

for the purpose of carrying on the work. Farmers who wish to adopt the method, and who will agree to comply with all its conditions, can have their herds tested free of charge. Provision is also made for partial compensation for animals slaughtered. With this assistance, the farmer is enabled to clear up his herd with a comparatively small expenditure of money, the cost for small herds of 25 to 30 animals being under \$100.00 according to the statements of several Danish farmers. The method involves a good deal of extra trouble, however, which is probably the main factor in hindering its more general adoption.

ADAPTED ONLY TO THE BREEDER.

There are several points which stand out prominently in connection with Bang's system. It is a method adapted only to the breeder, since it calls for the renewal of the herd by breeding and rearing healthy stock. The dealer, that is the man who is constantly buying new animals, would scarcely find it practicable. It is necessarily a slow process, and the man who undertakes it must be prepared to exercise patience. It calls for unceasing care and vigilance, perhaps, more than the average man can be expected to practise. It calls for the expenditure of more or less money, and involves a very considerable amount of extra labor.

There are certain facts, however, which should be considered in connection with the question. The problem of dealing with tuberculosis is attracting more attention now than it ever did in the past, and the chances are that it will attract more attention in the future than it does at present. In connection with the problem, the question of pure milk supply has received some consideration in the past, and is likely to receive more as time passes. It is quite probable, therefore, that the dairyman who starts betimes to rid his herd of tuberculosis, may have reason to congratulate himself upon his foresight. In addition to this, the animals and products from a herd that is known to be healthy should command a premium over those from doubtful herds, and it has been demonstrated in Denmark that the cows retain their usefulness for a longer period in those herds which have been cleansed. Here, then, is some compensation for the expense and trouble which the system involves.

SYSTEM CALLS FOR VOLUNTEERS.

The Bang system is not one which can be forced upon a people, but it calls for volunteers, and the Denmark Government encourages volunteers by giving financial aid. This is surely a wise use of public money, where so much is at stake, and is vastly more economical than the wholesale slaughter of reacting animals, such as we have sometimes seen in the past.

Space will not permit of the full treatment of the subject, but enough has been said to give a reasonably clear idea of the Bang method. From results achieved in Denmark, we are forced to the conclusion that the method has great possibilities, and is worthy of full investigation. One thing is certain, it could scarcely be carried out without financial aid from the state, but the cost to the country would be a very trifling matter in comparison with the importance of the undertaking. Those of us who are interested in the live stock industry should make it our business to become fully informed regarding the practicability of the method proposed by Professor Bang.

In conclusion it may be noted that the Bang method has been tested in several American herds and the results up to the present are very encouraging.

Farm and Dairy is a very practical and helpful farm and dairy paper and should be of value to any Canadian farmer. I cheerfully recommend it to any farmers in my district who I think might subscribe.—Horace W. Parker, Kings Co., P.E.I.

The Culture of Fall Wheat

H. Johnson, Middlesex Co., Ont.

Little time should be lost in preparing land intended for fall wheat. The summer fallow, once thought to be the only place for wheat, and which affords an excellent preparation has gone very largely out of use in Ontario. Land that has grown a crop of peas is generally in a fine condition to be followed by wheat. Peas, however, of late years are not grown largely in many sections. The clovers are grown everywhere and a red clover or alsike sod turned down by plowing lightly makes probably the most satisfactory situation that is available for wheat. It should be plowed early, rolled and harrowed to cause the sod to rot quickly. Cultivation at frequent intervals with the broad pointed cultivator and harrows, will be beneficial and will tend to make a fine seed bed. Barley land possibly makes the next best place for wheat. It should be plowed early in order that a firm bottom may be obtained. Sow during the first 10 days of September.

On land that has been properly underdrained, there will be no need of plowing it up into high ridges. The level cultivation is to be preferred. The drains will take care of surplus water. A top dressing of manure is of great benefit if applied evenly after sowing. The manure spreader is adapted for this work. It will generally give



"Alice Hochstulds De Kol" calved May 19th at 25 mos. In the 30 days of June she gave 155 lbs. of milk, giving as high as 49 lbs. in one day. She is owned by G. A. Brethen, of Peterboro Co., Ont., one of the competitors in the Dairy Farm Competition. Photo by a Special Representative of Farm and Dairy.

the best results if applied before the wheat is sown. The sooner a field that is intended for wheat is plowed, and the more it is worked, the greater is the amount of water the soil will hold, which water will be made use of when the seed is sown. Wheat sown in the fall of 1908 showed marked results in favor of the early plowing.

Some Pointers Concerning Alfalfa

Hy. Glendinning, Ontario Co., Ont.

Probably 75 per cent. more alfalfa hay has been cut in Canada this year than ever before. The largest number of acres sown in one year was in the spring of 1909. The first crop has been saved in fine condition, as weather conditions in most sections were favorable.

That some mistakes have been made and that some disappointments have occurred is only what might be expected. Complaints are heard from some that they have lost a large quantity of the leaves. This may result from several causes. If the plants are very thick and the crop heavy the leaves on the lower part of the plants are shaded from the sun, which causes them to turn yellow and fall off. The most common cause for the loss of leaves is allowing the fresh cut plants to remain too long in the sun after cutting, without tedding. The leaves become dry and shriveled while the stalks are green and sappy. In this condition the leaves drop off readily and it makes the hay more difficult to cure, as the leaf is the organ that nature provided for drawing the sap from the plant.

Alfalfa should be tedded every two or three

hours before raking into windrows. During the present season, owing to the dry time, we did not find it necessary to coil our alfalfa. We tedded the windrows lengthways two or three times and used the hay loader for putting it on the wagons. This made hay of the finest quality. Another cause for the loss of leaves is that of allowing the crop to mature too much before cutting. It should be cut just as it is coming into bloom, when there are probably one-tenth of the blossoms out. The second crop should be cut when the bloom is at the same stage as for the first cutting.

SECOND AND THIRD CUTTINGS.

The second cutting this year will be heavy and if the weather is favorable the third will come on rapidly. Great caution should be exercised about the third crop this season. Owing to the backward spring the first cutting was from two to three weeks later than it has been for some years. New beginners in growing alfalfa may be easily led astray by seeing the rapidity with which a third crop is grown and conclude that if they cut it for hay the crop will be a fourth crop sufficient to cover the land and hold the snow during the winter. In this they are likely to be disappointed. A few cold days and nights will change the whole thing. Alfalfa is a rapid grower when the weather is warm, but a very poor grower in the fall when the weather becomes cold. If there is an apparent waste in leaving a heavy third crop on the field to go into winter, it may prove to be the most profitable crop of the season, as it is likely to be instrumental in bringing the plants through the winter in good condition. The most unprofitable and dangerous thing to do is to pasture off this third crop. There are few sections in Canada where it can be pastured in safety.

The Perennial Sow Thistle

S. A. Northcott, Ontario Co., Ont.

The editorial entitled "Sow Thistle must be checked," in Farm and Dairy Aug. 5, I can strongly endorse as not exaggerating the situation with regard to the perennial sow thistle in Durham and Ontario counties. Sow thistle has been gaining ground till some fields are infested to such an extent that the grain crop is entirely choked out. Low lying lands and farms which have been rented for a number of years are most infested.

Compared with other weeds, sow thistle heads the list of bad weeds ever known in this section. Canada thistle and wild oats are tame when compared with sow thistle, which is propagated both by root and seed and the seed being winged will fly for miles and infest farms at a distance as well as those adjoining. It is evident that it is impossible for any farmer to keep entirely free from sow thistle when other farms, either far or near, are infested like the sections mentioned. This weed is as yet a perfect stranger to farmers in some localities, but unless there is co-operation to prevent the weed from seeding, everyone will know it to their sorrow in a short time. Something must be done to check this foe. It appears that the best way would be for the Ontario Government to follow the course suggested by Farm and Dairy of Aug. 5th, namely, adopt Manitoba laws regarding this weed.

If the weed was prevented from seeding and excidants made more favorable for the growth of crops the roots could soon be killed. Underdraining wet places is a move in the right direction; low, wet land is unfavorable for grain crops and is an ideal spot for sow thistle. Hoed crops will check the weed but will not kill it unless persistent hand hoeing is practised near the plants where the cultivator cannot be used. In badly infested fields this method seems impracticable. The crop, whether grain or hay, should be cut early and the ground plowed shallow as soon as possible, and plowed or cultivated with the broad-shared cultivator for the remainder of

the season appear as well cultivated backwoods. There were some seedling, until such time be discon-

Farm

General agriculture who use and Dairy Peterboro this farm enough to Garbutt's relations to in the region petition the dairy. The cows are horns. Some appear to be milkers. percentage are registered speaking of the Mr. said that he tried to keep milkers, all good ones from to raise his. Thirty-eight all are kept. time of our seven were

The cattle are dantly provided on a large range, implemented, it by a soiling grown in a pen convenient for sent to the very suitable. Fall wheat, in the ratio peas, 12, hay wheat, all the

Mr. Garbutt considers an A stave silo the demand kept, provided is 24 feet high of an eight of corn are Learning. Com varieties, mixed to the field rest and corn only about 1000 cultivation, he believing it to and one of the on the farm. And in this available land on

Although some hood are being Garbutt has been checked. On some troublesome. It is trouble crop.

Some of the suited for sheep cupped an impo this farm, but