

Dairy Matters Discussed at Prescott.

Convincing proof that cooling the milk for cheesemaking is much more satisfactory than aeration by stirring, dipping, or special straining, and a strong plea from several sources that farmers take precautions to guard their own interests by producing more suitable food in larger quantities on their farms, were striking features of last week's convention of the Eastern Ontario Dairymen's Association, held at Prescott. The former point, though advocated by dairy experts in various parts of the Dominion for decades, has for years not been so generally popular as thorough aeration, where, perhaps, 15 or 20 minutes' time was spent in stirring or dipping, with the idea of getting rid of animal odors and certain qualities, by having the milk come into contact with the air. Careful tests conducted by experts at the homes of dairy farmers where ordinary conditions prevailed, invariably produced cheese of higher quality and free from gas holes. Farm-yard and milk-stand surroundings, as well as the manufactured article, were shown by lantern slides on canvas, with the result that profound interest in the question was aroused. With regard to the production of food for the dairy herd, it was claimed that hundreds of thousands of dollars were being spent in each county where dairying was carried on every season in the purchase of food that the soil was capable of returning if properly handled.

The large crowd of intensely-enthusiastic dairymen, from all quarters of Eastern Ontario, were extended most hospitable treatment by Prescott's citizens. The commodious town hall, however, was scarcely large enough to accommodate those who wished to attend the evening sessions. A hearty reception was expressed by L. H. Daniels, the venerable mayor, and W. P. McCarthy, the young and energetic president of the Board of Trade. Music was provided for the evening's programme by Hulme's Orchestra and the Prescott Concert Orchestra. A very pleasing number was the whistling solo by Miss Ruth Keeler. The boys and the girls of the high school also delighted the gatherings with club swinging and dumb-bell drills.

The whole town seemed to have put forth every effort to make the delegates glad they had come to Prescott, while leading men of different parts of the county joined in the welcome. A magnificent banquet was tendered the directors of the association, representatives of the press and friends, reaching a total of over half a hundred, by Howard Ferguson, member for Grenville in the Ontario House.

A disappointing feature of the convention was the dearth of questions following the addresses. Whether this was due to the fact that the speakers covered the ground thoroughly in every detail, or to a lack of interest, cannot be explained. Considerable disappointment was expressed at the inability of ex-Governor Hoad to be present. However, the various departments of the dairy industry were treated most fully by experts who have labored for years in different parts of Ontario to overcome the difficulties that continually are met. Eloquent and inspiring addresses were delivered by Dr. Robertson, Principal of the Agricultural College at Ste. Anne de Bellevue; G. C. Creelman, President of Ontario Agricultural College, Guelph, and C. C. James, Deputy Minister of Agriculture, Toronto.

PRESIDENT'S ADDRESS.

In summing up the output of the dairy products of Canada, J. R. Dargavel, M.L.A., of Elgin, President of the Association, said there was a marked falling off of the exports of cheese, but an increase in the output of butter. The aggregate value of Canadian cheese and butter exports for the season just ended was approximately \$18,987,340, as compared with \$20,186,398 for 1907, a decrease of \$1,999,058, but if we make comparison with 1906, which amounted to \$25,999,084, this season's returns would show a decrease of no less than \$7,011,694.

This review has to do with the exports only, but as was pointed out by J. A. Ruddick, Dairy Commissioner, in a statement which he made before the Select Committee of Agriculture, at the last session of Parliament, this cannot be taken as a correct basis upon which to estimate the amount of money derived from the manufacture of butter and cheese in Canada. While the growth of the population was small, this might answer, but with increased immigration we have had a rapid increase in home consumption, which we must not overlook. Owing to extreme dry weather, during the summer of 1907, many farmers in Eastern Ontario found themselves short of feed to get their cattle through the winter of 1907-08, and thousands of milk cows were sold, for almost nothing, to reduce the number for which feed must be produced. The shortage of feed in the spring of 1908 and a drought during the summer following, caused the farmers to buy considerable feed, and, in consequence, less revenue was derived from their dairy business, although prices ruled slightly higher during the year of

1908 than for any of the previous years, but the farmer is slowly learning the lesson of the necessity of better cows, better farming, more feed, and cheaper production. The near future will see us not only making a quantity as great as the years of our largest make of cheese in Canada, but larger quantities than Canada has ever known.

It is not too much to say that the superior quality of our cheese has had much to do with the increased demand for our goods in England. The English consumer likes a good article, and we have been able largely to satisfy his fastidious taste and secure his trade, but there is still room for improvement, and we must strive for better things if we are to hold our own in the English market, which is open to the competition of the world. We should congratulate ourselves that we have been able to build up such a large and profitable trade. But we must not stand still, as there is much yet to be done. Not long since a Scottish Agricultural Commissioner, on his return to the Old Country from a visit and inspection of dairying in Canada, stated that "the stables in which some Canadian cows are kept are not as clean as they ought to be, and he coupled with this the suggestion that something should be done to induce the Imperial Government to see that the Canadian authorities enforced a system of inspection in the Dominion of Canada as rigorous as that applying to dairying in the Old Country." Does this not look like a danger signal? remarked Mr. Dargavel. This Scottish agriculturist must have cause to make this statement, and my belief is founded on personal knowledge of the condition of some stables I myself have seen. It behooves us to bestir ourselves in the direction of meeting in advance any objections which may be urged against our methods.

Reference was made to the many achievements of the Eastern Ontario Dairymen's Association in promoting the dairy interests. I am proud to be able to say that such an organization does exist, concluded the president. To those who think this association has lost its usefulness, I would say that if there is no other reason than the fact that it has been, and is now, the connecting link between the dairymen and the Government, you could not afford to do without it.

Recognition of valuable service in behalf of the dairy industry was expressed toward Hon. Nelson Monteith, Hon. Sydney Fisher, G. H. Ferguson, M.P.P., and the efficient Dairy Commissioner's staff. From Hon. Jas. S. Duff continued assistance was assured.

INTENSIVE SOIL CULTIVATION.

The weakest point in the dairy industry of Eastern Ontario, according to Senator Derbyshire, of Brockville, is in regard to soil cultivation. The aim should be to give more intensive cultivation, so that larger quantities of food of more desirable quality should be produced. Milk never was worth more money, and cows of greater milking propensities should be kept in condition for producing raw product for a greater number of months each year. Careful computations in several counties showed that about \$300,000 was expended in buying feed for the dairy herd that should be produced within the county borders.

Ice was a prime requisite in every department. The farmer needed it to cool the milk, while in the factory it was indispensable. It could be produced economically by freezing well water in suitable pans if no lake or river was within a reasonable distance.

Everyone appreciated the efforts made by the association, which had been successful in providing free education to dairymen through the dairy instructors. It was claimed that no man in Eastern Ontario had done more than G. G. Publow to further the dairy interests. The value of dairy-school training was evident in cleaner factories and cheese of higher and more uniform quality.

VALUE OF COW TESTING.

The idea of cow-testing associations, and what could be done by this co-operative work in connection with the dairy industry, was outlined clearly by Chas. F. Whitley, of the Dairy Commissioner's staff at Ottawa. It was pointed out that hundreds of cows gave milk containing 2.5 per cent. fat or less. A striking comparison of the returns from two cows of the same herd, for seven months of 1908, was charted as follows:

	Most Profitable.	Least Profitable.
Weight of milk...	5,595 lbs.	2,790 lbs.
Weight of fat...	186 "	110 "
Yield of cheese...	509 "	272 "
Value of milk...	\$55.95	\$27.90
Cost of feed...	21.00	21.00
Profit	34.95	6.90

This shows the profit from the best cow to stand more than five times as high as that from the poorest, assuring that an equal amount of feed was consumed and care given in each case.

Regular testing of cows was the best-known force in increasing the returns. Co-operative breeding associations were said to be the logical outcome of the record work. This system meant the continued use of pure-bred sires of some one breed on the grade, and mixed breeds now so common.

During the past few seasons a great improvement was noticeable in districts where cow-testing associations had been formed. It was necessary to study each cow in the herd. In the Rockford Association 37 cows gave a total of 225,454 pounds of milk in six months, May to October. During that same period 37 cows in Warsaw Association produced only 162,506 pounds. The best cow at Rockford gave 7,598 pounds, and the poorest 4,090 pounds of milk, while at Warsaw the highest yield was 5,430 pounds, and the lowest 3,270. The figures from the various districts revealed the fact that 78 cows of some parts accomplished as much as 200 cows of other sections. Some herds of 14 cows contained 3 cows that produced as much milk as the remaining eleven. One herd comprised a cow that gave 12,960 pounds of milk in 10 months, and another cow the capacity of which was only 4,618 pounds. The value of the milk from the best cow during her milking period of 1908 was over \$171.00.

Q.—You say that the average of herds increased from an average of 4,000 pounds to an average of 6,000 pounds in two years. How could that be done by testing? Was it not due to better feeding?

Ans.—It is a case of feeding, weeding and breeding. The poor cows were disposed of.

Q.—Where did cow-testing associations first spring up?

Ans.—The first in Canada was at Cowansville, P.Q., and in Ontario in the Brockville district.

PROBLEMS OF THE DAIRYMAN.

Some of the conditions met with throughout the past season were referred to by G. A. Putnam, Director of Dairy Instruction for Ontario. The producers had to face the problem of keeping many cows that were not profitable. In one district he knew one man with 8 cows making as large profit as nine men with 8 cows each. Too many small factories was the chief problem that proprietors had to face. The establishment of central factories was urged so that competent makers could be engaged to remain there permanently.

WINTER DAIRYING.

That the successful dairy farmer was the one who practiced dairying 365 days in the year was the opinion of Henry Glendinning, of Manilla. The labor question was not as serious as many people thought. Farmers should engage their hired help by the year. Many paid almost as much for a man for seven, eight or nine months as was demanded for a full year.

The highest average yield per cow was found in districts where dairying was an important feature on the farm winter and summer. This was due to the fact that those who attended to the dairy herd for only a few months allowed the cows to run on low food ration when dry, resulting in loss of flesh. Then it required a great part of the season to bring them back to the condition in which they must be for maximum production. The successful farmer milked for ten months, and fleshed up the remaining two.

Food rations, with particular attention to low cost, were discussed thoroughly, with reference to results obtained on his own farm. Alfalfa was used extensively. He claimed to have been able to produce butter at a cost of 4 cents per pound. A herd of 25 cows had been fed during November, at an average cost below \$2.00 per cow.

A lively discussion dealing chiefly with alfalfa ensued, some points of which will be given in full at a later date.

IMPORTANCE OF AGRICULTURE.

In dealing with present conditions and future outlook, C. C. James, Deputy Minister of Agriculture, said that the first indications of prosperity were found in the value of products returned from the soil. This showed the importance of thorough system instead of haphazard methods, in attempts to build up any branch of agricultural industry. Since the farmer dealt primarily with the soil, it was his duty to see that his fields were kept in the best possible condition. Something should be done to persuade present-day farmers to move from shallow, rocky or light sandy soils and locate only where soil was adapted to crop production. In Northern Ontario was an area of excellent clay soil greater in extent than the older part of the Province.

Ontario's average yield of products was not as high as the yields of countries of Europe where intensive cultivation had been practiced for a thousand years or more. In helping to increase the yield great attention had been paid to selection of seed. If by selection, or any other means, a single seed could be added to each head of corn grown in Ontario each season, the in-