

# College of Agriculture

Truro, N. S.

**CALENDAR**  
**1928-29**





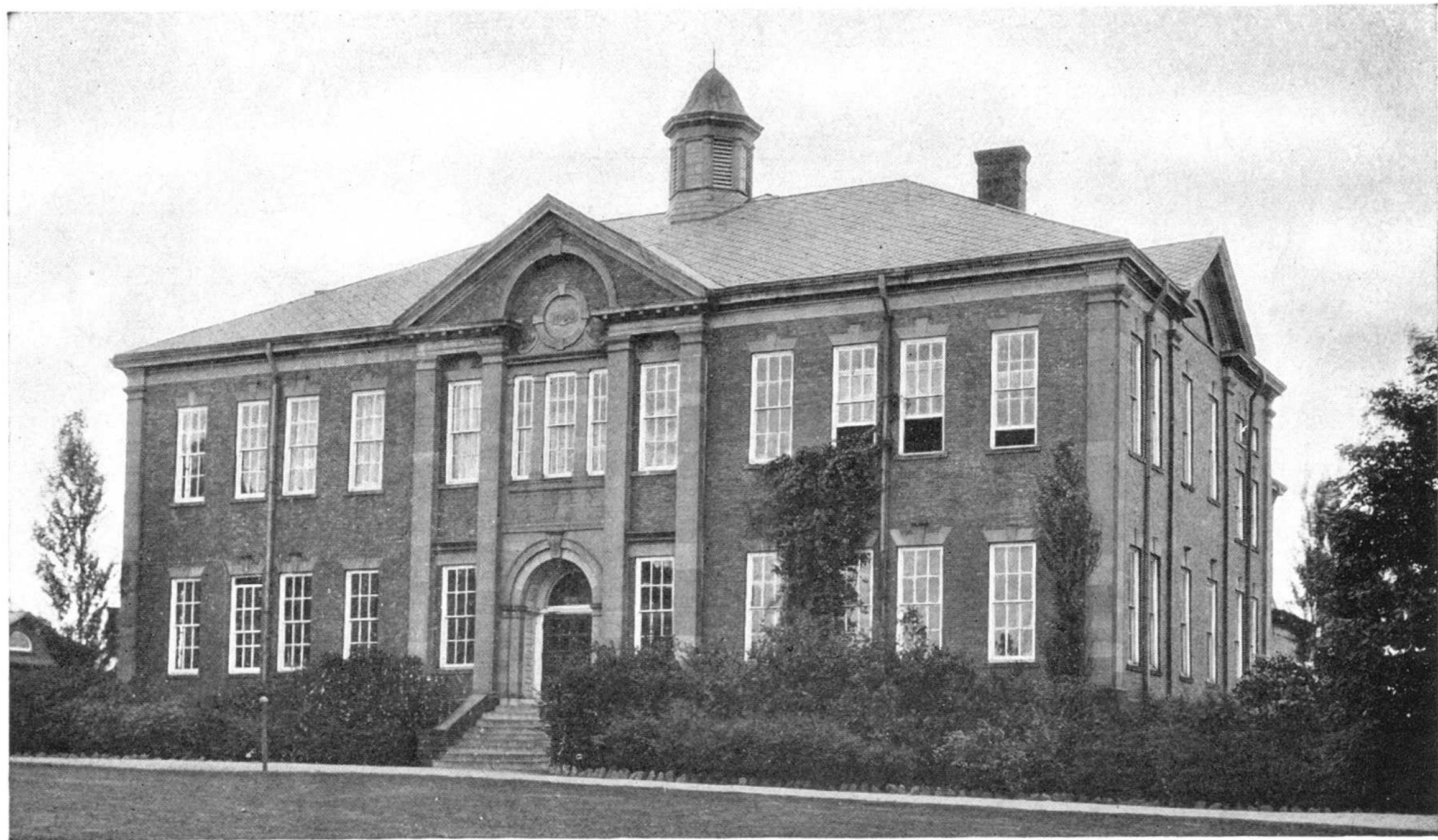


## FOREWORD

THE Nova Scotia College of Agriculture is situated on Bible Hill, just outside the town limits of Truro, a recognized educational, industrial and railway centre. The original School of Agriculture, of which the College is the outgrowth, was established in 1885 in a few rooms of the Provincial Normal College building in Truro. In 1888, three years later, land forming the nucleus of the present valuable holdings and the site of the many buildings which have been subsequently erected—was purchased by the Provincial Government. The situation of the grounds is remarkable for beauty, health and accessibility—on one side the high bank overlooking the Salmon River and its valley, on the other side the marshes stretching away to Cobequid Bay; half a mile down the river the town of Truro. The campus is painstakingly cared for and the lawns, flower beds, shrubbery, trees, etc., form an exceptionally attractive setting for the College Buildings.

In Truro, twelve minutes walk from the College are located the Provincial Normal College, the Colchester County Academy and the Success Business College. The town contains several fine churches which are always glad to welcome the students of the various educational institutions during the school year. Living conditions are splendid and there is every reasonable opportunity for young men and women to enjoy social activities of the right sort.

In short, students of the College of Agriculture pursue their work under conditions which are both pleasant and healthful, and with ample opportunities to achieve the happy “broadening” effect which all real education affords.



ADMINISTRATION BUILDING



# FACULTY OF INSTRUCTION

---

J. M. Trueman, B. S. A., LL. D., *Principal and Professor of Animal Husbandry.*

L. C. Harlow, B. S. A., B. Sc., *Professor of Chemistry and Provincial Chemist.*

A. R. Prince, B. A., M. A., *Professor of Biology.*

W. A. Middleton, B. S. A., *Professor of Horticulture and Provincial Horticulturist.*

W. V. Longley, B. S. A., M. Sc., *Professor of Economics and Director of Extension Service.*

W. J. Bird, B. S. A., *Professor of Dairy Industry and Provincial Dairy Superintendent.*

J. P. Landry, *Lecturer in Poultry Husbandry and Provincial Poultry Husbandman.*

J. J. Creighton, *Lecturer in Dairy Industry and Assistant Dairy Superintendent.*

Helen J. Macdougall, *Lecturer in Home Economics and Director Women's Institutes.*

J. E. Barteaux, M. A., *Lecturer in Mathematics and Physics.*

H. J. Fraser, B. A., *Lecturer in English and Economics.*

D. A. McIsaac, V. S., *Lecturer in Veterinary Science.*

C. V. Marshall, B. Sc., *Assistant Chemist.*

H. G. Payne, *Provincial Apiarist.*

Geo. L. Fisher, *Accountant and Business Manager.*

Wm. R. Retson, *Ass't. Farm Superintendent,*

F. L. Fuller, *Supt. of Exhibitions.*

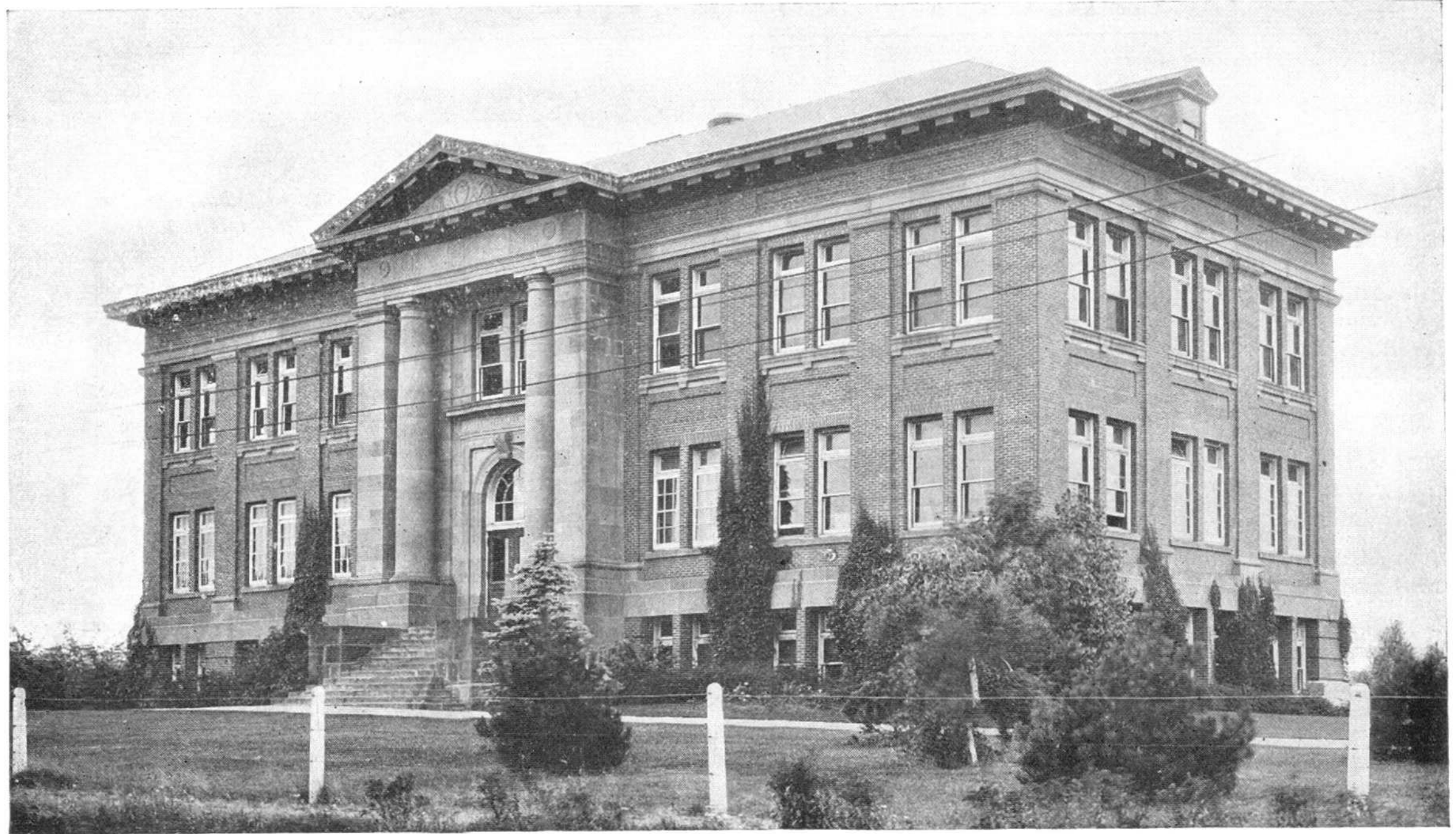
---

## **Affiliated Professor from Macdonald College.**

W. H. Brittain, B. S. A., M. Sc., Ph. D. *Professor in Economic Entomology.*

*(Issued by Authority of Hon. J. A. Walker, Minister of Natural Resources, Nova Scotia.)*





SCIENCE BUILDING



# BUILDINGS AND EQUIPMENT

THE College property consists of the following:

1. Seven buildings used for instruction.

(a) **The Administration Building.**—This is a large brick building constructed in 1904. It is the oldest of the present College group and is generally known as the “Main Building.” In it are located the offices of the Principal, the Director of Extension Service, the Superintendent of Exhibitions, the Provincial Dairy Superintendent, the Provincial Poultryman and Lecturer in the Poultry Department, the Business Manager and Accountant with stenographic and clerical force, and the Farm Superintendent; also class rooms, botanical laboratory, library, assembly hall and gymnasium.

(b) **The Dairy Building.**—This is a commodious one story brick building containing class room and equipment for separating milk, testing milk and cream, and making butter.

(c) **The Horticultural Building.**—This building contains an office for the Professor of Horticulture, class room, potting and general work room, laboratory, fruit packing room and store room. Greenhouses for lecture and laboratory instruction are attached.

(d) **The Science Building.**—This is a large brick building of modern construction and superior workmanship. It contains the following laboratories: general chemistry, soil physics, research chemistry, entomology, domestic science and home economics. It has class rooms, assembly hall and the offices of the Professor of Biology, Professor of Chemistry, Dir-

rector of Women’s Institutes and Home Economics, and Provincial Apiarist.

(e) **The Live Stock Judging Pavilion.**—This building contains a large circular steam-heated arena used for instruction and practice in judging all classes of live stock.

(f) **The Poultry Buildings.** These are located conveniently near the other College buildings and consist of, (a) a roomy well-lighted class room, (b) a well-ventilated incubator cellar, equipped with a number of different makes of incubators, (c) a permanent breeding house, and (d) twenty colony brooder houses.

(g) **Blacksmith Shop.**—The shops are supplied with forges, anvils, tools, benches, etc., for instruction in blacksmithing.

Other rooms, located in various buildings, are used for studying farm machinery, gas-engines, tractors, automobiles, etc.

2. **A General Live Stock Farm,** comprising:

(a) 390 acres of land composed of 65 acres of dyked marsh land, 170 acres of interval and upland pasture and 155 acres of arable upland.

(b) A large cow barn with up-to-date equipment for 75 head of cattle, horse barn, swine barn, sheep barn, implement sheds and modern farm machinery, including tractors.

(c) Herds of high class pure bred dairy and beef cattle, swine, sheep and an excellent stable of horses including pure bred mares and stallions.





DAIRY BUILDING



# COURSES OF INSTRUCTION

THE courses given at the College of Agriculture are as follows:

1. A course leading to the Degree of Bachelor of Science in Agriculture, known as the "**Degree Course.**" The first two years of this course are given at Truro and the last two years at Macdonald College (McGill University) at St. Anne de Bellevue in Quebec.

2. The **Farm Course**, covering two winters' work, and consisting of one term of 3 months' duration each year, from January to April. This course is intended for students who expect to make a business of farming and who wish to obtain as much practical instruction in agriculture as can be given in a short time. It includes a large amount of practical work and is given at a time when young men can best be spared from the home farm. The course is open to students who have only had an ordinary school education. This course meets the needs of several classes of students. (1) Those who have a complete secondary school education and wish to take as practical a course in agriculture as is possible in a minimum time; (2) those with limited education who wish to attend classes in agriculture and to supplement their education in English literature and

composition, bookkeeping and mathematics; (3) those who may be quite expert in the work of the farm, but who wish to become versed in modern business methods as applied to farming.

3. The **Home Economics Course.** Short courses in Home Economics are offered annually at the College of Agriculture. Training in the profession of Home Making is of the greatest value to every girl, no matter what work she may do. It is the aim of the course to give each student right ideas of the dignity and beauty with which the work of the home may properly be invested. (See page 15 for details.)

## COLLEGE DIPLOMA

Those who complete the first two years of the Degree Course and make not less than 60 in English and 50 in all other subjects, will be awarded the Scholastic Associate Diploma which will qualify them for entrance to the third year of the course at Macdonald College.

Those who complete the Farm Course and make 33 or over in all subjects, will be awarded the Farm Diploma.





HORTICULTURAL BUILDING



## ENTRANCE REQUIREMENTS

All candidates for admission to all courses.

- (1) Must have passed their sixteenth birthday.
- (2) Must produce satisfactory evidence as to moral character.
- (3) Must produce satisfactory evidence of physical health.

Those entering either the Degree or Farm Course must before beginning the second year, produce satisfactory evidence of having had a season's experience on a farm.

All candidates for admission to the four-year course leading to the Degree of B. S. A. are expected to have completed grade XI, as university matriculation is required of those who continue their studies and take the third and fourth years at the Colleges that confer degrees. Under special circumstances, students may be admitted who have not full matriculation standing, but such standing must be obtained before they can continue their courses at Macdonald College.

## COLLEGE EXPENSES

Tuition—Free for all courses.

Board—Obtainable at private houses at \$6.00 to \$8.00 per week.

Books—Degree Course \$15 to \$25 per year. Farm Course \$5 to \$10 per year. Home Economics Course—Cost of material used in practical work. This will vary depending on the quality of material used in dress making and millinery work.

Incidentals—The student body conducts athletic and social functions for which each member must plan on paying a few dollars each year. Laundry and various other small expenses must be allowed for in making up a budget for the term.

## COLLEGE CALENDAR, 1928-29

### First Term.

#### DEGREE COURSE.

Registration for second year students, 8 P.M., to 10 P.M. Oct. 16th, 1928.

Classes for second year students begin 8.30 A. M., Oct. 17th, 1928.

Registration for first year students Oct. 30th, 1928.

Classes for first year students begin 8.30 A. M., Oct. 31st, 1928.

Christmas vacation begins 4.30 p. m., Dec. 20, 1928.

Classes begin 8.30 A. M., Jan. 3rd, 1929.

First term examinations, Jan. 31st to Feb. 5th, 1929.

### Second Term

Classes begin 8.30 A. M., Feb. 6th, 1929.

Final examinations begin 8.30 A. M., April 19th, 1929.

Closing exercises, April 25th, 1929.

#### FARM COURSE.

Registration, Jan. 3rd, 1929.

Classes begin Jan. 4th, 1929.

Course ends March 28th, 1929.

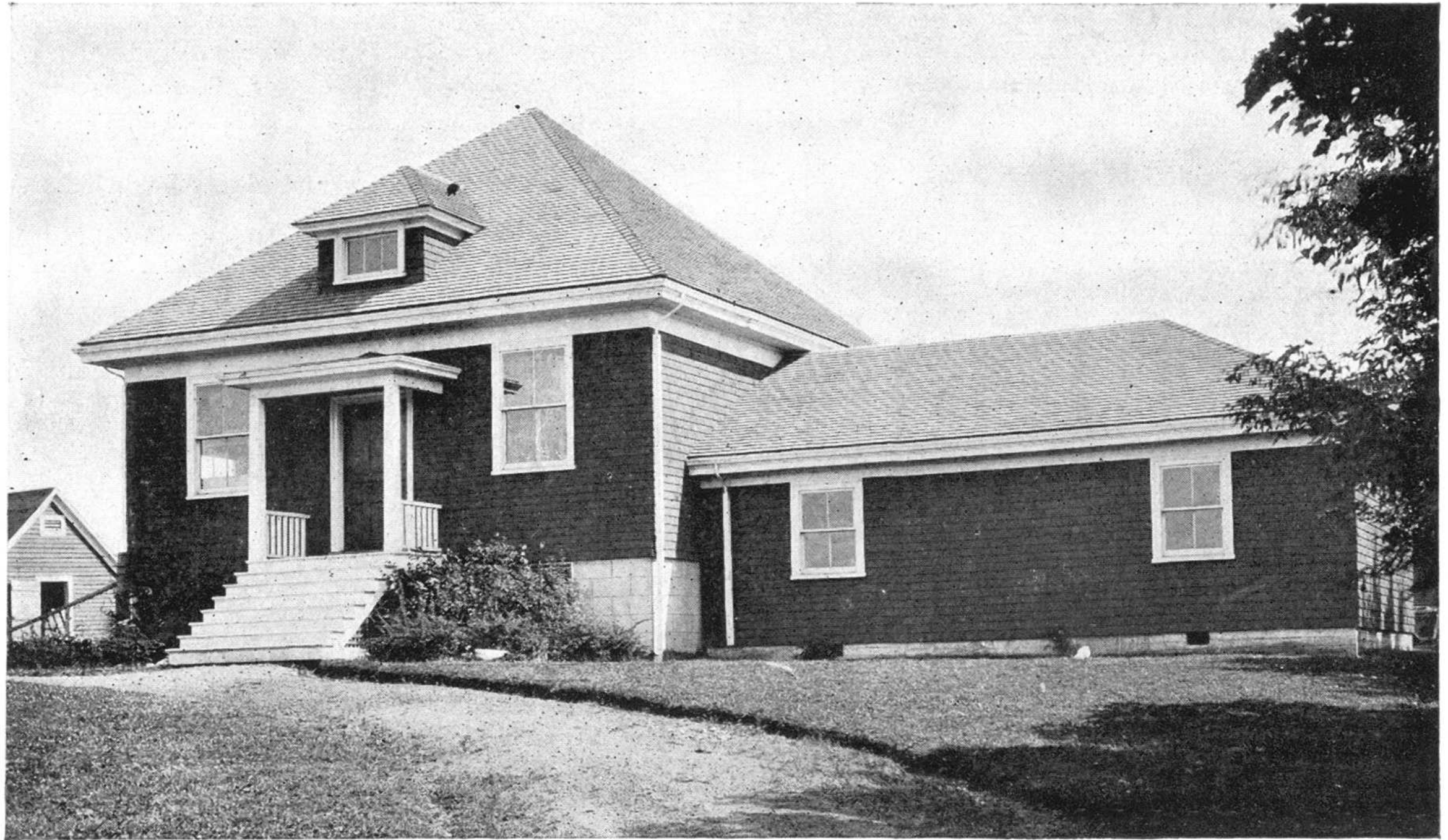
#### HOME ECONOMICS COURSES.

(Limited Classes—24 pupils)

First Course begins 9 A. M., Jan. 3rd, 1929.

Second Course begins 9 A. M., Mar. 6th, 1929.





POULTRY SUPPLY HOUSE



# THE FARM COURSE

## AGRICULTURAL ENGINEERING

**Course 1.** (a) **Farm Power.** A study of the gas engines as applied to stationary purposes, the automobile and the tractor. (b) **Implements and Machinery.** The use and adjustment of tillage, harvesting machinery and spraying equipment.

**Course 2. Farm Shopwork.** Blacksmithing, forging and iron work suited to farm repairs, rope splicing, halters and knots useful in farm work.

**Course 3.** (a) **Land Drainage.** The soil water table and its control; surface drains and underdrainage. (b) **Farm Sanitation.** Water supplies and water systems, methods of sewage disposal, refrigeration and the heating and ventilating of farm dwelling houses.

## AGRONOMY

**Course 1. Soils and Soil Management.** Types of soil, tillage, rotation, manuring, liming, drainage, etc., will be studied with a view to enabling the student to manage the soil on his own farm to best advantage.

**Course 2. Farm Crops.** A study of the standard farm crop for the Maritime Provinces; Seed Control Act, judging cereals, grasses and clovers, identification of seeds, rotation of crops and general field management.

## ANIMAL HUSBANDRY

**Course 1. Dairy Cattle and Swine.** Live stock practice with dairy cattle and swine is studied from the standpoint of economy in production. Feeding, breeding management, judging and marketing are features of the course.

**Course 2. Sheep, Horses and Beef Cattle.** A study of these classes of live stock and their place in Maritime Province farming; feeding, breeding and management.

**Course 3. Live Stock Breeding.** In this course the more important basic principles underlying breeding practice are considered. The selection of breeding animals is studied in the light of what is known in regard to reproduction, transmission of characters, heredity and environment. Practice is given in tracing pedigrees.

## APICULTURE

A course in modern beekeeping methods will be given to those who wish for information on this subject. Queen rearing, swarm control, wintering, spring management and the sources of nectar will be discussed, while the practical features of preparing equipment and extracting honey, will be taken up in the laboratory.

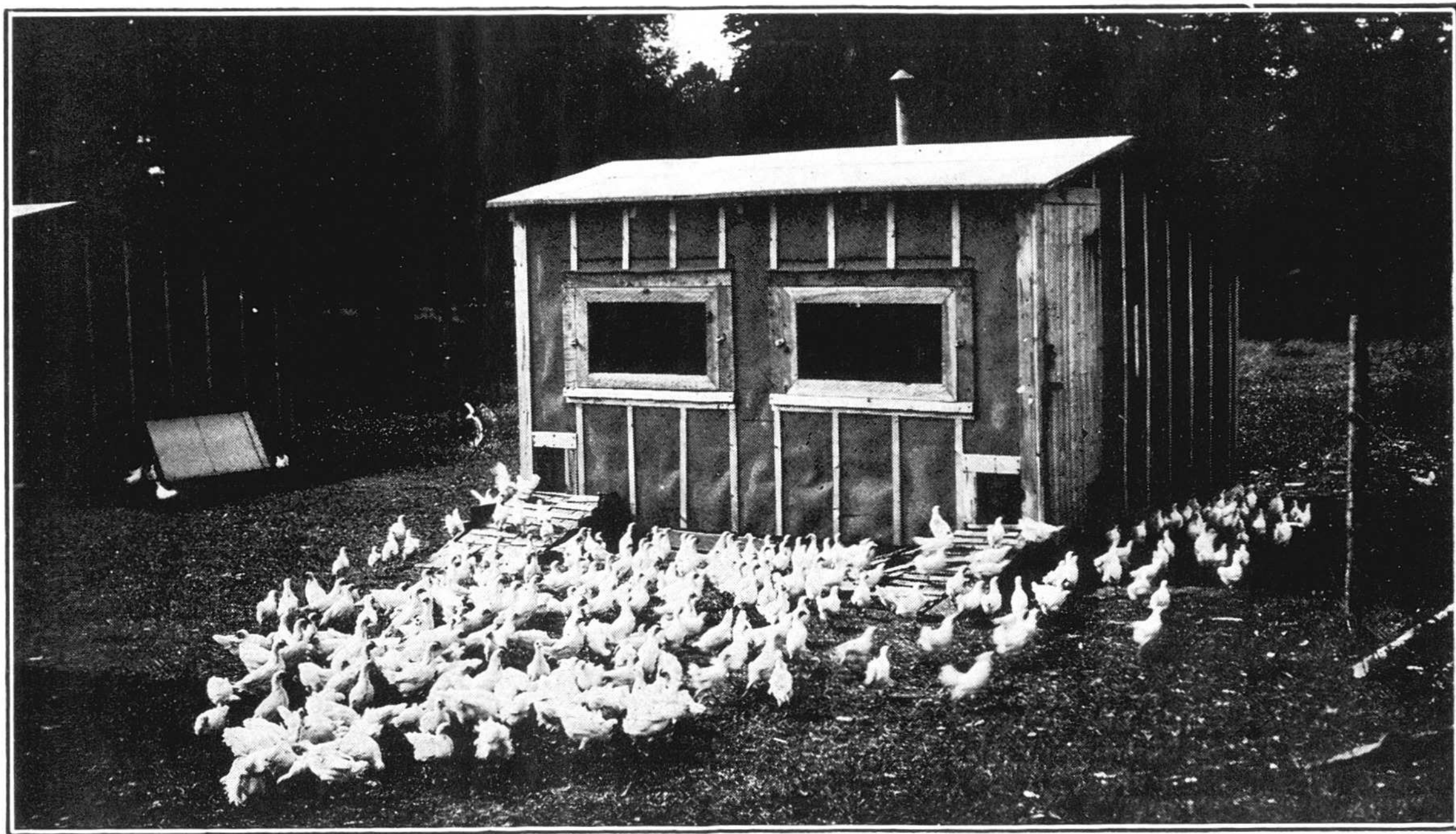
## ARITHMETIC

**Course 1.** The aim of this course is to provide a thorough training in arithmetic as applied to the practical problems of agriculture. Amongst other things is given training in the determination of the live and dressed weight of animals, the cubic capacity of barns, the calculation of milk records, measurement of timber, etc.

## BOOKKEEPING

**Course 1.** The use of the day book, journal and ledger leading up to trial balance sheet exemplified by short sets.





500 WHITE LEGHORNS—SPRING 1928



## THE FARM COURSE—(Continued)

**Course 2. Farm Accounting.** Costs as applied to farm crops, stock, labor, etc.; accounts as kept by different farm organizations.

### **CHEMISTRY**

**Course 1.** This course consists of experiments carried on by teacher and students followed by class discussions and explanations. The work will include the study of the common elements and compounds, the principles of chemical changes, acids, bases and salts; the composition and use of lime and fertilizers.

Reference Book "First Course in Practical Chemistry" by Aldride.

**Course 2.** Composition of feeding materials, manure, fuel and soils; the home mixing of fertilizers and spray materials; farm water supply.

### **DAIRYING**

**Course 1.** Practical work in testing milk, cream and skim-milk, using the Babcock method; operating and testing different makes of separators. Everyday dairy problems are discussed from the farmers' and manufacturers' standpoints.

**Course 2.** Cooperative dairying and its problems, with special reference to the business part of dairying; methods of selling milk and cream and the marketing of other dairy produce.

### **ECONOMICS**

**Course 1. General Farm Economics.** The elementary principles of economics, an analysis of the productive factors, organization of the farm enterprise; types of farming, operation of the farm; farm records and accounts; farm cost accounting.

**Course 2. General Economics.** A study of the tariff

currency, banking transportation and taxation; an analysis of rural organization, rural population, standards of living and agricultural policy. **Marketing of Farm Products.** Marketing agencies, method, services and regulations; the interpretation and use of marketing information; cooperation and other forms of organized marketing.

### **ENGLISH**

**Course 1.** Practical work in speaking and writing simple and correct English. Weekly themes will be required from all students. The text book used for reading in classes will be the High School Reader as used in the Junior High School grades in Nova Scotia.

**Course 2. Public Speaking.** Practice in the preparation and delivery of short addresses. Debates which will be commented upon and criticized, will be arranged from time to time. Instruction will be given in the organization of societies and in the conduct and procedure of public meetings.

### **ENTOMOLOGY**

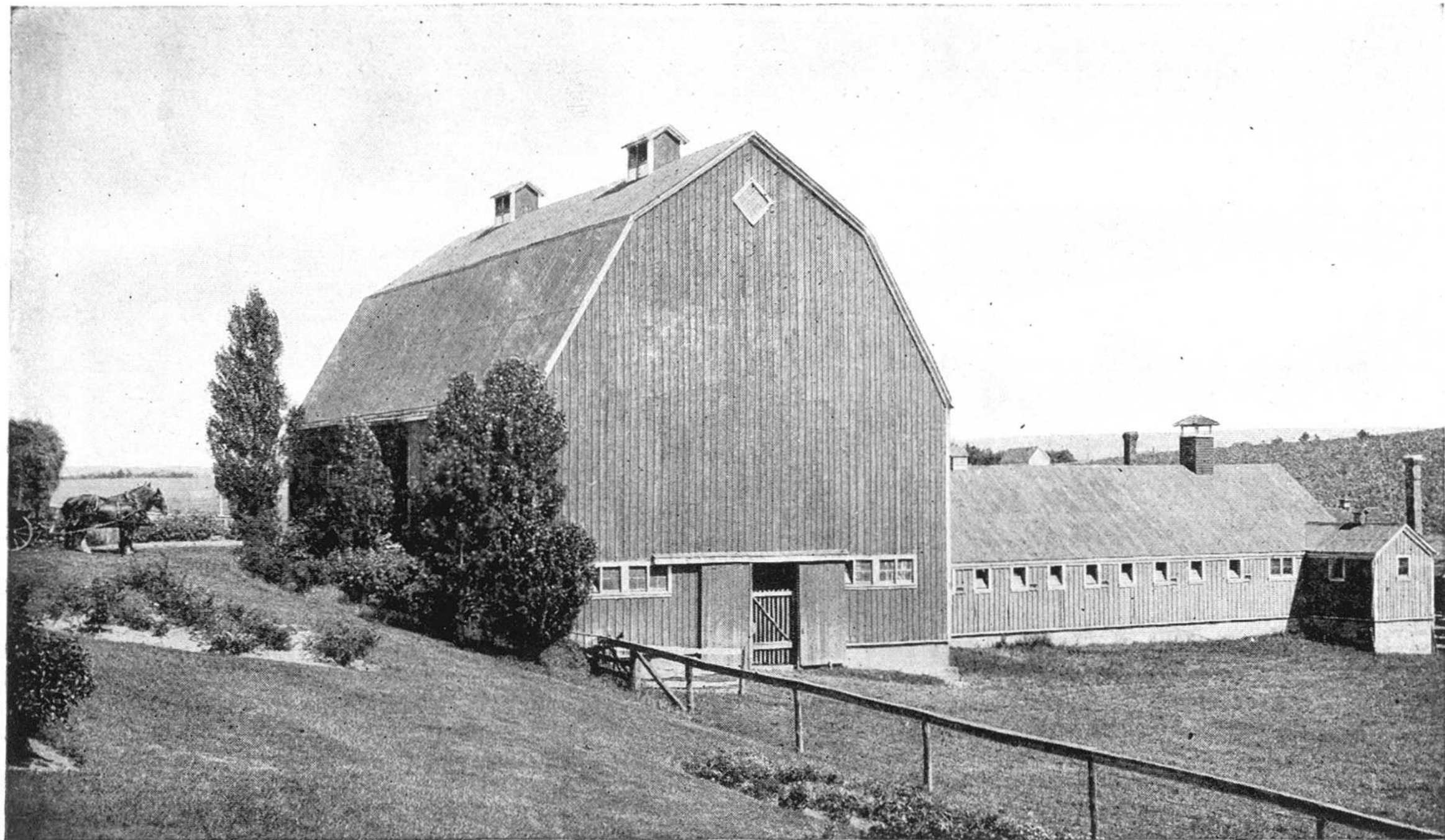
**Farm Pests.** A simple course in the recognition, habits and control of the chief groups of injurious insects. Instruction in the preparation and use of the common spray materials.

### **HORTICULTURE**

**Course 1. Gardening and Orcharding.** Seed and plant selection; soils, climate and cultural practices for the home and commercial garden; the selection and handling of small fruits; cultural methods; the planting and care of the orchard with special reference to the different orchard practices.

**Course 2.** A study of the factors which influence the financial returns from gardens and orchards will be made and information relating to the handling, grading, packing, storing and marketing of fruit and vegetables will be given.





HORSE BARN



## THE FARM COURSE—(*Continued*)

### **NUTRITION**

This course describes briefly the composition and nutritive values of common food materials and the essentials of an adequate diet. The application of such knowledge to the feeding of individuals and family groups is discussed with special reference to maintaining health.

### **PLANTS**

**Course 1. Farm Plants.** A study of the more important farm plants, their habits of growth and the diseases which commonly attack them.

### **POULTRY HUSBANDRY**

This course deals with the practical farm problems of producing and marketing poultry products.

### **PHYSICS**

**Course 1.** Deals with measurements with units, mechanical powers—lever, pulleys, screw—illustrated and worked out as applied to farm machinery; whippetrees, mechanical work, energy power, horse power.

### **VETERINARY STUDIES**

This course is based on a study of the anatomy and physiology of farm animals, using the horse and cow as examples, and with the object of giving the student a knowledge of animals in health and disease. The course will consist of lectures with illustrations and demonstrations and will include instruction in first aid work.

## HOME ECONOMICS COURSE

A three weeks intensive course which gives practical instruction in the following subjects:

### **Cookery.**

Instruction in cooking and combining staple food materials, menu-planning and practical work in preparing meals.

### **Table Setting and Serving.**

Practical work in serving of meals.

### **Nutrition.**

Study of food values and food combinations with special reference to health and general welfare.

### **Dressmaking.**

Teaching use of patterns, cutting, sewing machines, fundamental principles of dressmaking. Each student is required to make one tailored garment (shirt-waist or dress), which becomes her own property.

### **Millinery.**

Teaching principles of making hats, trimmings, color combinations, etc.

### **Household Administration.**

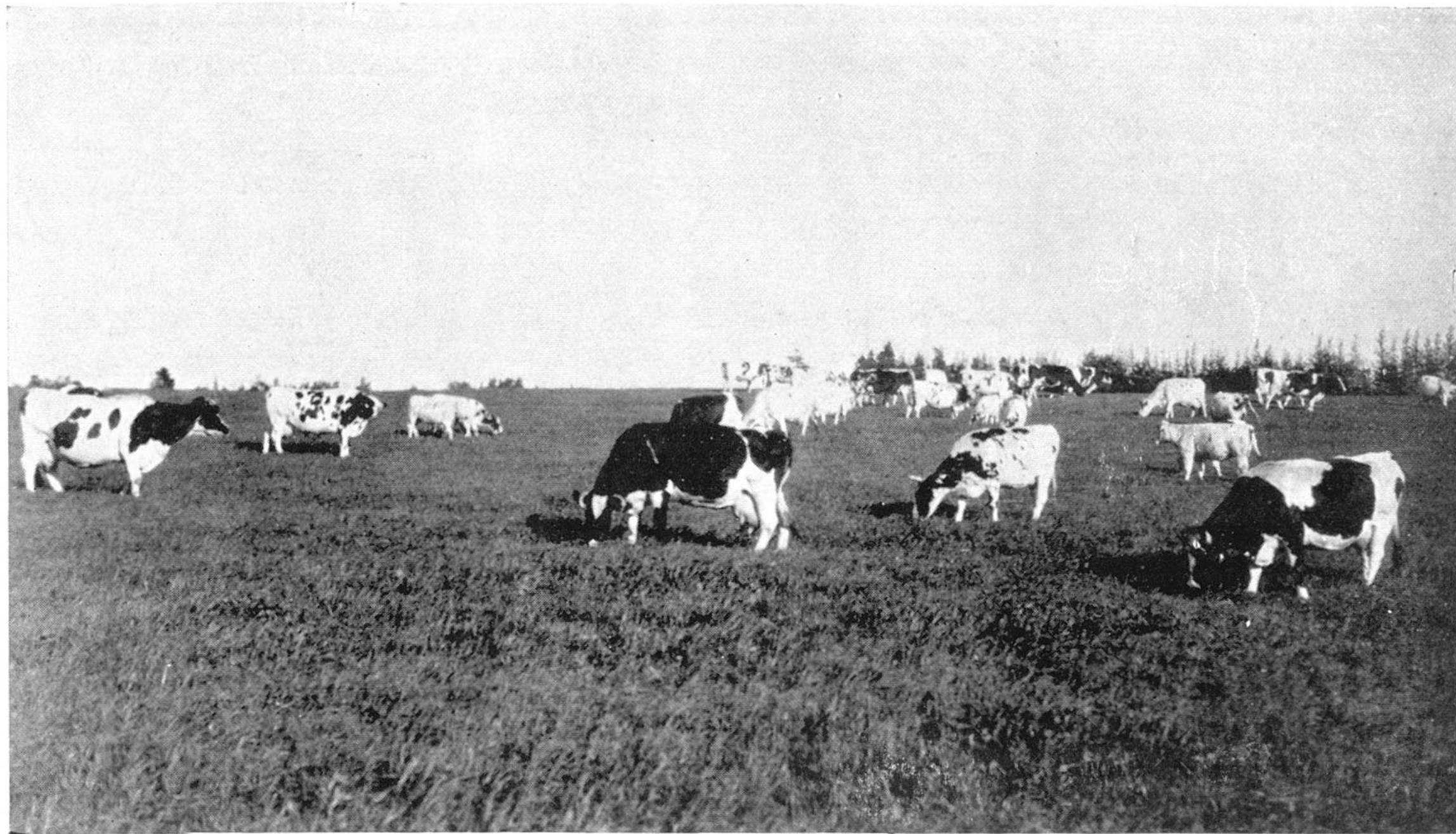
The principles of labor saving; cleaning and care of household equipment; marketing and the causes which influence the cost of food materials.

### **Home Nursing.**

Care of sick room, helpless patient, fomentations, poulticing, simple bandaging, invalid cookery.

### **Miscellaneous.**

Poultry, Gardening, Dairying, Chemistry. Several lectures will be given on these subjects as they are of practical interest to the home-maker.



PART OF COLLEGE PURE BRED HERD



# THE DEGREE COURSE

(This course leads to the degree of B. S. A.)

THE Nova Scotia College of Agriculture in affiliation with Macdonald College of McGill University, offers a four year course in agriculture culminating in the degree of Bachelor of Science in Agriculture. The first two years of this course are taken at the Nova Scotia College of Agriculture, Truro, the last two at Macdonald College, St. Anne de Bellevue, Que. The courses at these two institutions are so co-ordinated that it is possible for a student to pass from one to the other on the same basis as if all four years were taken at a single institution.

This arrangement offers certain very obvious advantages to Maritime Province students. It enables them to take the first two years of their College course without going any great distance from home, and under conditions with which they are familiar. Furthermore, when they have finished their four years course they will have received the broadening effect of study at two institutions, become acquainted with a larger number of leaders in Agriculture and with the difference in conditions existing between the Maritime Provinces and Quebec and Ontario.

## COURSES OF STUDY

(First and Second Years at College of Agriculture, Truro).

### AGRICULTURAL ENGINEERING

**Course 1.** (a) **Farm Buildings.** An elementary study of the requirements of farm buildings in regard to location, drainage and materials used. (b) **Farm Concrete.** A study of cement, sand and gravel, quality, tests and methods of proportioning; the buildings of simple forms and instructions for making such structures as floors, walks, water tanks, etc.

Second Year (first term)—1 lecture and 1 laboratory period per week.

**Course 2. Agricultural Drafting.** A study of the conventions and symbols used in architectural drafting to enable the student to interpret plans and specifications used in the working drawings of farm structures.

Second Year (first term)—1 laboratory period per week.

**Course 3. Farm Sanitation.** (a) Water supply—its sources, kinds of wells, their construction and maintenance pumping machinery, water systems. (b) Sewage disposal—a study of satisfactory sewage systems for farm houses. (c) Heating, lighting and refrigeration; the principles of heating and lighting farm homes; ice on the farm; the ice house and its construction; the harvesting of ice.

Second Year (first term)—1 lecture per week.

**Course 4. Farm Power.** An intensely practical study of the four-cycle gasoline and kerosene engine as applied to stationary purposes, the automobile and the tractor. Methods of calculating horse-power of engines, belting and shafting, rules for pulley speeds and installation of farm power plants.

Second Year (second term)—1 lecture and 1 laboratory period per week.

**Course 5. Shop Work**—blacksmithing, soldering and riveting; rope splicing and useful knots.

Second Year (second term)—1 laboratory period per week.

### AGRONOMY

**Course 1. Soils.** An elementary course dealing with the relation of soils to agriculture. It consists of a study of soil



SILO AND STOCK JUDGING PAVILION



## THE DEGREE COURSE—(Continued)

types and their relation to plant food, moisture, temperature, aeration, drainage, organic matter and tillage.

First Year (first term)—2 lectures per week.

**Course 2. Soils and Fertilizers.** Second Year—1 lecture per week throughout the year.

**Course 3. Field Crops.** A general course covering the production and handling of all important field crops. The laboratory work is designed to familiarize the student with good seed and the best varieties of each crop.

Second Year—2 lectures and laboratory period throughout the year.

### **ANIMAL HUSBANDRY**

**Course 1. Dairy Cattle and Swine.** Designed to give the student a general knowledge of dairy cattle and swine from the standpoint of profitable farm production. In lecture work an elementary study of the feeding, breeding, management and housing of dairy cattle and swine.

First Year (first term)—1 lecture and 1 laboratory period per week.

**Course 2. Horses, Beef Cattle and Sheep.** Plan and object of course similar to those of Course 1, but the work is applied to horses, beef cattle and sheep.

Second Year (first term)—2 lectures and 2 laboratory periods per week.

**Course 3. Farm Management.** A study of farm practice with special attention to mixed dairy farming; live stock, crop practice, equipment, labor and farm operations from the standpoint of farm management.

Second Year (first term)—2 lectures per week.

### **BIOLOGY**

**Course 1. Introductory Botany.** A knowledge of the

principles of plant life is fundamental in agricultural education. In this course in general botany particular stress is placed on the "agricultural viewpoint" as regards plants in their relation to human welfare. The following topics are discussed.

A brief history and the scope of Botany. The importance of plants to animal life. The plant and its environment (ecology); its relation to the soil, soil foods, soil water, air, rainfall, temperature, light, etc. Factors affecting growth etc. The general structure of plants (morphology). The botany of such crop plants as the clover, alfalfa, peas, beans, potato, hemp, sunflower, oats, barley, wheat, corn, etc. A study of the commonest and most important diseases of potatoes, apples, oats and other vegetables, fruit and cereal crops. A study of both the common and noxious weeds occurring in the Maritime Provinces. The identification, spread and control of weeds. Weed seeds; their identification; common weed seeds in various crop seeds; percentages allowed by the Control Act.

First Year—2 lectures and 2 laboratory periods per week

Reference Books—"General Botany" by Traubeau; "Botany with Agricultural Applications" by Martin; "Principles of Plant Growth" by Robbins; "Text Book of General Botany" by Holman and Robbins; "A Text Book of General Botany" by Smith, Overton, Gilbert, et al; "Botany of Crop Plants" by Robbins; "General Botany" by Gager; "Introduction to Plant Anatomy" by Eames and MacDaniels.

**Course 2. Introductory Cytology and the Principles of Genetics.** This course is intended to give the student a more comprehensive knowledge of the cell, the role of the cell organs in heredity, and the application of genetics to plant and animal breeding. The following topics will be briefly dealt with:



MAIN CLASS ROOM. SCIENCE BUILDING



## THE DEGREE COURSE—(Continued)

The Cell: its discovery; early theories of cell formation; early observations on the cell contents; foundation of the cell theory and its elaboration; the protoplasm doctrine; the new conception of the cell. Morphology of the cell. The Causes of Evolution: the Lamarckian Theory of the Inheritance of Acquired Characteristics; the Darwinian Theory of Natural Selection or the Survival of the Fittest; Mendel's Law; the Mutation Theory; Orthogenetic Theories; Isolation as a cause of Evolution; Evolution by Hybridization.

Second Year (first term) 2 lectures and 2 laboratory periods per week.

Reference Books—"Introduction to Cytology" by Sharp; "The Cell in Development and Inheritance" by Wilson; "General Cytology" by Cowdry; "Genetics in Relation to Agriculture" by Babcock and Clausen; "Genetics and Eugenics" by Castle; "Heredity" by Shull; "Principles of Genetics" by Sinnott and Dunn.

**Course 3. General Zoology.** This is a course dealing with the principles of animal biology, including an elementary study of the structure, life processes, adaptations, relationships and reactions of animals, a knowledge of which is prerequisite to more advanced courses in anatomy, physiology, genetics, veterinary science, etc. Dissections are made in the major phyla of the animal kingdom.

First Year—2 lectures and 2 laboratory periods per week.

Reference Books—"Text Book of General Zoology" by Curtis and Guthrie; "Principles of Animal Biology" by Shull; "General and Professional Biology" by Menge; "Foundations of Biology" by Woodruff; "General Biology" by Needham; "Biology of the Frog" by Holmes; "Biology of the Protozoa" by Calkins.

**Course 4. General and Economic Entomology.** This

course is an introduction to the study of insects, including their morphology, biology and classification, followed by a consideration of the general principles of insect control and an intensive study of some of the most important farm pests. It is designed for those students who intend to continue with the work of the third and fourth year.

Second Year (second term) 2 lectures and 2 laboratory periods per week.

Reference Books—"An introduction to Entomology" by Comstock; "Insect Transformations" by Carpenter; "Entomology" by Folsom; "Elementary Entomology" by Sanderson and Jackson; "Insect Pests of Farm, Garden and Orchard" by Sanderson and Peairs.

### **CHEMISTRY**

**Course 1. Elementary Chemistry and Qualitative Analysis.** A lecture and laboratory course illustrating the principles governing chemical change, the characteristics of the common elements and their compounds; the formation of acids, bases and salts; simple organic compounds, foods and fuels; as many illustrations as possible will be taken from farm experiences. Quantitative experiments will illustrate the laws of combination.

First Year—2 lectures and 2 laboratory periods per week.

**Course 2. Organic Chemistry.** This course includes the study of hydrocarbons and their derivatives, amino acids, fats, carbohydrates and proteins; benzene with some of its derivatives will be studied. Emphasis will be placed on the relation of organic chemistry to food and agricultural products.

Second Year—2 lectures and 2 laboratory periods per week.

**Course 3. Agricultural Geology.** This course includes the study of rocks and soils in order to illustrate the effects



CHEMICAL LABORATORY, SCIENCE BUILDING



## THE DEGREE COURSE—(Continued)

of the various geological forces which change the earth's surface. Field work will be emphasized. This course is given each half day from October 19 to November 3rd.

Second Year—12 lectures and 16 laboratory periods.

### **DAIRYING**

**Course 1. General Dairying.** Milk, its secretion, composition, chemical and physical properties; the cause of variation in fats and solids in milk; dairy regulations; milk-testing, separating; cow testing. The laboratory work consists of operating different makes of separators, milk and cream-testing, ice-cream making on the farm, testing composite samples of milk and cream, determining the amount of solids and solids-not-fat in milk, the detection of skimming, watering and other adulterations; testing cream and milk for acidity, and grading cream.

First Year (second term)—1 lecture and 2 laboratory periods per week.

### **ECONOMICS**

**Course 1.** Development of Canadian Agriculture. A study of the history of agriculture as applied especially to the Maritime Provinces; its present status and probable trends; how organized; relation to other industries.

First year (first term) 2 lectures per week.

**Course 2. Principles of Economics.** The elementary principles of economics; and analysis of the productive factors; a study of the tariff, currency, banking, transportation and taxation.

First Year (second term)—2 lectures per week.

**Course 3. Agricultural Economics.** Organization of the farm enterprise; types of farming; operation of the farm; farm records and accounts; farm cost accounting; an analysis

of rural organization, rural population, standards of living and agricultural policy.

Second Year (first term)—2 lectures per week.

### **ENGLISH**

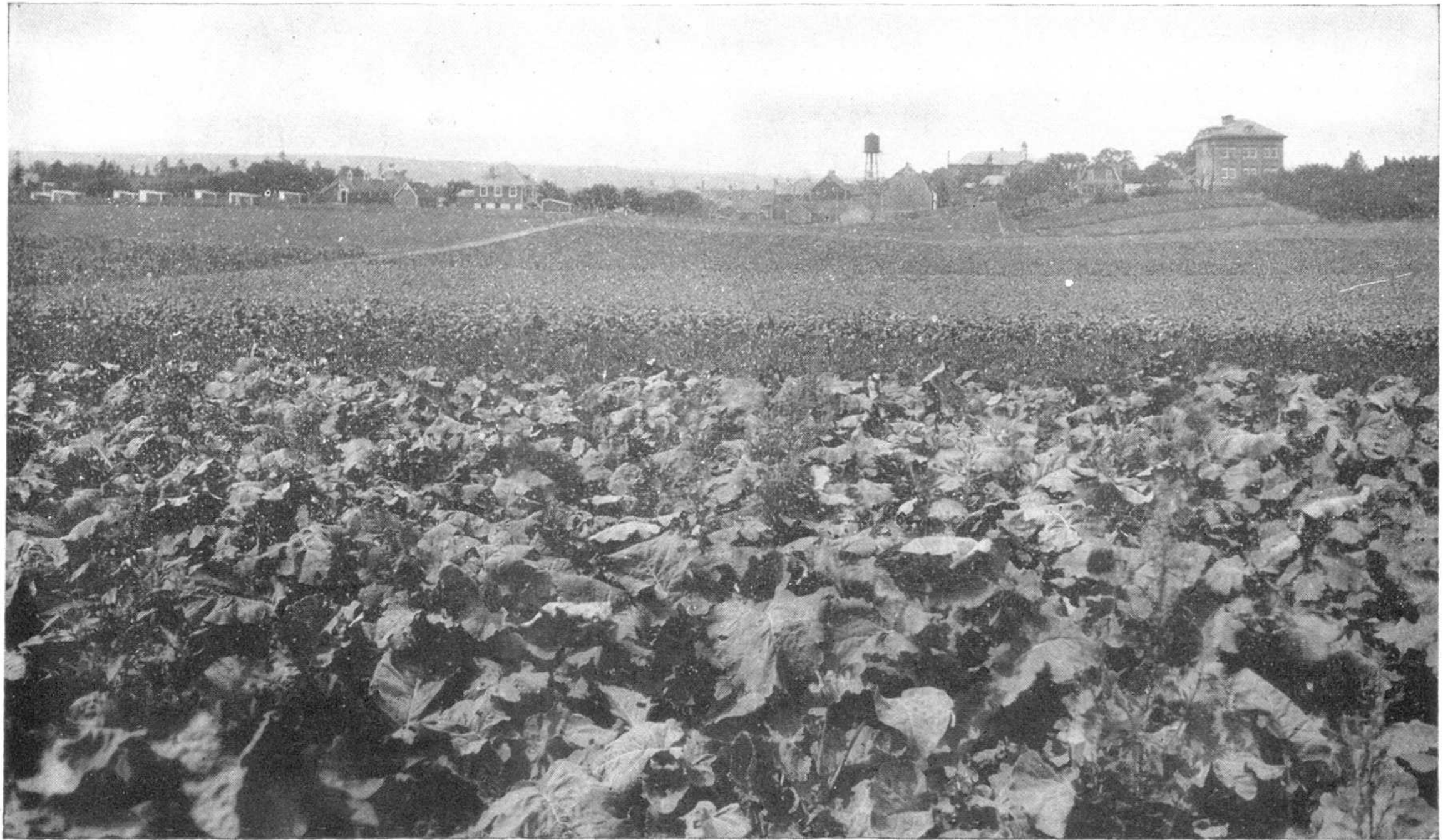
The ideal pursued in the department of English is two-fold; first, introduction to typical English literature in prose, drama and poetry; second, the use of simple and correct English in speaking and writing. The instruction given falls under three sections, Composition, Literature and Public Speaking. Three periods a week throughout the year are required of both classes.

1. **Composition.** In the first year the text book followed will be the "Writing of English" by Manly and Rickert, Part One. Weekly themes will be required, the subject matter being taken mainly from the College class work in the various departments, with practice in business correspondence. In the second year the "Writing of English", Part Two, will be followed, with weekly themes and special emphasis on the composition of press items.

2. **Literature.** The first year class will read selections from the "Sketch Book" by Irving, "Romeo and Juliet" by Shakespeare. Introductory lectures will be given on modern prose and the English drama. The second year class will read the "De Coverly Papers" by Addison, "Hamlet" by Shakespeare and selections from Tennyson.

3. **Public Speaking.** The work in this division will be mainly practice in the preparation and delivery of addresses. The second year students will be required in turn to prepare and deliver a resume of current events from week to week. An inter-class public debate will be arranged for towards the end of the year.

First and Second years—3 periods per week.



THE COLLEGE FARM



## THE DEGREE COURSE—(*Continued*)

### HORTICULTURE

**Course 1. Orcharding.** The selection of soils and sites for orchards; the selection of trees and varieties; instruction on the different orchard practices will be given.

First Year (second term)—2 lectures and 1 laboratory period per week.

**Course 2. Vegetable Gardening.** The characteristics of the different vegetables and the factors which influence production; the handling, storage, marketing and canning of vegetables will be studied.

First Year (first term)—1 lecture and 1 laboratory period per week.

**Course 3. Small Fruit Culture.** Nursery practice, factors relating to culture. The propagation of plants, handling, preserving and marketing the fruit.

Second Year (first term)—1 lecture and 1 laboratory period per week.

**Course 4. Orchard Management.** The factors which make for profit or loss in the growing of fruit; the handling, judging, grading, packing, storing, canning, dehydrating, evaporating and the marketing of apples will be studied.

Second Year (second term)—1 lecture and 1 laboratory period per week.

### MATHEMATICS

Elementary Trigonometry, including the solution of triangles; binomial theorem; series; logarithms and their use, the slide rule; plotting with rectangular coordinates.

First Year—2 lectures per week.

Books required—A text book of algebra, a trigonometry text book and a book of mathematical tables.

### PHYSICS

**Course 1. Mechanics and Applied Mathematics.**

First Year—1 lecture per week and 1 laboratory period per fortnight throughout the year.

**Course 2. Molecular Physics, Heat and Sound.**

First Year—1 lecture per week and 1 laboratory period per fortnight throughout the year.

**Course 3. Light and Electricity.**

Second Year (first term)—2 lectures and 2 laboratory periods per week.

### POULTRY HUSBANDRY

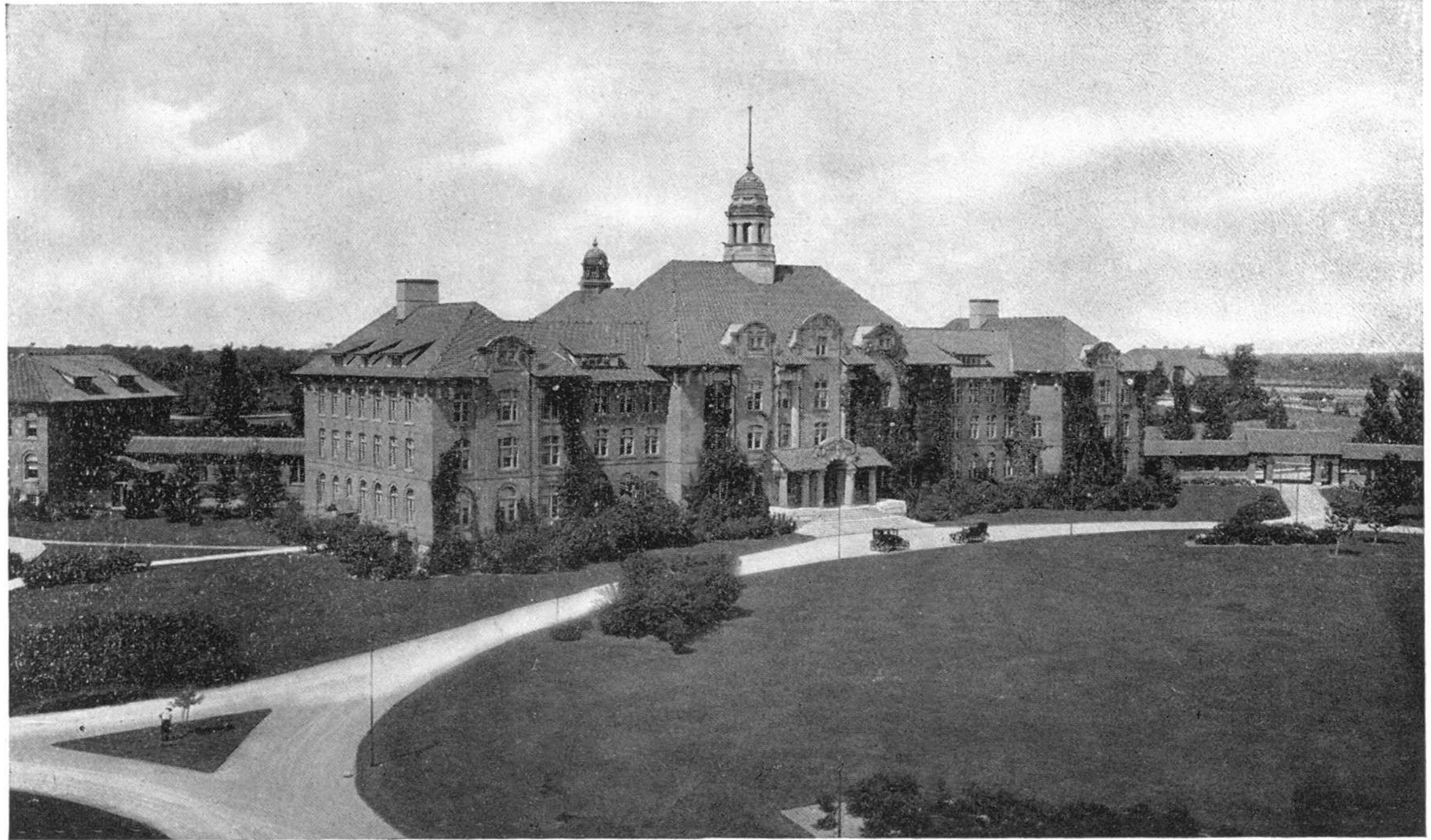
**Course 1. A study of the Poultry Industry.** The selection of a suitable farm and location; the breeds of poultry; the selection and culling of stock; the principles of poultry house construction; the feeding of poultry for growth and egg production; the summer and winter management of laying and breeding stock.

First Year (first term)—1 lecture and 1 laboratory period per week.

**Course 2. A study of the Principles of Poultry Feeding.** Study of the formation of the egg and the chicken; natural and artificial incubation and brooding; the care of the growing chick; the fattening, killing and dressing of poultry for home and foreign markets; the grading and marketing of eggs, and the business management of a poultry farm.

Second Year (second term)—1 lecture and 1 laboratory period per week.

Text Book—"Productive Poultry Husbandry" by Harry R. Lewis.



MACDONALD COLLEGE



# THIRD AND FOURTH YEARS

(At Macdonald College, St. Anne de Bellevue, Que.)

UPON entering the third year at Macdonald College, the student elects a certain "option" depending upon which branch of agriculture or its allied sciences he desires to follow. For full particulars regarding third and fourth year courses, write for the Macdonald College Announcement to The Registrar, Macdonald College, Que. The following is a list of the options offered.

Courses in **bold faced type** are majors for the option.

Courses in **parentheses** are elective.

## AGRONOMY OPTION

*Third Year:—*

Agronomy—**31**.  
Botany—**30, 31**.  
Chemistry—30, 32.  
Economics—(30).  
English—30, 31, 32, 33, 34.  
Genetics—**30**.  
Physics—30.

*Fourth Year:—*

Agronomy—**32, 38, 39, 40**.  
Animal Husbandry—37.  
Bacteriology—30 B, 32.  
Economics—31.  
Plant Pathology—31.  
Teaching, Art of—(30).

*Third and Fourth Years:—*

*Given 1928-29.*

Agricultural Engineering—30.  
Agronomy—**33, 36, 37**.  
Botany—33.  
Chemistry—34.  
Entomology—(34).  
Physics—32.

*Given 1929-30.*

Agronomy—**34, 35**.  
Chemistry—**33**.  
Entomology—34.  
Plant Pathology—31.

## ANIMAL HUSBANDRY OPTION

*Third Year:—*

Animal Husbandry—**36**.  
Chemistry—30, 32.  
Dairying—  
Economics—(30).  
English, 30, 31, 32, 33, 34.  
Genetics—**30**.  
Physics—30.  
Veterinary Studies—**30, 31**.

*Fourth Year:—*

Agronomy—38.  
Animal Husbandry—**37, 38, 39**.  
Bacteriology—30 B, 31.  
Economics—31.  
Teaching, Art of—(30).

*Third and Fourth Years:—*

*Given 1928-29.*

Agricultural Engineering—30.  
Animal Husbandry—**30, 33, 35**.  
Chemistry—**34**.

*Given 1929-30.*

Agricultural Engineering—(31).  
Animal Husbandry—**31, 32, 34**.  
Poultry Husbandry—33.

## CHEMISTRY OPTION

*Third Year:—*

Bacteriology **30A**.  
Chemistry—**30, 31, 32, (40)**.  
Economics—(30).  
English—30, 31, 32, 33, 34.  
Physics—**30**.

*Fourth Year:—*

Animal Husbandry—(37).  
Bacteriology—(32), (34), (35).  
Chemistry—**37, 38, 40, 41**.  
Economics—31.  
Physics—**31**.

*Third and Fourth Years:—*

*Given 1928-29.*

Agronomy—(38).  
Botany—(30).  
Chemistry—**34, 35, (36)**.  
Physics—**32**.  
Teaching, Art of—(30).

*Given 1929-30.*

Agronomy—(38).  
Botany—(30).  
Chemistry—**33, 39**.  
Teaching, Art of—(30).

*Note:—*A selective course similar to the chemistry option, may be arranged, but with bacteriology as the major interest.

## THIRD AND FOURTH YEARS—(Continued)

### ENTOMOLOGY OPTION

#### Third Year:—

Bacteriology—(30A).  
Botany—(30).  
Chemistry—30.  
English, 30, 31, 32, 33, 34.  
Entomology—**30, 32, 37, 38.**  
Physics—(30).

#### Fourth Year:—

Agricultural Engineering—(32).  
Economics—31.  
Entomology—**31, 33, 35, 36, 37, 38.**  
Physics—(31).  
Plant Pathology—31.  
Teaching, Art of—(30).

#### Third and Fourth Years:—

Given 1928-29.

Chemistry—(36), 35.  
Physics—(32).  
Zoology—**31.**

Given 1929-30.

Plant Pathology—31.  
Zoology—**30.**

### HORTICULTURE OPTION

#### Third Year:—

Botany—30, 31.  
Chemistry—30.  
Economics—(30).  
English—30, 31, 32, 33, 34.  
Genetics—30.  
Horticulture—30, **33.**  
Physics—30.

#### Fourth Year:—

Horticulture—**36, 37.**  
Bacteriology—30B.  
Plant Pathology—**31.**  
Agronomy—38.  
Economics—31.  
Teaching, Art of—(30).

#### Third and Fourth Years:—

Given 1928-29.

Agricultural Engineering—30.  
Botany—33.  
Chemistry—35.  
Entomology—**34.**  
Horticulture—**34, 35.**  
Physics—32.

Given 1929-30.

Chemistry—33.  
Entomology—**34.**  
Horticulture—**31, 32.**  
Plant Pathology—**31.**

### PLANT PATHOLOGY OPTION

#### Third Year:—

Bacteriology—30A.  
Botany—**30, 31, 32.**  
Chemistry—30, 32.  
English—30, 31, 32, 33, 34.  
Physics—30.  
Plant Pathology—**30, 32.**

#### Fourth Year:—

Bacteriology—**32.**  
Economics—31.  
Genetics—30.  
Plant Pathology—**32, 33a, 33b, 34, 35.**  
Physics—31.  
Teaching, Art of—(30).

#### Third and Fourth Years:—

Given 1928-29.

Agricultural Engineering—(32).  
Botany—**33.**  
Chemistry—35, (36).  
Entomology—34.  
Physics—32.

Given 1929-30.

Entomology—34.

### FIELD HUSBANDRY OPTION

#### Third Year:—

Economics—(30).  
English—30, 31, 32, 33, 34.  
Chemistry—30, 32.  
Genetics—30.  
Physics—30.  
Poultry Husbandry—**30, 37.**  
Veterinary Studies—**30.**

#### Fourth Year:—

Agronomy—38.  
Animal Husbandry—**37.**  
Bacteriology—30B.  
Economics—31.  
Poultry Husbandry—**35, 36, 37.**  
Teaching, Art of—(30).

#### Third and Fourth Years:—

Given in 1928-29

Agricultural Engineering—30.  
Chemistry—34.  
Veterinary Studies—**32.**  
Zoology—**31.**

Given 1929-30.

Agricultural Engineering—(31).  
Agronomy—34.  
Poultry Husbandry—**31, 32, 33, 34.**

### SELECTIVE OPTION

Students may make a selection from the courses offered in the third and fourth years, after full consultation with and consent of the faculty of agriculture.



# COURSES OF STUDY B. S. A. COURSE

(3rd and 4th years at Macdonald College).

## AGRICULTURAL ENGINEERING

- 30. Drainage and Surveying.
- 31. Farm Building Construction.
- 32. Spraying and Dusting Machinery.

## AGRONOMY

- 30. General Field Crops.
- 31. Cereal Crops.
- 32. Hay and Pasture Crops.
- 33. Roots, Corn and other Silage Crops.
- 34. Experimentation.
- 35. Plant Breeding.
- 36. Crop Distribution and Adaptation.
- 37. Agronomic Organizations.
- 38. Soil Management.
- 39. Experimental Results.
- 40. Standing Field Crop Studies.

## ANIMAL HUSBANDRY

- 30. Swine.
- 31. Sheep.
- 32. Beef Cattle.
- 33. Horses.
- 34. Dairy Cattle.
- 35. Advanced Live Stock Judging.
- 36. Breed, History and Pedigree.
- 37. Feeds and Feeding.
- 38. Animal Breeding.
- 39. Seminar.

## BACTERIOLOGY

- 30 A and B. General Bacteriology.
- 31. Microbial Diseases of Animals.
- 32. Soil Microbiology.

- 33. Laboratory Diagnosis and Public Health.
- 34. Food, Microbiology and Advanced Technique.
- 35. Dairy Bacteriology.
- 36. Microbiological Investigation and Assigned Projects.
- 37. Seminar.

## BOTANY

- 30. Plant Physiology.
- 31. Histology and Cytology.
- 32. Plant Morphology.
- 33. Systematic Botany.

## CHEMISTRY

- 30. Analytical Chemistry.
- 31. Qualitative Analysis, General.
- 32. Biochemistry.
- 33. Chemistry of Soils and Fertilizers.
- 34. Chemistry of Animal Nutrition.
- 35. Chemistry of Insecticides and Fungicides.
- 36. Analysis of Insecticides and Fungicides.
- 37. Dairy Chemistry.
- 38. Food Chemistry.
- 39. Physical Chemistry.
- 40. Assigned Projects.
- 41. Seminar.

## DAIRYING

- 30.

## ECONOMICS

- 30. Marketing and Cooperation.
- 31. The Economics of Agriculture.

## ENGLISH

### A. Literature.

- 30. Essay, Advanced Work.
- 31. Drama.
- 32. Poetry and Private Reading.

### B. Public Speaking.

- 33. Public Speaking.

### C. Composition.

- 34. Journalism.

## ENTOMOLOGY AND ZOOLOGY

- 30. External Insect Anatomy.
- 31. Internal Insect Anatomy.
- 32. Entomological Technique.
- 33. Economic Entomology.
- 34. Pests of Field Crops, Garden and Orchard.
- 35. Systematic Entomology.
- 36. Insect Ecology.
- 37. Seminar.
- 38. Projects.

## GENETICS

- 30.

## HORTICULTURE

- 30. Apiculture.
- 31. Vegetable Gardening.
- 32. Landscape Gardening.
- 33. Marketing.
- 34. Orcharding.
- 35. Floriculture.
- 36. Plant Breeding.
- 37. Seminar.

## COURSE OF STUDY B. S. A. COURSE—(*Continued*)

### MATHEMATICS

#### PHYSICS

- 30. Soil Physics.
- 31. Physical Measurements.
- 32. Meteorology.

#### PLANT PATHOLOGY

- 30. Technique.
- 31. Diseases of Plants.
- 32. Plant Pathology.
- 33. Mycology.
- 34. Projects.
- 35. Seminar.

### POULTRY HUSBANDRY

- 30. Poultry Raising on the Farm.
- 31. History of Breeds and Judging.
- 32. Marketing Principles and Practice.
- 33. Advanced General Poultry Husbandry.
- 34. Breeding Principles and Practice.
- 35. Poultry Farm Management.
- 36. Experimental, Investigational and Research
- 37. Assigned Projects.

#### TEACHING, ART OF

- 30.

### VETERINARY STUDIES

- 30. Veterinary Physiology, Elementary.
- 31. Veterinary Studies, Advanced.
- 32. Poultry Diseases.

#### ZOOLOGY

- 30. Parasitology.
- 31. Comparative Vertebrate Anatomy.

For further information, write

**J. M. TRUEMAN, (Principal,)**

COLLEGE OF AGRICULTURE, TRURO, N. S.



# LIST OF 1927-1928 STUDENTS

## DEGREE GRADUATES

Burrell, Daniel.....	Carleton, N. S.
Cameron, McBain.....	Truro, N. S.
Chisholm, A. C.....	Moose River, N. S.
Harrison, M. P.....	Fredericton, N. B.
Jamieson, J. R.....	Bible Hill, N. S.
Logan, V. S.....	Amherst, N. S.
Longley, R. P.....	Paradise, N. S.
McLeod, George.....	Black River, N. B.
McLeod, Wm. J.....	Sussex, N. B.
McNeil, J. G.....	Iona Rear, N. S.
McVicar, Roddie.....	New Aberdeen, N. S.
Munroe, Sterling.....	Fredericton, N. B.

## FARM GRADUATES

Gillis, D. J.....	The Highlands, West Newfoundland
Harding, Henry C.....	Fredericton, N. B.
Howlett, Ernest C.....	Lake Edward, N. B.
Jeppesen, L. V.....	New Denmark, N. B.
McGillivray, A. F.....	St. Andrews, N. S.
McLellan, John A.....	Glenville, N. S.
MacPherson, Hugh.....	Arisaig, N. S.
MacKenzie, J. J.....	Rear Christmas Island, N. S.
Parker Roland.....	Newport, N. S.
Payne, Clinton J.....	West Bathurst, N. B.
Rankin, David F.....	Fredericton, N. B.
Smith, J. E. C.....	Amherst, N. S.
Townshend, J. F.....	Rollo Bay, P. E. I.

## DEGREE FIRST YEAR

Alexis, Lionel.....	Providence, B. W. I.
Boyle, Jas. A.....	Kentville, N. S.
Blair, Don. S.....	Kentville, N. S.
Cann, D. B.....	Yarmouth, N. S.
Cripps, C. B.....	Sussex, N. B.

Fraser, G. K.....	Truro, N. S.
Lucas, F. W. T.....	Kentville, N. S.
Murphy, John.....	Halifax, N. S.
MacDonald, D. R. F.....	Glendale, N. S.
McPhee, D. E.....	Baddeck Forks, N. S.
Pitman, B. A.....	Yarmouth, N. S.
Torrie, James.....	Moncton, N. B.
Turner, R. C.....	Dorchester, N. B.
Webber, R. G.....	Halifax, N. S.
Woodworth, F. L.....	Port Williams, N. S.

## FARM FIRST YEAR

Butler, W. A.....	St. George's, Nfld.
Cameron, A. J.....	McPherson's, N. S.
Carlisle, C. G.....	Fredericton, N. B.
Carlisle, H. E.....	Fredericton, N. B.
Chisholm, Angus.....	Glassburn, N. S.
Elliott, Matthew.....	Melvorn Square, N. S.
Frelich, H. S.....	Western Head, N. S.
Garvie, A. A.....	Pinevale, N. S.
Gillies, J. A.....	Port Hood, N. S.
Gouthro, D. J.....	McLeanville, N. S.
Hyatt, F. W.....	Mill Cove, N. B.
Jones, G. A.....	St. Eleanor's, P. E. I.
Landry, L. I.....	Afton Station, N. S.
Larsen, Philip.....	New Denmark, N. B.
LeBlanc, Marc.....	West Arichat, N. S.
MacGregor, R. S.....	East Baltic, P. E. I.
McDonald, Dan R.....	Christmas Island, N. S.
McInnis, Neil.....	East Bay, N. S.
McIsaac, W. D.....	Giants Lake, N. S.
McIsaac, D. A.....	Rear Little Judique, N. S.
McKinlay, J. G.....	Truro, N. S.
McKinnon, Neil.....	Grand Mira, N. S.
MacLean J. L.....	Bailey's Brook, N. S.
McNeil, Wm.....	Windsor, N. S.
McNeil, J. B.....	Chatham, N. B.

## LIST OF STUDENTS—(Continued)

McKenzie, R. K	Barrachois Harbor, N. S.	Johnson, Esther	Upper Stewiacke, N. S.
McPherson, Hugh D	Fraser's Mills, N. S.	Jollimore, Marjorie	Bridgewater, N. S.
Murray, Hugh	Balmoral Mills, N. S.	Langille, Willa	Oxford, N. S.
Rankin, John	Judique, N. S.	Mitchell, Flora	Chester, N. S.
Ryan, Joseph	Plaster Mines, N. S.	Mills, Mrs. Neilson	Truro, N. S.
Smith, Angus	Arisaig, N. S.	Morash, Kathryn	Lunenburg, N. S.
Steele John	Gillis Lake, N. S.	Morine, Ellen	Port Williams, N. S.
Thomas, J. N	Truro, N. S.	Mitchell, Ida	Grand Pre, N. S.
Weatherbee, Sheldon	Wentworth, N. S.	McLennan, Marguerite	Westville, N. S.

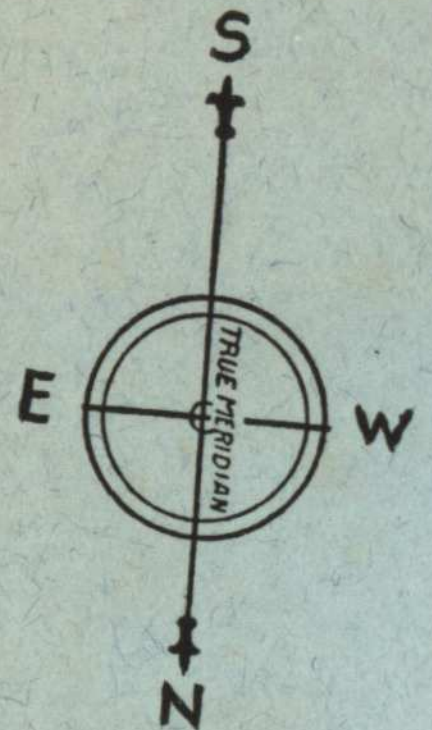
### HOME ECONOMICS

Annis, Verna	Carleton, N. S.	McLaughlin, Mrs. W	Salmon River, N. S.
Ainslie, Bertha	Bible Hill, N. S.	McLeod, Mrs. Alex	Scotsburn, N. S.
Archibald, Laura	Harmony, N. S.	MacNeil, Helen	Windsor Forks, N. S.
Archibald, Mrs. H	Salmon River, N. S.	O'Brien, Dorothy	Noel, N. S.
Blair, Eudora	Great Village, N. S.	Palmer, Marjorie	Windsor Forks, N. S.
Black, Alice	East Amherst, N. S.	Retson, Doris	Bible Hill, N. S.
Cameron, Catherine	Mabou, N. S.	Stephens, Eileen	Tenecape, N. S.
Delaney, Mrs. Fred	Truro, N. S.	Sutherland, Lavinia	River John, N. S.
Gilroy, Marcia	Oxford, N. S.	Tays, Inez	Truro, N. S.
Graham, Margaret	Bible Hill, N. S.	Trenholm Laura	Grand Pre, N. S.
		Wilson, Mildred	Falmouth, N. S.
		Woodworth, Margaret	Port Williams, N. S.
		Zwicker, Charlotte	Mahone Bay, N. S.

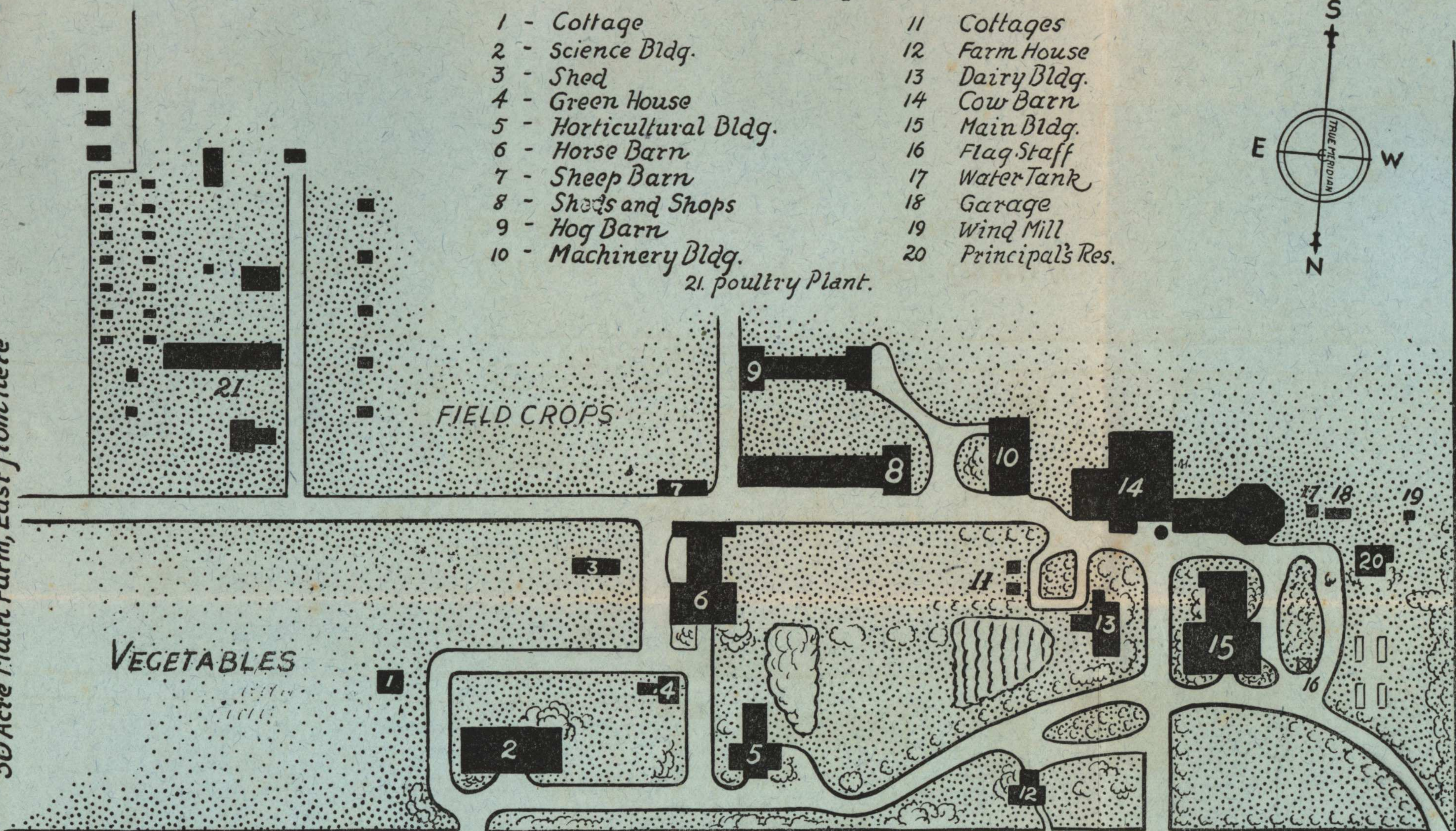


# KEY

- |                         |                     |
|-------------------------|---------------------|
| 1 - Cottage             | 11 Cottages         |
| 2 - Science Bldg.       | 12 Farm House       |
| 3 - Shed                | 13 Dairy Bldg.      |
| 4 - Green House         | 14 Cow Barn         |
| 5 - Horticultural Bldg. | 15 Main Bldg.       |
| 6 - Horse Barn          | 16 Flag Staff       |
| 7 - Sheep Barn          | 17 Water Tank       |
| 8 - Sheds and Shops     | 18 Garage           |
| 9 - Hog Barn            | 19 Wind Mill        |
| 10 - Machinery Bldg.    | 20 Principal's Res. |
| 21. poultry Plant.      |                     |



50 Acre Main Farm, East from here



Grounds of College of Agriculture, Truro, N.S.

Scale  $\frac{3}{16}$ " = 30 ft. Paced and drawn by H.L.T.



