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FARM AND DAIRY



We Welcome Practical Progressive Ideas

& RURAL HOME

The Recognized Expert 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.

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No. 27

Summer Feeding of the Dairy Cow

Experimental and Practical Evidence as to its Value

CANADIAN dairymen have long been accustomed to hail with joy the time when the cows are "turned to grass." It means the end of many laborious morning and evening chores. True, the milking still has to be done, more of it than in winter on most farms, but the feeding and stable work are regarded as over or the season. There was a time when this system of dairy management was advisable. Now conditions are changing and dairy farmers, perhaps slowly and unwillingly, for none of us welcome extra work, are increasing the attention that they give to their cows during the summer months. The old system of spending the summer growing feed for the cows in winter, while these same cows were half-starving on dry pastures, is no longer profitable.

One of the greatest factors in this changing system of summer management is the improvement in our dairy herds. The cow that did not inherit productive capacity sufficient to produce more than 5,000 lbs. of milk in a summer season, was kept at the greatest profit where the output on her behalf was least. The well bred pure or grade cow of today, however, capable of producing from 8,000 to 15,000 lbs. of milk in a year, must be given proper nutrition every one of the 365 days in the year if she is to yield the greatest profit. Another factor that is bringing about a change in our system of management is the increasing cost of land; cheap pastures in many sections are already a thing of the past. Still another factor is the milk contract, calling for a uniform supply of milk the year round. Hence the tendency is all towards more summer feeding, although there are still many intelligent farmers who question if it is profitable.

Experimental Evidence

There is little in experimental evidence to make the doubtful one enthusiastic over grain feeding in connection with pastures. At the Cornell Experimental Station, for instance, some years ago the utility of feeding grain to cows on pasture was studied in the Station's own herd. In the first trial, cows receiving grain while on luxuriant pasture, gave less milk but an equal amount of fat with those getting no grain on the same pasture. The following season with the pastures luxuriant, except for a short time in midsummer, the lot receiving grain and that without grain did equally well. In the

third trial, both lots were soiled with grass, one lot getting grass only while the second received grain in addition. In this trial the grain-fed cows gave just enough more fat to pay for the grain received.

The Station authorities followed up these tests with one that was more practical. They took a herd of 16 cows belonging to a neighboring dairyman, which had been fed lightly during the winter. The cows of lot one were fed four quarts of grain daily and a mixture of two parts corn meal, one part wheat bran, and one part cotton seed meal by weight. The other lot received no grain. When the pastures became poor, both lots were fed green fodder corn and

fat. Again too small to pay for the grain fed.

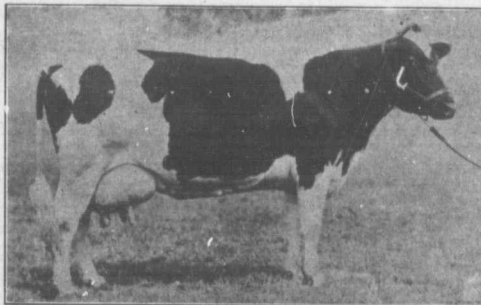
From all the experimental evidence on hand, we may conclude that where pastures are luxuriant, there are no profits from feeding cows grain. It should be noted, however, that in all of these experimental tests, the cows had ample pasturage, some of the pastures being described as "luxuriant," and when the pastures grassed failed, they were supplied abundantly with soiling crops. The experiments, therefore, did not apply to conditions on the average farm where the pastures are dry perhaps for a couple of months each year, and where soiling crops are not supplied. This factor explains, too, why many practical dairymen are so emphatic in the re-

belief that the feeding of grain does pay. Two progressive dairy farmers in Peterboro county, for instance, kept careful tab on the money spent for grain when pastures were dry and soiling crops had not been provided, and they found that for every one dollar invested in grain, the increased milk yield netted them three dollars. This is an exceptionally high return, but other dairymen have reported returns of \$2 to \$1 in favor of grain feeding on short pastures. In previous issues of Farm and Dairy, such leading dairymen as Wm. E. Mason, Alex. Hume, R. M. Holby, and R. W. Walker have all testified to the satisfactory returns from feeding grain when pastures are short.

Grain Not Ideal Supplement

Grain, however, is not the ideal supplement for summer pastures. A combination of grain with soiling crops, or, better still, grain with summer silage, is more economical and desirable. Recently one of the editors of Farm and Dairy sent a couple of days in the district supplying milk to the Tillsonburg condensery. For miles around, the country bore a prosperous appearance, and that prosperity came largely through dairying and dairying at these factory prices, for the condensery has been running but three years. It is logical to assume, therefore, that the feeding practice in such a prosperous dairy community must be about right from an economical standpoint. These milk producers should be able to testify as to their profitability of summer feeding.

Mr. John Simmons, just across the line in Norfolk county, milks 20 to 25 cows, which average him at the condensery \$100 to \$125 each year. The profits from his herd have largely



The Princess Pride Johanna Rue, 121063, the Newest Queen of the Dairy World.

The world's record for butter fat production has been broken no less than four times in the past few months. The new record of Princess Pride Johanna Rue, owned by the Somerset Holstein Breeders Co., Somerville, N.Y., is 25,037 lbs. of milk containing 1,176.47 lbs. of butter fat, and she is about as good in conformation as in production.

later green millet. As a result, lot No. 1 were fed 5,200 pounds of grain and gave 4,931 pounds of milk more than those getting no grain, or 28 per cent. This lot also showed the greatest gain in weight. At present prices for grain the experiment could not be considered a financial success, although at the time it was conducted it was not reported on favorably.

Experiments at other Stations are no more convincing. In Kansas 10.8 and 12.5 pounds of corn meal, bran or oats were fed daily to cows on "ample pasturage consisting for the most part of orchard grass and red clover." The increase in milk fat amounted to 16 to 31 per cent., not sufficient to pay directly for the feed supplied. At North Dakota bran and shorts were fed to cows grazing on good pasture, with an increase of only six per cent. in the yield of