





RADIO TALKS  
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DOMINION DEPARTMENT OF AGRICULTURE  
OVER THE NETWORK OF THE  
CANADIAN BROADCASTING COMMISSION STATIONS  
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OCTOBER 4, 1934  
to  
APRIL 25, 1935, Weekly



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## ROMANCE AND DIVIDENDS IN AGRICULTURE

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Subjects and Dates for Radio Broadcasts for Dominion  
Department of Agriculture on Canadian Radio Broadcasting  
Commission Coast to Coast network to be given from  
October 4, 1934 to April 25, 1935 inclusive at 8 p.m.  
E.S.T. over Eastern and Midwest network and at 11.30 p.m.  
Pacific time over B.C. network.

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<u>Date</u>	<u>Subject</u>
Oct. 4, 1934	Romance in All Things - introduction to the series of talks.
Oct. 11, "	Down the Garden and Orchard Paths - Clean up to Reduce Insect Infestations.
Oct. 18, "	Fine Feeds Make Fine Birds - The Art of Producing the Best Poultry
Oct. 25, "	Hallowe'en Apples
Nov. 1, "	The Nutritional Value of Dairy Products
Nov. 8, "	The Milky Way - What Clean Milk Production Means.
Nov. 15, "	Boys' and Girls' Farm Clubs
Nov. 22, "	What is Done to Assure Wholesome Meat - Meat Inspection in Canada.
Nov. 29, "	Canada's Best in Beef.
Dec. 6, "	Commercial Feeding Stuffs
Dec. 13, "	Christmas Turkeys
Dec. 20, "	Christmas Giving
Dec. 27, "	A Review of the Year's Markets
Jan. 3, 1935	The Agricultural Situation
Jan. 10, "	Canada's Famous Varieties of Grain
Jan. 17, "	Among the Best of Foods - Canned Foods
Jan. 24, "	Honey - One of Nature's Best Foods
Jan. 31, "	Prices of Farm Products
Feb. 7, "	The Seed Catalogue - Testing of Seeds for Purity
Feb. 14, "	Bacon Grading - Its Value to Canada's Trade.
Feb. 21, "	Grading Dairy Products
Feb. 28, "	Protecting Canada from Dangerous Insects
March 7, "	The Battle Against Grasshoppers
March 14, "	Maple Syrup - One of Canada's Most Delectable Crops
March 21, "	Lamb - One of the Best of Meats
March 28, "	Eggs for Easter
April 4, "	Succession of Crops in the Garden
April 11, "	The Story of the Clothes Moth
April 18, "	Marketing Services
April 25, "	Concluding Summary.

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## INTRODUCTION FOR RADIO ANNOUNCER

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### ROMANCE AND DIVIDENDS IN AGRICULTURE

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This is the first of a series of five-minute talks to be given every Thursday evening at this same time by the Dominion Department of Agriculture over the Coast-to-Coast network of the Canadian Radio Commission. In this series, which will be continued until the end of next April, an outline of some of the activities of the Department will be given.

Talk No. 1 - Introduction,

Ottawa, October 4, 1934.

## ROMANCE AND DIVIDENDS IN AGRICULTURE

### Talk No. 1.

of which have a relation to the life and well-being of every Canadian.

The work of the Dominion Department of Agriculture in co-operation with the provincial departments and other related organizations, has for many years been conducted on the broad basis of service to the farmer, the consumer, and the industry. Modern agriculture is now a highly diversified industry vastly different from the industry the early pioneers knew. It has been revolutionized by improved methods, improved implements and materials and the application of practical science.

No: As the poet tells us, there is romance in the building of a barn, in the green-sward and growing grain, in the very twist of a pig's tail and the turn of a cow's horn. For this parent of golden dreams, as Byron has described romance, is to be found in practically every condition of human life and activity. Even fruit and vegetables have their moments. Certainly there is something very far removed from the commonplace in the development of the requirements of both the domestic and export markets. It has been a significant feature. Many of the greatest achievements of the great wheat-producing areas of Western Canada, a development that caused the greatest railway system in the world to be constructed, that developed the greatest island ports, and earned for Canada the title of "The granary of the Empire".

Down through the generations, agriculture has been the most important of all Canada's industries. What is now the most important of all Canada's industries, agriculture today supports nearly five million Canadians directly and many more indirectly. It has been and still is the most essential of the Dominion's industries. It is the basis of life, and the primary source of food, clothing, shelter, and marketing of farm products. It is not intended to attempt to educate those who follow these talks with us, so much as to interest them; to give, as it were, in a popular way, some idea as to the relation of certain phases of the great industry of agriculture to the general public. These talks will deal with eggs, poultry, fruit, canned goods, dairy products; the inspection and grading of meats; pure seed for the farm and garden; the beneficial work of the entomologists; boys' and girls' farm clubs; what Canada has done in producing incomparable varieties of grain; and other subjects, all

of which have a relation to the life and well-being of every Canadian.

The work of the Dominion Department of Agriculture in co-operation with the provincial departments and other related organizations, has for many years been conducted on the broad basis of service to the farmer, the consumer, and the industry. Modern agriculture is now a highly diversified industry vastly different from the industry the early pioneers knew. It has been revolutionized by improved methods, improved implements and materials and the application of practical science.

Agricultural progress in Canada has not, however, been merely by the expansion of crop acreages and production, nor by the increase of live stock. Improvement in the methods of production and decreasing the cost by attaining, through experiment and research, commodities of the best quality, have been even more important. The introduction of such standards as will best meet the requirements of both the domestic and export markets, has also been a significant feature. Many of the products of the field, of the garden and of the orchard of this country are among the very best of their kind in the world.

Down through the generations since de Monts and Hebert began what is now the most important of all Canada's industries, for agriculture today supports nearly five million persons in Canada directly and many more indirectly, it has been, and still is, the most essential of the Dominion's industries. Food is the chief need of life, and the principal concern of agriculture is the production and marketing of foodstuffs.

No activities of the Government service of Canada touch so intimately or so vitally the life, the health, and the well-being of the people as those of the Dominion and Provincial Departments of Agriculture and the associated organizations and institutions, such as the agricultural colleges and schools.

The Department of Agriculture hope you will enjoy the talks to be given each Thursday evening. A copy of each talk will be sent

We shall continue this series next Thursday evening at this same time by inviting you to come with us for a walk "Down the Garden and Orchard Paths".

## DOWN THE GARDEN AND ORCHARD PATHS

## CLEAN UP TO REDUCE INSECT OUTBREAKS

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The care and development of a successful garden is one of the most enjoyable, permanent and satisfying hobbies within the reach of almost every one. No Canadian home is considered to be complete unless it has one - be it flower garden, vegetable garden or a combination of both. And no garden, on the other hand, seems to be complete without its insects to plague the gardener and devour the plants. Thus in thousands of Canadian homes with the little wife well willed and a little land well tilled among the most annoying and destructive flies in the domestic ointment, at least in the summer, are the insects in the garden. It is, therefore, concerning these, and to the protection of the plants on the little bits of land well tilled, we would call your attention for a few minutes.

The recollection of the pleasures and disappointments of the gardening season just passed may still be clearly in mind and should serve as a stimulant to secure more perfect results next year. The simplest and most direct method of protection against insects in any garden is to be found in the careful garden clean-up.

The insects attacking the garden plants must survive the winter and they do this, by preference, in or about the garden. They occur, in various stages of development according to the characteristics of the insect, in the cultivated plant or weed refuse, in the soil, in the piles of leaves or grassy head lands, or even in the cracks and crevices of the fencing, garden seats and trellis work. In fact any spot in the garden may be serving as the winter quarters for insects of one kind or another. If they remain undisturbed for the autumn and winter, every encouragement is given to the establishment of a flourishing outbreak next year. Therefore, every gardener who wishes to protect his plants from insects should keep this in mind and do the major part of his insect control work in the autumn with rake, fire and spade.

Although it is much better to carry on the cleaning up process as a continuous one throughout the season the last two weeks of October provide the most effective period to get the maximum effect from the minimum of labour. The insects by then have practically ceased their activity for the year and are in their winter quarters. In this cool weather there is an assurance that if disturbed they will not be able again to seek out favourable locations and most of them will perish before next spring.

The garden clean-up is a relatively simple task. The whole area should be raked clean and all cultivated plant refuse and fallen leaves, as well as all weeds and fallen fruit should be gathered and burned or composted with soil. The soil should be ploughed or spaded deeply and left as rough as possible. The grassy borders of the plot should be burned over, the fence corners cleaned out and if possible the weeds and refuse in the neighbouring lot should also be disposed of to prevent cutworms and stalk borers migrating into the garden in the spring. And finally, ridiculous as the operation may appear, wooden fences, arbours and trellises should be brushed down with a corn broom.

If you want a garden comparatively free from insect pests we know of no more effective way to accomplish this than to follow the methods for insect control we have briefly outlined. The Entomological Branch of the Dominion Department of Agriculture, however, is at your service and will be only too pleased to place at your disposal its fund of information in solving any particular insect problem you may have.

The next talk in this series will be "Fine Feeds Make Fine Birds - The Art of Producing the Best Poultry" and will be given at this same time next Thursday evening.

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## FINE FEEDS MAKE FINE BIRDS -

## THE ART OF PRODUCING THE BEST POULTRY

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There is nothing more delectable as the principal course on the dinner menu than good poultry. The producer and the consumer both should realize that it is poor business to sell or buy poultry that is thin in flesh. To sell a bird not properly finished does not pay the producer for he misses his best opportunity to make a profit and it is false economy for the consumer to buy such a bird even though the price per pound may be lower for he gets too little flesh and too much waste for what he pays.

Take the two cases briefly. First, that of the buyer or consumer. There are two main differences in the eating of the thin bird and the fleshed bird. - One is the increased proportion of edible meat that the fat bird has over the thin bird and the other is the quality of that flesh. An ordinary thin or range bird at 10 cents a pound is dearer than a well fleshed bird at 15 cents, simply because the difference in weight that the fleshed bird has is made up of flesh almost entirely, the waste, such as bones, head and feet, are practically the same whether thin or fleshed. Also the difference in the quality of the flesh is most marked - what flesh there is on the thin bird is tough and dry, and what little oil or juice there may be has a tendency to dry out in cooking.

But what about the producer? For some unknown reason he is rather too willing to market his poultry without finishing it and the consumer too often has no choice in the matter, for there is not enough of the quality product to go around. The producer is working against his own best interests every time he markets an unfinished bird, for by so doing he fails to get out of his work the profit that is there for him. It is this last pound or two that is the cheapest to produce.

At the Central Experimental Farm, Ottawa, it has been shown that it takes  $4\frac{1}{2}$  pounds of mixed grain to produce a pound of chicken. With grain at one cent a pound, therefore the extra pound of flesh is developed at a cost of about five cents counting the milk that is used, and this extra five cents means from two to five cents a pound more for the whole bird.

Incidentally the feeding of mixed grain to poultry provides a good market for coarse grains. In recent years mixed grain has sold as low as 50 cents per 100 pounds at the elevators. Had this grain been fed to chickens of good type and the chickens sold at even 10 cents per pound, 100 pounds of grain instead of bringing the farmer 50 cents at the elevator would have brought him over \$2.00 per cwt. through the fat chicken route.

The place for this extra feeding is before the birds leave the hands of the producer. The lack of quality in much of Canada's dressed poultry is one reason why Canadians are comparatively small eaters of poultry, the per capita consumption being about 10 pounds as against 18 pounds in the United States. The sooner producers are convinced that selling thin birds is false economy the sooner better market conditions will prevail.

Producers are urged to study the market requirements for poultry by reading available literature on the subject. Information in this connection can be obtained free by writing to the Publications Branch, Department of Agriculture, Ottawa, or to any Dominion Experimental Farm.

This is the third talk in this series. The next will be Hallowe'en Apples to which you are invited to listen in at this same time next Thursday evening.

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## INTRODUCTION FOR RADIO ANNOUNCER

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### ROMANCE AND DIVIDENDS IN AGRICULTURE

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Hallowe'en Apples is the title of this evening's talk, the fourth of the series of five-minute talks to be given every Thursday evening at this same time by the Department of Agriculture over the Coast-to-Coast network of the Canadian Radio Commission. In this series, which will be continued until the end of next April, an outline of some of the principal activities of the Department will be given.

TALK NO. 4 - HALLOWE'EN APPLES

OTTAWA, OCTOBER 25, 1934.

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## HALLOWE'EN APPLES

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After supper next Wednesday, children in Canada, as in other countries, will combine to celebrate the feast of Hallowe'en with all its happy games and mischievous pranks. Though now known as little else than the eve of the Christian festival, All Saints' Day, Hallowe'en perpetuates customs long ante-dating Christianity. On the Druidic ceremonies held each fall in thanksgiving for the harvest were grafted some of the characteristics of the Roman festival in honour of Pomona, Goddess of fruit and gardens, held about the first of November, in which apples and nuts, representing the winter store of fruits, played an important part. The sport of "apple-ducking"-- attempting to seize with the teeth an apple floating in a tub of water -- and other similar games, all have an ancient origin.

As the use of apples in Hallowe'en festivities dates back to early history, so does the apple industry in Canada date back to the early pioneer days of this country. History records the establishment of apple and pear orchards in the first settlements in Nova Scotia over three hundred years ago by French settlers, and the land made famous by Longfellow in his immortal poem, "Evangeline", namely, the Annapolis Valley, has for many generations been one of the most widely known apple producing sections in North America.

In the Province of Quebec there are records of apples growing three hundred years ago. In Ontario the first apple trees were planted about 1750, and in British Columbia about 1850.

The Canadian climate is well suited to the production of high quality apples, and the industry, originally intended to provide apple cider and vinegar for home consumption has developed to such an extent that now Canadian apples find their way into many countries. Of the 1933 crop, approximately  $2\frac{1}{4}$  millions of barrels were exported.

In the early days of apple growing in Canada little attention was paid to varieties; apples were just apples. Improvement in transportation and storage facilities, the development of export and home markets, and more knowledge gained of the market demand, made necessary experimental and research work. There are now in Canada good varieties of apples with keeping qualities which enable them to be stored and available for consumption throughout practically the entire year.

The Fruit and Honey Act and the Regulations prescribe the grade for apples when marketed. Not only in the production of new and better varieties do Dominion and provincial agricultural authorities seek to provide better fruit for a discriminating public taste, but in the packing, grading, transportation, and sale of apples every effort is made to assist the grower in placing before the consumer an attractive and delectable fruit. While under modern housing conditions in the average home there may be insufficient cold storage space for a unit such as a barrel, yet the smaller units such as the box, hamper, or basket, are quite suitable to store. Unit purchase is advised as the buyer is assured of a uniformly graded product, and the cost is much less than where smaller quantities are purchased. There could certainly be, for health and enjoyment, a much larger consumption of apples among Canadians, as the fruit grown in their own country is unexcelled in the world.

With a knowledge of the varieties suited to the season, consumers who insist on these varieties will obtain the greatest value for their outlay and their greatest satisfaction in the enjoyment of this fruit. The names of the varieties best suited to the season should be learned by everybody. Requests for and detailed information on this subject, as well as on the uses, season, grading, packing and storing, will receive prompt attention by the Dominion Department of Agriculture in Ottawa.

The next talk in this series will be The Nutritional Value of Dairy Products, to which you are cordially invited to listen at this same time next Thursday evening.

## THE NUTRITIONAL VALUE OF DAIRY PRODUCTS

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Due to the remarkable discoveries made in recent years regarding the close relationship of well-balanced, adequate meals to bodily health, the old adage "one must eat to live" has been superseded by the modern version "one must eat enough of the right foods to live in good health".

Among the highly nutritive foods dairy products which include milk, cheese, butter and ice cream hold a prominent place, and although certain food properties are common to all, it ~~may be~~ well, from a nutritional standpoint, to consider each product separately.

Milk - the food for which there is no substitute - furnishes more to the body than any other single item in the diet. Its proteins (or body-building material) are of the highest quality; its fat is easily digested; it is the best source of calcium (lime) and also contains a liberal amount of phosphorus - the two minerals so necessary for the development of the bones and teeth. In addition, milk contains several of the vitamins known to play a part in normal health and growth and also, because of its fat and sugar content, is important as an energy producer.

Health and nutritional authorities agreeing that milk is the most indispensable food for the growing child, recommend a quart for each child every day and advise a pint for an adult. How much are we using? The latest estimated figures indicate that the per capita consumption of milk in Canada is not more than one pint which means that some, yes many, are going short. For human nutrition milk is an incomparable food, ~~a liberal supply of which will promote normal growth in children and enable adults to enjoy a longer lease of healthier life.~~

Now a few words about cheese. To ~~fully appreciate the value of cheese, its relationship to milk should not be overlooked.~~  
~~cheese~~  
~~Cheese~~, like milk, is an economical, healthful food. Its high

food value is supported by the fact that a pound and a quarter of cheese contains fully as much protein, calcium and phosphorus as a gallon of whole milk. <sup>One of the largest buyers of cheese in the world recently states that Canadian factory cheese is the best in the world</sup> Many people raise a question about the digestibility of cheese, but if this concentrated food is eaten in rather small amounts at a time, served with bulky foods and thoroughly chewed, cheese is well digested. The method of cooking also affects its digestibility - Cheese should be grated, mixed well with the other ingredients and cooked at a moderate temperature for a rather short time - so that the protein will not be toughened. <sup>You may be interested to know that National Cheese Week will be from November 10<sup>th</sup> to 17<sup>th</sup>.</sup> And yet another <sup>important</sup> dairy product. <sup>in Canada</sup> Butter. It is not hard to understand why butter is put on the table three times a day or why the woman who prides herself in her cooking prefers it to other fats for its delicious flavour appeals to every one. There is, however, reason to believe that, if the nutritive qualities of butter were valued as highly as its flavour, this wholesome food would be used even more liberally in Canadian homes. ~~In addition to being a concentrated energy producer,~~ Butter contains vitamins which place it first among fats.

Cream from which butter is made, and ice cream are likewise important not only for their palatability, but for their contribution to health. Few people need to be coaxed to eat ice cream for its smooth texture and delicious flavour <sup>when properly made</sup> appeal to young and old. Taking into consideration, in addition, the food value of cream and other ingredients used in its manufacture, it is not too much to say that ice cream rightly deserves to become our national dessert.

The next talk in this series will be - The Milky Way - What Clean Milk Production Means - to which you are invited to listen at this same time next Thursday evening.

<sup>Copies of these talks or any others in this series</sup> may be obtained free by writing to the Publicity Branch, Dominion Department of Agriculture, Ottawa.

THE MILKY WAY

(WHAT CLEAN MILK PRODUCTION MEANS)

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In view of the fact that milk is one of the most valuable human foods, the importance of clean milk production can hardly be emphasized too strongly. Generally speaking, consumers in Canada demand milk of a very high standard of cleanliness. How many consumers, however, have ever given a thought to the problems involved in the production of clean milk down on the farm?

Clean milk may be defined as milk that is free from dirt and foreign matter, containing comparatively few bacteria and certainly none of a disease-producing nature. The first essential in producing milk of such a standard is to have healthy cows. They must be free from tuberculosis, anthrax and other contagious diseases to which cattle are subject and which affect the milk indirectly. In addition, the udders of the cows must be free from such diseases as mastitis and cow pox which directly infect the milk with bacteria. Tests have to be applied frequently to determine the diseased cows and eliminate them from the herds, usually at a considerable loss to the farmers.

Next to healthy cattle come the twin factors of clean cattle and clean barns. In summer time, these are comparatively simple matters as the cows are washed by the frequent showers and have clean fields on which to lie. During the seven months in which dairy cattle have to be stabled, however, cleanliness is a big problem. Warm, well-lighted, sanitary barns must be constructed and these must be kept scrupulously clean. Proper ventilation must be provided, otherwise the cows will be unhealthy and the warm, freshly-drawn milk will absorb barn odours. Stables must be cleaned twice daily, cows must be clipped and brushed regularly and they must have their udders and teats washed before each milking. Clean bedding, free from dust, put down before milking, and plenty of good, clean food, free from mustiness, served after milking, are prime essentials.

Milking cows by hand is an art and clean hand milking is a fine art, involving a high degree of healthiness and cleanliness on the part of the milker. Machine milking is a science, involving a knowledge of the physics of electric motors, internal combustion engines and vacuum pumps. In addition,

it is necessary to have taken a minor course in the art of hand milking, the latter for use when the transformer burns out, the gas runs low or a gasket pops.

Clean milk production requires clean utensils as poorly washed utensils form one of the most potent sources of bacteria in milk.

Clean milk must be rapidly cooled if the number of bacteria is to be kept down. This means the harvesting of large quantities of natural ice during the winter months at a time when there is plenty of other work on the dairy farm. The latest alternative is the installation of comparatively expensive electric refrigeration.

Finally, the milk must be promptly delivered to the distributor.

This involves turning out at anywhere from 4.00 to 6.00 a.m. on a cold and frosty morning in order that the cows may be milked, the milk cooled and delivered to the early morning train, so that it may reach the city and be bottled for delivery and consumption the following day.

The foregoing brief resume of the factors involved in clean milk production on the farm should be sufficient to show that the "Milky way" is no sinecure for the farmer. He is therefore entitled to an adequate share of every dollar the consumer spends along the "milky way".

May we remind you that National Cheese Week, which is endorsed by the Dominion and Provincial Ministers of Agriculture, will be held from November 10th to 17th. Canadian cheese is not equalled in quality by any other country.

The next talk in this series will be "Boys' and Girls' Farm Clubs".

Copies of each talk may be obtained by writing to the Publicity Branch, Dominion Department of Agriculture, Ottawa.

OTTAWA, NOVEMBER 15, 1934.

## INTRODUCTION FOR RADIO ANNOUNCER

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### ROMANCE AND DIVIDENDS IN AGRICULTURE

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The title of this evening's talk is "Boy's and Girls' Farm Clubs". It is the seventh in the series to be given every Thursday evening at this same time by the Dominion Department of Agriculture over the Coast-to-Coast network of the Canadian Radio Commission.

TALK NO. 7 - "BOYS' AND GIRLS' FARM CLUBS"

OTTAWA, NOVEMBER 15, 1934.

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## BOYS' AND GIRLS' FARM CLUBS

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Among the national organizations connected with Canadian agriculture the Boys' and Girls' Farm Clubs with 26,000 members may assuredly be listed among the most encouraging and hopeful.

The movement was started twenty-one years ago for the purpose of developing among the young people in the rural districts of the Dominion a practical interest in farm work and to provide a measure of agricultural education to those unable to attend schools or colleges of agriculture. The number of the clubs and their membership have grown steadily in the twenty-one years to a degree beyond the most sanguine expectations of the original promoters. The 26,000 boys and girls enrolled in the clubs are now working under a variety of projects which includes all classes of live stock, poultry, field crops, horticulture, and for girls, home economics. In the United States enrolment in boys and girls farm clubs known as 4H clubs totals over 900,000. Similar clubs are established in the British Isles, Australia, New Zealand and other countries, where, as on this side of the world, they pressage advancement in sound agricultural practices and a force for character building among the youths in rural districts.

Boys' and girls' farm clubs have been very aptly described as a great extension school of agriculture in which the subjects for study are the club projects and the pupils are the enrolled club members.

The fact that each club member must carry on the club project on the home farm is one of the most important factors underlying the success that has been achieved. The club member with his calf, pair of pigs, chickens, seed grain plot, or whatever the project calls for, develops an enviable pride in ownership, in achievement, and a keen and healthy interest in the project, in the farm and in the community. The keeping of accounts and records, which is demanded of every member, the possibility of acting as an officer of the club

or as chairmen at meetings, the opportunity to prepare and present papers, of giving demonstrations of some phase of work, the giving of oral reasons in judging competitions and the working together with other young people of the community all constitute a broad and valuable training for future citizenship.

The Dominion and Provincial Departments of Agriculture include club work in their extension programmes, and substantial support has been given in the form of trips, special prizes, trophies and scholarships by railway companies, banks, industrial institutions, service clubs, exhibition associations, agricultural bodies of various kinds, and interested individuals. This wide recognition of the value of the work these clubs are doing may be taken as evidence of their merit.

In 1931 the Canadian Council on Boys' and Girls' Club Work was formed, with the object of developing and maintaining a constructive national club policy. The membership of the Council includes representatives of the Dominion and Provincial Departments of Agriculture and a number of business organizations that are interested in the national growth of the movement.

There are now three phases of club activity, local, inter-club or provincial, and inter-provincial or national. One of the interesting features of the Royal Winter Fair to be held in Toronto from November 21st to 29th will be the National Contests of the Boys' and Girls' Farm Clubs conducted under the direction of the Canadian Council in which thirty-one teams of two members each, selected in provincial elimination contests, will compete for Dominion championships in six of the major live stock and field crop projects.

This growing rural youth movement promises even greater economic, educational and character building possibilities for Canada.

The next talk in this series will be "What is Done to Assure Wholesome Meat - Meat Inspection in Canada", and will be given at this same time next Thursday evening. May we again remind you that copies of these talks may be obtained by writing to the Publicity Branch, Dominion Department of Agriculture, Ottawa.

# INTRODUCTION FOR RADIO ANNOUNCER

## WHAT IS DONE TO ASSURE WHOLESOME MEAT CANADIAN MEAT INSPECTION

That romantic and colorful personality, Disraeli, for several years Prime Minister of Britain, once sagely remarked that the happiness of the Nation depended upon health. One of the surest ways of safeguarding the public health is by insuring the soundness of the staple items in the assuredly sound and wholesome, for ~~the~~ one of the staple items in the normal human diet.

"What is Done to Assure Wholesome Meat - Meat Inspection in Canada" is the title of this evening's talk given by the Dominion Department of Agriculture, the Government, for as long as we have health and without health there can be little happiness. The ~~Department~~ ~~inspects~~ ~~the~~ ~~meat~~ and Canned Foods and with its supporting regulations, and applies to interprovincial and export shipments of meat and meat food products, and to those which may be imported.

The object of the meat inspection service is to prevent the shipment to other countries and from one province to another in Canada of unwholesome and otherwise dangerous meats; to ensure that the preparation and handling of meat and meat food products conform with modern sanitary requirements; to prevent the use of harmful dyes and preservatives and chemicals, to enforce correct and honest **TALK NO. 8 - WHAT IS DONE TO ASSURE WHOLESOME MEAT - MEAT INSPECTION IN CANADA.** sound, wholesome and fit for human consumption.

OTTAWA, November 23, 1934

No meat, or meat food products, can be shipped out of a province, nor out of the Dominion, unless and until those handling such products have fully complied with the requirements of the ~~meat~~ ~~inspection~~ regulations.

All establishments in the Dominion, engaged in the export of meats and meat food products, irrespective as to whether this trade constitutes the major or minor portion of their business, are subject to the operations of this Act and must come under Federal inspection or supervision in this trade.

Inspection is not granted to any establishment unless the plant meets the requirements of sanitation in regard to construction, equipment and maintenance.

## WHAT IS DONE TO ASSURE WHOLESOME MEAT CANADIAN MEAT INSPECTION

When inspection is granted the entire premises, including the yards,

That romantic and colorful personality, Disraeli, for several years

Prime Minister of Britain, once eagerly remarked that the happiness of the

Nation depended upon health. One of the surest ways of safeguarding the

public health is by insisting upon a hygienic meat supply, one that is

assuredly sound and wholesome, for meat is one of the staple items in the

normal human diet.

The Meat Inspection Service administered by the Health of Animals

Branch of the Dominion Department of Agriculture may, therefore, be regarded

as one of the most vitally important of the services performed by the Govern-

ment, for it has to do with health and without health there can be little

happiness. This service functions under the Meat and Canned Foods Act with

its supporting regulations, and applies to interprovincial and export shipments

of meat and meat food products, and to those which may be imported.

The object of the meat inspection service is to prevent the shipment to

other countries and from one province to another in Canada of unwholesome and

otherwise dangerous meats; to ensure that the preparation and handling of meats

and meat food products conform with modern sanitary requirements; to prevent

the use of harmful dyes and preservatives and chemicals, to enforce correct

and honest labelling, and to ensure that the meat and meat food products are

sound, wholesome and fit for human consumption.

No meat, or meat food products, can be shipped out of a province, nor

out of the Dominion, unless and until those handling such products have fully

complied with the requirements of the Act and regulations.

All establishments in the Dominion, engaged in the export of meats and

meat food products, irrespective as to whether this trade constitutes the major

or minor portion of their business, are subject to the operations of this Act

and must come under Federal inspection or discontinue in this trade.

Inspection is not granted to any establishment unless the plant meets

the requirements of sanitation in regard to construction, equipment and

maintenance.

When inspection is granted the entire premises, including the yards, pens and stables, are placed under the constant supervision of officers of the Health of Animals Branch of the Dominion Department of Agriculture.

The actual work of inspection begins the moment the animals enter upon the property under inspection. The first examination is known as ante-mortem inspection. The animals are very carefully examined by veterinarians.

If no evidence of disease is found upon slaughter, the carcass is permitted to pass out of the slaughtering department, and is then stamped "Canada Approved" the Dominion Government's Inspection Legend, which is the guarantee of freedom from disease and of wholesome food.

The completeness of the control exercised by the inspection staff must be seen to be fully appreciated. Nothing is allowed to enter or leave the plant without the knowledge, consent and supervision of an inspector; the same control being exercised continuously throughout every portion of the plant.

The claim, therefore, that Canadian Meat Inspection stands second to none in the world is well supported. The Dominion Government, with the fullest confidence and assurance, places its official mark "Canada Approved" on all meats and meat food products leaving Canada, and issues the official government certificate certifying to the healthfulness and wholesomeness of the product.

While the Meat Inspection Service, which is rendered free of charge, can only be applied under the provisions of the Meat and Canned Foods Act to establishments engaged in the export, or interprovincial trade, these establishments also supply local markets with "Canada Approved" meats. Consumers can, therefore, procure these marked wholesome meats in their local markets and receive the advantages of this service.

"Canada's Best in Beef" will be the title of the next talk in this series and will be given at this same time next Thursday evening.

certain of getting beef of good eating quality.

Third, there is CONVENIENCE. If you are purchasing meat it

is not necessary to pay a personal visit to your dealer for the purpose of

selecting it. Familiarity with the names and characteristics of the different

cuts enables you to order beef by telephone with every assurance of satisfaction.

CANADA'S BEST IN BEEF

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Do you like good beef - beef that is tender, juicy and of fine flavour? If you do, it will be to your advantage to learn what the Dominion Department of Agriculture is doing through its Beef Grading Service to make it easier for those who enjoy and want good beef to be certain of getting it.

It is no longer necessary for a person to be a judge of beef in order to be sure of getting the quality desired. The judging is now done for you under Dominion Government supervision.

For several years the two top grades of beef have been branded to identify quality. These identifying brands are placed on the beef in the form of a narrow ribbon-like mark running the full length of the side. When the beef is cut up a portion of this brand mark appears on every important cut and definitely identifies it as graded or quality beef.

There are five principal reasons why graded beef is becoming so popular.

First, there is the QUALITY. The two official grades represent top quality beef. The "Good" grade, which is identified by a blue brand, carries the moderate amount of fat necessary to protect it in handling and cooking and to render it tender, juicy and of good flavour. This grade is in demand with those who desire reasonably good eating quality without undue waste. The "Choice" grade, identified by a red brand, carries a little more fat or finish than does the "Good" grade. The choice grade appeals to those who desire the very highest quality obtainable and to whom the question of price may not be the most important consideration.

Second, there is DEPENDABILITY. When graded beef is purchased there need be no concern as to whether it will be good. You are practically certain of getting beef of good eating quality.

Third, there is CONVENIENCE. If you are purchasing graded beef it is not necessary to pay a personal visit to your dealer for the purpose of selecting it. Familiarity with the names and characteristics of the different cuts enables you to order beef by telephone with every assurance of satisfaction.

Just ask for the desired cut of red brand or blue brand beef. The portion of the brand mark which appears on each cut when it is delivered is your safeguard and protection.

Fourth, there are the advantages of HEALTHFULNESS AND FREEDOM FROM DISEASE. All graded beef must pass Dominion Government inspection for health before it can be branded. The round purple health inspection stamp, which bears the words "Canada Approved", should not be confused with the ribbon-like brand marks of quality, as all beef which has been pronounced free from disease is not necessarily of good eating quality.

And, Fifth, there is the all-important question of VALUE. The purchase of graded beef ensures receiving uniformly good beef of the quality for which you have paid. You run no risk of substitution or misrepresentation. Graded beef is the product of well-bred and properly-fed young animals of the best beef type. On the other hand, poor quality beef cannot possibly possess either the attractiveness or food value of beef that has been properly fed and finished. If your dealer does not sell branded beef, ask him to get it for you.

The popularity of beef, however, has a much deeper foundation than simply its appeal to the palate. Recent experiments have shown that man's natural fondness for meat is based upon a sound scientific foundation, as meat not only contains many of the elements necessary for the proper growth and development of the human body, but it supplements and improves to a great extent the value of many of the nutrients found in grains and vegetables. Beef is a very valuable source of protein, which is a tissue building and repairing food; the fat furnishes heat and energy; and the mineral salts, such as iron and phosphorus, as well as the vitamins, contained in beef are in a form that is readily assimilated.

Further information on Graded Beef, also a coloured chart showing the various cuts, and a valuable booklet on the choosing and cooking of beef, may be obtained by writing to the Publications Branch, Dominion Department of Agriculture, Ottawa.

The next talk in this series entitled "Commercial Feeding Stuff" will be given at this same time next Thursday evening.

### COMMERCIAL FEEDING STUFFS

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You may not be a farmer or a feed manufacturer, yet as a consumer of milk, butter, eggs, beef, bacon, dressed poultry and other animal products you have an indirect interest in commercial feeding stuffs, because they have a very definite influence on the quality of these foods.

Scientists in animal nutrition recognize this fact and they now study not only how to combine feeds to secure economical production but also how to give them in combination in order to produce foods that are healthful and palatable. Practical scientists even consider the ocular appeal of certain foods, for it is surprising the extent to which most of us eat with our eyes nowadays. And so we find these scientists consulting with the chefs in large hotels and restaurants and with the vendors of foods to ascertain consumers' tastes and preferences.

In order to balance and round out farm grown and other readily available feeds to secure the desired results, many and varied products are tested experimentally. As a result of experiments some of the by-products from manufacturing which were regarded as of little value or even worthless, have come to be recognized as highly nutritious foods. Among these are the by-products from the manufacture of flour, cornmeal, soup barley, rolled oats and other table cereals, also the rich residues after oil has been extracted from flaxseed, cottonseed, soya beans, peanuts, coconuts and other oil-bearing seeds. Dried or powdered skim milk and buttermilk have high feed values. The meat trimmings in abattoirs are cooked, and after the removal of some of the fat are dried and ground for feed. The residues from filleting or canning such fish as cod, salmon and haddock, and also whole fish such as herring and pilchards, are similarly treated and used. Other ingredients used to supply nutrients, minerals or vitamins, to increase palatability or to impart medicinal properties, include alfalfa meal, brewers' and distillers' grains, dried sugar-beet pulp, cane and beet molasses, cod liver and other vitamin rich fish oils, dried kelp or seaweed, wheat germ, bone meal, salt, ground limestone, oyster shell, charcoal, iodine, sulphur, and many others.

Primarily with a desire to convert otherwise waste materials into saleable products, industry has contributed substantially to present day developments. It has employed technical and engineering skill in the processing of materials to retain the maximum feed value or potency. It utilizes expensive and elaborate machinery to convert the raw materials into suitable condition for incorporation into feeds, and to blend the various ingredients into rations for different purposes. Every kind and age of animal has its peculiar feed requirements; hence we find some firms manufacturing thirty or more different feeds. There are feeds for baby chicks, growing chicks and fattening chicks; feeds for hens, turkeys, ducks and pigeons; feeds for cattle, horses, pigs and sheep; complete feeds and highly concentrated feeds to supplement and balance farm grown grains; feeds for winter and feeds for summer; in short, feeds for all needs.

As a guide and protection to feeders, and to protect honest industrial enterprise against unscrupulous competition, manufacturers are required by law to label these feeds with the guaranteed chemical composition and ingredients, and these guarantees are checked by officers of the Seed Branch of the Dominion Department of Agriculture.

And so, as the delicious flavour still lingers of that tender, toothsome roast you may have had for dinner, or of the firm, uniformly streaked bacon and quality eggs you had for breakfast, remember that these desirable characteristics didn't just happen; they were "fed into" those products and are the result of the combined efforts of science and industry, coupled with the labour, experience and skill of the feeder.

With the approach of Christmas many of us are no doubt thinking of buying a graded Canadian turkey for the dinner on the great day. And so the next talk in this series to be given at this same time next Thursday evening will be Christmas Turkeys.

## CHRISTMAS TURKEYS

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The turkey, king of birds in the poultry class, has for many years become particularly identified with Christmas and other festal occasions. In addition to millions of Canadian turkeys which will adorn tables at Christmas time in Canadian homes, many thousands of these noble birds from Canada will be served for Christmas dinner in homes in the Old Land, for large shipments from the Dominion have been sent to the British Market.

To most Canadians a Christmas dinner without a turkey would hardly be a Christmas dinner at all. A real Canadian graded turkey, when dressed, stuffed, and roasted to a rich brown will assist considerably in radiating the joyous spirit of Christmas and result in such a feeling of satisfaction after dinner that will elude expression in mere words.

The turkey has its origin in North America and though there are now many varieties throughout the world, all are descended from the wild turkey of this continent. The principal course in the first festal meal of the Pilgrim Fathers, 313 years ago, was turkey and since then the bird has been glorified, and worthily so, by epicures throughout the world, while in the United States and Canada it has taken an almost sacrificial place upon all occasions for national thanksgiving.

But, you may ask, if the turkey is a native of North America how did it derive its name, which is the same as that historic country in Europe. The scientific name for the Northern variety of wild turkey is *Meleagris Americana*. The origin of the name turkey is said to be suggested by a supposed resemblance to the old Turkish costume of a red fez coming down to the ears, with a dark flowing robe beneath. Another suggestion is that the word is corrupted from turquoise, supposed to be that bluish carunculation about the head of the bird. The name "Turk" is often applied to anyone notable for apparent domineering and pompous tendencies or appearance, and it is possible this may have become attached to the turkey cock, and gradually modified. Still others claim the name

derived from the Hebrew word Tukki, meaning peacock.

It is only within the last twenty or thirty years that turkeys have come to be appreciated as one of the most satisfactory and profitable farm products in Canada. The Dominion has become a notable turkey-producing country, and the quality of the birds raised in the different provinces is unexcelled.

Many farmers of an earlier generation in Canada were of the opinion that turkeys were difficult to raise because the mortality among the young birds was high. The principal cause of this was found to be incorrect feeding and rearing and in recent years, as a result of instruction in improved methods given by the Dominion <sup>through the farmers</sup> ~~and Provincial Departments of Agriculture~~, turkey raising has increased substantially, with quality keeping in line with the development.

There has also been great improvement in the methods of marketing. Farmers, in community groups, in order to get the best prices, now not only better finish and dress but properly grade and attractively pack their birds, six or eight to a box, according to quality and weight. The housewife would be well advised when going to buy the Christmas turkey to ask for a government inspected and graded bird, which should be tagged according to grade. There are three grades, A, B and C. Grade "A", indicated by a red tag, denotes the highest quality of bird, well fattened and well fleshed, clean plucked, free from deformities, bruises and discolouration, highly attractive in appearance, with the breast, back, hips, and pin bones well covered with fat. Grade "B", <sup>identified</sup> indicated by a blue tag, is a reasonably well fleshed bird, but is not so attractive in appearance or finish as Grade "A". Grade "C", marked with a yellow tag, is a lower grade bird. The grade, identified by the tag, is the indicator of quality. The grading is done according to standards set by the Dominion Department of Agriculture.

For your Christmas and New Year's dinner you, of course, want birds of assured quality and grading takes the guesswork out of buying. And so, when you with your family and friends gather around the table to enjoy the graded Christmas turkey, we wish you a Happy Christmas.

We invite you to listen to the next talk in this Series next Thursday evening at this same time, which is appropriately entitled "Christmas Giving".

## CHRISTMAS GIVING

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Action is truly the interpreter of thought at this season of Christmastide when the urge to give is universal. Every hand seems to be opening and making ready to scatter its bounty over the land. It is the only time in the whole year when high and low, young and old go on a shopping spree, the intensity or the extent of which is limited only by the number of one's friends. For weeks past gifts of every description have been carefully chosen and hidden away. And now with only three shopping days left the finishing touches are being given and lists carefully checked against the possibility of forgetting anyone.

Christmas giving has changed with the years as everything is changing, and all that is left of many of the old Christmas customs is the memory of them. Many will remember when the chief excitement was the hanging of the stockings, the holly and the mistletoe. It was a very special time for young people, particularly children, when apples, oranges, nuts, candy, raisins, and perhaps a book or a parlour game were the extent of the gifts left by Santa Claus. The older people did not let the season pass, however, without due recognition and many were the roasts, chickens, turkeys, plum puddings, and mince pies which passed from home to home, just in that spirit of remembrance and giving which seems to be part of the Christmas season. Perhaps in those days people thought, as did Samuel Johnson who expressed the opinion that 'a man seldom thinks with more earnestness of anything than he does of his dinner', and we were anxious that our friends should fare as well as we did. However that may have been it is certain Christmas Day in many homes was made cheerful as a result of that method of giving.

Three shopping days are left and the million and one little personal selections for presents have been made, and yet the stores seem just as full. In passing down the street one wonders has anyone been forgotten, particularly when the eye catches a glimpse of a scene similar to the one seen by Scrooge when he sent off the boy to buy the big fat prize turkey. And hanging with that turkey had been other poultry, meat, suckling pigs, and fruits piled high, as Dickens puts it, "that people's mouths might water gratis as they passed".

A little increase in the purchase of these good things, and a few more mouths actually made to water with the anticipation of the enjoyment of their goodness will cause the benefits from the ripples in the stream of giving to extend far from the grocers' and the butchers' shop right out into the country and encircle the farms from which these good things come.

Few appreciate the big part played by the farmer in this Christmas festival. He realizes that the turkey must be plump, the chicken well-fleshed, the steer properly fed to produce the most tender beef, the hogs firm and of the right weight, the eggs fresh and of good size, and so on. He also realizes the value of the teachings of the Dominion Department of Agriculture with regard to the standardizing and grading of these farm products, because at this season more than any other consumers demand and are prepared to pay for the best quality.

Christmas is a season when we all wish everybody in the wide world A Happy Christmas. It is a season of open hearts, and open pockets. It is a season when we may agree with Cato that "the best way to keep good acts in memory is to refresh them with new". It is a day set apart to celebrate the birthday of the Christ Child, and in the eagerness with which we look forward to the hopeful promise of the day, we can perhaps copy Scrooge's example and give a turkey, a chicken, apples, cheese, vegetables, or something that comes from a Canadian farm that will increase the happiness of some family, and make their Christmas happy and complete. And with this thought we cannot do better than close with that time honoured greeting "A Merry Christmas to you all".

The title of the talk to be given at this same time next Thursday evening is "A Review of the Year's Markets".

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Radio talk given December 20, 1934.

A REVIEW OF THE YEAR'S MARKETS  
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In the economy of nations, whether producing a surplus of products for export or a volume below domestic needs, agriculture is today, and indeed, always has been, the most important single factor. During recent years, agriculture has been front page news, particularly for producers in Canada since the meeting of the Imperial Economic Conference in Ottawa in 1932. From the agreements made, pig producers and others have received substantial benefits. But farmers and other citizens are aware of the trade checking effects of national recovery programmes in European and other countries, set up to improve the financial status of the community and the farmer.

It is some satisfaction therefore that insofar as Canada is concerned, similar panaceas have not been demanded nor has it been necessary to resort to such drastic action toward industrial recovery. And it is even more satisfactory that a comparison of the rate of recovery and the returns from agriculture and its allied industries in Canada with those from similar sources in other countries is in the main favourable to the Dominion.

There is no doubt that any statement regarding price upturn and increase in farm revenue will be news to some producers. Some will hear it with mixed feelings, particularly those who, during the past year, have experienced much distress as a result of the drought and grasshopper trouble. Many farmers in the western provinces were almost entirely deprived of returns from their 1934 tilling and seeding, and there were sections in other provinces where, through lack of moisture, crops were poor and returns from production smaller than in 1933.

If, however, we examine the condition of wholesale prices of farm products and assume, as is reasonable, that the prices paid to farmers are in the main a reflection of these prices, it will be found that there has been a very considerable improvement. The upturn to wholesale prices of farm commodities during the first ten months of 1934 amounted to about 15 per cent. Number one Manitoba

Northern Wheat showed an upturn of 22 per cent in price; Number two Canadian Western Oats, 27 per cent; Number two Timothy Hay, 70 per cent; good beef cattle, 21 per cent; bacon hogs, the present outstanding source of farm revenue in Canada, 61 per cent; Eastern Bright Wool, 49 per cent; fresh eggs, 13 per cent; milk, 9 per cent; butter and cheese, unfortunately <sup>only</sup> 2 per cent. Potatoes, of which there have been tremendous surpluses in some areas, were down 17 per cent.

These improved prices are, of course, since 1933, a year of record low levels, but they are improvements, and in the main very encouraging, except that in some instances they are the product of a shortage.

It is not, however, the farmer's income, but his purchasing power, that is of chief importance to further national recovery. If the things which the farmer has to buy increase in price faster than the things which he has to sell, then his last state is worse than his first. Fortunately, however, the price of manufactured goods has not been moving forward as rapidly as the price of primary products, and the producer has been able to buy a larger supply of the things he needs this year than was the case in 1933. A pig buys more binder twine; a dozen eggs a more bread; a load of barley, more implements; a good beef steer, more boots and shoes; and a ton of hay, more table necessities.

Higher market values for grains are causing some dereliction from live stock. The brightest spot in the 1934 market was provided by the bacon hog and despite occasional lapses from grace, it is deserving of permanent adherence on the farm. An appropriate agricultural coat of arms for Canada might show well finished live stock rampant on a field of golden grain.

The outlook is promising. Conditions during the last quarter of 1934 were ideal for live stock, and there was a maximum amount of fall work done on the farm. Live stock went into winter quarters in excellent condition, and the open season greatly aided the feed supply. The farmer is well prepared for the 1935 farm operations. Price prospects have their encouraging features, and we may wish, with every hope of fulfilment, for a prosperous new year for Canadian agriculture.

The talk for next Thursday evening to be given at this same time is entitled "The Agricultural Situation".

RADIO TALK NO. 13, Broadcast DECEMBER 27/34.

THE AGRICULTURAL SITUATION  
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The beginning of a new year is always a good time to take stock of the position of an industry and to start plans for production and marketing the output. This is now true of the agricultural industry just as it is true of any large industrial enterprise. Agriculture provides employment for a large proportion of the population of Canada; it provides the food for the nation and a surplus for export trade. Those engaged in agriculture and related industries, therefore, are concerned not only with the condition and requirements of domestic markets but also with those of export.

It is also important that they should know something about the nature and extent of competition to be met in both domestic and foreign markets. It is with these factors in mind that again a Committee representative of Dominion and Provincial Governments and Colleges of Agriculture has reviewed the position of Canadian agriculture for 1934 and the prospects for it in 1935. The findings of this Committee are about to be issued in a few days in pamphlet form under the title of "The Agricultural Situation and Outlook". This publication, as its title implies, will present in concise and interesting form a summary of essential information and statistics relating to agriculture that will serve as a helpful guide to those engaged in agriculture and the associated industries in order that they may be assisted to plan intelligently to meet the demands of the best markets at home and abroad. It is believed that the information compiled will also assist the farmer in adapting his farm operations to synchronize more closely with changing conditions. While the events of the coming year cannot be forecast with positive assurance or accuracy, it is felt that a reasonable measure of direction and guidance will be given by the reports that have been compiled from information secured, and from what are considered the most reliable sources.

Looking back over 1934 the situation of the farmer showed some improvement compared with 1933. True, income was not evenly distributed among all groups of farmers; some suffered severely from drought conditions and the ravages of the grasshoppers but on the whole further progress was made toward recovery. The index of Canadian farm products fluctuated within narrow limits from 55.5 in

January to 60.0 in October. There has been a tendency toward lower taxes and easier credit conditions both of which aid the farmer. The movement of wheat, though not as large as anticipated earlier in the season, has taken place at more satisfactory prices than a year ago. Hog production has been fairly stable and prices of butter and cheese advanced approximately 2 per cent up to the end of October. Insofar as the outlook for 1935 is concerned, it may be emphasized that improvement in business activity, reduction of unemployment, higher wholesale prices and easier credit conditions make the prospects more reassuring than they were a year ago. Trade restrictions still hamper the movement of farm products in export markets and there seems little likelihood of widespread relaxation of such barriers in 1935. On the whole, however, conditions in Great Britain, the most important export market for Canada, have improved and the prospect is brighter than at the beginning of 1934.

From this rather brief summary it is evident that the prospects for the farmer in Canada are more encouraging than they have been for the past few years and when farming presents a more hopeful outlook, it is reasonable to assume that conditions generally in the Dominion will be better, for agriculture is the basic industry of the country.

On Thursday evening, January 10th at 9.15, Dr. G. H. Barton, Deputy Minister of Agriculture, will speak more fully on the Agricultural Situation and Outlook and you are invited to listen in at that time.

The next talk in the Romance and Dividends in Agriculture series will be given at this same time next Thursday evening and is entitled "Canada's Famous Varieties of Grain".

## CANADA'S FAMOUS VARIETIES OF GRAIN

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The imperative need for more desirable varieties of grain to meet the requirements of farmers in Canada was one of the principal reasons for the creation in 1886, of the Dominion Experimental Farms. The first Director of this important organization, Dr. William Saunders, was quick to realize, among other things, that if that vast tract of country now known as Canada's Wheat Belt was ever to attain a position of prominence in the agricultural world it must have a variety of wheat capable of maturing earlier than Red Fife which was the variety then commonly grown.

And thus began a world-wide search for the ideal variety which, ending in failure, led to the introduction of a programme of plant breeding the results having proved of incalculable value to Canada.

The most famous variety of any crop produced in Canada thus far by artificial means undoubtedly is Marquis wheat. While many varieties have sought to dethrone this epoch-making variety none thus far has entirely succeeded, Marquis is still entitled to be regarded as the King of Canadian Wheats.

Other Canadian varieties which are entitled to be included under the title of this address are Reward, Garnet, Bobs and Huron, the latter being valued chiefly in Eastern Canada.

Reward which was produced at Ottawa from a cross between Marquis and Prelude, has attained fame chiefly on account of its earliness coupled with its remarkable ability to produce at least reasonably good quality in areas where high quality is not expected.

Introduced in 1928 it spread rapidly especially in the so-called Park Belt of the Prairie Provinces, in certain parts of which it has become quite firmly established.

Garnet, another variety of wheat originated at the Central Experimental Farm at Ottawa, was developed from a cross between Preston and Riga. This variety usually ripens a little ahead of Reward and in many places yields considerably more. Being somewhat different in milling and baking characteristics it will be graded by

itself after August 1st, 1935.

Bobs, developed by Dr. Seager Wheeler, of Rosthern, Saskatchewan, is another early ripening wheat which has come to occupy a fairly important place among the leading varieties - especially in parts of Alberta. While normally a high yielder its proneness to suffer in quality and grade in the north has retarded its spread appreciably throughout that section.

Huron was one of the first cross-bred varieties to be introduced by the Dominion Experimental Farms. While a high yielder it lacks somewhat in quality for bread-making and consequently is confined chiefly to Eastern Ontario and Quebec where it is still one of the leading wheats.

Mindum, a durum wheat, and Ceres a bread wheat, both introduced from the United States in recent years, are deserving of special mention as both have won places of distinction in Southern Manitoba and Saskatchewan particularly.

Among the autumn-sown wheats produced in Ontario Dawson's Golden Chaff, a variety originated in 1881 by Robert Dawson, Paris, Ontario, stands out pre-eminently. This variety is regarded as the Standard of perfection for the production of pastry and cake flour.

In Southern Alberta where Fall Wheat is grown to a limited extent a hardier variety originating in Russia and known as Kharkov is the leading variety.

In the case of oats, the leading varieties in Canada thus far have all originated outside of the Dominion, although certain Canadian creations are gradually coming to take the place of some of these "foreigners".

The most outstanding varieties grown in Canada at present are Banner, Alaska and Gopher, all of which have come from the United States, and Victory, which was introduced from Sweden.

In barley, as in oats, certain foreign importations or selections therefrom have taken first place. Among these the variety O.A.C. 21 selected out of Mandschuri at the Agricultural College, Guelph, Ontario, is the most outstanding.

In the Maritime Provinces a two-rowed variety known as Charlottetown, SO selected by the Dominion Experimental Farm at Charlottetown, Prince Edward Island, has held the lead for many years.

Several excellent varieties other than those referred to might also have been mentioned but this brief talk has been limited to those varieties which up to the present have proven the most outstanding in Canada.

The next talk in this series is entitled "Among the Best of Foods - Canned Foods" and will be given at this same time next Thursday evening.

INTRODUCTION FOR RADIO ANNOUNCER

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ROMANCE AND DIVIDENDS IN AGRICULTURE

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Presented by the Dominion Department of  
Agriculture and this evening featuring "Among  
the Best of Foods - Canned Foods".

TALK NO. 16 - AMONG THE BEST OF FOODS - CANNED FOODS

OTTAWA, Canada, January 17, 1935.

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AMONG THE BEST OF FOODS - CANNED FOODS

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The essential qualities of all foods are that they should be wholesome, nutritious, sanitary, safe and economical. Canned Foods possess these qualities to a very high degree, consequently they are entitled to a place among the best of foods.

Canned Foods are wholesome because the fruits or vegetables used are left on the trees, bushes or vines to ripen to perfection. They are then harvested, carefully graded and safely processed in hermetically sealed containers, thus giving no opportunity for deterioration.

Canned Foods are nutritious as they contain practically all the nutritive value originally included in the best grades of properly matured fruits and vegetables. No preservatives, other than sugar and salt are used, the only preserving agency being sterilization. The degree of heat used for this sterilization varies with the class of food to be prepared. As this sterilization takes place after the foods are hermetically sealed in the containers all the nutritive value of the original fruits or vegetables has been preserved.

Canned Foods are sanitary. There are about 550 canning, jam and pickle factories and evaporators in Canada operating under permit from the Fruit Branch of the Dominion Department of Agriculture. There are, in addition quite a number of small factories which have not qualified for Dominion Agriculture Inspection.

All factories which operate under Fruit Branch, Dominion Department of Agriculture, permit are regularly inspected by a trained staff of qualified inspectors and rigid sanitary requirements are enforced. The help must be free from tuberculosis or other communicable disease and must observe all the habits of cleanliness required in the modern home.

Canned Foods are among the safest of foods. The only precaution the housewife needs to take is to inspect each can before she opens it. If it is blown or bulged at the end or shows signs of leaking she should take it back to the grocer from whom she bought it for replacement. The cannery are always ready to replace any defective cans.

Using this simple precaution she is free to use canned foods without fear. We do not know of a case of ptomaine poisoning in Canada resulting from the

use of canned fruits or vegetables.

Canned foods are among the most economical of foods. The real economy, however, in using canned foods comes with the knowledge of being able to buy the particular grade she may wish to use. To assist the buyer in this, the Fruit Branch of the Dominion Department of Agriculture has established certain grades of quality, each grade being legally defined.

These grades are known as Fancy Quality, Choice Quality, Standard Quality and Seconds (Substandard) Quality and are based largely on perfection of appearance and flavour rather than actual food value.

Fancy Quality represents perfection in uniformity of size, maturity, tenderness and finish.

Choice Quality is the grade which, while not as perfectly selected for appearance as the Fancy, is much more uniform than the ordinary orchard or field run.

Standard Quality is good everyday food which may be irregular in size, colour or finish, but for general food value is beyond criticism.

Seconds (Substandard) Quality is perfectly sound food lacking finish but of good value in its own place.

The quality of the canned fruits or vegetables in the can is always declared on the label in terms of Fancy, Choice, Standard or Seconds.

It should be the ambition of every thrifty housewife to understand these grades and buy her canned foods accordingly.

It would be poor economy for the housewife to pay 25 cents for a can of Fancy Quality peaches to use in pie or pudding when the contents of a can of Standard Quality costing 18 cents would meet every requirement for that dish.

On the other hand it would be very unsatisfactory economy for her to buy Standard Quality peaches to use for a dessert at a dinner party where appearance would be a considerable factor, when for seven cents more she could get Fancy Quality equal in flavour and pleasing to the eye.

In this illustration Fancy and Standard Qualities have been used. Choice Quality is between these two, it is considerably better in finish than Standard Quality and cheaper in price than Fancy Quality.

For the reasons outlined in this talk we believe that Among the Best of Foods - Canned Foods are entitled to an honourable position.

Inquiries about canned foods will be gladly answered by applying to the Fruit Branch, Dominion Department of Agriculture, Ottawa.

The next talk in this series is entitled "Honey - One of Nature's Best Foods".

HONEY - ONE OF NATURE'S BEST FOODS

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Honey has always stood for superlative sweetness. Before the introduction of cane sugar, honey was apparently the only sweet available for human use. It is not known, however, just when it was that man first discovered the bees habit of storing within their nests large quantities of a sweet and delectable substance that could be taken from them and used by man as food. That this discovery was made centuries ago is disclosed by the fact that the honeybee and her products were highly extolled in the most ancient literature of the world. The Vedic poet sang of honey and the dawn at the same moment, and the philosophers of ancient Greece admired the work of the bee, while in Egypt, nearly four thousand years before the Christian era, the bee stood as a symbol of kingly power. In those ancient times the bee was looked upon as a special creation of the gods and honey as being endowed with wondrous virtues, one supposition being that to eat honey brought strength, wealth, knowledge and offspring to man. Such qualities, however, may be doubted at the present time, even though the wise King Solomon admitted its strength-giving properties.

Honey is the nectar of flowers gathered and ripened by the bees within their hives. The ripening process consists of evaporating the excess moisture from the nectar and of certain changes in the chemical constitution of the sugar it contains.

At the heart of almost every flower is a tiny organ that secretes a weak, sugary solution called nectar. This solution is eagerly sought after by the bees and is the reward offered by the flower for certain services rendered to it by the bee (cross pollination). The drop of nectar secured from each flower is very small, and many have to be visited before the bee obtains a load large enough to carry back to her hive. Bees travel from two or even three miles in search of nectar and the average flight of a bee in its search for nectar is from one mile or two miles for the return trip, which means that the one pound jar of honey which may have been on your meal table today represented thousands of flowers visited, and at least 40,000 miles of travel, not to say anything of the number of busy lives that were lost in securing it.

Fresh nectar contains a high percentage of sucrose, the same kind of sugar with which you fill the sugar bowl, but if this sugar remained unchanged in honey, then honey would be little or no better than the ordinary sugar of commerce. Somewhere between the time the nectar is taken from the flower and the time it is deposited in the cell of the honey comb, certain enzymes are added to it and these enzymes digest or break down the sugar of the nectar into the two simple sugars found in honey, namely, Levulose and Dextrose. Levulose is a non-granulating sugar and is said to be the sweetest sugar found in Nature. Dextrose is less sweet and is the predominant sugar found in commercial syrups. Approximately 75 per cent of the honey consists of these two sugars. There is also found in honey a small percentage of those minerals that are essential to the well-being of the human body. While the amount present may be very small, it is not to be ignored, for their very presence, together with the enzymes that invert the sugars, immediately stamps honey as a food direct from Nature. Flavour is essential to the enjoyment of food and there is no sweet or food in which such a variety of flavours can be found as in honey. A product of sunshine and flowers containing all the health-giving powers of the former and the aroma and flavours of the latter, it comes direct from Nature through the hive to the table, unchanged and unadulterated by human agency. The ancient proverb still holds good, My Son eat thou honey because it is good.

The next talk in this series will be given at this same time next Thursday evening and will be entitled "Prices of Farm Products".

those of field products reaching a low yearly average of 55 in 1933, although it was down to 55 in February of 1933. PRICES OF FARM PRODUCTS time, this index has been rising almost continuously and stood at 71 in December.

The level of prices of farm products is a matter of great importance to the people of Canada. It affects the purchasing power of the largest single group and thereby limits the market for large quantities of industrial goods. To compare prices over a period of time, it is rather difficult to establish exact relationships; therefore, statisticians use a device known as an index number which represents the relative position of prices at a given time as compared with those in a period when conditions were fairly stable and prices of the different groups of commodities occupied a reasonably satisfactory relationship.

Prices in the year 1926 have been used by many statisticians as a base period. With this in mind, perhaps, comparative price changes may be discussed more readily. Using round figures, we observe that in 1929 the index number of wholesale prices of 14 Canadian farm products computed by the Dominion Bureau of Statistics was 101, and in 1932, it dropped to 48. Conditions had so improved, however, that in February 1933, prices of farm products began to rise and have on the whole continued an upward trend to the present time. In fact in 1934, it was estimated that wholesale prices of Canadian farm products were 15 per cent above those in 1933. This gain was, however, not fully represented in increased purchasing power because prices of goods which farmers buy advanced though not in proportion to the rise in prices of farm products. In considering wholesale quotations, it should be remembered that comparatively rigid marketing charges must be deducted before the price paid to the farmer can be obtained and this has been one of the causes of hardship during recent years.

If we examine the two main groups of farm products for which indexes have been constructed, it will be found that prices of field crops fell more rapidly than those of animal products. Thus in 1929, the index of field crops was 94 compared with 100 in 1926, whereas in 1932, this index had dropped to 41 and in January 1933 was as low as 35. During 1933, however, grains and vegetable products advanced in price, the index rising to 46, and in 1934, it ranged between 48 and 61. Animal products on the other hand were well above the average in 1929, the index being 112 but prices declined more slowly than

those of field products reaching a low yearly average of 60 in 1933, although it was down to 55 in February of that year. Since that time, this index has been rising almost continuously and stood at 71 in December.

Prices of farm products fell more rapidly during the depression than wholesale prices in general and very often prices of farm products rise more rapidly during the period of recovery than those of wholesale prices in general. Thus we observe that the index of wholesale prices was 64 in February 1933 and rose to 72 in August 1934, declining to 71 in November and December. The farm products price index rose from 43 to 62 in the corresponding period. Thus, while the index of all commodities at wholesale rose about seven points, that of farm products rose 19 points. The prices of farm products are, of course, determined by the conditions of supply and demand in the domestic and export markets. Regularity of supply, evenness of distribution of the product and standardized quality adapted to the needs of the market are important factors in realizing satisfactory prices. Another factor which exercises an influence is the monetary policy, although there will not be general agreement regarding the extent to which this is true. It is nevertheless a factor which should be considered.

The Dominion Government recognizes the importance of price information and provides a regular service in the collection and dissemination of data respecting prices of farm products through the Live Stock Markets Intelligence Service, the Dairy Market Service and the Fruit Branch in the Dominion Department of Agriculture and other services of the Government.

The best information gleaned from these sources indicates that the situation with respect to prices of farm products in the immediate future appears to be somewhat brighter although severe competition and trade restrictions continue to affect world trade in agricultural products.

The talk to be given at this same time next Thursday evening is entitled "The Seed Catalogue - The Testing of Seeds for Purity."

However, somewhat different. The importance to Canada of keeping the number of varieties, particularly of wheat, oats and barley, to a minimum, and prohibiting the distribution and use of undesirable ones, must be apparent to everybody. Now varieties of cereal grains are tested by the Dominion Government and no licences are issued unless the new varieties possess such merit that if added will prevent variation in Canada the value of Canadian grain will not be impaired on the world's markets.

THE SEED CATALOGUE - TESTING OF SEEDS FOR PURITY

Notwithstanding the fact that the outward and visible signs of spring have been made that those who spend money for this kind of advertisement throughout the greater part of Canada may not be plainly evident just now, we are reminded that winter is in the lap of spring, for the 1935 Seed Catalogues are off the press and being distributed. Of all the seasonal publications issued none seems to stimulate such cheerful and hopeful visions as the seed catalogue.

It may not be generally known that the Dominion Department of Agriculture, through its Seed Branch, exercises control over these catalogues issued in Canada. This control dates back to 1923. In that year the Seeds Act was amended to provide a clause requiring truth in advertising and made provisions for controlling the variety names used. A list of about twelve thousand names of varieties of seeds, to be regarded as an established list eligible for use in Canada, was prepared from the principal seed catalogues issued in the Dominion, Great Britain and the United States.

Canadian seedsmen complained that British and foreign seed catalogues were permitted distribution in Canada containing new variety names which Canadians were not permitted to list until tested and licensed for sale. Not wishing to prohibit distribution of outside seed catalogues, a compromise was put into effect that permitted the listing of new varieties of field root and garden vegetable seeds the year of introduction on the understanding that samples would be submitted to the Dominion Agrostologist or to the Dominion Horticulturist to make propagating tests and report on the results. If the growing tests were found to be satisfactory, the new varieties would be licensed for sale while if unsatisfactory they were to be withdrawn from future sale.

The application of the law to new varieties of cereal grains is, however, somewhat different. The importance to Canada of keeping the number of varieties, particularly of wheat, oats and barley, to a minimum, and prohibiting the distribution and use of undesirable ones, must be apparent to everybody. New varieties of cereal grains are tested by the Dominion Cerealists and no licences are issued unless the new varieties possess such merit that if mixed with present varieties in Canada the value of Canadian grain will not be impaired on the world's markets.

BACON GRADING -2-

Of all the variety of agricultural products that go to make up the Seed catalogues are expensive publications to produce. The claim has been made that those who spend money for this kind of advertising should be permitted to use variety names that will identify them with the product sold. This has resulted in the practice followed by many seedsmen of placing the firm's name in front of many standard varieties in the belief that customers satisfied with the seed purchased one year will return to the same source for their seed supply the following year.

To check on the purity of variety of seeds advertised for sale, all samples of certain kinds of field root and garden vegetable seeds imported into Canada are taken annually at ports of entry and tested. Reports of these tests are compiled and made available to the Canadian importers and the exporters of seed to this country. It is interesting to note the improved quality of seed from year to year shipped to Canada as a result of the publicity given to these tests. Seedsmen who have a reputation for good seed and wish to maintain it are keeping the quality of their seed stocks up to a good standard. It is well to remember that it costs extra money to produce good seed as it does any other commodity of superior quality and it may be very false economy to try and save on the price of the seed at the expense of quality and purity of variety. It is also well to bear in mind that high prices paid for new and untried varieties may prove equally disappointing. The best advice that can be given at this season of the year when purchasers are contemplating the purchasing of their seed supplies for the coming season, is to buy from reliable sources the old standard varieties that are known to be suitable to the locality.

You are invited to write to the Publications Branch, Dominion Department of Agriculture, Ottawa, for Booklet No. 111 dealing with the subject of this talk.

The next talk in this series will be entitled "Bacon Grading - Its Value to Canada's Trade" and will be given at this same time next Thursday evening.

BACON GRADING - ITS VALUE TO CANADA'S TRADE

Of all the variety of agricultural products that go to make up the daily menu in every home, none just now is more in the lime-light than bacon. It is one of the principal items of export of Canadian foodstuffs and to maintain the Canadian bacon trade with Great Britain is of direct and vital importance not only to the swine producer but to a very large number of people engaged in the processing and transportation of the product before it leaves Canada. Last year, our exports of one hundred and twenty million pounds brought twenty million dollars of new money to this country and yet the total amount of bacon exported was not half of the quota allotted Canada by the Empire Trade Agreement made in Ottawa in 1932. Further, our ability to export the product of one million hogs increased the value of the remainder and gave an impetus to an industry from which farmers derived an income estimated at between ninety and one hundred million dollars in 1934.

The Dominion Department of Agriculture maintains a number of services to support this important branch of agriculture. These services cover the breeding, feeding and marketing of hogs and bacon and when considered collectively form a comprehensive policy embracing every phase of the industry. Bacon grading is one of these services and standardizing as it does the quality, grade and appearance of the product exported to Great Britain is one of the cornerstones of the improvement policy of the Department. The object of bacon grading is to raise the general level of the exported product and to establish a basis of merchandizing Canada's bacon as a National product and to consolidate our position for the future on a highly competitive market.

Most of the bacon exported is in the form of Wiltshire sides. It is to this product only that grading is applied. A Wiltshire side is the entire side of a pig, cured, and with the feet, head, backbone and shoulder-blade removed. The grading is complicated by the fact that the quality of the sides cannot be altered by mechanical means depending as they do for their quality upon the breeding, type, weight and general finish or condition of the pig from which they are made.

There are three grades, "A", "B" and "C". Grade "A" represents the best of our product and includes only sides of such conformation that when made into

retail cuts in Britain will yield a high proportion of high priced bacon from the middles and hind quarters and a correspondingly low percentage of cheaper cuts from the shoulders and flanks. The general quality, of course, must be high because it is this grade to which is applied the national brand "Canada". This supersedes all other brands and marks which may appear on the side and intended to be a mark of quality. The best Canada can produce.

Grade "B" bacon, although of good quality from the standpoints of taste and general appearance, is made up largely of sides, the product of hogs of non-bacon type and for that reason bacon in this grade does not possess in the same degree the ideal type and conformation of the Grade "A" product. Its distinguishing brand is that of the firm producing it only, to which cannot be added the national mark of highest quality.

Grade "C" provides a place for bacon which in the process of manufacture has developed certain undesirable features. It is an unbranded product and the amount exported is negligible and at the present time contributes less than five per cent to our export volume.

Bacon grading has been in operation for a little over a year. The conditions imposed under the regulations are compulsory and in addition to prescribing the standards for the various grades and the basis of marking and branding they require that all exporters must operate under licence secured upon application to the Dominion Department of Agriculture. The Department has had from the beginning the confidence, support and co-operation of the trade in this important piece of work and during the short time that bacon grading has been in effect a very noticeable difference is apparent in Canada's bacon as it leaves the packing house and upon arrival in Great Britain.

The talk to be given at this same time next Thursday evening is entitled "Grading Dairy Products".

## INTRODUCTION FOR RADIO ANNOUNCER

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### ROMANCE AND DIVIDENDS IN AGRICULTURE

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Presented by the Dominion Department of  
Agriculture and this evening featuring "Grading  
Dairy Products".

TALK NO. 21 - GRADING DAIRY PRODUCTS

OTTAWA, CANADA, FEBRUARY 21, 1935.

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## GRADING DAIRY PRODUCTS

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The grading of dairy products under the direction of the Dairy and Cold Storage Branch, Dominion Department of Agriculture, has been in effect for the past twelve years. The regulations authorizing the grade standards provide for the grading of export cheese and butter, but do not cover the grading of these commodities for domestic consumption. However, at the session of Parliament held in 1934, the Dairy Industry Act and Regulations were revised and provision made that if any province passed enabling legislation, making the grading of butter for domestic consumption compulsory, the Federal Department would assume the responsibility of enforcing this legislation.

Alberta is the only province which has passed the necessary legislation up to the present time, but it is expected that British Columbia, Saskatchewan, Manitoba and Quebec will also pass legislation shortly whereby all butter must be graded when it is offered for sale to the consumers.

It is believed that when the consumer has the privilege of buying butter on grade, there will be a decided preference for the best grade and this increased demand will make selling prices more in keeping with the quality of the different grades than is the case at present. It is also expected that when butter is sold on grade, there will be a marked improvement in quality and this in turn will increase consumption.

The grade marks which must be used are First Grade, Second Grade, Third Grade and No Grade.

First Grade butter should be well made and have a mild clean butter aroma, which is pleasant to the taste and which induces one to spread the butter on thick and then ask for more.

Second Grade butter is usually somewhat defective in flavour, which may be either slightly objectionable, or so objectionable that it is quite disagreeable. The general character of this butter may also be defective with greasy or sticky texture, mottled or uneven colour, or contain too much salt.

Third Grade butter is decidedly inferior to Second Grade, while

No Grade butter in many cases is almost unfit for human consumption. Fortunately, however, only a small percentage of this butter is made in Canada.

You can understand that if certain provinces adopt grading of butter for domestic consumption and other provinces fail to do so, it may be expected that low grade butter will be shipped into those provinces where grading is not compulsory and where butter can be sold under brands which do not always indicate the quality. In other words, some of the provinces are likely to become a dumping ground for second and third grade butter.

As previously stated grading of cheese and butter has been in effect for twelve years. A very large proportion - about 95 per cent of the total cheese manufactured in Canada - has been graded and a recognized difference in price paid under the different grades. The result has been that cheese made in Canada during 1934 graded 95½ per cent first grade compared with 78 per cent in 1923. The improvement in quality has been remarkable and Canadian cheese is rated as the finest Cheddar cheese imported to the British markets.

Last season 96 million pounds of creamery butter were graded. This represented about 42 per cent of the total production in the Dominion, which was approximately 231 million pounds. Almost 85 per cent of the graded butter was classed as first grade, but it cannot be stated that this represented the average quality, as some provinces which have good local markets for their entire output only grade a small part of the total make. It follows, therefore, that if low grade butter can be sold to advantage under various brands which do not indicate the quality, there is no inducement to have butter graded.

On the other hand, the grading records indicate that provinces which have a proper cream grading service in conjunction with butter grading have not only made a marked improvement in quality, but turn out a large proportion of high class butter.

In conclusion it may be said that if the grading of butter for domestic consumption were made compulsory throughout the Dominion and the grade marks shown on all butter wrappers, consumers would be

protected against misrepresentation of second and third grade butter.

The talk to be given in this series next Thursday evening is entitled "Protecting Canada from Dangerous Insects".

PROTECTING CANADA FROM DANGEROUS INSECTS

believed that the deciduous fruit ----- in Canada would be ruined.

February is almost over, spring is on its way and during the past few weeks seed and plant catalogues have been literally pouring in. The gardener sitting in his chair at home turns over the pages and gazes at the beautifully coloured illustrations of the flowers, fruits and vegetables and has wondrous visions of what he hopes to produce a few months hence. Gone are the thoughts of the battles he waged last summer and the summer before that, against the beetles, caterpillars, borers, bugs and other insect forms which endeavoured to destroy all that he grew. He thinks only that his efforts this year will surpass the glories of the illustrations, but alas! his dreams may not be realized unless he lives in a region far remote from civilization, for where man is, there also will insects be found to prey on what he produces.

Frequently those who grow crops say that years ago they were not bothered to the same extent by invasions and attacks of these insidious and destructive foes, and this is largely true, for unfortunate as it may be the majority of the most serious insect pests in Canada are invaders from other lands, or in the case of native insects have changed their habits from feeding on native plants to attacking the cultivated ones which man has furnished in abundance. An example of this latter class is the potato beetle, known to all in Canada east of the Rocky Mountains. The original home of this insect was the foothills of the Rockies where it fed on native plants of the potato family. With the arrival of the white settlers and the planting of potatoes it turned its attention to the potato plant.

Owing to the abundance of food it increased in numbers and spread with amazing rapidity eastwards until it is now present over the greater portion of the continent. The Mexican beetle is another example. It was described from Mexico in 1850. For many years it remained in the southwest then started its migrations for some unexplained reason. In 1920 it was found in Alabama and by 1925 it had reached southwestern Ontario. These are examples of native insects which have changed their habits. But let us examine some of the foreign foes. The San José scale originally came from China and spread so rapidly that it was

## INTRODUCTION FOR RADIO ANNOUNCER -

believed that the deciduous fruit industry in Canada would be ruined. The codling moth, the worm frequently found in apples came from Europe. The Oriental fruit worm which attacks peaches came from Japan. The gypsy and brown tail moths which are serious forest defoliators in the eastern United States are of European origin, as are also the Satin moth, and the earwig, which is present on the Pacific coast, and a host of others such as the Hessian fly, cabbage worm, carrot rust fly, and the pine shoot moth. How did these insects come to this continent? Many of them were brought in on plants of various kinds, whereas others were carried by commodities of different sorts. The problem we have to face is to prevent further introductions of economic insects, for experts tell us that there are at least three thousand other species which have not yet reached this land. To meet this serious situation a system of inspection has been organized by the Entomological Branch of the Dominion Department of Agriculture which requires that all plants imported into Canada shall be inspected in the country of origin but also shall be re-examined on arrival here. To give an idea of the extent of this work it may be mentioned that in one year, over fifty-seven million plants and two million packages of plant products were examined. In sixteen hundred shipments insect pests or plant diseases were found. Thus the silent war of protecting Canada from dangerous insects is carried on, and although the gardener in his chair may not realize his dream, at least he can rest assured that steps are being taken to assist in protecting his crops from other insect foes which are awaiting the opportunity to make their home in Canada.

The next talk in this series is entitled "The Battle Against Grasshoppers" and will be given at this same time next Thursday evening.

TALK NO. 15 - THE BATTLE AGAINST GRASSHOPPERS

OTTAWA, CANADA, MARCH 7, 1935.

## INTRODUCTION FOR RADIO ANNOUNCER

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### ROMANCE AND DIVIDENDS IN AGRICULTURE

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Presented by the Dominion Department of  
Agriculture and this evening featuring "The  
Battle Against Grasshoppers".

TALK NO. 23 - THE BATTLE AGAINST GRASSHOPPERS

OTTAWA, CANADA, MARCH 7, 1935.

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THE BATTLE AGAINST GRASSHOPPERS  
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The word battle used in the title of this address implying a war may seem rather out of place in reference to the relation between man and an insect. There seems, however, to be no term more suitable with which to describe the activity involved in defending prairie crops from destruction by grasshoppers. The scale of operations in dealing with these insects is so vast, the area involved is so extensive, the number of persons concerned is so great, and the threat to the agriculture of Canada is so definitely of national importance, that to any one engaged in grasshopper control work the words battle, campaign and war seem particularly appropriate in describing the activity.

The grasshopper outbreak, at present in course in Western Canada, involves practically the entire open plains area of the Provinces of Manitoba, Saskatchewan and Alberta. It began to be of serious economic concern in 1931. It increased in intensity and extent with an astounding rapidity and reached its greatest severity in 1934. In that year it involved over two-thirds of the wheat growing area of the prairies and threatened the destruction of at least 50 per cent of the grain and feed crops grown in an area of over 40,000,000 acres. The agricultural authorities of the Prairie Provinces, however, were acutely aware of the serious nature of the grasshopper situation and with the co-operation of the officers of the Entomological Branch of the Dominion Department of Agriculture, from 1932 onward, organized their respective provinces for the protection of the various crops.

The practices utilized in the killing of the grasshoppers are comparatively simple and consist chiefly in poisoning them with a mixture of bran, sawdust, sodium arsenite and water, accompanied, in certain areas, by special cultural practices. The preparation for the battle required the organization of tens of thousands of farmers for the protection of millions of acres of crop in each of the three provinces. The areas in which outbreaks were to be expected were surveyed and mapped. The danger of the situation was made clear to the farmers in the threatened districts by the holding of thousands of

public meetings in town and country, reinforced by the use of every avenue of propaganda and publicity. In the preparation of supplies with which to carry on the fight, tens of thousands of tons of bran, thousands of carloads of sawdust and literally hundreds of thousands of gallons of poison were purchased by the provincial governments and delivered in each threatened locality in amounts adjusted to the probable need. At the points of delivery the materials for the campaign were taken over by the municipal authorities who mixed them for use and distributed them to the farmers.

In the 1934 campaign, for example, there were 468 central mixing stations with 1,098 additional distribution points, while a total of some 2,981 (paid) officials and local assistants were required to supervise the work. In all, about 77,000 tons or 154,000,000 pounds poisoned bait were delivered to farmers, at a total outlay, including costs of materials and feed with which to carry on the special cultural control programme for grasshopper control in the relief areas of approximately \$1,173,000.

The battle resulted in a victory of which agriculture as a whole can be justly proud. From the point of view of the country as a whole, victory in the grasshopper war averted an assured destruction of crop upon the scale of a national calamity. From the agricultural point of view the success of the campaign reduced a threatened loss of 65 per cent of the grain and feed crop in the badly infested districts of the west to not more than 15 per cent and is estimated to have saved a total of at least 70,000,000 bushels of grain. From the human point of view the local skirmishes in the battle by farmers throughout the entire open prairie area of Western Canada saved the greater proportion of the grain and feed crop upon tens of thousands of farms and thereby averted widespread financial ruin, and enabled thousands to carry on without the necessity of recourse to public relief.

The prospect for 1935 is for a greatly reduced outbreak of these pests. The preparations for the campaign of 1935 are already well advanced. The outlay is expected to be materially below that in 1934 and the proportion of the crop saved is confidentially expected to be

higher.

The next talk in this series is entitled "Maple Syrup - One of Canada's Most Delectable Crops" and will be given at this same time next Thursday evening.

## INTRODUCTION FOR RADIO ANNOUNCER

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### ROMANCE AND DIVIDENDS IN AGRICULTURE

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Presented by the Dominion Department of  
Agriculture and this evening featuring "Maple Syrup -  
One of Canada's Most Delectable Crops".

Talk No. 24 - MAPLE SYRUP - ONE OF CANADA'S MOST DELECTABLE CROPS  
OTTAWA, CANADA, MARCH 14, 1935.

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*Maple Syrup - One of Canada's Most Selectable Crops*  
THE MAPLE SUGAR INDUSTRY

Of all agricultural activities practised on the North American continent, that of extracting sap from the maple tree and concentrating it into syrup or sugar, is probably the oldest. The discovery of the art is shrouded in many legendary Indian stories among them the discovery of the sweetness of the sap through the accidental breaking of a branch in the Spring and the use of the "sweet water" of the maple in which venison was boiled. The Indians are known to have made maple sugar prior to the year 1673. Their method of tapping trees was to make a diagonal incision in the trunk of a maple probably with a tomahawk into the lower end of which was inserted a reed or concave piece of bark through which the sap was conveyed to a bark trough or other receptacle. Hot stones plunged repeatedly into the sap concentrated it into a thick dark syrup.

The early white settlers followed this method to a considerable extent but during a long period of years they improved upon this by substituting wooden spiles, or spouts, for the reed or bark spouts, and iron or copper kettles for bark receptacles in which to reduce the sap. Under modern methods the auger has replaced the axe or tomahawk, metal spouts and covered metal pails for wood spouts and wood pails and evaporating pans built over an arch or furnace in a cabin have taken the place of kettles over an open fire. The use of clean utensils, frequent collection of sap in the bush, straining or filtering of sap before evaporating and shallow and rapid boiling in the evaporator is now the approved method of manufacturing quality maple products.

While methods of production have shown great development in the last half century the romantic side of sugar making has not been interfered with very seriously. The expression "sap's running" in Spring still provides a joyous thrill to rural dwellers and "sugaring off" still is a feature of the annual make. The tramp to the woods on a mild spring day, the aroma of escaping steam, the sampling of the hot syrup, the eating of wax that has been allowed to harden on the clean snow all are joys of Spring that appeal to young and old.

In the early days of the industry there was little traffic in maple products, but with the migration of sons and daughters from the farms to the cities and towns and their desire for the well-remembered delicacies there gradually has developed a trade in maple products. In 1851 production amounted

to 13,500,000 pounds of sugar; in 1891, 22,500,000 pounds. Notwithstanding unfavourable climatic conditions during the past few years production has averaged approximately 23,000,000 pounds annually of which Quebec has produced 75 per cent, Ontario 24 per cent and the Maritime Provinces the remainder.

The Maple Sugar Industry Act was passed in 1930 effectively to control the industry; to prevent the practice of adulteration and to provide standards for maple products. Maple syrup must weigh not less than 13 lbs. 2 oz. per gallon nor contain more than 35 per cent water. Maple sugar must contain not more than 10 per cent water; maple butter, maple cream and maple wax not more than 15 per cent water. The use of the word "Maple" is restricted to pure maple products.

Maple syrup carefully produced by modern methods is light amber in colour and of a delicate maple flavour. Maple syrup and maple sugar are delicacies of unsurpassed flavour and in addition to their uses on the table they make an excellent flavour for ice cream, cakes, cake icings and other foods. Maple products are rich in carbohydrates in a quickly assimilative form, possibly cloying to the taste if eaten to excess but delicious if used in moderation.

A large proportion of the consumers of maple products are of the opinion that pure maple products can be purchased only in the Spring of the year. This is incorrect as grocery stores throughout the country have maple products available to them throughout the entire year.

The next talk in this series will be entitled "Lamb - One of the Best of Meats" and will be given at this same time next Thursday.

usually reach most LAMB - ONE OF THE BEST OF MEATS

October and November. Owing to the liberal supply of lamb at this time

Lamb in Canada dates back almost to the days of Christopher Columbus. During pioneer days along the shores of the St. Lawrence highest point. Any surplus of milk-fed, grass-fattened lambs are put and the Ottawa rivers at logging bees, barn raisings and husking bees into storage and are available for winter and spring use to supplement farm killed lamb was one of the most favoured meats. From these early the supply of range feedlot lambs. The high quality of lamb put into days on to the present, sheep flocks in Canada have been steadily storage accounts for the high quality of storage lambs as sold improved and the industry has been organized with a view to providing throughout Canada.

the Canadian people with a regular supply of choice lamb at all seasons Lamb in Canada is largely a Canadian product produced exclusively of the year.

for the Canadian market. In 1934, imports of lamb were only 37,764

In recent years lambs grown on the ranges of the prairie provinces pounds. Exports of lamb in 1934 were ten times the volume of imports, and the interior of British Columbia have been put into feedlots on again reflecting the saleability of the Canadian product.

irrigated farms in Alberta, on grain farms in the West and with

Price is always a factor in deciding what will be bought in the selected farmers in Eastern Canada. The Dominion Department of form of meat. The "New Deal Policy" in the United States has caused a Agriculture, under its Lamb Feeding Project, has further encouraged the rapid rise in the price of beef, with the result that there is a demand feeding and finishing of these range lambs so that today all over the from buyers in the United States. Likewise exports of bacon to Great Dominion city markets are amply supplied with fresh-killed lamb Britain have had a stimulating effect on the price of pork products. carcasses which combine all the delicious flavour of good lambs with Lamb is very much an all Canadian product and in relation to other meats the necessary tenderness and juiciness. Furthermore, these carcasses is very reasonable in price. Selection of lamb cuts may be made to suit are of the most desirable weights so that legs of lamb and roasts of any pocket-book. Stewing lamb, which is the cheapest portion of the lamb may be cut in sizes and weights to suit the needs and pocket-carcass, can be made into lamb stew and other appetizing dishes. Lamb books of the Canadian purchasers.

chops are quickly and easily cooked, thus affecting a saving in both

Easter lamb or hothouse lamb, as it is commonly called, has always the cost of fuel and labour. Legs of lamb and roasts of lamb are both been considered as a meat delicacy. Lamb at Easter has the same readily prepared for the table and can be served in a variety of ways, significance as turkey at Christmas time. Improvement of farm buildings all of which combine attractiveness with appetizing qualities. It is has made it possible for a rapidly increasing number of farmers to safe to say that lamb is one of the easiest meats to cook. Pamphlet undertake successfully the rearing of these early lambs so that from No. 142 published by the Dominion Department of Agriculture, Ottawa, Easter forward into the spring and summer months there is a steadily entitled "Selection of Lamb Cuts" contains direction for cooking, and increasing volume of these baby lamb carcasses available for the retail this pamphlet may be obtained by writing to the Publicity and Extension trade. Tourists coming to Canada have been favourably impressed with Branch, Dominion Department of Agriculture, Ottawa.

the quality of Canadian lamb and this, no doubt, has to some extent The next talk in this series is entitled "Eggs for Easter" and accounted for its growing popularity with our own people for general will be given at this same time next Thursday evening. use along with beef and pork.

The fall and early winter are the periods of the year when the great bulk of milk-fed, grass-fattened lambs go to market. These lambs

usually reach most desirable weights during the months of September, October and November. Owing to the liberal supply of lamb at this time of the year, the price is most reasonable and consumption reaches its highest point. Any surplus of milk-fed, grass-fattened lambs are put into storage and are available for winter and spring use to supplement the supply of range feedlot lambs. The high quality of lamb put into storage accounts for the high quality of storage lamb as sold throughout Canada.

Lamb in Canada is largely a Canadian product produced exclusively for the Canadian market. In 1934, imports of lamb were only 37,764 pounds. Exports of lamb in 1934 were ten times the volume of imports, again reflecting the saleability of the Canadian product.

Price is always a factor in deciding what will be bought in the form of meat. The "New Deal Policy" in the United States has caused a rapid rise in the price of beef, with the result that there is a demand from buyers in the United States. Likewise exports of bacon to Great Britain have had a stimulating effect on the price of pork products. Lamb is very much an all Canadian product and in relation to other meats is very reasonable in price. Selection of lamb cuts may be made to suit any pocket-book. Stewing lamb, which is the cheapest portion of the carcass, can be made into lamb stew and other appetizing dishes. Lamb chops are quickly and easily cooked, thus affecting a saving in both the cost of fuel and labour. Legs of lamb and roasts of lamb are both readily prepared for the table and can be served in a variety of ways, all of which combine attractiveness with appetizing qualities. It is safe to say that lamb is one of the easiest meats to cook. Pamphlet No. 142 published by the Dominion Department of Agriculture, Ottawa, entitled "Selection of Lamb Cuts" contains direction for cooking, and this pamphlet may be obtained by writing to the Publicity and Extension Branch, Dominion Department of Agriculture, Ottawa.

The next talk in this series is entitled "Eggs for Easter" and will be given at this same time next Thursday evening.

## INTRODUCTION FOR RADIO ANNOUNCER

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## ROMANCE AND DIVIDENDS IN AGRICULTURE

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Presented by the Dominion Department of  
Agriculture and this evening featuring "Eggs  
for Easter."

TALE NO. 26 - EGGS FOR EASTER

OTTAWA, CANADA, MARCH 28, 1935.

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EGGS FOR EASTER  
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On Sunday, April twenty-first, children and adults in Christian countries will help to maintain a tradition older than any history, the tradition of the Easter Egg.

Everywhere, in all ages, there has been a Spring festival which has been celebrated with eggs because they are a symbol of life and of the birth of Spring after the death of Winter.

The Egyptians regarded the egg as the emblem of re-creation, of the renovation of the human race after the deluge. The ancient Persians celebrated festivals marked by the presentation of painted eggs. In Persian legend the universe was hatched from an egg at the time of the vernal equinox and today in Persia eggs are given as gifts at the Spring Festival. In accordance with this tradition the Persian new year is set by the vernal equinox, as is the Christian Easter. The custom of giving eggs at this time has come down through the ages practically unaltered.

Thus the association of eggs with Easter, like many other customs among Christians, is of pagan origin, and began far back in the mists of antiquity, when superstition ruled. In modern times, of course, the practice has become largely the following of an established tradition. Under improved methods of husbandry eggs are no longer the product only of the spring months but are produced the year round. Likewise their popularity in Canada is not limited to any season. Canadians, in fact, consume perhaps more eggs per capita than any other people, a condition which is due in large measure to the efficient system of grading introduced by the Dominion Department of Agriculture, which has been in effect in this country for a number of years. The tradition of the Easter Egg, however, has been maintained because of its popular appeal, particularly to children, and probably will continue to live throughout the years.

Whether the honoured position held by eggs among ancient peoples had any basis in their value as a food, history does not clearly reveal. The Hindus abstain from eggs as food because they are a symbol of the

origin of life. Grecian philosophers also tried to inculcate some such notion. On the other hand, eggs have been a favorite food throughout all the ages because they contain all the elements of life.

Our knowledge of the association of the rabbit with eggs as an Easter symbol goes back only as far as a story told to German children that if they are good, a white hare will creep into the house on Easter eve and hide eggs for them in nests which they have prepared.

In ancient, as in modern times, the eggs used at Easter have varied from simple tints to creations of gorgeous colours. Coloured eggs are a delight to every child at Easter. Dyes for colouring eggs may be readily obtained, or, if they are not available, there are a number of other simple ways to achieve a similar effect. Boiling eggs in coffee gives the shell a delightful brown. Boiling them in beet juice or rolling hot boiled eggs in beet vinegar will give a pink or magenta colour. Skins of onions rolled around the egg and both boiled together will give shades of yellow. Tiny stars, crescents or pictures can be pasted on the egg shells. All help to lend colour to the Easter display and to maintain the tradition of the Easter Egg.

After the Easter Egg has been eaten, of course, the shell should be crushed, as egg shells, according to ancient superstition, are witches' goblets and may be used to harm him who ate the egg. Before the Christian era the breaking of egg shells was practised by the Old Romans as a preventive of evil. If the crushed shells can be dropped into a stream of water after the old Italian fashion the effect is even more complete, for witches abhor the spell of running water.

For the historical aspects of this review the Dominion Department of Agriculture is indebted to an unnamed Canadian historian, who, in 1916, assembled and recorded the facts of the origin of the Easter Egg tradition under the simple initials "Max McD.T."

The next talk in this series is entitled "Succession of Crops in the Garden" and will be given at this same time next Thursday evening.

SUCCESSION OF CROPS IN THE GARDEN  
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A vegetable garden whether small or large can be made a source of real profit and pleasure if proper thought is put into the preparation of a plan for such an undertaking.

Provision should be made to start indoors such crops as lettuce, cabbage, cauliflower, tomato, pepper and eggplant in window boxes or a hotbed and to take care of these plants under glass until the danger of freezing is past, when they may be planted in the field. Stocky, well grown plants are most desirable.

As a rule the seed of such crops as lettuce, radish and spinach is sown outdoors as soon as the soil is sufficiently dry to work. Lettuce and radish can be grown in a mild hotbed if real early crops are desired. The outdoor sowings are made so as to follow after the hotbed crop. Two or three sowings of these made at intervals of ten to fifteen days apart in the garden will succeed quite well, before the dry hot weather arrives with the usual insect pests. Sowings should be made again in early or mid-August to provide a supply for the autumn and late fall.

Onions are important for salads and other purposes. Sets planted as early in the spring as the soil will permit followed by seed sowing will give a good succession for summer use and winter storage.

Garden peas of the smooth and dimpled types can be sown as soon as soil and seasonal conditions will permit. When the soil warms up the wrinkled varieties can be sown with safety.

Beans of the bush varieties may be sown at the same time as the wrinkled peas, using Round Pod Kidney Wax or Stringless Green Pod for three or four sowings or the following two varieties may be sown with the former, Stringless Refugee Wax and Hodson Wax. This will give an extended season for snap pod beans. The pale bean is also of great value for extending the season. Kentucky Wonder Wax or the green pod type will be found very useful. The seed must be planted at the same time as the early maturing bush varieties.

The usual way for beets and carrots is to sow the seed in the garden on raised drills for the early crop and on the level for the late sown seed.

Raised drills give the plants the benefit of the soil heat and drainage, while the level sowing for the later crops allows better utilization of the limited soil moisture. Beet and carrot seed sown around June 15th will produce nice sized roots of the finest quality for winter storage.

Cabbage and cauliflower are divided naturally into early mid-season and late or winter varieties. To obtain early cabbage and cauliflower for market early sowing of such varieties as Golden Acre, Early Jersey Wakefield and Copenhagen Market cabbage and Early Dwarf Erfurt and Early Snowball cauliflower are recommended. For first early, sow the seed in a hotbed in mid-March and another sowing in the first week in April and at intervals of fifteen days apart in the open garden until mid-June. The seed of the late cabbage Danish Ballhead should be sown during the latter part of May.

Sweet corn is essentially a warm season crop and cannot be planted much before May 24th. By using an early maturing variety like Banting, an origination of the Horticultural Division, Central Experimental Farm, Ottawa, green corn can be grown to maturity in 64 to 73 days from planting. Two or three plantings of this variety made at intervals of ten days apart and two or three plantings of Golden Bantam made at the same intervals will give an extended season for sweet corn of high quality.

The early maturing Abel and Alacrity tomatoes, originated in the Division of Horticulture, Central Experimental Farm, are very desirable for the early crop, while Bonny Best and John Baer are good main crop varieties.

Information dealing with vegetable crops will be given on request to the Horticultural Division, Central Experimental Farm, Ottawa, or upon application to the Publicity and Extension Branch, Dominion Department of Agriculture, Ottawa.

The next talk in this series is entitled "The Story of the Clothes Moth" and will be given at this same time next Thursday evening.

THE STORY OF THE CLOTHES MOTH

For thousands of years clothes moths have caused incalculable losses and inconvenience to man by damaging or destroying his worldly goods. Undoubtedly the extent of this damage has increased during modern times owing to the more widespread use of furs, woollen goods, rugs, upholstered furniture and similar materials of animal origin.

Dominion entomologists tell us that two species of these destructive insects occur in Canada; namely, the webbing clothes moth, which is the more common, and the case-making clothes moth. The adults of both species are small, buff-coloured moths. They may be seen in dwellings at any season of the year, but are more numerous in spring and summer. The moths are harmless but lay the tiny pearly-white eggs from which, after a period of a week or ten days, hatch the injurious larvae or caterpillars.

The caterpillars as well as the moths seek out dark protected places in fur and woollen goods or in upholstered furniture, on which they feed, causing damage to the materials. These caterpillars live from a few weeks to more than two years and may be found in all stages of development throughout the year.

The larvae of the two species differ in habits. Those of the webbing clothes moth move about freely and spin silken threads on infested fabrics, often forming unsightly webs. They construct flimsy shelters of silk into which they often retire and where they eventually pupate and transform into the winged moths. On the other hand, larvae of the case-making species make small cylindrical cases of tightly woven silk and fragments of the materials on which they feed.

Clothing and other materials subject to attack, should not be left for long periods, particularly during summer, in cupboards, attics and similar places, unless precautions have been taken to protect them. After thoroughly brushing and beating them preferably in strong sunlight, they should be placed in trunks or chests, cotton or paper bags, or in cardboard boxes sealed with paper strips. Wrapping clothes in two thicknesses of strong paper, taking care to see that the edges are turned so that no moths may gain entrance is also recommended. One pound of fresh naphthalene flakes scattered among the garments in an

ordinary sized trunk assures protection from moth injury. When using moth bags or similar containers several ounces of naphthalene flakes placed in each will give additional protection. Clothing not protected in this way should be examined and carefully brushed at frequent intervals, and valuable articles, as fur coats, should be placed in cold storage. Department of Agriculture, since, like a well-known paint, they When clothes moths are seen flying in the home it is important to discover and remove the source of infestation. Often moths will be found issuing from neglected trunks and forgotten pieces of clothing in attics, basements or closets, or from furniture, and sometimes from collections of lint in floor cracks and behind baseboards, or even from the cold air shafts of hot-air furnaces. All these should be cleaned out periodically. Frequent use of a vacuum cleaner on carpets and furniture and other articles that are objects of attack has definite control value. When the house is to be closed for a time in summer, it is a wise precaution to scatter naphthalene flakes liberally over rugs and carpets, afterwards rolling them tightly and tying them up in stout brown paper. Upholstered furniture may also be treated with naphthalene and then tightly covered with paper or cotton sheets.

To rid upholstered furniture of moths is often difficult. There are three methods that give good results. These include the use of sub-zero temperature, superheating and fumigants. The use of heat, or superheating, as it is called, and fumigation with certain gases are methods also applicable to the treatment of entire infested buildings. Sprays containing pyrethrum extract in a mineral oil such as refined kerosene are useful for destroying the life stages of clothes moths. To be effective, such sprays must come in direct contact with the insects. In recent years various moth proofing substances have been developed and certain of these are in use by manufacturers, dyers, dry cleaners and others. Further information on this subject may be secured by writing to the Publicity and Extension Branch of the Dominion Department of Agriculture.

The next talk in this series is entitled "Marketing Services" and will be given at this same time next Thursday.

the marketing services. The legislation is the author of their being but only that.

# MARKETING SERVICES

Approximately 700 words are about the limit of intelligible utterance in five minutes, and are not, of course, sufficient in which to deal, except in general terms, with the marketing services of the Dominion Department of Agriculture, since, like a well-known paint, they cover the country. now the criterion of quality and known as Red Brand. Practically every farm product is served in some definite way through the medium of a marketing plan. If one enumerates in one's mind the farm products of domestic and export importance, it will be apparent how multitudinous are the problems, and how wide the field to be covered. in the last analysis it is the consumer who decides the success. Marketing is one of the oldest of arts. Throughout the ages, same bargaining power has been the strength of individuals and of nations. If Esau had had a keener sense of bargaining power, he would not have sold his birth-right for a mess of pottage. Well, the purpose of the marketing services of the Dominion Department of Agriculture is to increase the farmers' bargaining power. In a very real sense, most policies in agriculture are marketing policies. The ultimate end of all farm production is the market. The most widely known legislative aid to agriculture at the present time is the Natural Products Marketing Act. In dealing tonight with marketing services, however, we are not referring to this special machinery, but to specific commodity enactments in effect for a number of years, such as the Live Stock and Live Stock Products Act, which deals with supervision of the marketing of live stock and live stock products; the Dairy and Cold Storage Act, the Seeds, Feed and all Fertilizers Acts, dealing with the class of commodities mentioned; the Animal Contagious Diseases Act; and the well-known Meat and Canned Foods Act. And there is other legislation, such as is directly concerned with the marketing of fruit, of honey, of tobacco, of potatoes, beans, peas, etcetera. In fact, no one of the agricultural products of Canada, important in the domestic and export market, is without Dominion Government assistance. It will be given at this same time next Thursday evening.

Many projects have been set up, and these projects are actually

the marketing services. The legislation is the author of their being but only that.

Among the better known marketing services of the Dominion Department of Agriculture are: hog grading; egg and poultry grading; seed certification; cheese and butter grading; agricultural commodity demonstrations; market standards of quality, branding and sale of the two top grades of beef, now the criterion of quality and known as Red Brand and Blue Brand Beef.

In all these projects, the consumer plays a most important role. It is no secret that in the United Kingdom's heroic and far-reaching efforts to rehabilitate her agriculture, every recognition is given to the fact that in the last analysis it is the consumer who decides the success or failure of the most important of the projects. And the same is true of the success of policies in Canada. If the consumer were to remain indifferent as to the quality for price of his purchases, and ceased to demand quality guaranteed, then much of the effort of the Dominion Department of Agriculture would become of no benefit to the producer. Therefore, the chancellor of the home exchequer should realize that in demanding graded products, cleanly handled and efficiently merchandized, she is very wisely economizing and as well is helping the producer of first-class commodities. Therefore, always ask for the graded product.

Full information regarding all these policies can be secured on application to the Dominion Department of Agriculture, Ottawa.

And now we have just a moment in which to deal with the markets intelligence services of the Department. These services provide unbiased, up-to-date, and regular news on supply and demand of all classes of farm production. How great the handicap, then, in remaining blind, often deliberately so, in regard to the sale of butter, cheese, live stock, tobacco, eggs, fruits, etc. And how foolish! This service, as well as other services, is a public service, free on application to all directly interested in production.

The next talk in this series will be the last and will be entitled "The End of the Series". It will be given at this same time next Thursday evening.

THE END OF THE SERIES

This is the last of the five-minute talks in the Romance and Dividends in Agriculture Series for this season. These have been given by the Dominion Department of Agriculture over the coast to coast network of the Canadian Radio Commission Stations at this same time every Thursday evening. Those who have heard the previous twenty-nine talks, which began on October 4, 1934, will, no doubt, readily agree that the nature of the subjects dealt with has justified the title of the series.

The oldest, the greatest and the noblest of all industries - agriculture - assuredly is charged with romance and certainly returns dividends even though these may not always be in specie or money to the extent desired. It is still true, as Daniel Webster said 95 years ago, "When tillage begins, other arts follow. The farmers, therefore, are the founders of civilization."

The object of each talk has been to attempt in the brief space of five minutes to give to those who listened in from the Atlantic Coast across the extensive expanse of land and intervening waters to the Pacific Ocean, an interesting summary of some phase of the work or service the Dominion Department of Agriculture has available both to the producer and the consumer. The subjects have covered a wide and varied field such as entomology as related to the farm, the garden and the home; poultry and eggs, fruits, dairy products, Boys' and Girls' Farm Clubs, meat inspection and the grading of beef and bacon; cereals, canned foods; a review of the agricultural situation in Canada at the dawn of the New Year; honey, maple syrup, seed catalogues and gardening. All of these have a very real place in the life and general well being of every Canadian.

The series was suggested by Hon. Robert Weir, Dominion Minister of Agriculture, who desired to make more widely known the broad basis of service his Department, in co-operation with the Provincial Departments of Agriculture and the Agricultural Colleges and Schools, has to offer to the farmer, to the consumer and to those engaged in the many industries closely related to agriculture. When the suggestion was conveyed to the Canadian Radio Commission it was readily accepted and its network was placed at the disposal of the Dominion Department of Agriculture without charge. Throughout the 30 weeks the Commissioners and their staff have given invaluable co-operation and to a most encouraging degree. This the Department desires gratefully to acknowledge.

It is evident that the talks have been appreciated, for many of those who have heard them while sitting at their radios in urban centres, in rural districts, and in isolated dwellings somewhat remote from established communities have written for copies of the talks or for literature issued by the Department dealing with the subject of the talk. We recall that the first request came from Kerrobert, Saskatchewan, the second from Sydney, Nova Scotia, and the third from New Westminster, British Columbia, which indicates the far flung scope of the radio, one of the most marvellous of modern inventions. The radio is an incomparable link of contact; it has virtually eliminated isolation for it transmits sound through the air at the same speed as light travels from the sun. This means that the radio listener in the most remote settlement of the Dominion or any other part of the world can hear a programme at the precise moment at which it is broadcast from a station hundreds of thousands of miles away.

Since the first three requests for copies of the talks and incidental literature were received, there has come each week a steady stream of similar requests. Sometimes, following a talk on some subject with a more or less popular appeal, such as Boys' and Girls' Farm Clubs, Hallowe'en Apples, Canada's Best in Beef, Maple Syrup, Eggs for Easter, we received heavy mails from all parts of the country.

But the conclusion of this series of radio talks to-night does not imply any slackening of the activities of the Dominion Department of Agriculture. The service of its varied branches will continue to be maintained and extended to all the people of the Dominion. All are directly effected by its work, though its principal interest is the farmer, and the cause of good husbandry, for --

Ill husbandry braggeth  
To go with the best;  
Good husbandry baggeth  
Up gold in his chest.

So we wish our listeners Au Revoir with the hope to be with you again next autumn when the farmers of Canada have quit their fields after what we trust will be a profitable harvest.



DATE DUE  
DATE DE RETOUR

[illegible]

LOWE-MARTIN No. 1137

