

Science and Practice in Dairying

"Professor at the Milking Stool"

The time is about to come when the question will be asked very frequently, will it pay to feed cows grain, bran, or any other concentrated feed? For the most part, pastures have been good up to the present, but nearly everywhere we have good, the cows seem to be very thin in flesh and on many of them it is to be seen the old hair which ought to have been shed in the spring and would have been shed if the cows been in good condition when turned out to grass. Owing to the scarcity of feed during the past winter, false economy, with reference to feeding cows, was practised by many of our dairymen. The principle of feeding a cow when dry, so that she may build up her system cannot be emphasized too often nor too strongly. Owing to the thin condition of cows and the probable high price of dairy products, the question of feeding cows some extra feed during July and August is of more than usual importance. While it is never safe to prophesy regarding price of dairy goods in the future, all signs indicate an unusually strong demand for milk, butter and cheese during the year 1908. In order to meet this probable demand and receive the benefit of the accompanying high prices, farmers ought not to allow their cows to shrink in yield of milk because of drying pastures. It is a well known fact that once cows go down in their

milk through lack of food, it is almost impossible to bring them back again to their normal flow.

THREE WAYS TO SUPPLEMENT PASTURE

There are three ways of supplementing the pasture crop, viz.: by the use of soiling or green crops; by feeding silage made from corn grown last year; and by the use of meal or other concentrated food, such as bran, oil meal, cotton seed meal, or one of the many prepared feeds now sold to dairy farmers.

At the West Virginia Experiment Station, three tests were made with 12 cows divided into two lots, one lot received grain in addition to pasture, and the other had grass only. In the first test of 28 days, the cows produced 352.75 lbs. more milk when fed grain in addition to pasture, but they ate 1,008 lbs. grain, costing \$12.60 making the cost of the extra milk 7.6 cents a quart. Unless a high price were received for the milk, it is evident that in this case, the extra milk was produced at a loss. In the second test, the results were more un-economic as the extra milk by feeding grain cost \$1.1 a quart. The third trial resulted in a greater cost still, or 15 cents a quart for the extra milk produced by grain feeding.

In the summary, the author of this bulletin says, "This experiment clearly shows that there was no direct financial gain in feeding grain to the cows while at pasture. It is true that the cows which received grain were uniformly in somewhat better flesh than those that did not receive grain, but as far as the milk yield was concerned, the increased flow was produced at a loss."

A PROLONGED AFTER-EFFECT

Doubtless, the foregoing deduction is correct for this particular experiment, so far as direct cost of production is concerned, but the extra condition of the grain-fed cows probably made an increased yield of milk later on, or at the next lactation, more than would offset the apparent loss. Many dairymen follow the plan of giving the cows some meal throughout the year and claim that they are more than paid for the extra cost by the improved appearance of the cows and more persistent milk flow. That this is more than likely to be the case with the average herd is indicated by an experiment conducted at the Cornell Station, Ithaca, N.Y., where a herd of cows belonging to a private person was selected for a similar experiment to the foregoing. The

herd was not accustomed to any grain in summer and very little in winter, which is the too common lot of "average" herds in both Canada and the United States. The herd was divided into two lots—one of them fed grain in addition to pasture and the other received no grain. The lot fed grain consumed 1,300 lbs. wheat bran, 1,200 cotton seed meal and 2,900 lbs. corn meal. This lot averaged 13.4 lbs. milk a cow daily. The other lot, with no grain, gave an average of 14.4 lbs. daily. The milk of the lot with no grain was constant and well-marked increase in the yield of lot 1 which received the grain. This increased milk yield amounted to the almost exactly 5,000 lbs. milk for the eight cows during 22 weeks. The grain cost about \$71.50, making the increased milk yield cost slightly more than three cents a quart. When the milk is retained in five or six cents a quart, grain feeding, as in this case, would be a paying proposition. The lot fed grain gained on an average, 53 lbs. more in (live) weight during the test than did those without grain."

IN FAVOUR OF GRAIN

But this is not the whole story. The Cornell station got the record of these cows the following season and for six months. In this case, the lot which had received grain the previous year gave 480.3 lbs. more milk a cow than did those which had not received grain. This gain represents an increase of 16 per cent. in favour of the grain-fed lot, which was in large measure due to the grain fed during the previous season. This was more particularly the case with the younger cows. The writer says: "It was plainly evident that the grain-fed two-year-olds and three-year-olds developed into better animals than their stable-mates having no grain."

We should strongly advise the feeding of from two to four lbs. grain a cow daily during July and August, believing that it will pay in extra milk and increased thrift; also be a step in the general improvement of the dairy herd. All these things tend to cause an advance in the milking power of a herd. This pays either directly or indirectly.

Cattle on Highway

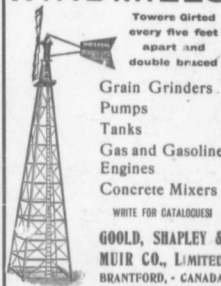
In a township where cows are allowed to pasture on the road, when accompanied by a herdsman, has any farmer the right to set his dog on the cows and drive them past his place? If not, is the herdsman liable if he has a gun and shoots the dog? This is the best way to stop the trouble.—J. H. Westworth Co., Ont.

A Township Council may pass by-laws allowing cows to run at large on the highway, and may make provision that such cows must be accompanied by a herdsman.

When cattle are thus running lawfully at large it is unlawful for any person to set dogs after the cows, and the herdsman must take reasonable precautions to prevent the cows being injured by a dog, and in extreme cases he might even have the right to shoot, but we would not care to commiserate just then, and just when he should not, exercise such an extreme right. The carrying of fire arms is surrounded with so many restrictions that the herdsman would be liable to legal penalties for carrying a gun, and we would suggest either using a club on the dog, or if necessary applying to the court for an injunction restraining the owner of the dog from inciting the dogs to chase cattle.

Protecting Turnip Seed.—To protect my turnip seed, against the fly, I mix a teaspoonful of coal oil with every four pounds of turnip seed. The mixture is stirred thoroughly and left until it is fit for sowing, which is about two hours. If more coal oil than the amount mentioned is used it becomes difficult to get the seed dry enough for sowing. I have prepared my seed twice this way with excellent results. Formerly I used to have considerable trouble with the fly. Several of my neighbours are also protecting their seed in this way.—R. M. Loveless, York Co., Ont.

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