

The ration was made more desirable by adding some salt.

Succulence tended to increase digestibility. Roots were most easily digested. Coarse straw and poor hay were difficult of digestion. The most important element needed for milk production was protein. Many cereals were of value, and easily produced on the farm. Bran is among the best. Oil-cake meal contains a high percentage of protein, and is not desirable as a feed for dairy cows. Barley and corn meal should not be fed in large quantities to milk cows. It was not wise, however, to feed a ration excessively high in protein, because of high cost, and so precaution must be taken to mix judiciously.

For economy of feeding, oats, bran and peas at normal prices—oats at \$25 per ton, bran at \$18 or \$20, and peas at \$30—were most satisfactory. Present prices made it necessary to buy oil cake and gluten meal. If milk was sold at ordinary prices, meal could be fed at the rate of 1 lb. to every 4½ or 5 lbs. of milk produced. When high prices could be secured there was profit from giving 1 lb. meal to 3 lbs. of milk produced.

Q.—How often do you feed your cows?

Ans.—In the morning about 7 o'clock silage, roots and meal are fed, and after this a slight quantity of long hay. In afternoon at 4 p.m. silage, roots and meal are fed again, and also hay given afterwards.

Q.—Would it not pay to feed three times?

Ans.—We have tried both ways repeatedly, and find that the increase of milk by three feedings does not run 1 lb. from ten cows.

Q.—How often do you give salt?

Ans.—It always is added to the mixture of silage, roots and meal.

POULTRY DISCUSSION.

The question of feeding and rearing chickens was discussed by Prof. W. R. Graham, of Ontario Agricultural College, Guelph. Lantern slides were used to show various forms of houses, desirable and otherwise. Some details of incubation were given, and the value of buttermilk and Zenoleum in the incubator touched on briefly.

Q.—How do you use buttermilk, and why?

A.—Our reason for using it is because it has been found to produce a gas similar to that found in natural incubation. This milk is put in a shallow pan along with some Zenoleum. A rank smell results. We have had almost as good results from Zenoleum alone.

Q.—Do you find any benefit from adding a culture to the buttermilk?

A.—We had practically the same results from treated and untreated buttermilk.

Q.—Do you advise always providing moisture in the incubator?

A.—Yes, in every case it is better. Our average runs 20 per cent. more chickens from incubators with moisture.

Q.—What do you feed young chicks?

A.—A good start can be made with cracked wheat, oatmeal and cracked corn. In the winter, of course a different diet must be given. Chickens must have green food. In summer they get this while running about. A satisfactory winter-feeding mixture can be made of 2 hard-boiled eggs, 2 loaves of bread and 2 fair-sized onions, well chopped and thoroughly mixed. After a time it is well to add to this bone charcoal, about the size of a walnut.

Other addresses of particular interest to mixed farmers and stockmen were given by J. H. Grisdale, Prof. G. E. Day and A. W. Smith. A synopsis of these will appear in future issues. G. H. Clark, of the Dominion Seed Branch, gave a valuable talk on weeds, and showed the more noxious specimens by lantern slides.

STOCK-JUDGING SESSION.

The session for expert judges of live stock, called by J. Lockie Wilson, Superintendent of Fairs and Exhibitions, was largely attended, and the discourses and demonstrations thoroughly appreciated. Prof. G. E. Day, of O. A. C., Guelph, dealt with the judging of beef cattle. Dairy-cattle judging was taken up by W. F. Stephen, of Huntingdon, P. Q. John Gardhouse outlined the details of horse judging. In each case typical animals were used.

Valuable Reports.

"The Farmer's Advocate" makes a special point of publishing the fullest, best and most carefully-prepared reports of live-stock and agricultural exhibitions, as well as meetings and conventions of Provincial or Dominion scope. The average newspaper throws together a few scrappy impressions and facts, without much regard for utility. "The Farmer's Advocate" sends experienced, painstaking correspondents to sift out and digest the points of practical importance. Our reviews of live-stock judging-rings have long had a continental reputation for reliability and instructiveness; and, of recent years, while fully maintaining this reputation, we have also put forth special efforts to cover the various agricultural conventions better than any other publication. A meeting in a column, three sessions in a page, is the rule. Reading the report in "The Farmer's Advocate" is the next best thing to personal attendance. For its exhibition and convention reports alone our paper is worth its subscription price.

Changes in Ontario Fruit Experiment Stations.

The Advisory Board for Ontario Fruit Experiment Stations' work held their first meeting for the New Year in Toronto, on January 4th. Reports of the past season's work were received from all of the Stations, and will be published in full in the annual report, as soon as issued.

The Jordan Harbor Station made important progress during the year, large plantings of all kinds of fruits being made in the spring. Extensive vegetable tests for varieties, fertilizers, were started, and will be continued from year to year. The outlook for this Station is very promising, and, through the services of a permanent staff of experimenters, should prove of great value, not only to the tender-fruit sections, but to other parts of the Province as well.

The smaller stations in this district will be closed as soon as possible, Mr. Peart, at Burlington, and Mr. Woolverton, at Grimsby, dropping out this year. Mr. Peart states that he has completed the experimental work assigned to him, and is unable longer to give the necessary attention to this work. The Board desire that Mr. Pettit continue his work with grapes during 1909, paying special attention to experiments for the control of the grape rots and mildews.

Mr. Dempsey, of Trenton, resigned his position as experimenter in the spring of 1908. Since that time, representatives of the Department of Agriculture have been appointed in the counties of Prince Edward and Ontario, and these men intend to conduct various experiments and investigations in horticulture during the present season. As they are paid to give their full time, these men will be able to undertake more extensive experiments than was possible under the old system.

For this reason, the Board recommended the appointment of such representatives in those districts where at the present time no local stations exist. In Simcoe County, where Mr. Caston has acted as experimenter for a number of years, the horticultural conditions are so varied that it has been thought best to close the station, in view of the appointment of an assistant to the Department representative at Collingwood, who will give his whole time to the Departmental work. This man will be expected to cover the Georgian Bay section and the Lake Simcoe section, as well as the inland sections whose conditions were represented in the past by Mr. Caston.

The other stations will remain as in 1908, until their special work is completed, or can be taken over by such representatives of the Provincial Department of Agriculture as may be appointed from time to time. Mr. Hilborn, at Leamington, in peaches, and Mr. Jones, at Maitland, in hardy winter apples, have special problems in these fruits which require attention.

In addition to Mr. Young's work on St. Joseph's Island, and some smaller experiments in the Temiskaming district, the new Government farm at Matheson will be made use of, if possible, for experimental work in hardy fruits.

The Agricultural Department representatives in the Counties of Essex, Simcoe, Prince Edward, and Ontario will conduct numerous experiments during the coming season, and make investigations into the horticultural conditions in their various districts. A. McMeans, of the College staff, is working with the Board in conducting experiments in cranberry-growing at two points in the Province. Other places have made inquiries, and, if found suitable, plantings will be made this year.

Canadian Hackney Horse Society.

The 17th annual meeting of the Canadian Hackney Horse Society was held at the King Edward Hotel, Toronto, Friday, February 15th, the President, W. C. Renfrew, in the chair.

The President, in his opening address, said in part: It is not very long ago that the Hackney breed was not properly appreciated on this continent, but it is now a very great pleasure to know that it has rapidly forced its way to the front, until it now stands at the head of all other breeds for the purpose of getting carriage horses. Hackney sires are being used to cross on the Standard and other breeds, but no matter how or what it is crossed on we shall still have to maintain the pure breed for this particular purpose. Some very high prices have been paid in the United States during the past year, and some very fine specimens of the breed have been exported from England to America. At the last great show, the International, at Chicago, the Hackney breed was 1st, 2nd and 3rd in the class for the best horse suitable for getting carriage horses.

The Secretary-Treasurer's report, and the financial statement, were read and adopted, the President congratulating the society on the position reflected in the report.

After some discussion on the inspection fees, the meeting proceeded to the election of officers, which resulted as follows: President, W. C. Renfrew, Bedford Park, Ont.; Honorary President, E. C. H. Tisdale, Beaverton; 1st Vice-President, A. G. Campbell; 2nd Vice-President, W. H. Gibson, Beaconsfield, Que. Directors—Senator Robert

Beith, Bowmanville, Ont.; Robert Miller, Stouffville, Ont.; E. C. H. Tisdale, Beaverton, Ont.; T. A. Graham, Claremont, Ont.; A. E. Major, Whitevale, Ont.; R. E. Gunn, Beaverton, Ont.; Fred. Richardson, Columbus, Ont.; John Boag, Queensville, Ont.; O. Sorby, Guelph, Ont. Vice-Presidents for Provinces—Ontario, J. W. Allison, Morrisburg; Manitoba, John Graham, Carberry; Saskatchewan, R. H. Taber, Condie; Alberta, J. R. Thompson, Calgary; Quebec, T. B. Macaulay, Montreal; British Columbia, Mr. Mitchell, Victoria; Maritime Provinces, Mr. Black, Amherst, N. S. The secretary is H. M. Robinson, 8 Albert St., Toronto.

On motion, it was agreed that the usual membership fees be sent to the Ontario Horse-breeders' Association. The question of grants to the various shows, also in regard to the question of the Studbook, raised by the President, were left in the hands of the directors.

Mr. Major raised the question of inspection fees, and after some discussion it was moved by Mr. Pepper, seconded by Mr. Campbell, that on receiving application for inspection of a mare, the President and Executive appoint an inspector in that locality to inspect the mare free of cost, other than expenses, and as may be arranged by the Executive.—Carried.

On motion, the meeting endorsed the action of the Executive in obtaining legal advice on the constitution, and in the appointment of the President, Mr. W. C. Renfrew, as delegate to the Canadian National Exhibition.

The meeting then proceeded to consider the constitution, the President calling upon Mr. Brant, of the National Live-stock Association, to read the draft. After full discussion, certain amendments were included, and the draft of the constitution as amended was finally approved and declared adopted.

On motion, a vote of thanks was tendered to Mr. Brant, in recognition of the time, trouble and attention he had given them, in attending the annual meeting, and assisting so ably in the matter of the new constitution, and for the courtesy and consideration he had always extended to the society in its relations with him.

The winter short course at the Agricultural College, Truro, N.S., closed January 15th, having had a regularly enrolled attendance of 203 in the men's course and 20 in the ladies' course, with an intermittent attendance of over 300. Included among the number were 25 students from New Brunswick and 40 from Prince Edward Island; also some 10 from Great Britain, and the rest from the various counties of Nova Scotia. The course has been in every way the most successful yet held in the history of the College, and the attendance points to a day, not very far distant, when the class-rooms at the College must be increased. A number of the short-course students are going in with the regular classes, the attendance at which will now stand at about 50. Aside from the numbers in attendance at these short courses, it is most satisfactory to observe that they are constituted, for the most part, of the most progressive and intelligent farmers of the Maritime Provinces. It is, therefore, with every confidence that those interested in agriculture in the Eastern Provinces are looking forward to a development of the agricultural resources, which will gradually bring this division of Canada up to the highest standing. When it is considered that four years ago the number in attendance at this short course was 64, and the number in the regular course was 15, readers will readily appreciate the progress being made.

Wages for Farm Help.

According to the Dominion Bureau of Census and Statistics, the average wages of farm and domestic help for the Dominion, per month, in 1908, was \$24.60 for males, and \$13.50 for females; and, per year, \$295 for males, and \$162 for females. The highest averages are reported for the Western Provinces, where they reach about \$300 per year for males, and \$160 for females. In Ontario and Quebec, the average for males was about \$240, and for females \$120, per year.

By the more general adoption of modern labor-saving implements and methods, the earning capacity of the labor on most of our farms could easily be increased fifty per cent., and in many cases doubled, with resultant advantage to employer and employee alike.

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WM. WILLIAMSON.