

of the Irish blight in potatoes are destroyed when the tubers are kiln-dried, and that the germination of the seed subsequently is not affected.

J. S. DUNNET

American Dairy Shorthorn Association.

Americans are nothing if not opportunists. Recognizing the growing demand for dual-purpose cattle rapidly arising within the United States, due, in part, to the disappearance of the large-range conditions, under which beef could be grown cheaply, a body of breeders met on the Vermont State Fair Grounds, Sept. 22nd, 1910, and organized the American Dairy Shorthorn Association. In the constitution it is clearly set forth that it is not intended to establish any separate herdbook, but that the aims are to promote the interest of the Dairy Shorthorn by securing classes at fairs, giving prizes, recommending judges, encouraging and publishing records, and conducting tests. The purpose is surely a laudable one. One has but to read a little of the early history of the breed to discover that by many of the founders of the improved Shorthorn milk and meat were equally considered. The modern improved Shorthorn, which is almost wholly a beef animal, received its impetus from Cruickshank very largely. However, there are those who have never lost sight of the dairy function, although they have been obliged to stay out of the modern showing. Thus, there are such cows as Lulu, that made 12,341 pounds milk and 606 pounds butter in one year; Mamie Clay 2nd, that made 13,232 pounds of milk; and Rose of Glenside, that in semi-official test gave 18,075 pounds of milk in one year.

The milking Shorthorn is likely to come into her own shortly; for meat we will have for a few generations yet, but not by meat alone can high-priced farms be made to pay.

The executive officers of the association are: Leland D. May, Granville Centre, Penn., President; W. A. Simpson, Lyndonville, Vt., Secretary and Treasurer.

Sheep and Silage.

While succulence is not considered so important in the winter feed of sheep as in cattle rations, and particularly the rations of dairy cows, there is data on record pointing to the conclusion that a moderate percentage of succulent feed is of distinct value in the winter ration of breeding stock. In the British Isles, climatic and labor conditions are particularly favorable to the supply of this characteristic in the ration by the production of root crops, upon which the sheep largely exist. But with us these conditions are scarcely as favorable, and the amount of labor required in the growing of roots prevents their general liberal use. As a consequence, a desirable, more easily produced substitute has been found in silage. It is largely used in feeding dairy cattle, becoming generally used for beef cattle, and, to a considerable extent, is being used for sheep. However, there has been more or less unfavorable experience in feeding it to sheep, and a good many people are chary of using it for such purposes.

The Indiana Experiment Station has recently issued the results of three years' careful investigations into the adaptability of silage as a feed for sheep. Three purposes were kept in mind, viz: The uses of silage as a feed for (1) pregnant ewes due to lamb in March, (2) ewes with fall lambs at their side, (3) young lambs prior to weaning. To one lot of pregnant ewes for three winters was fed oats, mixed hay and silage, while to a corresponding lot was fed oats, mixed hay and corn stover. For the second and third winters, a grain mixture, with clover hay and silage, was fed to one lot, while to the other a similar ration, lacking the silage, was fed. Each lot was fed all the hay it would clean up. The amount of silage during the first winter was limited, since some doubt as to its safe use was entertained. During the second winter the ewes ate nearly four pounds of silage per head per day, and during the third winter over 4½ pounds. No injurious effects were evident from the free use of silage. The ewes evidenced a more vigorous appetite, and seemed healthier. They made larger gains than those on dry rations without in any way impairing their maternal functions. They ate 7.06 per cent. less grain, and 32.25 per cent. less hay or stover, thus being wintered more economically. The average birth weights of the lambs in the silage lots were consistently heavier, and the ewes seemed to milk better.

FOR EWES WITH FALL LAMBS.

For two years, flocks of ewes with fall lambs were wintered on a grain ration with clover hay to one half of them, while to the other half silage was added. Rapid gains for the lambs and a maximum flow of milk being the main objects sought, all the hay, silage and grain were fed

that would be consumed readily. Averaging the results of two years, the ewes fed silage were found to be much thriftier, and yielded more wool than the others. The lambs in the silage lot gained 16 pound each daily, and those in the no-silage lot .47 pound. The ewes with fall lambs receiving silage ate 4.82 per cent. less grain, and 29.86 per cent. less hay.

All of these facts go very clearly to show the value of silage to the shepherd. The investigators state that, after the close of the feeding trial of winter lambs (in the warm spring weather), four lambs died, due, in their opinion, to the eating of decomposed, spoiled silage.

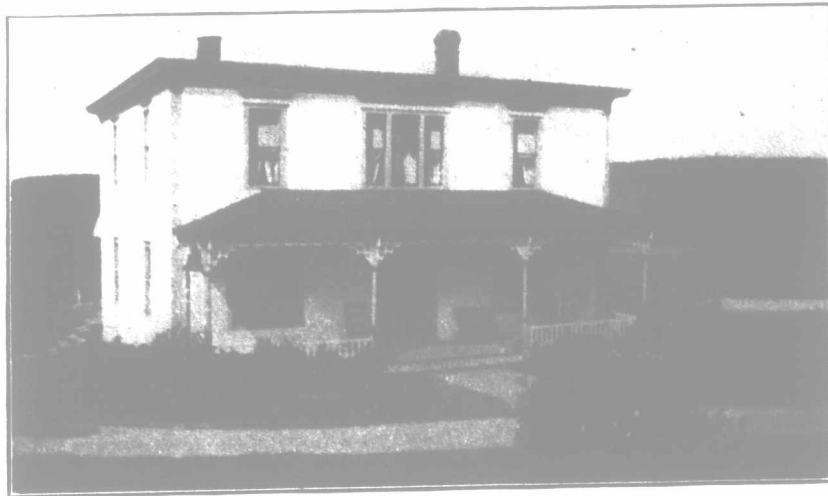
The point principally brought out in these feeding trials is that silage may be safely and profitably added to even a clover hay and grain ration for pregnant ewes, or for ewes nursing winter lambs.

THE FARM.

Goose Lake and Its Mud Industry.

By M. G. MacNeil McWhirter.

The traveller along Bay Chaleur is struck by the beauty of the scenery. The diversity of the landscape, backed by high mountains, is very picturesque. Thriving settlements are scattered on the coast. Sixty miles from the mouth of the Bay is New Richmond, bounded on the east by the Little Cascapedia River, and on the west by the



A New Brunswick Farm Home.

Residence of David Porter, King's Co., N. B.

Grand Cascapedia. These two rivers are famous for salmon and trout; while the forests which extend at the rear of the settlement abound with moose and caribou, animals much sought after in their season.

New Richmond has rich lumbering industries, which give employment to many persons at all seasons of the year.

Agriculture is, however, the main occupation of the inhabitants. The farmers are industrious, possessing good farms well stocked.

All the latest improvements in agricultural implements, as binders, mowers, hay tedders, loaders and manure-spreaders, have been introduced. Large crops of hay, grain, potatoes, turnips, etc.,

are harvested. These rich crops are the result of the manure which the farmers use upon their land.

A considerable part of the dressing is the mud which is found in Goose Lake. This piece of water is situated midway between the two rivers, and three miles from the seashore. The lake is a mile long by three-quarters wide at its widest part, while no more than one hundred and fifty yards at its narrowest. It intersects several of

the farms, and so by right of possession a part of the lake belongs to their proprietors.

Goose Lake received its name from the large number of geese which, years ago, being frightened by persistent gunners or heavy gales of wind, flew inland and sought refuge in this lake in the woods. However, even in this secluded spot danger lurked. It was no uncommon occurrence to see the farmers in the vicinity slip back quietly, and return, each laden with five or six of these coveted birds.

It was a long time before the settlers discovered the value of the sediment in Goose Lake. At one place a white mud or marl is found. This made an excellent whitewash.

At last Narcisse Le Blanc carried home a basket full of mud, and sprinkled it upon a corner of one of his fields. I do not know what results were expected, but the difference in the growth on that spot was so marked that next year the old man used more; so gradually the neighbors found it out, and many followed his example.

Narcisse, in his broken English, gave rather obscure directions regarding its use. Said he: "When you want to put that on your land, spread it so thin you can't put it."

So easily was the mud obtained that one man told me he often threw up with his shovel as many as fifty sleighloads in a day. After a time this became dangerous, on account of the increase in depth of water. Several persons were nearly drowned, so it became necessary to find other methods of securing the mud. Before long a mud-digger was obtained, and gave good satisfaction.

The digger is a simple machine, consisting of an upright frame with an arm. Behind this is a capstan; a chain is attached from one to the other, and wound up by a horse making from three to six revolutions, according to the depth of water.

A hole is cut in the ice, fifteen feet long by six feet wide. The shovel is large enough to hold half a barrel of mud; its wooden handle is twenty feet long. To a ring in this handle the chain is fastened. Two men guide the shovel, a little boy attends to the horse. The capstan does its work, and ere long up comes the shovel of mud; it is guided to the side by the arm. The boy stops the horse; the shovel is

emptied, and the action is repeated till the quantity required is "lifted."

Three men are sufficient to lift mud. Forty dollars at the outside is the value of the outfit. Seeing the digger in operation for the first time, the spectator is struck by the simple, primitive appearance it presents.

In these days the farmers use from twenty-five to three hundred loads of mud upon their land, according to the size and condition of the farm. A load when freshly dug will weigh about twelve hundred pounds; of course the weight depends largely upon the amount of water in the mud. Dry mud is most frequently lifted, and is lighter. A sleigh eight feet long, by two and a half feet

wide, is filled to the depth of one foot, and costs ten cents. Of course, there is a shrinkage, but not more than one-quarter. It spreads satisfactorily with the manure spreader; as much as 75 bushels are scattered over an acre. It appears to be adapted to the soil of New Richmond. Shells, clams and mussels are plentiful in it.

At the request of the editor of "The Farmer's Advocate," the writer sent a sample of this mud to Prof. Frank T. Shutt, Chemist, Dominion Experimental farms, for analysis. The result of his analysis is best given in his own words, which I take the liberty to copy. His memorandum is as follows:

MUD FROM GOOSE LAKE, NEW RICHMOND, QUEBEC.

"As received this 'mud' was a greyish-white earthy material. It was of a pasty consistency, apparently being partly dried out, and contained many small shells. It was found to contain 17.4 per cent. water.

"After being dried it was submitted to analysis, and the following results obtained:—



Haying on the New Brunswick Intervale.

on farm of David Porter, King's Co., N. B.