

# Extremely Busy Year At The Experimental Station

The Guardian is indebted for the following comprehensive review of the year's activities at the Dominion Experimental Station to Superintendent R. C. Parent:

The past year has been an extremely busy one at the Charlottetown Experimental Station. In addition to carrying on the home farm, a survey has been completed of the new properties on the Upton and Beach Grove Inn farms. Old buildings have been torn down, new fences built and the place generally prepared and made ready for a series of new experimental work to be begun in 1950.

Mr. D. C. Cooper from the Engineering Department, Central Experimental Farm, Ottawa, spent two weeks on this property with a crew measuring and taking levels of the two hundred and twenty acres. This will enable us to establish tile drain lines and lay out several fields on the contour.

One of the new projects will compare contour farming with the regular method of farming. On the farm a definite area will be set aside for pasture and another for soil fertility studies. In addition to these two large fields have been set aside for the use of the Plant Pathological and Entomological Divisions of the Science Service for research work in the control of plant disease and harmful insects.

The twenty acre woodlot has been surveyed by representatives of the Dominion Forestry Service under the supervision of J. C. Veness, Fredericton, and a planned system of cutting will be followed.

**New Staff Members**

During the year two new staff positions were created and filled. Mr. Graeme Boswell, M.Sc., was appointed to the position of Specialist in June, and will have charge of soil fertility experiments on the new farms. Graeme Boswell is the son of the late George Boswell and Mrs. Boswell of French Fort. He studied for his Master's degree in soil chemistry at Macdonald College.

Mr. Ramsay was appointed as Poultryman, Grade I, in December. Mr. Ramsay has been an employee of the Experimental Station for the past year. He is an experienced poultryman and a veteran of the last war. He held the rank of Flying Officer at the time of discharge.

**New Construction**

One new dwelling house was constructed during the year and another house was converted into an apartment for members of the staff. A garage and workshop were also built at Upton farm and on the home farm work has been started on a public rest room.

In addition to this the Advanced Registry Board is well advanced with the construction of a new pig testing station for Advanced Registry at the Charlottetown Station. This building is to be the very latest in pig barns and is large enough to hold thirty-two pens of pigs. This will enable upwards of seventy-five litters to be tested in one year. The building will likely be ready for use some time during February, 1950.

**Meetings & Field Days**

The largest group to visit the Experimental Station during the past summer was a Junior Farmers' picnic held on August 8. Approximately five hundred farmers were present and were given an opportunity to review the more important projects under study at the Station. In addition to this the Massey Harris Co. put on a large field day at Upton farm and the Parkdale Women's Institute held their annual tea on the lawn. Other groups holding meetings at the Station included the following: The Stanley Livestock Shipping Club, the Ontario Goodwill Potato tour, The P. E. I. Dairyman's Association, the Strawberry Producers, the Maritime Poultry Producers, Marketing Committee, the Ayrshire Breeders' Club annual meeting, the Nova Scotia Ayrshire Breeders' Association and others.

**Prominent Visitors**

Practically all of the Divisional Chiefs and their assistants from the Central Experimental Farm, Ottawa, visited the Station from time to time throughout the summer to discuss problems pertaining to their particular line of work with the Superintendent and the assistants at the Charlottetown Station. In this many prominent visitors called at the Station. Among these may be included the following: Colonel Kennedy, Minister of Agriculture for Ontario, Gilbert MacMillan, President of the Dairy Farmers of Canada, Dr. Marcel de Gortzen, University of New Brunswick, A. C. Porter, Ontario Agricultural College, R.A. Hornstein, Meteorological Service, Halifax, J.V. Veness, officer in charge of Forestry Service in the Maritimes, George Templeton and John Sinclair, prominent farmers of Scotland, Francis Park, U. S. D. A. Forest Service, Keith Morrow, C.E.C., Halifax, R. M. Edgar, New Zealand, J. S. Parker, Director, Maritime Marshlands Rehabilitation Commission, Mr. Marshall from the office of the Belgium Trade Commissioner, Ottawa and Thomas Dunbabin, Press Attache, the Australian High Commission Office, Ottawa.

**Weather Conditions**

The growing season of 1949 was about average and favorable for the production of all farm crops. The winter was mild with the lowest reading of three below. This was recorded on January 26. The snow was well blanketed throughout the winter

The second experiment is entitled, "Progeny Testing of Purebred Ayrshire Sires by Means of Artificial Insemination". In this experiment the senior herd sire at this Station, "Evana Sir Roderick", is being artificially mated to the breeding females in our herd. He is also bred to the breeding females in a number of co-operating Ayrshire herds in the vicinity of Charlottetown where production records are kept.

The following year the same breeding females are to be bred to the junior sire, "Charlottetown Sir Roderick 7th", a son of "Evana Sir Roderick". The resulting groups of heifers are to be compared with their dams and with one another.

Five years will be required to complete this experiment. Since the experiment was started in June sixty females have been bred in ten herds including the Experimental Station herd.

During the fall months the herd of Ayrshires at the Charlottetown Experimental Station was tested for Brucellosis (Bang disease) and for T.B. and was given a clean rating. This herd has now been classed as a Bang's disease free listed herd since 1938 and accredited since 1922.

**Poultry**

Projects under way at the Station during the year were of a continuing type and no project was completed, comment on the work is more or less of a routine nature.

Work with the unselected, or so-called "Jungle stock" was perhaps the most interesting item and some data is now available from the first year's work.

Highest Plymouth Rock egg record was 288 while highest record for unselected stock was 266 eggs. This latter bird was grey and somewhat similar to Rock but rather rusty and with a different type of barring—she was very fine boned and weighed slightly over four pounds.

Best ten Rock records was 282.5 eggs while best ten unselected stock record was 238.2 eggs.

Best production for all Rocks completing their laying year was 204.5 eggs and for unselected stock 159.4 eggs.

On a bird-housed basis the Rocks averaged 175.6 eggs while unselected stock averaged 159.4 eggs.

**Soil Survey, Etc.**

During 1949 a detailed erosion and land use survey was commenced in a selected area of Queen's County designated the Hunter River basin area. The survey to date has shown that the insidious sheet erosion has been and continues to be responsible for losses of soil fertility through the removal of surface soil. While there are no large blocks of severely eroded land in the area surveyed, erosion has advanced far enough on nearly every farm so that gullying is evident in some places.

The co-operative field plot experiments comprising two hundred field plots of potatoes and grain were conducted in 1949 on the O'Leary, Charlottetown and Culdren soil series. In the greenhouse three hundred plots were used to compare thirty mixtures and rates of soil collected from the three above mentioned soil types. The greenhouse experiments supplement the field experiments and enable us to assess the fertilizer treatment much quicker and more accurately than if either one of the other was used alone.

While the results obtained to date indicate interesting trends further work will be necessary before conclusions can be made.

Over eleven hundred soil samples from the various soil fertility plots, and from farmers seeking advice on their soil fertility problems, were analyzed during the year.

**Illustration Stations**

Generally speaking, the year 1949 may be considered as a very favorable one for the production of farm crops. Studies of a field finding nature involving some 604 experimental plots were under study on eight Illustration Stations representative of various soil types in the province. These field experiments are so designed that information acquired may supplement research work conducted by the Experimental Farms and in turn benefit the individual farmer. Only with the hearty co-operation and assistance rendered by Illustration Station operators and members of their respective families has it been possible to carry the season's heavy program to a successful conclusion.

While pastures did not reach the peak of production attained during 1948, fertilized pastures produced an abundance of herbage. Fertilized areas receiving the equivalent of 1000 pounds 2-12-6 per acre at the New London station produced 28.35 tons of green herbage per acre, giving an increase of 12.37 tons over the unfertilized section.

Special investigational studies comprising 27 fertilizer formulae for potatoes were established on a two acre area at the New London station operated by William E. Johnstone and son, for the second successive year. All plots were established in duplicate with and without manure. Trends to date indicate an increase in yield as the rate of nitrogen applied increased.

An experiment to ascertain the effect of varying rates of a 5-10-10 fertilizer when applied alone and in combination with barnyard manure for potato production has been active at all stations during the past three years. The residual effect of fertilizer alone versus manure and fertilizer on succeeding crops is further being studied. Ten tons of manure plus 1500 pounds 5-10-10 per acre has to date given very encouraging results.

Mr. Robert Woodside and son, operators of the newly established experimental station at O'Leary, have displayed a keen interest and natural aptitude for experimental work. During the past two years over 20 acres at this station have been devoted to experimental studies. These include plowing and reseeded, top-working and reseeded, fertilization, manuring and timing of permanent pastures, testing of cereal varieties, potato fer-

**Apiary**

1949 was a good year for the beekeepers in the province. Package bees built up rapidly and were in a strong condition at the start of the main honey flow. The honey flow up until the middle of July was above average, but the warm, dry weather during the latter part of July and August retarded the crop below an earlier estimate.

A new project was commenced in the spring of 1949 to compare different sized packages arriving on different dates. The object of the experiment is to secure information on the most suitable time for the purchase of package bees in this province, and to determine which is the most economical package to buy, a two or a three pound one. The first year's results from the experiment indicate that the total production from the three pound size package was only thirty seven pounds more than the production from the two pound size package. This increase would barely compensate for the extra cost of the three pound package. The experiment will be continued over a period of years.

**Horticulture**

From the standpoint of immediate interest, the late blight resistant potato varieties probably highlighted the experimental work this season. Most of the blight resistant potatoes under test were bred and selected at the Dominion Experimental Station, Fredericton, but a few originated at Experimental Stations in the United States and elsewhere.

The past two years have been very favourable for blight development and we were very pleased to find that quite a number of the new varieties stood up well under the most severe conditions. Included in these were the two most prominently mentioned

**Wild Fruits**

Cranberries and blueberries were only moderately productive this year and a frost on September 12 destroyed large areas of cranberries.

Work is now well underway at Blooming Point and about 14 acres of upland soil was planted to cranberries in 1948 and 1949. Some of the vines set out are Early Black's and Howe's, and the remainder are native varieties. The first two were brought in from Cape Cod.

Various ways of planting are being tried out with cranberries including that of broadcasting. The vines in this method are first run through a straw chopper and cut into pieces of from two to three inches in length. These are then sown by hand and disc'd in.

A rotational burning experiment with blueberries is now well underway at Blooming Point. In this experiment about three acres of land is burned one-third of this is burned over each spring. The practice of burning over blueberry barrens in a definite rotation is common in other parts of Eastern Canada and the United States and could well be adopted in our

**Weed Experiments**

Chemical weeding is now being widely advocated and market gardeners are finding that some of the weedicides are of definite value. Among the materials tested at the station this year was varson or common cleaning fluid. This makes a wonderful job of controlling weeds in parsnips and carrots and was the most outstanding chemical tested in 1949.

by the Fredericton station for release within the next year or so. Also included in the potato tests were over 75 named varieties including Kennebec and other highly rated new American seedlings. The present time has been found to have the old Island favorite McIntyre receive its credentials and be included in the registered variety list of the Dominion. This would mean that the McIntyre potato would be eligible for Certification.

**Vegetables**

Because of the increased importance of cucumbers in the province the station has undertaken considerable work with this vegetable. At the present time thinning and fertilizer experiments, coupled with testing all the new and promising varieties, are the main lines of endeavour. It is, of course, too early to draw conclusions from these experiments but it is fairly evident that reasonably close spacing and high fertilizing, especially with manure, produce the best yields.

At least one new variety has attracted the interested of the processors and would seem to be a definite improvement over the type now being grown.

**Tree and Small Fruits**

McIntosh is still the most popular apple in the province but Hume and Red Delicious are in increasing demand. Red Meba, Cortland, Red Spy and a few others are also being grown to some extent. Other varieties, such as Joyce, Lobo, Lawseed and Sandow could well be included, at least for the small home orchard. A sport of the old Pewaukee—which the station has named Bright—has attracted some interest to home orchardists. This apple, originating in the Smallwood orchard near Charlottetown, is very similar in most respects to the original variety but, in addition, is almost solid red in color. Since it is quite resistant to scab and insect injury it is of special value in areas where spraying is not a regular practice.

Several new strawberry varieties are showing promise in the station plots and these include Valentine (early), Catskill, King, McKenzie and Louise (late). These are in addition to the two or three popular varieties Senator Dunlap and Premier.

Rideau and Trent continue to be the two leading raspberries. The new rust resistant black currants Crusader and Coronet are showing considerable promise and are very vigorous and hardy. Cuttings of these will be available from the Station until the berries are in common cultivation. Magnus is still one of the best of the older types.

Clark and Davidson are two large fruited gooseberries worth including in any planting.

Red Lake and Stephen's No. 9 are two red currants and of much promise.

One of the most interesting phases of small fruit culture is the work with grapes. Several varieties, principally Portland, have wintered for several years without protection and have matured very nice crops of fruit.

**Chancery Sale**

Of lands at the corner of the Malpeque Road and the New Road, Charlottetown, Royalty.

NOTICE is hereby given that pursuant to the Order of the Court of Chancery made in the Rolls Court Hereof the 2nd day of December, 1949, in a suit there-in pending numbered 635 between Thomas Nelson Waye and others, Complainants, and Lambert Clarence Waye, Defendant, I will sell by Public Auction on the premises on Thursday, the 29th day of December, 1949, at the hour of 12 o'clock noon ALL that tract, piece and parcel of land situate, lying and being in the Royalty of Charlottetown, in Queen's County, bounded and described as follows, that is to say:—

Commencing on the west side of the Malpeque Road and on the North side of the New Road (so called, running westerly from the Malpeque Road); Thence along the North side of the said New Road westwardly for the distance of 182 feet, or to land now owned or occupied by Ernest A. Cudmore; Thence northwardly parallel with the west side of the Malpeque Road a distance of 66 feet; Thence eastwardly parallel with the north side of the New Road 182 feet to the Malpeque Road; Thence southwardly along the western side of the Malpeque Road 66 feet to the place of commencement.

The above land will be sold free from encumbrances and freed from any right, title and interest

**OUR BOARDING HOUSE**

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Donald J. MacLean, mayor of Sydney, N.S., was recently charged with murder following the death of Joseph MacKinnon, city registrar of votes, MacKinnon, a 63-year-old semi-cripple, died in hospital as a result of injuries which police say were received in an undetermined mishap involving a car which did not remain at the spot. Later, police said, they had seized a car which was identified as that of Mayor MacLean.

utilization studies, and rotational studies to determine the most effective and economical place to apply plant food in the form of farm manure and chemical fertilizer in the regular farm rotation.

The majority of these projects together with regional studies of a fact finding nature are being conducted at other stations operated by Zenon Gallant, Urbainville, Thomas Noonan and son, Richmond; J. W. MacKenzie and son, Rose Valley; James E. Daly and sons, Iona; T. Albert Hicken, Alliston and Hugh J. Macdonald, Monticello.

A special feature of the Illustration Station program at Iona, Rose Valley, Rustico, Alliston and New London has been the establishment of managed woodlots to demonstrate selective cutting and methods whereby growth may be increased and tree quality improved. By dividing the woodlot into a number of well defined compartments, rotational cutting has been facilitated and each section is now being treated as a regular rotational farm crop.

During the past year the Division of Illustration Stations in co-operation with the Experimental Station, the Provincial Department of Agriculture held eight Illustration Station field days attracting a total attendance of 1060 farmers.

**Cereals**

Grain crops in the province were, generally speaking, the best in many years. Some areas were out badly in the spring, however, suffered considerable injury by cutworms and aphids which reduced yields in a few fields, but the overall picture is bright so far as average yields are concerned.

Abegweit oats continues to give a good account of itself, although Erban and Beaver provided close competition in the tests conducted this season. Hybrid material under study at the Station includes crosses between Ajax and Abegweit, Roxton and Abegweit and a three parent cross, Onward by Anthony by Bond.

Cascade wheat also gave good results this year and there appears to be a tendency toward a greater wheat acreage in the province. Farmers with good seed wheat on hand are urged to hold it for the next spring because the supply is low and it is often impossible to import seed of recommended varieties.

Charlottetown No. 80 barley is still the leading variety in the province and a good supply of registered seed was grown this year.

Replicated tests this year included 452 plots of oats of which 320 were grown at Illustrated Stations and private farms, 48 of wheat, and 104 of barley. In addition, some 255 single plots of various sizes were used for selection and breeding work.

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## FARMERS' WEEK MEETINGS

### Canadian Legion Hall, Charlottetown

#### January 10, 11, 12

TUESDAY, JANUARY 10th—ANNUAL MEETING PRINCE EDWARD ISLAND DAIRYMEN'S ASSOCIATION.  
Opening Session 11:00 O'clock.

WEDNESDAY, JANUARY 11th—ANNUAL MEETING PRINCE EDWARD ISLAND FEDERATION OF AGRICULTURE.  
Meeting commences at 9:30 a.m., with afternoon and evening sessions.  
(Local resolutions are required to be in the hands of Secretary at least five days in advance of meeting).

THURSDAY, JANUARY 12th—  
9:30—Organizational meeting King's County Federation.  
(King's County Representatives).  
1:00 p.m.—Provincial Federation Directors Meeting.  
Sgd.:  
L. P. McISAAC, Secretary

## LIVESTOCK BREEDERS ATTENTION

The Provincial Department of Agriculture will pay a bonus of \$100.00 each to accepted applicants who enrol in a course on Livestock Breeding with the Graham Scientific Breeding School. This course will be held at Newark, New Jersey, from January 10th-15th inclusive. A limited number of applicants, selected by a Committee appointed for this purpose, will receive the above mentioned assistance. Only bona fide farmers and cattle breeders will be eligible and it is desirable that applicants enrolled shall be representative of the province at large. Not more than one applicant will be selected from any one general locality. Full particulars regarding this course which deals mainly with cattle breeding problems will be forwarded on request. Interested cattle breeders should send their applications without delay to the

P. E. I. DEPARTMENT OF AGRICULTURE  
CHARLOTTETOWN

ber, 1949.  
W. E. BENTLEY, Auctioneer.  
W. E. BENTLEY, Complainant's Solicitor.  
R. H. ROGERS, Master in Chancery.  
MAJOR HOOPLE

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