

the best he can under his special circumstances, and far better than most of those persons could do who are offering advice so freely to the farmer.

This is not said to justify the careless, indifferent farmer, nor to adversely criticize those who are doing the best they can in advising farmers; but it is necessary to take into account the "flattened zeal," the "blunted enthusiasm," and the "cooling ambition" caused by the hard work and small returns which are all too common on Canadian farms. We are facing "a condition, not a theory."

#### THE FUTURE

Time fails me to speak of this at any great length. We shall sketch a few broad principles and allow hearers and readers to fill in the details from their own and others' experiences.

(1) Our dairy farmers must be relieved of the heavy interest charges they are paying under present conditions. It is reported that the far-

mers of the province of Saskatchewan are paying \$12,000,000 annually in interest, a debt charge equal to \$25 for every man, woman, and child. In the province of Ontario farmers are paying interest on over \$2,000,000 chattel mortgages alone. This is a million stone about the necks of our farmers that must be removed. Who that has ever struggled with a depressing mortgage and its damnable load of interest, but can sympathize with farmers who are carrying the burden of a mortgage in addition to their other burdens? Dairy farmers and all other farmers must be able to secure capital at reasonable rates, if they are to drain their farms, repair old buildings or build new ones, buy improved stock, and have modern conveniences on the farm. This is another of the problems our statesmen must grapple with. Verily we need a Lloyd-George in Canada! We say this with all due respect to Canadian statesmen, who have not had the experience of those in Great Britain, and who, may we add, are lacking in the courage of a Britisher.

(2) The second great agricultural problem is that of marketing. The principles of production have been fairly well worked out. All that is needed is the application of these principles on individual farms. This our farmers will do as soon as they have the necessary means to carry out new ideas, and are convinced that it will pay them to do so. In the last report (1912) of the Dairy Commissioner for Canada, p. 28, we read:

"Investigations in both this country and the United States have shown that there is unquestionably too great a spread between the price the farmer gets for much of his produce and the price the consumer is obliged to pay. Various causes for this condition have been advanced and many remedies suggested, but it is undoubtedly true that the lack of organization in the marketing end of the farming business has been responsible for a good deal of the difficulty and that the formation of cooperative selling associations offers the most promising solution of this part of the problem."

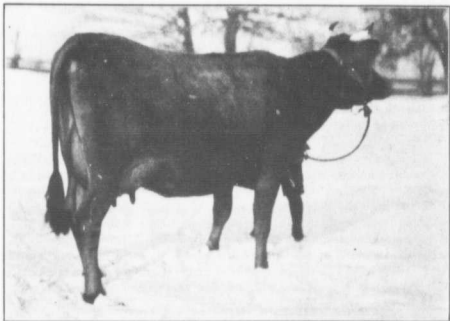
The unfavorable condition is admitted, and a remedy suggested, but may we not ask the writer

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## Before and After Calving

R. P. Elman, York Co., Ont.

If there is one idea more than another that should be "knocked," and "knocked" hard, it is that the dairy cow should calve in a thin condition. This idea is not held now nearly so commonly as it was a few years ago, but many dairymen still believe a little surplus flesh to be a detriment. For my own part, I like to have my cows in extra good condition, not butcher fat, but with a good surplus flesh that will stand during the first few months of milking. This is as true of the heifer calving for the first time as for the oldest cow in the herd. I put on this flesh, however, without feeding much corn. Cow fat I don't consider to be good fat for the dairy cow. Cows on good pasture will put on flesh when dry, and this is where my fall calving cows, about half the herd, have an advantage. Dry cows in winter are fed a good dairy grain ration.



A Canadian Cow in a Herd that is Making Good

Did you read those sane and sensible remarks by Mr. Geo. Lathwaite, of Huron Co., Ont., in the Breeders' Number of Farm and Dairy? Mr. Lathwaite is breeding Jerseys for what they will do at the pail. In the illustration may be seen one of the products of Mr. Lathwaite's breeding in Fontayne's Blue Gem, a three-year-old cow that has made a good record in R.O.P. Test.

When a cow is on grass no special precautions need be taken before calving. In the stable, however, I feed only highly digestible and nutritious feeds. Feeding a lot of straw to dry cows shortly before calving deranges the bowels and keeps the intestines crammed full of indigestible fibre. Roots are my favorite food for the week or so before calving. They are palatable, cooling and digestible. They keep the bowels in the very best condition. Bran, middlings and oats are all good grains. I place special value on ground fax. We grow a small patch each year to have specially for cows at calving. A couple of handfuls of this, scalded and mixed with bran each day, practically ensures right conditions for calving.

In the case of the heifer the really critical time comes after calving. I give a drink of warm water almost immediately. The calf is not allowed to suck at all in our stables. I draw off a little milk, not much, three or four times the first and second days, and don't milk out dry until the third or fourth day, depending upon the condition of the udder.

Although I do not permit the calves to suck, I consider it of great importance that they be given the colostrum or first milk. It sets the bowels in order. If the calf is handled gently it will not be very long before it will be willing to drink its mother's milk. I dip two fingers into the milk and allow the calf to suck the fingers, drawing the fingers down into the milk, the calf following. I know there is a strong temptation when the calf gets rough to be rough in proportion, but rough usage does not make the calf's education any easier.

I watch the udder closely for the first few days. When the udder does not clear of the swelling or loosen up properly, I massage thoroughly, beginning at the upper portion and working downward as the milk is drawn. This treatment I believe is especially necessary where the calf is not allowed to suck, as the calf sucking seems to draw the heat and swelling from the udder. Especially bad cases I rub the udder thoroughly with sweet oil.

We feed lightly for the first three days after calving, bran and oats in the form of a mash being the favorite food. Then I work quickly to full rations. I believe in feeding well right up to the time the cows go on pasture and then not dropping the grain suddenly. Feeders who are sparing of their grain thinking that cows will pick up when they get on pasture are making a bad mistake. The extra milk that a well fed cow will give when she goes on pasture will not pay for the extra grain she consumes in the stable. Anyway, I would not keep a cow around that would not pay for good grain feeding when she is fresh.

## Advantage of Larger Farms

F. C. Nunnick, Agriculturist, Commission of Conservation

In Farm and Dairy of April 2nd, Mr. Andrew McCrimmon calls attention to a very important matter, namely, the wholesale advocacy of small farms by the city newspapers. The small farms will pay if operated by geniuses who get into special lines, and providing they are situated close to a good market. But for the average man, the small farm is likely to prove a disappointment. In British Columbia, there are many tractor farms sold by land speculators to settlers from the Old Land. These settlers have been led to believe that they can plant these small farms out to fruits and in a few years be able to make big money. No doubt many have been led in this direction also by reading such books as "Ten Acres Enough," "Three Acres and Liberty," or "A Little Land and a Living."

Professor Warren found that the small farms were unprofitable unless devoted to some special branch. Professor Boss of Minnesota found that the average profits from farms grow greater as the farms increase in size up to 280 acres. Above that, the results are uncertain. Doubtless the most profitable size of farm on the average is the one that is easily managed by the farmer and his sons, or his hired men, and is not too large to be under his own personal supervision. We cannot specialize. A few can, but the majority must carry on general or mixed farming, and to do this a little land is not enough. I am not advocating the large farm, but merely wish to call attention to the fact that it is not in the best interests of agriculture, or of those contemplating taking up farming, that they should be led to believe that success awaits everyone who will till a little land.

The following table shows the actual average conditions obtaining on 586 farms in Tompkins county, New York. This table is taken from "Farm Management," by G. F. Warren.

Acres.	Size	Per Acre.	Per Acre.	Per Acre.	Per Acre.	Per Acre.	Per Acre.	Per Acre.	Per Acre.
30-40	105	14.51	8.10	6.34	7.65	1.00	1.00	1.00	1.00
40-50	85	12.59	5.60	6.89	6.32	1.00	1.00	1.00	1.00
50-60	74	11.56	4.54	7.02	6.13	1.00	1.00	1.00	1.00
60-70	77	10.89	3.92	6.97	5.22	1.00	1.00	1.00	1.00
Over 201	261	10.93	3.33	6.30	5.22	1.00	1.00	1.00	1.00

1. Total amount paid for labor, value of household labor, value of unpaid labor by members of the family, and the farmer's labor estimated at \$2.00 the year.

2. Profit after deducting expenses, interest on capital at 5 per cent, and all labor as defined above.

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R. L.

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