

times it follows as a sequel to other diseases. One very common predisposing cause is weak feet. A horse with a good strong foot will not develop laminitis if used in an ordinarily careful manner, but in a horse with naturally weak feet very little troubling cause is often sufficient to set up the trouble.

SYMPTOMS

If both front feet are affected the animal will be almost unable to move but will stand with his hind legs drawn forward under the belly and the fore limbs extended forward in order to throw the weight of the body as much as possible on the hind legs. If compelled to move he will lift his feet with great difficulty and will sometimes groan with pain, while the body will often be wet with sweat. It will be almost impossible to make him move backwards and if he does so will throw the weight of the affected feet on the heels. Often the patient will lie down and it is difficult to make him rise.

TREATMENT

Gentle purgatives should be administered if the pain is intense. Opium or morphine should be given and the feet should be kept in warm poultices until relief is experienced. In the great majority of cases of this disease, it will be well to employ veterinary assistance as serious conditions often follow a case which has not been properly looked after and which not only renders the horse useless for months but will leave him with more or less deformed feet for the rest of his life and as a consequence reduce his value very much.

Winter Fattening of Sheep

From "Sheep Husbandry in Canada."

The principle of avoiding extreme changes of diet observed by all careful feeders, should be strictly adhered to when the housing season arrives. The daily feeds of hay and grain for a few weeks before winter seals up the ground and renders pasturing unprovidable is a fine preparation for complete hand feeding. As the rape, lucerne or whatever outside crop has been the chief diet fails, roots may be gradually substituted. The hay will have to be increased to all the lambs, and the grain ration may be gradually augmented as well. The chief thing to aim at is to keep the feeders gaining and thus paying for their diet as they go along.

The selection of a grain ration is a matter depending upon the market and the crops grown at home. It is generally wise to avoid purchasing feed if it can be satisfactorily raised on the farm. In planning the sowing of the different fields of the farm in spring the fattening lambs should be provided for as far as is consistent with the suitability of the soil and other conditions.

Oats are peculiarly suited to sheep feeding. This grain is nourishing and safe to feed; it will go well with other grains, and as a crop is easily grown, two parts oats, one part peas and one part bran is a good ration for sheep of any class. Corn substituted for the peas answers well. Towards the end of the finishing period the heavy part of the ration may be increased to fully three quarters by weight. Oil cake is highly valued by many sheep feeders. It may be substituted for the bran, when the proportion of heavy grain should accordingly be diminished. From a half a pound to one and one-half pounds of grain per head per day according to the ends to be attained constitutes a fattening ration, when the coarse fodder used is fed liberally and of good quality. The practice of feeders differs with localities. An extensive feeder, Mr. Thos. Shillinglaw, in Huron county, who buys in lambs and sheep to fatten, in some seasons uses rape and grass as the chief ration. Until the housing season arrives no grain is given, but after that date clover hay and grain are fed and the flock allowed on the rape one hour twice daily until about Christmas or un-

til snow buries the feed. The sheep thrive finely on this diet, and are sold as soon as the rape feeding is finished, as it has been found that satisfactory gains are difficult to secure for some weeks after the rape is done. The grain ration used usually consists of a mixture of oats and peas, oats and corn, and sometimes barley is added. About one pint of grain per head per day in two feeds is the usual rate of feeding. Lambs weighing 90 pounds in October 1st, weighed about 110 pounds at Christmas. These weights constitute the average of 600 head.

In North York, Mr. Robert Somerville raises and feeds about one hundred ewe and wether lambs. In the fall grass pasture is the chief dependence, but either rape or kale is provided also. When taken from the fields lucerne hay and pulped turnips are liberally fed, and a grain ration of oats and barley or peas is commenced at the rate of one pint per day for each animal in two feeds. The lambs are usually finished in January, when sold, weighing about 120 pounds each. The breeding flock consists of Grade Oxford ewes and pure bred Oxford rams. A further discussion of foods occurs elsewhere in this bulletin.

It is of the first importance that for the well-doing of any class of live stock the animals be comfortable. Unless proper precautions are taken sheep are almost sure to be more or less infested with ticks and perhaps the more minute form of vermin lice, a more irritating insect than the former. To rid sheep of these pests they

by the records, and their mating with good bulls of decided dairy descent would give certain results, better cows in every way, without such glaring difference as in this case where the yield of two fairly good cows is more than the total yield of five poor ones.

Feed and Care of Cows

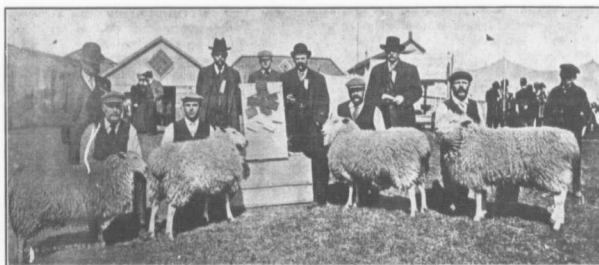
G. H. Blair, Carleton Co., Ont.

The financial success of the dairyman will depend largely upon his ability to feed his animals to profit and advantage. No set rule can be laid down as to what the exact rations of a dairy cow should be. This will depend on the feeds the farmer has at his disposal, and the cheapness with which he can procure those which he does not possess. In every case he should raise all his own rough fodder and as much of the more concentrated foods as he can.

As regards the different foods, our experience has been that ensilage is the cheapest and most economical bulky food at the disposal of the Canadian farmer. He should also have at his command plenty of clover hay and roots, mangel preferred. In most cases also oats and some barley can be grown in sufficient quantities on small Canadian farms.

THE DAILY RATIONS

These feeds, with the addition of some bran, which we have to buy, constitute the rations which we have fed to our cows throughout the winter. We have no fixed standard ration which



Sheep from a flock that has been Very Successful at Local Fairs

H. and N. Allin, of Durham Co., Ont., who own the sheep illustrated, exhibited at seven fairs this fall, and out of 46 first prizes offered, they captured 43, besides seconds and thirds. They have also taken the flock prize wherever shown.

should be thoroughly dipped with one or other of the reliable commercial preparations, which not only destroy the vermin but clean the skin, reducing irritation and unrest to a minimum.

23 Cows or 60 Cows, Which?

C. F. Whitley, in charge of Records, Ottawa

Some of the September records received from members of cowtesting associations show further remarkable variations in different sections of Ontario and Quebec. It is the exception in the Ontario associations to find less than 600 lbs. of milk or 20 lbs. of butterfat as an average yield for the 30 days. In Quebec associations the average yields are almost all lower, though one or two are well up, even to 700 lbs. milk and 26 lbs. fat. One association in Quebec has a total production from 23 cows of 17,800 lbs. milk and 775 lbs. fat, while in another Quebec association just a little less than that is the total production of 60; the 60 cows average less than 300 lbs. of milk.

Twenty three cows in one case, 60 in the other, which kind of a cow would one rather keep? What glowing possibilities are indicated here? Most likely the 60 cows could be made to give better yields if fed better.

The selection of the best individuals as revealed

we feed to the cows, as different cows require different quantities of food and what each will consume is a matter of study and determination for the feeder himself. We aim, however, to feed a daily ration of about 25 lbs. ensilage, 20 lbs. mangels, 10 lbs. hay (clover) and 5 to 6 lbs. of a mixture containing one part barley to four parts oats, with the addition of a pound or two of bran, to an Ayrshire cow weighing about 800 lbs., when oilcake can be had at a reasonable price, we procure a little of it and feed one-half pound a day to a cow. This ration is fed in cows in full milk, and if she is seen to leave any uneaten food in the manger, her bulky food is decreased and her meal ration left unchanged. The cows are fed half their hay the first thing in the morning; after milking they are given their ensilage and ground feed. About 10 o'clock the full daily ration of foods is fed, and from then until five in the evening they are left practically undisturbed. Then they are fed their ensilage and hay and last of all the grain by itself. We find that the cows are less restless when not fed at noon as their period of digestion is not broken into and they appear to respond by giving a larger yield of milk.

Some city milk dealers have an aversion against milk from ensilage-fed cows, claiming that that milk is tainted, but as the opinions of many but-

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