

## A Comparison of Mutton Breeds.

From a paper upon "Mutton Sheep for Manitoba," read by Wm. Wallace, Niverville, at the Sheep and Swine Breeders' Association, the following extract was taken:—

To those about to embark in sheep husbandry one of the first questions is the class of sheep to be kept. I have no intention of raising the battle of the breeds. I believe that all the established breeds of Scotch and English sheep will do well here. In place of expressing an opinion, I will briefly give some facts as to the weight of the various breeds at the last Smithfield Club Show of Fat Stock. Each of the breeds was represented by three classes—weddors under two years, ewes over three years, and lambs—there being a pen of three sheep in each class. The following is the average live weight of each sheep:

	Weddors. Lbs.	Ewes. Lbs.	Lambs. Lbs.
Leicesters	280	296	150
Cotswolds	305	301	224
Lincolns	328	369	190
Cheviot	224	...	...
Blackface	204	...	...
Southdown	204	212	163
Hampshire	308	279	212
Shropshire	268	255	167
Oxford	283	321	194
Half-bred Leicester-Cheviot	291	...	...
Cross, Oxford-Hampshire	324	...	222

The various breeds did not compete against each other except to this extent, that a champion cup was awarded to the best pen of long-wools, which was gained by the Cotswold lambs; reserve, Cotswold weddors; and a cup for the best pen of short-wools, gained by the Hampshire weddors; reserve, cross Oxford-Hampshire weddors.

In a block test for the best carcass of mutton, the following was the result: Long-wools—1st, Blackface; 2nd, Cheviot; 3rd, Cross, Leicester-Blackface; 4th, Blackface. Short-wools—1st, Southdown; 2nd, Suffolk; 3rd, Cross Downs; 4th, Hampshire. The mountain breeds, Blackface and Cheviot, were (I think, erroneously) classed with the long-wools, which latter had no show whatever against them in the block test.

The heavy, long-wooled breeds produce mutton of a somewhat coarser grain than the Downs and mountain sheep—the flesh of which is better mixed and of a more delicate flavor. The following are quotations for different classes of sheep in a recent Islington market: 7½ stone Downs, 6s.; 10 stone do., 5s. 8d.; 10 stone half-breds, 5s. 6d. to 5s. 8d.; 12 stone Lincolns, 4s. 10d. to 5s.; 10 stone ewes, 4s. 4d.; 7 to 7½ stone Americans, 4s. to 4s. 4d. per stone of 8 lbs.

The weight of the fleece and the price of the wool are matters to be taken into account. The long-wooled breeds as a rule give heavier fleeces than the Downs. The following were the average prices of hogg and wedder wool in London at the close of the year: Lincoln fleeces, 28s.; Cotswolds, 25s.; half-breds, 22s.; and Downs, 20½s.—the rise in the price having been much greater in the long-wools than in the Downs.

## Shearing Sheep.

The sooner the fleece is removed after it is warm enough the better for the sheep. The practice of allowing sheep to wear their heavy fleece until the month of June does more harm to the animal by them suffering from heat than the extra weight of fleece amounts to. As soon after May 1st as possible is a good time to shear, which will, in many cases, be about the time they are turned out to grass. This will save tagging and a lot of wasted wool. The lambing season is over and there is no reason whatever for leaving the wool on later. Doubtless wool is frequently left on until the sheep can be washed in a stream, but it is preferable to shear in the grease or warm water to wash them in a tub than to wait too long. When sheep are washed before shearing they should be kept in very clean quarters for ten days before the wool is removed. This allows the yoke to rise and which makes the shears run smoothly and the fleece heavier.

The best place to shear is upon a plank floor where there is plenty of light. A large canvas or mat should be nailed down with enough hay or straw underneath it to make a soft cushion for the comfort of the sheep and shearer. If a sheep is a kicker strap the front to the hind leg of the opposite side to shearer at work. This will save the fleece from being torn, and also the shearer's temper from rising.

## Harness Galls.

Well-fitting harness is the best preventive of galls on horses. Harness should never be bought when the animal is not at hand to be fitted. This is true of all parts of the harness, and particularly of the collar. There is as great variety in horses' shoulders as there is in men's noses, and because the collar fits one horse is no reason why it should fit another. Before a collar is purchased every part of its face should be carefully pressed, so that if there are hard lumps in the collar, or if it is harder in some places than others, it may be rejected.

Sheep put up for fattening, and indeed all of them, need especially to be fed with perfect regularity. Otherwise, they fret and worry, and worry has the same effect on sheep as on their owners, it makes them thin.

## FARM.

## Cleanings from the Institutes.

## FALL SEEDING OF CLOVER.

The late spring frosts, coupled with the exceedingly dry summer, have been very hard on the new catch of grass seeds. Many sections report no catch of clover whatever, but in spite of this, farmers have reported at different Institute meetings that they had a splendid catch of clover. They gave as the reason for their success that they had always grown plenty of clover and their land was full of it.

At several Institutes, farmers have testified to grand success by sowing after harvest. When the crop was harvested and it was found there was no catch of clover, the land was broken up with a cultivator, the clover seed sown and then inter-harrowed or rolled in. This was done some time in August and the first rains would start the seeds. A number of farmers report a good catch this way the past season; they were not sure about how it would stand the winter. Other farmers testified to having sown parts of fields where the seed had failed in this way, and it wintered as well as the rest of the field and gave as heavy a yield. It certainly is worthy of a trial.

## HOW TO SEED CLOVER IN THE SPRING ON FALL WHEAT.

Some of our most successful clover growers are terribly down on the old-fashioned way, as they call it, of sowing clover on fall wheat. The plan followed in most localities is to sow on the last snows—in fact, as early as it is possible to get on the land. Our more advanced clover growers condemn this plan unsparingly. There is no growth then—not till later; then why seed? Their argument is that we wait until the land is dry enough to work before we sow grain. We would never think of sowing spring wheat on the last snows. Then why sow clover seed? Surely the laws which govern successful germination are the same in both cases. The common-sense plan, as they follow it, is to wait until the land is dry enough to get on it with a team. Two plans are then followed: One is to sow the seed by hand and follow immediately with the harrow; the harrow mark will make a guide for the sower going back. Then roll down. The other plan is to put the seed in the grass-seed box of the grain drill and drill it in, sowing before the drills. This makes sure work. It also can be rolled down afterwards.

To avoid tearing up the wheat, the harrow or drill is driven the same way the drill was when the wheat was sown. The growth of wheat will keep the drill-hoe in the space between the rows, and it will be the same with the harrow. No harm will be done to the wheat; on the contrary, it will do it good, and you have made sure work with the clover seed; i. e., you have placed it in the best possible place for it to grow. No guess work or uncertainty about it. Doesn't it look reasonable? Try it.

## SEEDING WITH SPRING GRAIN.

It was advocated at the meetings to sow the clover before the hoes when sowing spring grain, then give a stroke with a light harrow crosswise afterwards. The drill-hoes throw the earth up in a ridge between the rows of grain; the grass seed will be covered with too much soil. A stroke of a light harrow crosswise will make this all right and still have the grass seed in the space between the rows of grain.

## LOSS BY POOR SIRE.

A great source of loss upon a farm is occasioned by the use of poor sires. Farmers do not see this plainly sometimes, but at our meetings a few good examples of this were given by farmers who had had their eyes opened as to the loss sustained by such a practice. A saving of fifty cents, or even a quarter of a dollar, in the service fee, where an inferior animal is used when a good one can be obtained, is almost sure to mean the loss of from ten to twenty times that amount when the progeny comes to maturity and is placed upon the market.

A Middlesex farmer stated that he always used a good pedigreed sire, but he got lazy one day and used a neighbor's inferior sire rather than go a few miles through a heavy rain. A few years later when he marketed the progeny of that season he received \$13 less for this particular one than he did for each of those from the good sire.

Another farmer gave a similar experience. He had used a good sire one season upon a certain animal, paying a good service fee. The following year he used an inferior sire upon the same animal. At maturity the progeny were marketed: the first brought \$52, the second only \$33. He had saved a little in the service fee, but lost \$19 when the progeny was marketed.

It is penny wise and pound foolish to use inferior sires if good ones are to be had within reasonable distance, and a man who does so is inflicting lasting injury upon himself.

## REARING A DAIRY HERD.

Many dairymen are trying to build up a good dairy herd with one hand and pulling down as fast as they build up with the other. What I mean is this: a man is taking extra pains to feed his cows well, he weighs his milk, tests it, and weeds out his poor cows; he does everything he can to develop the milk-producing powers of his herd, then turns round and uses a bull whose ancestry have been trained to produce beef, and expects to obtain progeny that will increase the producing power of

his herd; or he may be using a sire of a dairy breed, but the dam and granddam, etc., of the sire are inferior producers to his own animals. How can he expect the progeny of his herd to be as good producers as he already has, much less to be an improvement upon them? A stream cannot rise higher than its source.

If a dairyman is to be successful in increasing the producing powers of his herd, besides feeding well and weeding out the poor ones, he must give more careful attention to breeding. If he is to add anything to the abilities of his herd, he must use a sire descended from stock that is noted for their producing powers, powers superior to those already possessed by his own herd. How else can he increase them? It will cost time and money to secure such a sire, but it is a necessary step to success.

GEO. HARCOURT.

## Rotation of Crops.

SIR,—Although no set rule can be followed under this head, still it is best to have a standard to work by in farming as in all other business callings. This article was suggested by a neighbor saying that he was going to sow barley and seed down a field that had two successive crops of oats and was consequently poor and dirty. We will take for consideration a farm of one hundred and fifty acres, all cleared. This is divided into nine fields which average about sixteen acres each; the balance is orchard and garden.

The field mentioned above, that has been cropped twice with oats, would be better to grow a root crop next, according to my experience. One farmer says always take the dirtiest field for roots. Sixteen acres is generally too much for turnips and corn, unless a large stock is kept, so half of the field may be plowed immediately after fall wheat seeding is done, and sown to rye, about five pecks to the acre; this comes in for early pasture in the spring until the regular pasture has got a good start. It is allowed to grow till June, then plowed under and the ground prepared by light cultivation for fall wheat. The balance must be fall plowed deep, then covered with a good coat of manure, drawn out either in the winter or spring; plowed again and planted with hill corn, potatoes, turnips, etc. A field like this, if it is well cultivated and hoed, will be free from foul weeds and thistles for several years. Now, then, you have a field in good condition for barley and to seed down. The part first mentioned, which was sown to wheat the fall before, was seeded with timothy at the same time and sown with clover early in the spring. Then comes on a crop of clover hay, next year timothy hay, then pastured for one or two years, according to circumstances.

The sod is next plowed in the spring and sown with peas. This crop leaves the ground clean and in fair condition. A light dressing of manure on the poorer spots may be applied. Plow again if the old sod is well rotted, or cultivate shallow if otherwise and sow with fall wheat. This is not seeded down. If it is not desirable to have the whole field in peas, part may be either pastured early or a crop of hay taken off, then plowed and cultivated for fall wheat with the pea ground. Lastly follows one or two crops of oats, generally two.

This brings us around again to the root crop, and the first half that was sown to rye will be put into roots, and vice versa. This gives us every year about twenty-five acres of fall wheat, forty acres of hay, if only eight acres of peas are grown, sixteen acres of pasture, thirty-two acres of oats, eight acres of barley, eight acres in root crop, eight acres in rye and summer-fallow, and eight or sixteen acres of peas. Below the rotation is given in tabulated form:—

Field No. 1.—Roots and rye.	Field No. 8.—Oats.
" " 2.—Barley and fall wheat.	" " 9.—
" " 3.—Clover hay.	
" " 4.—Timothy hay.	
" " 5.—Pasture.	
" " 6.—Peas.	
" " 7.—Fall wheat.	

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## Ventilation of Stables.

SIR,—I noticed, with Mr. Horricks, John Gould's statement at the Western Dairymen's Convention, where he claimed that the foul air exhaled by animals falls. I believe that he is correct in that point, providing that the gas is left in the stable sufficient time to cool by coming in contact with walls and otherwise, and on examination we will find that the vapor has condensed and formed on the frozen wall down to the floor; but what we want in ventilation is to get that out of the stable before it has time to freeze to the walls.

I do not altogether agree with Mr. Usher in his plan of admitting the fresh air in pipes from the outside direct to the animals, because, as the warm air ascends from them the cold air must rush directly upon them and cool them too rapidly. There is, in my opinion, no way of ventilating a stable properly without having some plan of enlarging or closing the opening that admits the fresh air accordingly as the temperature rises and falls outside of the building. The pipes for the exit of foul air need not be interfered with, as they will not discharge more air than is admitted into the building from some other source, excepting there are very few cattle in the stable, then some of them would be better closed, which would be easily done by placing a little straw in the bottom of the pipe.

Now that tioned above and effective might state for eight years side, three i end. The fo which feed that plan to I was convin considered t foul air. M door at one length by cu other end of window an allowed this of the floor where it ope that all the the pipe. I quantity of regulated to in the stable against the of foul air l by two inc them on ei extending f wall to the the barn. I when I fou barn roof as three fe steam whi John Goul downward. is just this air into the the cattle out coming which will

## Middlesex

## Well-A

One of stock barns on the farm of West York County. The Hon. J. ter of Agr was erected is 90 feet l basement c masonry, covered wi roofing, an Portland c south, the spacious y horse stal roomy and poultry-hc Figure which is al of the 4 p pens, fite mangers. center, m The divis both halv same tim water-tan "C." repr filled from going up are splen 4 x 2½ ft., above the side. The the center the inside foot stabl allow sto stable. T have cem masonry are also flare out The stra down int cattle th are show Figure showing and gran of the st conveni study by coming s To Pre

## SIR,—

question to know that yes due to caused h so much vent th before h also has stronge