

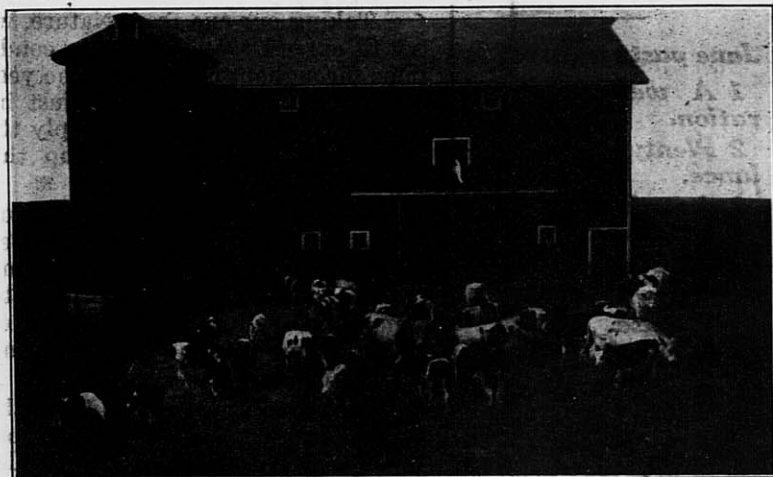
WISCONSIN BANKERS' FARM BULLETIN

The Winter Feeding of Dairy Cows

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OUT OF REACH OF WINTRY WINDS.

In feeding and caring for his herd the successful dairyman tries, at all times, to imitate summer conditions. He shelters well his animals from the storms of winter and he strives to supply them with feed closely resembling that furnished by June pastures.

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The Winter Feeding of Dairy Cows

The profitable feeding of dairy cows consists in supplying them with plenty of well-balanced, palatable feed in surroundings which afford them health and comfort.

Nature Feeds Dairy Cow Best. Nature gives us a model in the month of June and this is recognized to such an extent that the very words "June pasture" suggest the ideal condition for producing milk and butterfat of the highest quality and in greatest abundance.

Imitate June

June pastures provide

1 A well balanced ration.

2 Plenty of succulance.

3 An abundance of fresh air and sunshine

4 Pure water.

5 A normal amount of exercise.

Taking our cue from Nature, we try to extend these favorable conditions throughout as much of the year as possible and we succeed just in-so-far as we recognize and apply the factors which go to make up this ideal condition.

In the first place, our common grasses supply all of the required nutrients in the right proportions. Besides, this forage is relished by animals to such an extent that they will consume it almost to the limit of their capacities.

Then again, pasture grasses are succulent, and so keep the digestive system of the animal in a laxative condition favorable for the very best action of the organs of digestion and assimilation. And we must not forget that animals on "June pasture" are supplied with an abundance of fresh air and sunlight, not to mention pure water at will.

Adapt Methods to Conditions. In practice we must adjust ourselves to conditions of climate, soil, location and capital which in turn are affected by market for products and the help available for the care of the herd.

What would be wise practice for one man may be folly for another which shows that each should think through his own problem for himself. And it is certainly worth some study if he can make a pound and a half of butter where but one was produced before—especially if the first pound was made without a profit and the extra half is nearly clear gain.

Take An Inventory of Home Grown Feeds. Winter conditions bring their own problems and difficulties but there are also

some possible advantages. While the herd has to be kept under artificial conditions, these are usually more likely to be under the control of the feeder than is possible at other seasons.

In place of the ration prepared already for use by Nature we have to supply feeds from various sources which will answer in its stead. We have to furnish nutrients, bulk and succulence and go about it somewhat in this way: We first consider what is available in the form of roughage, for upon the quality of this will depend the selection of the concentrates, or grains, intended to balance up the nutrients and supply them in sufficient amounts.

One Good Ration For Dairy Cows

**Silage - 25-45 lbs.
Clover Hay 10-15 lbs.**

Grain Mixture

Wheat Bran	30 parts
Ground Oats	30 parts
Corn Meal	25 parts
Cotton Seed Meal	15 parts

**One pound of grain
mixture for each 3 to
4 pounds of milk
produced**

Clover, alfalfa, or clover and alfalfa hay are best, but of course, mixed hay and corn stover may be fed if these are not available. Alfalfa hay, being richer in protein, is perhaps most desirable as a portion of the roughage and permits a saving in high-priced grains. The grain portion is made up of a variety of meals, chops and by-products selected according to needs of the cows and market conditions.

Considerable judgment is required to get best results and the feeder must know both his cows and something of the effects of the feeds to be used. For instance, corn meal is a good feed but a good dairyman would not think of feeding it alone. The same is true to an even greater extent with oil meal, cotton seed meal or other high-protein feeds, but when one of these is mixed with the heat producing corn meal and other farm

grains to make a mixture having about the same bulk as well-ground corn and oats equal parts, the ration is improved in balance and is in suitable form.

Alfalfa or Clover Needed for Home Grown Ration. Without alfalfa or clover hay in the roughage, it is difficult to make a satisfactory and economical ration entirely from home grown material and very often the farmer can exchange some of the home grown grain for a by-product that will replace a portion of it in the ration at less cost and with actual improvement.

It is not best to feed cows more than they will eat up clean but if grain is left when it would seem that no more than enough is being fed, it will be well to try to find out if any portion of the mixture is not relished and then modify the ration to suit the taste of the animals.

Summer Succulence in Winter. Succulence must be fur-

nished if we are to have anywhere near an ideal ration. The silo solves the problem best and from all points of view silage is to be preferred. The second choice would be roots. These are quite satisfactory either alone or as supplementary to silage and by all means should be more generally used than at present. Lacking either, it is important to secure similar effects through the grain ration with the help of alfalfa or clover if available. In this connection oil meal is of great value because of its well-known laxative qualities coupled with its high protein content.

In the absence of silage or roots a grain ration something like the following may be used:

Bran	40 parts
Ground oats or barley.....	20 parts
Corn meal	20 parts
Oil meal	20 parts

Constipation is an obstacle to the efficiency of any animal as well as a menace to its general health. It is surely better to prevent ills by attention to ordinary rules of hygiene than to resort to the "dope" bottle after the damage is done.

Most dairymen have found that it pays to make use of the scales for weighing the grain for each cow and the milk from each milking. It is usually admitted that occasional weighing is worth while as showing whether a cow is a "boarder" or not but only those who have tried it realize the value of a complete milk record to the feeder. The first symptom of something wrong often appears on the milk sheet and no one who has had much to do with a herd needs to be told that in such cases the time to nip trouble is in the bud.

Feed to Make Milk. It will be inferred that no hard and fast rules can be laid down as to mixture or quantities to be fed. Much must be left to the judgment of the feeder and much depends upon the individuality of the animal, stage of lactation, etc. It is a safe rule to feed 10 to 15 pounds of hay, 25 to 45 pounds of silage or 30 to 50 pounds of roots, varying the quantities according to the size and capacity of the cow. In addition one pound of the grain mixture should be fed for every three or four pounds of milk produced. If a cow tends to fall off in production without gaining in body weight it would seem that she is not eating enough but if she gains in weight at the expense of production it is apparent that she needs more protein, relatively, in her ration or,—that she is the wrong kind of cow. A good feeder will not let a cow run down and become too thin. If she tends to "go too much to milk" she can stand a wider ration, that is more fattening feeds in proportion to those richer in protein.

If we study our cows closely and remember that our "June pasture" ideal included also fresh air, pure water, sunshine and liberty of movement, we will be able to realize better results from winter dairying than we ever have in the past.