

Cream Sampling

Jan. Svendsen in The Dairy Record

Of all the work done in the creamery, probably none is of greater importance than getting correct samples for testing of all milk and cream delivered. When each lot of cream is tested daily, the method of sampling does not need to be given the attention which is necessary when composite samples are taken. The cans of cream must, of course, be thoroughly mixed, but if the cans are dumped into a larger can and then well stirred, it does not matter if the sample taken for testing is large or small, and the sampling can be done with an ordinary dipper. If the samples are not tested at once they should be kept tightly covered to avoid evaporation of moisture.

When composite samples are taken of cream it is important that a proportionate sample is taken, and when sweet cream is handled, we believe that the tube sampling will give very satisfactory results, as the size of the sample taken will be in proportion to the amount of cream sampled. It is important that the sample bottles are kept tightly covered, and the glass-stoppered bottle will be found the most satisfactory. There are still some creameries using the tin-top bottles, but these are very unsatisfactory, as the tin covers do not always fit tight, and then some of the covers are tighter than others, making a variation in the moisture which escapes from the samples. Then again the tin covers become detached and we often find some samples entirely without covers, which, of course, results in unfair discrimination in favor of the uncovered samples.

To get satisfactory results from composite testing a proportionate sample should be taken, and the sample bottles should be kept tightly covered, and after the day's run they should be kept in the refrigerator, as the lower temperature will help to keep the samples in good condition and avoid evaporation of moisture.

Educational Work among Patrons

F. Brown, Grenville Co., Ont.

There is no way, to my mind, in which so much good can be done in educating the patron to care for his milk and to avoid tampering with it as frequent visits from the instructor. On my experience in the cheese business I have found that most good has been accomplished in special meetings and visits at the various farms.

Patrons are being fined all the way from \$5 to \$50 for perhaps taking only what they think is good milk from their can for table use. Others are allowed to go free that are sending milk that will turn out a smaller amount of cheese and of a poorer quality. My opinion is that if such people had been visited, less fines would have to be imposed, as fines are a curse to the factory and a disgrace to the community.

Some people wonder at their neighbor for taking a little cream from their can to make a cake or for their stomach's sake, and as a result have them fined, but the same people think it is all right to fill their cans with their neighbor's whey for the sake of their pigs' stomachs. There is no law against that.

I believe in the dual purpose cow. If the calves of pure-bred dairy cattle can be sold at fancy prices it is well. But half the calves are bulks, and if sold to dealers are worth \$1 less at two weeks old than the dual purpose calf, and if kept as steers they are at a still greater disadvantage. I have Ayrshire bulls and cows, so I think I know. — Geo. K. Robinson, L'Assomption Co., Que.

Much Depends on HOW You Sow!

A lot depends on the seed you use—a whole lot upon how you sow it. Proper seeding means that every seed is deposited where it will get the best chance. The "Leader" Disc Drill places the seed right at the bottom of the furrow, because the shields go well down on the discs. No haphazard scattering of seed when you are seeding with a "Leader."

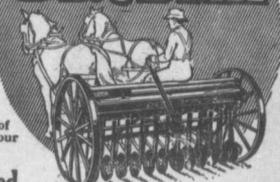
Old-time drills have disc castings of grey iron. We discarded this method, and equipped the "Leader" Drill with malleable disc castings, giving more strength with far less weight. The discs on the "Leader" will run clean through stiff mud and heavy trash without choking. They are made of high-quality steel that will not break when you strike stones or tough roots. Broken disc castings are things unknown to users of "Leader" Disc Drills.

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The one outstanding feature of the world's farming is that there will soon be a great shortage of meat supplies. Save your breeding stock. They are today Canada's most valuable asset. If you sacrifice your breeding stock now, you will regret it in the near future. Plan to increase your live stock. Europe and the United States, as well as Canada, that live stock is the only true basis of economic and profitable farming. The more grain you grow, the more stock you can carry. The more stock you keep, the more fertilizer for your fields. Mixed farming is real farming, not speculating.

Study this table, which was prepared before the war. Only one country increased its cattle more than its people in the past ten years. And, in it (Australia) in 1914, there was a tremendous loss of live stock through an unprecedented drought—a fact which the table does not show. Do you need any stronger argument than this table that there is bound to be an increasing demand for beef? Add to this con-

BEEF

Country	Population Since 1890	Increase	Cattle Since 1890	Decrease
France	26%	2%	2%	...
Germany	18%	4%	4%	...
United Kingdom	10%	4%	2%	...
Austria-Hungary	10%	2%
European Russia	14%	2%	12%	...
Canada	34%	17%
Argentina	40%	40%	6%	...
Australis	18%	16%
New Zealand	20%	16%
United States	24%	...	30%	...

dition, the destruction of live stock of all kinds, breeding and young stock included, in the war zones. The war has merely hastened the meat shortage of the world. When it is over, the farmer with live stock will continue to profit in the world's markets, and, in addition to having helped feed our soldiers at the front, will be in position to reap a further reward for having stayed with the live stock industry.

SHEEP. Canadian farmers have been losing great opportunities in sheep raising and sheep feeding. Hundreds of thousands of sheep have been slaughtered to provide winter clothing for the soldiers of the different armies. Australia's losses, through drought in 1914, were very heavy. Canada has been importing frozen mutton from New Zealand. In view of these conditions, wool and mutton should prove very profitable for Canadian sheep raisers during the next few years.

SWINE. Through the indiscriminate sale of swine in the Canadian West in the past three months, the supply in 1915 promises to be little more than half of 1914. Add to this the fact that the British soldier is allowed 1/2 lb. of bacon per day, and that sausage is the principal meat food of the German soldier, and you will understand the outlook for the future. Those who stay

steadily with swine, year in and year out, make money. Those who rush in and rush out, generally lose money. "Buy when others are selling, sell when others are buying," applies to live stock as well as to Wall Street stocks.

DAIRY. Milk cows increased in Canada from 2,408,677 in 1901 to 2,594,179 in 1911. This increase did not amount to 8% and was less than one-quarter of the population increase of Canada. At the same time, the per capita consumption of milk by Canadians increased 30%. Is there any wonder we had to import 7,000,000 lbs. of butter from New Zealand?

The exports of Canadian cheese have been steadily declining for ten years. Look at the market prices today. Do they not suggest the advantage of increased production?

Through cow-testing, selection and better feeding, the

average annual production per cow in Canada did increase from 2,860 lbs. per cow in 1901 to 3,908 lbs. in 1911, but this was only a beginning. Last year one cow in Canada produced 26,000 lbs.

The dairymen of Denmark who supply Great Britain with butter and bacon are not satisfied unless their herds average 10,000 lbs. per cow. Let Canadian dairymen work to increase the productiveness of the milk cow. Breed for milk. Test your cows. Save your calves. Select your milkers. Feed for yield. Read the Agricultural papers and Government reports and bulletins on dairying.

CONFERENCES

Now that you have attended the Conferences, or have read about them, get together and talk things over. Also write to the Publications Branch, Canadian Department of Agriculture, Ottawa, for bulletins and reports on live stock and dairying.

Canadian Department of Agriculture,
Ottawa, Canada