1932.

E. W. Beatty, Esq., K.C., LL.D.,
Chancellor,
McGill University.

Dear Chancellor,

Let me acknowledge your letter of yesterday, with documents mentioned. I regret that apparently I have not made myself clear to you.

What I had in mind when I proposed representations to the Dominion Government suggesting restitution of the former grants to the entomological services of Canada had less to do with Macdonald College in particular than with what I consider is of utmost importance to the cause of agriculture in general in Canada.

I believe in scientific agriculture, and I know of no other industry that needs, or deserves what science can bring to it more than agriculture. This country loses millions each year by the ravages of blights, pests and parasites; it was stated recently that Canada was losing $150,000,000 annually by insect pests alone, and I am informed on very good authority that this is probably an under-estimate. To combat the pests and to save the loss the total expenditure in Canada has been very small. Now, more than ever, we should continue our efforts to combat this wastage. Then, too, it is useless to hope that we can hold any preference we may be given in the markets of the Empire for our apples, potatoes, etc. unless we ensure that they are of a quality to compete successfully with the products of other parts of the world. I am sure there is no possibility of successful competition if our entomological services are cut down.

This annual loss cannot be removed by prayer; it can only be lessened by the attention of scientifically-trained men. These men, it is true, must be trained in the colleges and universities, but many of them look forward to employment in the Government Laboratories and in field work. Of the 287 who have obtained the degree of Bachelor of Science in Agriculture from Macdonald College, 46 are engaged in teaching, and 110 in government positions. There is more than enough for them to do; and what they can do to help the farmer is worth a hundred times more than the encouragement which the Government has given in the past.

Macdonald College is affected in this way.- It is the leading agricultural college in this Dominion. In the twenty-five years of its existence it has turned out more post-graduate students than all the other agricultural colleges in Canada put together, and I believe, although I am not positive, that to-day we have in attendance at Macdonald as many students taking post-graduate work as are in attendance at all the other agricultural colleges put together. More and more each year is Macdonald recognized as the leading post-graduate school in agriculture in Canada. No entomologist in Canada is quite in Professor Brittain's class, nor is there a geneticist superior to Huskins. The kindred departments, like Plant Pathology, Bacteriology and Soil Chemistry, are as well staffed here as anywhere else. If the Government chooses to emasculate its entomological services, naturally fewer men will attempt to make themselves expert in these subjects, because they will see that as far as this country is concerned, there is no future for practical work. I had two of this year's graduating class ask last week to be recommended for positions in the Colonial Service of the Imperial Government, who, despite the financial situation, are <u>increasing</u> their services of this kind.

You ask whether I am satisfied with the organization of Macdonald College. I am not. Discontent is the mainspring of progress. But I believe that in the light of my own knowledge and and of the Survey Report on Macdonald, the College is doing exceptional work and deserves well. We could improve it, without doubt, were resources available. Under present conditions, we must do everything possible to maintain its efficiency.

Ever yours faithfully,

Principal.

CANADIAN PACIFIC RAILWAY COMPANY

OFFICE OF THE CHAIRMAN AND PRESIDENT

MONTREAL
May 2nd, 1932.

Dear Sir Arthur,-

I return the documents you were good enough to give me on Friday and have carefully read them over the week-end.

In principle, I naturally agree with the contention made as to the unwisdom of reducing unduly these votes for scientific work. I am not sufficiently advised as to what extent Macdonald College is directly concerned with the grants, but if it is affected, then, of course, the sufficiency of the work of the College will require to be shown. I presume you are satisfied as to the organisation there and the result of their research activities.

The size of the grants have always been moderate, and I think a good case may be made out for a very limited reduction.

Sincerely yours,

Sir Arthur Currie, G. C. M. G.,
Principal and Vice-Chancellor,
McGill University,
MONTREAL, Que.

MEMO: Re Proposed Reduction in Agricultural Services.

The efforts of the Government to effect economies in governmental services and departments are admittedly essential to the present situation and deserving of the utmost sympathy and support. The curtailment of merely routine or clerical work, or the postponement of projected public works will have no permanent effect upon the future development of the country. On the other hand, the most careful discrimination as affecting vital services is essential, to ensure that the basic framework of our organizations and the machinery necessary for future progress is not irreparably injured. It may be that reorganization is called for, but it must be recognized that readjustment of such intricate and interdependent units must be an exceedingly delicate task and probably could only be safely undertaken after much expert thought and advice, such as could only be given in some cases by a properly qualified independent commission.

It would appaar that the sudden and drastic cuts proposed in certain of the public services, and notably in agriculture, are likely seriously to disorganize and unbalance the machinery that has been built up over a period of years in response to definite needs, to terminate established work of proven value, to disrupt the progress of promising investigations now in process of development and to prevent the inception of further needful work. Everyone recognizes that never in the present century has agriculture been in such sore distress. The progress made during this century is due, in no small measure, to these very services, which, apparently, are now to be seriously curtailed. However sympathetic and earnest

a government may be in advancing the interests of agriculture, it is extremely doubtful if any form of assistance can equal scientific service. Every country in the world recognizes that this is the best contribution that can be made to agriculture and even those in much greater distress than ourselves continue to build and extend this service.

It is not to be supposed that this service has been limited to the field of agricultural production alone; nor in addition has it merely had to do with the marketing of farm products, its ultimate effect may be most apparent in the sound development of the country's trade and commerce.

Canada's position in the export trade for farm products has never been more critical than it is today. She finds herself with a surplus quantity of a larger number of products than ever before. It is imperative that they be sold abroad, but, with all of these she has to face the most formidable kind of competition. Behind every single product that is now in a position to command consideration in the export trade is to be found a network of services including education, regulation and research, based largely on government services. Our position with any of these products is not yet so secure that we can afford to diminish our efforts in any way. Certain agricultural industries may be temporarily distressed and their product may now be of low value in the world's markets, but to relinquish their position might mean a great sacrifice ultimately and the services upon which they depend, once discontinued, or too drastically curtailed, cannot be readily brought back again with the return of more normal conditions.

Of late years, work of much potential value in certain fields has been undertaken and, indeed, has reached a point where returns of value are to be anticipated. It does not seem good business, therefore to lose irrevocably all that has gone into this work in trying to tide

the country over a serious temporary situation.

The severest blow that has been dealt by the proposed reductions, however, is to the human material, i.e. the technical personnel. We do not refer to the personal effect upon the men themselves, but the effect on the future development of Canada. For years it has been urged that Canada lacked a sufficient body of trained men, that, in spite of what was being accomplished, a different and more thorough training, a new view-point and a different method of approach was necessary to enable us to meet modern competetive methods. This challenge was accepted by the universities, who at great cost to themselves and with no appreciable assistance from the government, built up an organization capable of meeting these supposed needs. As a result, there are now available a more adequate force of competent young Canadians trained and equipped in Canada to solve Canadian problems.

The proposed sudden cessation of activities means that these men must find employment elsewhere and, not only that, but it will force all others in a less advanced state of training to look elsewhere for their life work. The result will be that when this time of stress is over we will neither have these same men nor others to take their places. These men will be irrevocably lost to us; the care and effort that went into their training will be lost; the money that they and the country have spent on their special education will be lost. A geneticist, a plant pathologist, a chemist, or an entomologist is not something that can be improvised in a few months or years, for the fact should not be lost sight of that those who are now completing their work, or have but recently completed it, are not only the result of a long and more careful process of training but also of a more rigid system of selection than

ever before. The country needs their services now even more than in prosperous times, when wastefulness is less harmful. In addition to the foregoing, a serious blow is struck at the morale of the whole remaining staff who see the efforts of years brought to nothing. The spirit of an organization is not something that can be built up at a moment's notice and it is this factor that will bear most heavily on the most efficient and valued members of departments.

If we have faith in the future of our country, may we not well question whether we are justified in paying so heavy a price to tide us over a merely temporary emergency.

SOME NOTES ON THE WORK OF THE FEDERAL DIVISION OF BOTANY

This is a brief statement of some facts that may be considered to have a bearing on the proposed cut in the appropriation of the Federal grant to the Division of Botany.

The chief endeavour of the Division of Botany is in the field of Plant Pathology. While Plant Pathology is one of the most recently developed branches of botanical studies, it is today one of the most important. The development of this science in Canada has been rapid during the past twenty years and in a measure in keeping with developments in this field elsewhere. In 1909 the Dominion Government established the Division of Botany as an entity and Dr. Gussow the present Dominion Botanist was appointed to be the head of the Division with one laboratory at Ottawa. Since then the services of the Division have been extended by the establishment of ten other laboratories across Canada all organized for the purpose of plant pathological work. There is now one laboratory in each province excepting British Columbia which has two. These are called Dominion Laboratories of Plant Pathology. While much credit is due Dr. Gussow for his leadership in this work and his efforts in inducing the Government to organize these laboratories, these have really been established due to pressure from various groups of growers in order to deal with special disease problems in the growing of plants. In other words each has been organized to meet a definite need and situation.

I estimate the permanent staff of these laboratories to total about fifty. For the summer work, in addition, about seventy-five

temporary workers are usually taken on. Each laboratory carries on extension work among the growers and investigations on the particular disease problems of the district it serves. The Rust Research Laboratory at Winnipeg was organized for the sole purpose of investigating the important cereal rust problem. Some idea of the amount of work, present standing and accomplishments of these laboratories may be obtained from the last printed annual Report of the Dominion Botanist for the year 1930. This a 185 page report all of which excepting 17 pages are reports on plant pathological work, most of which is of an investigational nature. This covers studies on diseases of all types, including cereals, vegetables, ornamentals and trees.

It is believed that an annual loss of 2 per cent of the total agricultural crop of Canada is a very conservative estimate of the damage done by disease in plants. This amounts to an annual loss of many millions of dollars. This year the appropriation to the Division of Botany based on the Government estimates has been cut to $160,000, which is approximately only one-half the amount they spent in their work last year. Both amounts are very small compared to the total losses due to plant diseases, and this would seem to justify the continued expenditure of the larger amount even in times of economic depression such as these. The chances for profitable growing of plants with low price levels is much less today than in more prosperous times, and so the grower is much more in need of such help as the Botany Division can and does supply. This service can be properly and adequately maintained only by the necessary financial government support. The appropriated sum of $160,000 seems entirely inadequate and must result in restriction and impairment of work so advantageous to agriculture. Many examples of the services rendered by the Division might be

given, but only a few will be mentioned.

The production of certified seed potatoes in Canada has grown up and been made possible by the efforts of the Botany Division. After a few years of preliminary work potato field inspection and certification was commenced in Prince Edward Island and New Brunswick by the Dominion Botanist in 1915. The value of this was soon apparent, so this work has been extended until now the inspection service extends throughout the Dominion, and is one of the more popular and very important activities of the Division. The acreages for the various provinces inspected by the Government for 1930 were as follows: Prince Edward Island - 24,874; Nova Scotia - 510; New Brunswick - 2,750; Quebec - 3,169 ; Ontario - 1,786; Manitoba - 348; Saskatchewan - 258; Alberta - 174, and British Columbia - 436. This makes a total of 34,305 acres for Canada with a total production of approximately 5,000,000 bushels of certified seed potatoes. The inspection work is carried on under the Destructive Insect and Pest Act of Canada. Last year the appropriation for this item, out of which potato inspection is financed, was $705,000 and this year this has been reduced to $328,000. This cut is so drastic that it may be necessary to drop or greatly curtail this service. A result of this kind would be deplorable as this represents a special type of industry of importance which can only be maintained by the continuance of seed certification.

The Dominion Rust Research Laboratory at Winnipeg, organized in 1923, is one of the leading laboratories in the world devoted to the study of the rust problem. Its work and organization has attracted attention and respect in all parts of the world. In 1928, Dr.D.L. Bailey, who was then in charge of this laboratory, stated that stem

rust on wheat alone caused an estimated loss of $200,000,000 in Western Canada in 1916, a year in which a very serious outbreak occurred. He estimated that the annual average loss due to stem rust during the previous twenty years was in the neighbourhood of $25,000,000. Thus the solution of the rust problem seems to be necessary for the assurance of the future wheat production in Western Canada. This laboratory has made much progress in a better understanding of the whole problem, and in the production of varieties resistant to the rust and suitable in other respects.

Such striking figures cannot be presented in connection with the work of the other laboratories, but it would be easy to justify the money spent in this way on the basis of the economic importance of the problems dealt with in each case. It is difficult to estimate the value of the services rendered by each laboratory. There are the frequent cases of an individual grower whose crop becomes badly diseased, and such help as the laboratory can often give him means a great deal to him. This type of effort must justify the existence of the laboratories. Moreover, each laboratory is doing investigational work in an effort to solve or to be better prepared to cope with the problems of the district in which it is located.

New problems are continually arising in plant disease control and some have not been touched as yet. In Quebec a severe outbreak of a destructive disease on apples called fire-blight has been very bad for the past two years. Some work has been done in connection with this outbreak, but much more should be done in order to be in a better position to adequately meet the situation. Practically no plant pathological work has been done among the vegetable growers in this

province. Here is undoubtedly a field where a good deal of profitable work could be done.

Other facts could be given to illustrate the importance to agriculture of the work done by the Division of Botany, but the ones given serve to indicate its value. It seems to us to be unwise to restrict the work of this Division even under our present economic conditions - either by elimination of certain parts of the work they have been doing, or the general lessening of all undertakings. To interrupt or to discontinue partly completed investigational work is to lose largely the value of the work done. It may be that the salvation of agriculture from its present condition is to be brought about through scientific efforts such as are being carried on by the Division of Botany.

NOTES ON THE WORK OF THE FEDERAL ENTOMOLOGICAL BRANCH.

This Branchentered the field as a distinct Division of the Experimental Farm's Branch in 1909. Such important practical results followed almost immediately upon the initiation of the divisional activities that, within a very few years, the Division had been elevated to the status of a Branch with laboratories in all the provinces except P.E.I. If the history of these laboratories be inquired into, it will be found that practically all new lines of work have been undertaken in response to a demand from farmers or fruitgrowers societies or similar bodies.

In fact, the pressure for the department to undertake new lines of work to meet emergencies that constantly arise, has been so strong and so constant that one of the greatest difficulties encountered by the workers concerned has been to maintain various projects intact, in their efforts to meet urgent demands for new work.

Should a survey be now made of these laboratories, it would be found that, with few exceptions, they are manned by a particularly able, efficient and well trained staff, who have gradually mastered the technique of a highly specialized field of work, have "grown into" their particular problem and are rendering indispensable service in their own particular fields. None of them attained their present position of usefulness in a few months. The problems of the prairie province farmer are so different from those of the fruitgrower of the Annapolis Valley, for example, or the corn-grower of Ontario, that no man, however sound his basic training, could without years of experience and study be able to function usefully if transferred to

another field. As well transfer a Bay of Fundy pilot to Vancouver.

A feature of the work of the Branch has been its readiness to co-operate in many projects throughout Canada with provincial and other organizations, and many lines of work officered by Dominion officials are partially financed by other bodies. The cut of approximately 55% in the appropriation of this Branch does not, therefore, represent work designed vaguely to "teach people how to farm" but is concerned with solving definite, tangible problems brought by the farmer or fruitgrower to the officials concerned for their solution. As typical of the kind of work that is affected by the proposed cuts, the following may be cited:

Prairie Provinces

The great insect pests of the prairie provinces are locusts, army worms and cutworms. It may not be realized in Canada, as it is in other countries, that the development on a commercial scale and the first widespread use of the only satisfactory remedy for these pests was the work of a Canadian, an officer now employed by the Entomological Branch.

The nature of the situation makes it impossible to draw up a balance sheet showing the value of the various contributions to this service, but we may well ask what would have been the story of prairie farming without this particular piece of work. With hundreds of square miles of territory and millions of bushels of grain menaced by locust outbreaks this year, with every trained man representing just so many thousands of acres saved, with the service undermanned already to meet any but the most pressing problems, it hardly seems the time to completely disrupt the entire organization by losing any experienced men. The most significant thing about

these outbreaks on the prairies, from an economic standpoint, is that the threatened loss will not consist of a series of small losses spread over the entire country, but the total, or almost total, destruction of localized areas, resulting in the partial or complete wiping out of the crops of hundreds of individual farms, a potential loss of approximately 50 million bushels being involved.

To prevent the ruin of so many of our citizens, when it can readily be accomplished by present services, would appear to be an obligation of the government.

In further regard to Prairie Province problems, the Dominion officers are pioneers in the field of the forecasting of outbreaks of certain insects, such as pale western cutworm, of which an outbreak involving over half of the provinces of Alberta and Saskatchewan is said to be in prospect. Since the methods involved in the control of this insect are largely indirect, requiring, for their successful application, constant educational effort, which only these officers can supply, it would seem the part of wisdom to increase rather than diminish the staff of trained officers at this particular time.

Orchard Insects

No crop more than the apple and other fruit crops is subject to such a variety of serious pests, nor requires more expert care to enable the end product to compete with that of our competitors in New York, Virginia or Washington. In each province Dominion officers are responsible, to a very large extent, for recent progress in this industry; the growers owe them the spraying schedules that alone

enable them to produce commercial crops and are constantly dependent upon them for advice regarding newly introduced pests, or old ones that have assumed new importance as a result of changing methods of cultura. The modern fruit trade would not have existed without this service and it would soon slip back were it withdrawn or diminished. The problems involved in the control of the apple maggot and oriental peach moth are particularly pressing at the present time.

Insecticide and Fungicide Investigations

The laboratory at Annapolis Royal is a pioneer in this field. It functions through the development of new and cheaper sprays and combinations, and offers constant service in testing work. Many co-operative and commercial concerns serving the growers make their purchases entirely on the advice of this laboratory. Branch officers can no doubt give actual figures as to the many thousands saved through the substitution of white arsenic in poison bran mash for locust attacks and other methods of cheapening the mixture, which are their own discovery. The officers of this laboratory have made a place for themselves in the farming industry that is quite indispensable They are able to carry on so much work because of having available in the busy season a number of partly trained student helpers. Without them, their work is largely emasculated.

Parasite Introduction

At Belleville is a laboratory known throughout the world for its work in this field. The only hope we have for the control of many introduced pests is to fight them with their own natural enemies. The successful introduction of the parasites of the larch sawfly,

which, on a former occasion, devastated our forests all over Canada, is an example of the results that may follow this work. The European corn borer and the oriental peach moth situation demand that there be no relaxation of this work. The certainty of the introduction of new pests likewise demands that this group, of workers be kept intact. They have all had a training that cannot be learned in schools, have shown quite unusual enterprise in devising new methods and equipment to meet their very special needs. This organization is one of those most likely to suffer severely from these cuts, since several of the staff are on the so-called "temporary" list.

Forest Insects

The importance of our forests in the national life of Canada is recognized by everyone, and all who have any acquaintance with the industry recognize the menace of insect outbreaks and appreciate the service already performed by the Division of Forest Insects. It has been foremost in surveying and investigating the pests concerned, in co-operating with lumber companies, provincial departments and private owners. It has been active in disseminating information in an original and practical form. The Division and its staff has the confidence and respect of all interests, as a result of these efforts.

Among the many emergency problems calling for prompt action, is an outbreak of a newly introduced species of sawfly that has already defoliated hundreds of thousands of trees and is spreading rapidly. Absolutely the only organization that offers any hope of warding off the swift destruction of the white spruce stand in this area (Gaspé) is this Division. To do so without detriment to the other equally valuable work that they are doing requires more and

not less assistance.

Co-operative Efforts

The importance of the co-operative efforts of the Branch have been already mentioned, and one case only need be cited here by way of example.

Four years ago there was undertaken at the request of the Nova Scotia Fruitgrowers Association, the Canadian Horticultural Council and the Government of Nova Scotia, an investigation into the problems involved in the pollination of the apple crop. Realizing that no one Division or Branch could handle so broad a question, a composite committee representing all those concerned was formed and the work carried on as a co-operative project, designed to extend over a period of at least five years. The project has been carried on intensively and has already brought to light a number of quite new facts applicable to orchard work anywhere. An efficient temporary staff has been brought together, has gained invaluable experience in the work, and once disbanded can never be brought together again. Furthermore, if dropped in its present stage everything done will have been lost.

New Dangers

Canadian forestry and agriculture are constantly exposed to the threat of new introductions, through modern methods of rapid transit. Two such menaces exist right across our borders. The gypsy moth which has cost the U.S. many millions, actually reached the province of Quebec in 1924 and was suppressed at the cost of $120,000. The menace still exists.

The Japanese beetle is another potential pest of vast importance. Flourishing in the northern island (Hakkaido) of Japan where climatic conditions are more severe than in southern Ontario and Quebec.

It was introduced into Philadelphia in 1922, is spreading rapidly and in the last year of which we have record, it cost the U.S. authorities approximately $445,000 in attempts to prevent further spread alone.

With such threats constantly present, in addition to the problems we already have it would appear that ultimately, and possibly very soon, we will lost much more than we have saved by the proposed economies. We may well be forced promptly to re-establish these services, only to find that our trained personnel is non-existent and that there is no one to take their place; for, in this type of work, any but carefully selected and thoroughly trained men are worse than useless.

IMPORTANCE AND PROGRESS OF SCIENTIFIC AGRICULTURE

The decreasing proportion of effort required to secure adequate food supplies in those sections of the world where scientific methods in agriculture are the most generally followed is among the most impressive trends in modern times.

This trend has been noticeable for some time as we have the authority of a comparatively recent history of Rome[1] for the claim that it required eighty per cent of the income of the married labouring man to secure the necessities of life in the time of Cicero. Scarcely more than a century since it is pointed out by Thorold Rogers in his "Six Centuries of Work and Wages" that it required fairly regular employment for the agricultural labourer in Britain at the weekly wage recorded to secure necessities. The approach to the Napoleonic war period of high food prices finds the weekly employment lengthened until finally fifty-two weeks of the year are insufficient. The hiatus is overcome by the statement that it is hard to understand how existance was achieved during this period of high prices.

During the present century the advance has been more rapid and figures are available for measuring that advance. The Dominion Bureau of Statistics provides these figures --

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(1) Frank, T. An Economic History of Rome, 1920, p. 337.

Comparison of Prices of Food, Fuel and Light[2] and Rent

	1900 $	1910 $	1913 $	Jan. 1920 $	Jan. 1921 $	Jan. 1930 $	Jan. 1932 $
Foods	5.48	6.95	7.34	15.30	14.48	11.88	7.68
Fuel & Light	1.50	1.76	1.91	3.27	4.17	4.26	3.11
Rent	2.37	4.05	4.75	5.54	6.60	6.99	6.77
Total	9.35	12.76	14.00	24.11	25.25	22.13	17.56
Proportion of food to total	58.6%	54.5%	52.3%	63.5%	57.3%	53.7%	43.7%

Index Numbers Living Costs January 1932[3]

1913 = 100

Food	105
Fuel & Light	152
Rent	158
Clothing	123
Sundries	163
All items	133

Weighting for all items

Food	35.0%
Fuel	8.0%
Rent	18.5%
Clothing	18.5%
Sundries	20.0%

(2) Labour Gazette February 1932, p. 223.

(3) Ibid, p. 231.

The evidence indicates that the proportion of income expended for food is declining rapidly particularly during the present century.

If this be true what may be the cause? The answer is obviously the improvement in technique made possible by investigation, invention and research and specifically the more general adoption of methods embraced under what is known as scientific agriculture.

To avoid any possibility of underestimating the importance of this cause it is only necessary to examine the records of some sections of the world where what is embraced under the term scientific agriculture is unknown. This is possible. A recent survey in a section of China where scientific agriculture is yet unknown finds the struggle against starvation there so intense that the expenditure on fertilizer is greater than on education and authorities had to secure the assistance of the militia to help to collect not the 1931 taxes but those of 1939(4).

A report from India states that in the Acadian simplicity there prevailing 97 to 98 per cent of the total expenditure is necessary to secure the absolute necessities of life.

Apparently the benefits of scientific agriculture have been secured by society in general by securing food of better quality for the expenditure of a rapidly decreasing proportion of effort.

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(4) Brown, H.D., and Li Min Liang. Survey of 50 farms on the Ching tu Plain, Shweckwan, China, 1928.

This result is only achieved by improved technique by lowering production costs the direction which scientific agriculture has taken.

The declining proportion of effort spent on procuring food leaves a greater surplus for expenditure in other ways. The proportion of income of the investigator or technical worker, however, which is spent on food is less than that of some other classes of society. Expenses of this class on other things such as books, supplies, periodicals, association fees, appear only able to move in one direction, which is upward.

If price per unit of product may be taken as a fair criterion of efficiency and perhaps it is as good a one as is available if quality be considered, then the benefits of the more general adoption of scientific methods appear convincing. While progress has been rapid during this century, and the benefits passed on to society in general, this very progress reveals the way to greater accomplishment - provided invention, research and education are not interfered with.

Countries that fail to maintain this kind of service must expect to suffer in competition with those that continue to place their faith in it.

It has been pointed out by Stanley Baldwin that encouragement of invention and research is the best method of attacking the problem of unemployment.

THE FEDERAL APPROPRIATIONS FOR AGRICULTURAL RESEARCH

("Science" Vol. 75, No. 1935, page 124)

Science Service reports that items in the agricultural appropriation bill, which were reduced below the Bureau of the Budget estimates for 1933 by the House Committee on Appropriations included many lines of scientific research, which had already felt the pruning knife of the agricultural chiefs and the bureau.

The Bureau of the Budget estimates had pared the $235,664,694 agricultural supply act of 1932 down to $186,243,405 -- a decrease of more than $60,000,000. Much of this was concerned with decreased appropriations for road building and relief loans -- in fact almost all of it except about $10,000,000 to be cut from regular departmental activities. Actual savings of more than three millions, to revert to the treasury, were planned in various agricultural bureaus.

The house appropriations committee cuts from budget estimates, amounting to an additional ten million dollars, were made all along the line, and touched the following scientific investigations:

Administration of agricultural experiment stations, $13,646. (Bureau of the Budget had recommended increase).

General weather service and research in Weather Bureau, $30,500. (Already cut $71,482).

Aerology, $26,900. (Already cut $225,000.)

Animal Husbandry, $20,505. (Already cut $29,495.)

Diseases of animals, $6,000. (Already cut $31,050.)

Dairy investigations, $9,900. (Already cut $69,442.)

Barberry eradication, $3,600. (Already cut $177,140.)

Cereal crops and diseases, $3,700. (Already cut $19,575.)

Citrus canker eradication, $2,100. (Already cut $7,900.)

Cotton production and diseases, $2,600. (Already cut $12,100.)

Rubber, fibre and other tropical plants, $1,500. (Already cut $25,031.)

Protection and administration, national forests, $76,500. (Already cut $119,746.)

Forest products investigations, $2,200. (Already cut $25,460.)

Agricultural chemical investigations, $5,600. (Already cut $5,851.)

Color investigations, $800. (Already cut $2,500.)

Insecticide and fungicide investigations, $1,100. (Already cut $10,000.)

Soil chemical and physical investigations, $200. (Already cut $30.)

Cereal and forage insects, $4,900. (Already cut $42,500.)

Insects affecting man and animals, $4,300. (Already cut $10,200).

Agricultural engineering investigations, $6,600. (Already cut $58,550.)

Home economics investigations, $900. (Already cut $12,335.)

Pink boll worm control, $5,600. (Already cut $61,000.)

Gypsy and brown-tail moth control, $5,700. (Already cut $65,000.)

European corn borer control, $500,000. (Already cut $155,000.)

Japanese beetle control, $25,000. (Already cut $45,000.)

Among other cuts made by the Bureau of the Budget and not touched by the committee was one of $40,840 from the soil erosion investigation appropriation last year.

M E M O R A N D U M

Re: Reduction of Government Appropriation for March 31, 1932-33, for Administration of Destructive Insect and Pest Act.

The undersigned, viewing with a not inconsiderable degree of apprehension the reduction of appropriation for administration of Destructive Insect and Pest Act (Vote No.49) from the sum of $705,000 to $328,300, a reduction of somewhat less than half (Plant Pathology 49%, Entomology 45%), respectfully suggest that this drastic reduction may have a very untoward effect on the continuity of the work of these Scientific Departments, to the misfortune of our country at large, and we therefore submit for your consideration the following memorandum.

We realize fully the very great importance of measures of economy at the present time. There can be no question about that. It will, however, be conceded, we believe, that the more important services of the Government should be crippled the least, especially when such services are in themselves of the highest importance in saving money for the country. In such cases, a small economy is bound to result in a large loss, which, however, may not appear in the bookkeeping accounts.

1. We do not know on what grounds the axe of economy has been applied so severely to the Scientific Services, but, in case it be based on the theory that overproduction is one

of our present evils and that this is fostered by research, we respectfully submit our opinion that the question of whether or not there is real overproduction in the world to-day is beside the point, because the aim of scientific research is not necessarily greater, but cheaper and more efficient production, by which alone Canada can compete with other countries. A comparison of States which support research and those which do not is sufficient evidence of the value of such work. The present widespread fear of Russian competition in the world markets is based on the fact that, even in her hour of direst economic need, that country has been using every effort to increase research and its application to agriculture and industry. We cannot conceive that the Government of Canada will adopt a less far-sighted policy.

2. In case that the cut of appropriation to the Laboratories of Plant Pathology and Entomology indicates that they are not esteemed at their true value, we venture to point out:

(a) They protect against importation of diseases by inspection at ports (witness the country's freedom from black wart disease in potatoes).

(b) They assist export trade by inspection and certification of crops and products (for example, the potato, apple (and other crop) inspection service).

(c) They apply scientific research to the study and control of existing diseases and to the

breeding of disease-resistant varieties of crop plants.

It would seem that few of these activities can be even temporarily reduced and few even of the smaller laboratories closed without loss to the country.

Of particular value, for example, at the present time, in view of the need of diversification of Western agriculture, is the work being carried on with clovers and other forage crops in the Dominion Plant Pathology Laboratories at Saskatoon and Edmonton. The growing of clover and other legume crops, so necessary in any system of diversified agriculture has never been satisfactorily established on the prairies, due chiefly to excessive "winter killing". At these laboratories it has recently been found that much of the so-called winter killing is really due to disease, the organism of which flourishes at low temperatures. With this knowledge available, progress can now be made in the production of resistant varieties. On the other hand, there are proposals to use this knowledge for exactly the opposite purpose. It is believed that it would be possible to infest certain species of noxious weeds with this disease and thus have a biological method of weed control.

Vigilance in the inspection of imports cannot safely be relaxed.

Inspection and certification of exports cannot be abandoned without sacrifice of trade. Incidentally, its abandonment would seem to annul any prospect of removal of the British embargo on potatoes from Canada.

3. Especially important with regard to the future is the fact that interruption in the training of a technical staff would result from cessation of temporary employment of students during the summer, which would have disastrous results. The demand has been for better trained specialists. Universities and Agricultural Colleges have attempted to meet this demand in Entomology, Plant Pathology, Genetics, etc.; but with their accustomed means of support, namely, summer work, discontinued, the students in question will abandon their careers, the investment in their training will be sacrificed and many years will have to elapse befor a supply of well trained men can again be available.

It might be pointed out that the summer employment of senior and graduate University students is the most efficient and economical means of obtaining high grade assistance in seasonal agricultural work. Without such assistance the permanent and higher paid officials must be severely handicapped and a large part of the irreducible expenditures wasted.

4. In view of the fundamental nature of the Scientific Services and of the general excellence of the personnel thereof, it would seem wiser to economise in the secondary services, dependent on the Scientific Services and em-

ploying a less highly trained staff.

It is a matter of common knowledge that great economies could be made in the governmental expenditures on agriculture without loss of efficiency. Whether or not this is the time to tackle that larger problem is another question.

There is, for example, in the matter of "Illustration Farms" and Experimental Farms" much duplication of Provincial and Dominion effort. Further, part of the experimental work at the latter is, in our opinion (based on the personal experience of one of us), of an obsolete type, valuable in pioneer days but of very little value to the present-day farmers. Many examples could be given.

It is a fact that the Divisions which have received the heaviest cuts (Entomology and Plant Pathology) are just the divisions which are doing work of the most vital importance and work which does not duplicate Provincial effort. Further, the standard of technical training and efficiency is very much higher in these divisions than in the Agricultural Services generally. "Politics" have never entered into their work as they have into some of the Agricultural Services. The value of many phases of their work is to-day receiving wide recognition, outside of Canada as well as within the Dominion.

The question of curtailing expenditures on Illustration Farms, etc. is fraught with political difficulties. If, however, the present Government is prepared to face such difficulties for the general good of Canada,

this might be a very opportune time to undertake the reorganization of the entire agricultural services of the country. Criticism of the present system is not confined to those outside of it, and a qualified commission would undoubtedly find willing co-operation from most men in the Service. Reorganization which would involve economies in expenditure and at the same time increase the output of vital research and methods of application of knowledge gained from research could, without doubt, be effected. To avoid recurrence of duplication and inefficiency, a permanent Agricultural Advisory Board should, in our opinion, later be appointed.

4a. We make our plea for reconsideration of the estimates the more hopefully because of the insignificant saving which this reduction affords The amount assigned, for example, to the protection of the crops, pastures and forests of the country from disease and insect pests is only $325,000 (reduced from $700,000), a mere bagatelle compared with the values at stake.

Signed: Dept. of Botany

" Physics

" Chemistry

" Zoology

of McGill University.

No answer received

March 2nd, 1932.

Mgr. A. V. Joseph Piette, P. A.,
Rector, Université de Montréal,
Montreal. P. Q.

My dear Monseigneur Piette,

The recent action of the Government in the direction of economy includes a reduction of the appropriation for the work of the Laboratories of Plant Pathology and Entomology from $705,000 to $328,300 - a reduction of somewhat over 50%.

As you are aware, the work of these Laboratories is fundamental in character, employing expert scientific workers who have prepared themselves by long training, and are, for the most part, products of our universities. The work itself is aimed at the protection of our country against the importation of diseases, affords adequate inspection at ports and applies scientific research to the problems of damage and disease by animal and plant pests.

I cannot but believe that the above reduction is so drastic as to cripple most seriously this important work, and to prejudice its future by alienating the men now preparing for the scientific work of the Government in future.

In view of the importance of the matter, it occurs to me that we might co-operate with Toronto and Queens' in making suitable representations of the whole issue to the Ministers of Finance, Agriculture and the Interior at Ottawa; and I venture, therefore, to suggest that as a preliminary step we exchange memoranda with a view to agreeing on the terms of a protest and arranging for an appointment in Ottawa.

Ever yours faithfully,

Principal's Office

not acknowledged

Queen's University
Kingston, Ont.
March 10th, 1932

My dear Sir Arthur,

Thank you for your letter of March 2nd about the reduction of the appropriation for the work of the Laboratories of Plant Pathology and Entomology. We very strongly deplore the suggested reduction as being really an extravagance for which the country would pay dearly were it carried out. ~~And~~ among its worst effects would be the disruption of the service, which would mean that young researchers would lose confidence in the government and could not be easily recalled if it were at any time proposed to restore the service.

I enclose with this a brief memorandum drawn up by Professor MacClement, the Head of our Department of Biology and Botany.

We shall be very glad to co-operate with you in any manner that you think best.

Yours very sincerely,

W. A. Fyfe

Principal.

Sir Arthur W. Currie,
Principal,
McGill University,
Montreal, P.Q.

Re Reduced Appropriations for Departments of Plant Pathology and Entomology.

1. Conservative estimates of the damages resulting from Plant Diseases and Insect pests declare that at least 10% of the annual value of the crops and of the products of domestic animals are lost to the farmers of the country in spite of many certain results of control devised and operated by the Departments of Plant Pathology and Entomology.

2. The starving of these departments is a direct blow at the prosperity of the foundation of national wealth in Canada, and reduces very greatly the value of the efforts being made to rescue agriculture from its almost desperate condition of depression.

3. Canadian departments of defence against fungal and insect pests have repeatedly lost many of their most efficient men because of the meagre salaries paid up to the present. Any further reduction of salaries or opportunity for progress will result in again reducing to comparative inefficiency the staff, which has but very recently become somewhat adequate.

4. Because of the technical nature of the methods which have to be used in the scientific research on which pest control rests, the workers have to depend but slightly on popular and public support, and to expect that of the well-informed statesmen, who look beneath the surface, as well as anticipate the future, in formulating policies for the benefit of the country at large.

5. The Universities of Canada have only within the last decade been able for to produce a number of young men qualified to do acceptable work in the departments of plant and animal protection. If no outlet for the activities of men thus trained is afforded in Canada, there will certainly be a lack of qualified investigators when they are again desired.

March 2nd, 1932.

Principal W. Hamilton Fyfe,
Queen's University,
Kingston, Ontario.

My dear Principal,

The recent action of the Government in the direction of economy includes a reduction of the appropriation for the work of the Laboratories of Plant Pathology and of Entomology from $705,000 to $328,300, a reduction of some what over 50%.

As you are aware, the work of these Laboratories in fundamental in character, employing expert scientific workers who have prepared themselves by long training, and are, for the most part, products of our Universities. The work itself is aimed at the protection of our country against the importation of diseases, affords adequate inspection at ports and applies scientific research to the problems of damage and disease by animal and plant pests.

I cannot but believe that the above reduction is so drastic as to cripple most seriously this important work, and to prejudice its future by alienating the men now preparing for the scientific work of the Government in future.

In view of the importance of the work, it occurs to me that we might co-operate with Toronto, and the University of Montreal in making suitable representations of the whole issue to the Ministers of Finance, Agriculture and the Interior at Ottawa, and I venture, therefore, to suggest that as a preliminary step we might exchange memoranda, and, if we could agree on the terms of a protest, arrange for an appointment in Ottawa.

Ever yours faithfully,

March 2nd, 1932.

Sir Robert Falconer, K.C.M.G., LL.D.,
President, Toronto University,
Toronto, Ontario.

My dear Principal,

The recent action of the Government in the direction of economy includes a reduction of the appropriation for the work of the Laboratories of Plant Pathology and Entomology from $705,000 to $328,300 - a reduction of somewhat over 50%.

As you are aware, the work of these Laboratories is fundamental in character, employing expert scientific workers who have prepared themselves by long training, and are, for the most part, products of our universities. The work itself is aimed at the protection of our country against the importation of diseases, affords adequate inspection at ports and applies scientific research to the problems of damage and disease by animal and plant pests.

I cannot but believe that the above reduction is so drastic as to cripple most seriously this important work, and to prejudice its future by alienating the men now preparing for the scientific work of the Government in future.

In view of the importance of the matter, it occurs to me that we might co-operate with Queens and the University of Montreal in making suitable representations of the whole issue to the Ministers of Finance, Agriculture and the Interior, at Ottawa; and I venture, therefore, to suggest that as a preliminary step we exchange memoranda, with a view to agreeing on the terms of a protest and arranging for an appointment in Ottawa.

Ever yours faithfully,

President's Office.

March 4, 1932

Dear Sir Arthur Currie:

In Sir Robert Falconer's absence I beg to acknowledge the receipt of your letter of March 2 regarding the reduction in the appropriation of the Laboratories of Plant Pathology and Entomology by the Governmant at Ottawa. Sir Robert Falconer has had a sharp attack of influenza, and will not be in his office until next week. He will therefore be unable to prepare a memorandum to be submitted to the other Universities, but I am sure he would support any action that may be taken by them in regard to the reduction.

On his return to his office your letter will be submitted to him.

Yours sincerely,

A. W. Patterson

President's Secretary.

Sir Arthur Currie, G.C.M.G.,
Principal, McGill University,
Montreal.

President's Office.

not acknowledged

March 15, 1932

My dear Sir Arthur:

I am sending you a copy of a letter that I have just received from Professor Thomson, the head of our department of botany, in regard to the matter that you brought before me in your letter of March 2nd dealing with the proposal of the Government at Ottawa to reduce the appropriation for the work of the laboratories of plant pathology and Entomology from $705,000 to $328,300. I was absent through illness from my office when your letter came, and this is the first opportunity I have had of sending you anything definite. I hope that Professor Thomson's letter may be of some help to you.

Yours sincerely,

Robt. Falconer.

President.

Sir Arthur Currie, G.C.M.G.,
Principal, McGill University.

University of Toronto
PRESIDENT'S OFFICE

COPY.

University of Toronto,
Department of Botany,
March 11, 1932

Sir Robert Falconer, K.C.M.G.,
President,
University of Toronto.

Dear Sir Robert:

With regard to Sir Arthur Currie's letter suggesting that this University co-operate with other Universities in making representations to the Government at Ottawa as to the importance of the plant pathological and entomological services of the Dominion Department of Agriculture, I may say that this department is unanimous in feeling that the suggestion is one worthy of our active support. The services involved have shown themselves to be of fundamental importance to the economic welfare of the Dominion and to the development of scientific information in their respective fields.

In our opinion the inspection and preventive service alone more than justifies the funds required to carry on the entire work. In so far as work in connection with plants is concerned, it is general knowledge that within the last fifty years several disastrous diseases have caused enormous losses which in every case, except that of stem rust of wheat, have been caused by an organism recently introduced from some foreign country. For example, chestnut blight, which destroyed the magnificent chestnut forests of the Eastern United States, was due to a fungus introduced from the Orient. Likewise the citrus canker which cost the Gulf States millions of dollars to eradicate was caused by a bacterium introduced from Japan. To mention one more of similar cases, the blister rust which threatens the ultimate destruction of our white pine, came to us from Europe in shipments of nursery stock. It is difficult to see how the suspension of a service which gives us a reasonable measure of

protection from new importations of such devastating pathogens and at the same time provides us with a supply of certified disease-free potatoes, raspberries, etc. for seed and export purposes can be justified on the grounds of economy.

In addition there is involved the organisation and effectiveness of a whole network of laboratories. These laboratories, scattered from coast to coast, have been built up through tireless unremitting effort during the last twenty-five years, and render a valuable service to the agricultural industry through their investigations of local and general problems in every line of agricultural activity. In the Plant Pathological Service there are laboratories in British Columbia devoted to those intricate physiological problems like "Drought Spot" and "Corky Core" of the apple which are involved in cultivation under irrigation. On the Prairies are laboratories devoted to cereal pathology in which studies are made of such important problems as root rot diseases of wheat and stem rust of cereals. In Ontario a laboratory is located in the Niagara peninsula for the investigation of fruit diseases and the central laboratory of the Division is at Ottawa. In the Maritime Provinces there are laboratories, strategically located, which serve the fruit growing districts of the Annapolis Valley and the potato producing areas. From these laboratories there have come not only results of immediate practical importance but also contributions to pure science which have won recognition throughout the world. For example the paper by Dr. J. H. Craigie, of the Dominion Rust Research Laboratory at Winnipeg, on sex in rust fungi was given the "Eriksson Award" as the most outstanding contribution to cereal pathology presented at the last World's Botanical Conference at Cambridge.

From our own standpoint, we are especially interested because we have in this department eighteen postgraduate students in plant pathology and mycology who are undergoing special training to enable them

to undertake the very problems for which these laboratories were organised. To disrupt the plant pathological and entomological services of the Department of Agriculture will lead to a type of loss that cannot be balanced against a temporary saving in the budget. The men who will be dismissed and the men in training are of a very highly specialised type whose service is necessary for safety and efficiency in the production of our food, and thus basic to the economic recovery of the country.

Yours sincerely,

(Signed) R. B. Thomson

MACDONALD COLLEGE

McGILL UNIVERSITY

RAILWAY STATIONS AND EXPRESS:
STE. ANNE DE BELLEVUE, QUE.

POST OFFICE:
MACDONALD COLLEGE, QUE., CANADA

FACULTY OF AGRICULTURE
OFFICE OF THE DEAN

March 8th, 1932.

Sir Arthur W. Currie, G.C.M.G.,K.C.B.
Principal & Vice-Chancellor,
McGill University,
Montreal, Que.

Dear Sir Arthur:

I am enclosing revised copy of the memorandum in regard to proposed reduction in agricultural services and which I gave you at your house. I am also including some other material which some of the members of the staff have prepared.

Yours faithfully,

H. Barton

Dean.

HB/Y
ENCLO/

P.S. The other material will follow by express-mail - H.B.

Comments on Proposed Reduction in Dominion Grant
for Agriculture.

In considering the reduction in the Agricultural Grant for the Dominion Department of Agriculture for 1932-33, one is confronted with the difficulty of not knowing exactly how it will apply within the various branches. It would appear, however, that for the department as a whole the cut of some 33% in the appropriation is one of the largest proposed in the Government Service.

With some of the proposed reductions one cannot disagree in these times, in fact one might be tempted to make them larger did circumstances permit. The grant of $150,000 for a World Grain Congress under present conditions would be hard to justify were we not committed to it. The reduced assistance to Fairs will not be popular but it is possible that this form of agricultural assistance may have been overdone in the past. In any case, it can well be reduced now and Exhibitions can find various ways of making the necessary adjustments.

One finds in the estimates that one important branch, namely, Live Stock, is cut less than 10%, while another, Administration of Destructive Insect and Pest Act, considered vital from a crop production standpoint is cut over 50%. The certified seed potato business, the production of quality fruit, and farm crop protection against injurious insects depend directly upon this service. A fifty per cent service will certainly involve grave risks.

The Experimental Farms Branch is cut some $800,000, or approximately 39%, the Health of Animals Branch, a like amount, or 35%. By limiting the area of Tuberculosis eradication work it would seem that with the amount allotted the Health of Animals Branch might carry on its important health protective service without undue disturbance. But in the case of the Experimental Farms which constitute the major investigation and related services of the department, such a substantial cut is likely to cripple the work as a whole, if the reduction is to take the form of general curtailment. It is believed by many familiar with the work that the effect of such a drastic cut can only be met satisfactorily by the elimination of a number of farms. Such a course naturally would be unpopular with those immediately affected, including the representatives of the constituencies in which farms might be discontinued, but such opposition should not be allowed to jeopardize the value of the work as a whole.

Farm Economics is a new branch and represents a type of work not sufficiently developed in Canada. It is being greatly stressed in other countries where information regarding types of farm organization, operation costs, production and marketing trends, and the commercial relations of agriculture is proving of great value, not only to farmers but to business men and Governments as well. It is regrettable that such a small appropriation should be reduced 28%, or from $12,000.00 to $8,600.00, and with two men on the present staff with salaries of $7,620.00 it is difficult to understand how they can function effectively.

It is understood that all employees of the department who are classified in the category known as "Temporary" have been notified that their services would not be required after March 31st. This is a more drastic step than it might seem because many of those affected, while classed as, "Temporary" have actually been employed in the Service for a considerable period and are doing extremely valuable and highly specialized work, not to mention that many of them are married men withbfamilies. It may be said that these so-called temporary men constitute largely the front line Service, in that they are field operators in immediate contact with farm conditions, and farm people. They add tremendously to the value of the permanent staff because much of the work, while planned and directed by the permanent staff is given effect through those in the "Temporary" category. Young men, with the most recent and the best training, are to be found in this category, and incidentally are receiving the lowest rate of pay in the department.

The Dominion Government carries the largest single share of agricultural work in Canada. This Service is the greatest contribution the Government makes to agriculture, and the Government, thanks to the Universities, is now in a position to find highly trained young Canadians for that service. To drop all the younger men in the way proposed must mean not only serious disorganization in many of the Services, but also the loss for all time of a number of the best trained young men in it, and the discouraging of others who contemplate entering it. It is therefore not only the immediate but the ultimate effect as well that should be considered.

MEMO: Re Proposed Reduction in Agricultural Services.

The efforts of the Government to effect economies in governmental services and departments are admittedly essential to the present situation and deserving of the utmost sympathy and support. The curtailment of merely routine or clerical work, or the postponement of projected public works will have no permanent effect upon the future development of the country. On the other hand, the most careful discrimination as affecting vital services is essential, to ensure that the basic framework of our organizations and the machinery necessary for future progress is not irreparably injured. It may be that reorganization is called for, but it must be recognized that readjustment of such intricate and interdependent units must be an exceedingly delicate task and probably could only be safely undertaken after much expert thought and advice, such as could only be given in some cases by a properly qualified independent commission.

It would appear that the sudden and drastic cuts proposed in certain of the public services, and notably in agriculture, are likely seriously to disorganize and unbalance the machinery that has been built up over a period of years in response to definite needs, to terminate established work of proven value, to disrupt the progress of promising investigations now in process of development and to prevent the inception of further needful work. Everyone recognizes that never in the present century has agriculture been in such sore distress. The progress made during this century is due, in no small measure, to these very services, which, apparently are now to be seriously curtailed. However sympathetic and earnest a government may be in advancing the interests of agriculture, it is extremely

doubtful if any form of assistance can equal scientific service. Every country in the world recognizes that this is the best contribution that can be made to agriculture and even those in much greater distress than ourselves continue to build and extend this service.

It is too often erroneously believed that the benefit from the sums expended on scientific service for agriculture are enjoyed by the farming population alone. The fallacy of this can be seen in the fact that in all countries where the services of scientific agriculture have been enhanced, the proportion of income expended on food is rapidly declining, while at the same time the quality of food has been greatly improved. Nor is it to be supposed that this service has been limited to the field of agricultural production alone; nor, in addition, has it merely had to do with the marketing of farm products. Its ultimate effect may be most apparent in the sound development of the country's trade and commerce. Canada's position in the export trade for farm products has never been more critical than it is today. She finds herself with a surplus quantity of a larger number of products than ever before. It is imperative that they be sold abroad, but, with all of these she has to face the most formidable kind of competition. Behind every single product that is now in a position to command consideration in the export trade is to be found a network of services, including education, regulation and research, based largely on government services.

The seed potato industry of Canada is an excellent example of this fact. The research that determined the cause of the various diseases and the remedies, the educational work that resulted in the widespread adoption of such remedies, the organization that placed the work on a sound business basis, the inspection that enables this business to be maintained and that keeps the established

standards intact, are all the creation of scientific service. Thus an entirely new industry representing the product of 40,000 acres of intensively cultivated land owes its existence to the activities of the Department of Agriculture. The Canadian apple trade is an equally appropriate example. The research on which the pest control schedules employed by our fruit growers is based, is the work of trained specialists. Fifteen years ago only a fraction of the orchards were sprayed while today no commercial orchard is possible without spraying. The advanced cultural methods followed, even many of the superior varieties grown, the organization of the growers and the inspection of the product, have again, to a great extent, been dependent upon scientific service and official regulation. The result is only too clear at the present time. While neither potatoes nor apples command a high price, certified seed potatoes are now being sold at a premium of fifty per cent, and quality apples are among the few farm products that can be sold at a profit. We might equally well take any other agricultural product from wheat to eggs to illustrate the dependence of agriculture upon such service.

Our position with any of these products is not yet so secure that we can afford to diminish our efforts in any way. Certain agricultural industries may be temporarily distressed and their product may now be of low value in the world's markets, but to relinquish their position might mean a great sacrifice ultimately and the services upon which they depend, once discontinued, or too drastically curtailed, cannot be readily brought back again with the return of more normal conditions.

Of late years, work of much potential value in certain fields has been undertaken and, indeed, has reached a point where returns

of value are to be anticipated. It does not seem good business, therefore, to lose irrevocably all that has gone into this work in trying to tide the country over an admittedly serious temporary situation. In the present struggle for world markets our scientific services are the weapons upon which we must depend to enable us to overcome the competition we are compelled to face.

The severest blow that will be dealt by the proposed reductions, however, is to the human material, i.e. to the technical personnel. We do not refer to the personal effect upon the men themselves, but the effect on the future development of Canada. For years it has been urged that Canada lacked a sufficient body of trained men, that, in spite of what was being accomplished, a different and more thorough training, a new view-point and a different method of approach was necessary to enable us to meet modern competitive methods. This challenge was accepted by the universities, which, at considerable cost to themselves and with no appreciable assistance from the government, built up an organization capable of meeting these supposed needs. As a result, there are now available a more adequate force of competent young Canadians trained and equipped in Canada to solve Canadian problems.

The proposed sudden cessation of activities means that these men must find employment elsewhere and, not only that, but it will force others in a less advanced state of training to look elsewhere for their life work. The result will be that when this time of stress is over we will neither have these same men nor others to take their places. These men will be irrevocably lost to us; the care and effort that went into their training will be lost; the money that they and the country have spent on their special education will be

lost. A geneticist, a plant pathologist, a chemist, or an entomologist is not something that can be improvised in a few months of years, for the fact should not be lost sight of that those who are now completing their work, or have but recently completed it, are not only the result of a long and more careful process of training, but also of a more rigid system of selection than ever before. The country needs their services now even more than in prosperous times, when wastefulness is less harmful.

One effect of the proposed action is the elimination of large numbers of the so-called temporary staff. Many of these are the very men who by virtue of their training are capable of rendering a very special service and many of them constitute the connecting link between the farmer and science. Temporary helpers are the cheapest and most effective type of assistance available to enable the work of the higher officers to find expression in field service, without which the farmer contact is largely lost. Moreover, it is from this group that many of the effective workers of the future should come. Would it not therefore be sounder policy in these trying times to take stock of the situation with a view to determining not only what services should be eliminated or curtailed but also those that should be conserved and even strengthened.

In addition to the foregoing, a serious blow is struck at the morale of the remaining staff, who see the efforts of years brought to nothing. The spirit of an organization is not something that can be built up at a moment's notice and it is this factor that will bear most heavily on the most efficient and valued members of departments. If we have faith in the future of our country, may we not well question whether we are justified in paying so heavy a price to tide us over a merely temporary emergency.