

# FARM AND DAIRY



We Welcome Practical Progressive Ideas

**& RURAL HOME**

The Recognized Exponent of Dairying in Canada

Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land.—Lord Chatham.

Vol. XXXIII.

FOR WEEK ENDING NOVEMBER 5, 1914

No. 45

## How to Feed the Dairy Cow\*

### The Basic Principles of Feeding Simply Discussed

J. H. GRISDALE, DIRECTOR DOMINION EXPERIMENTAL FARMS

COMMON sense in cow feeding is the growing of the feeds best adapted to our fields and feeding them in such a way as to get the greatest amount possible of milk. I don't mean that I don't consider it advisable not to purchase feeding stuffs. I fully believe it more profitable to buy what concentrated feeds we can use profitably, than through mistaken ideas of economy to go without them. True, many men feed with poor results even when they feed liberally, but this is because they do not know how to handle the feeds that they have to get the greatest quantity of milk. Let us consider this feeding problem.

In the first place, the cow brim full of food is the cow that is comfortable and most likely to make the best use of the food that is in her. Fill her right up.

Then we must consider nutritive quality. Some place this first. I don't. Palatability is the first consideration,—that which the cow likes. A cow will seldom fill up on wheat chaff. Why? Because she doesn't like it; not because she doesn't consider it of high nutritive value and digestibility.

#### The Source of Palatability

With these three points in mind we know which feeds to grow. I said grow those feeds most adaptable to our farms. How are we going to impart palatability also? I would answer that the most important consideration in palatability is succulence. Succulence is juiciness. If we can get this succulence into the ration it will be acceptable to the dairy cow.

Succulence in summer is easy. How about the winter? The silo is solving the question for us. Every man of us should have a silo. Every good man of us already has a silo. If, however, we cannot afford a silo we can grow some roots for I know that 1,000 pounds of roots is worth 1,000 pounds of ensilage for cow feed. Roots, however, cost more to produce and are not so certain a crop. Likewise we get less food per acre.

The third way to get succulence is to get straw and damp it with water and 20 per cent. of feed molasses. This is not as good a method of getting palatability as with ensilage or roots, but it has its advantages. Inferior straw or hay can be disposed of by mixing with roots, en-

silage or feed molasses. Good feed molasses can be had for 20 cts. a gallon and is worth 20 cts. to 25 cts. a gallon for its nutritive value alone. Hence it is a profitable food, and where we have inferior roughage to dispose of its value can hardly be over-estimated.

I do not advise the feeding of pure ensilage. I would prefer to have mixed with it cut straw, hay, etc., which seems to modify the flavor and cause the mixture to be eaten with greater avidity. This mixing is especially advisable when ensilage is cut in an immature stage. Such corn cannot give ensilage of highest quality.

I have been growing corn for thirty-five years in the Ottawa valley and have never had a failure yet. If you want a sure crop here it is. Corn is the only crop that can be grown in Eastern Ontario that has never been a complete failure. Last year we came nearest to a failure, and we had 15 tons an acre then.

The next requirement in the cow's ration is variety. Give the cow a change. Would you suggest ensilage to-day and roots to-morrow?

Not at all. That is not the way the cow likes variety. She likes it at each meal. A sudden change is not variety. Lend variety by including in the ration as many feeds as possible. Many give ensilage in the morning and roots and wheat straw at night each day, and this, too, affords variety.

A good meal ration has some variety. I have found that if you mix meals in proportions best suited to the amount of milk given by each cow, say, one-half gallon to a large producer or one-quarter to a cow not producing so much, a good proportion of oats and one-quarter part bran, you have satisfactory rations. Give the cows producing less milk less of the expensive feeds.

#### Give Best Feeds in Morning

In the morning give the feeds that are acceptable to the cow. When hungriest give things she likes best and she will make the best use of them. At night give less of the acceptable feeds, and she will pick it over during the night.

The next requirement in the ration is flavor. We can add flavor to feeds by being careful how we handle them. Take first class clover and stack outside exposed to the rain. It is not acceptable. Clover stored wet which becomes heated and moldy is not acceptable. It has lost flavor. I would advise cutting the hay on the fresh side. Cut the clover before you see a dead head, a few days before anybody else. Cut the timothy when in bloom. There will be almost as many pounds of hay as if left longer, and there will be more pounds of digestible feed. By leaving for a longer time before cutting you may gain five pounds in weight but lose 10 pounds real food, as this food will turn to indigestible fibre.

#### In the Glow of a Good Lamp

A. C. Gorton, New Westminster Dist., B.C.

TIME was when I envied city people the home conveniences that seemed to happen just naturally in the city, but which could not be got in the country except at great outlay. Chief of these conveniences was electric lighting. My memory extends back to tallow candle days. In my boyhood oil lamps were not unknown, but they were considered very dangerous, and candles were still the standby. We did not read very much in those days; we went to bed early. As I see it now we retired early because our living-room was so dark as to be dull and cheerless. Oil lamps were better than candles, but still there was not enough light by which to read easily or to make the atmosphere cheerful.

As I write this letter to Farm and Dairy, I have a light that makes me

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The Silo is Solving the Succulence Problem

"Every man of us should have a silo. Every good man of us already has a silo." So says J. H. Grisdale, Director of Dominion Experimental Farms. The silo illustrated is in connection with the new sanitary milk barn at the Central Farm, Ottawa, where a herd under Mr. Grisdale's direction is fed according to the principles laid down by him in the adjoining article.

\*Photo courtesy De Laval Supply Co.

\*Synopsis of an address by Prof. J. H. Grisdale, Central Experimental Farm, Ottawa, before the Eastern Ontario Dairymen's Association Convention held at Cornwall in January, 1914.