

Sheep Husbandry.

[Read before the last meeting of the Dominion Sheep Breeders' Association, by Henry Arkell, Teeswater, Ont.]

The principles upon which the breeding and general management of sheep should be conducted are subject to such modifications as are necessary to the peculiarities of soil and climate, and other surroundings. In the long run the best results are obtained by breeding sheep really good of their kind, whatever that kind may be.

I propose to touch upon what I conceive to be some of the weak points in the management of sheep in this country, both by the ordinary farmer, and also the breeder of pure-bred stock. By the ordinary farmer sheep are treated a "catch crop"; instead of being provided for under a regular system of management, no particular provision is made to insure their producing the largest amount of wool and mutton within a given time, which would make them render to their owner the largest amount of profit, and also show the excellency of the breed or flock, and the owner's skill in the management of same.

If the farmer would give even as much attention to his sheep as he does to the ordinary rotation of his field crops, and as carefully select his sires as he does his seed grain, I am safe in saying he would be able to keep four times as many sheep on his farm as he does now, with a corresponding profit, without diminishing the amount of other stock on the farm. For instance, when summer comes, instead of turning his sheep on the highways, as many do, or into the pasture fields and have his wife complaining that "those sheep are eating all the grass from the cows," I would suggest that he sow the land intended for turnips with fall rye, and by the middle of May he will have the very best feed ever found for ewes and lambs; and after his rye is finished, which should be before it comes out in head, or in time to put in his turnips, a patch of oats and tares should be ready, which may be grown on the summerfallow, if he does summerfallow—if not, on land set apart for the purpose—followed again by tares sown at intervals of two weeks apart till his clover is fit for feeding to the lambs, which should be weaned by the first of August, when the ewes can run the stubble field. After the clover rape should be provided for the lambs, which should be finished by the middle of November, and the lambs be fed white turnips or swedes, as the case may be, with a little grain.

In feeding the above-mentioned crops I have no doubt the question will be asked, How will you do it? Answer—Use a portable fence, a portion of which is so constructed as to allow the lambs to have access to the portion of the field where the ewes are to be fed on the morrow, where they can be fed a little grain if desirable; this, of course, is optional.

Give your sheep each day what they will eat after the rye is finished, and as the weather gets hot provide a field where they can run, having access to water and shade through the heat of the day, say from ten o'clock in the morning till four o'clock in the afternoon, when they return to their allowance of tares, oats, etc. By this means your land is regularly manured instead of the fence corners or the highways, and your sheep will be healthier and grow more wool of a better quality, and your lambs will take well to their winter feed on coming into the yard, if you keep them for fattening. A very small quantity of land will, under this system, keep twenty or thirty ewes and lambs through the summer and not interfere with your other stock, besides leaving on the land the manure, worth at least ten cents per week per ewe and lamb. The food consumed will by this plan be grown on land that otherwise would have lain idle for a great portion of the summer.

If farmers will only take pains to save well their pea straw, this, with a few turnips, will winter well ewes until lambing season approaches, when good clover hay will be required. Much has been said about giving water to sheep in winter. My experience of thirty years in Canada is that sheep do not require water when fed a sufficient quantity of turnips, viz., from seven to eight pounds daily in two feeds for a ewe in lamb. Feed young sheep nearly all they will eat, with salt always before them. Keep them in a suitable building provided with a yard to feed in, divided off according to age and size. Place them where they cannot be molested by other stock.

As intimated in the beginning of this paper, I wish to notice what to me seems the weak points in the breeding and management of our established breeds of sheep.

The first which presents itself to my mind is the want of uniformity in the flock; this is a great weakness and drawback to our success as breeders, and the question arises, why does this exist? First, I think from want of more careful and judicious selection of sires, for, as one of your members has stated in a former paper, "the sire is half the flock." I have said careful and judicious selection of sires, for it is a pretty well-known fact that as a general rule the first cross between an inferior and superior animal is very successful, producing, in many instances, animals equal to the improved breeds used; but the judgment and skill of the breeder is called forth in raising the standard of his pure-bred flock. This has been done, and what has been done can be repeated, but it requires great care and shrewd judgment to bring about the de-

sired results. One reason why failure in this direction is often experienced is, I think, in introducing a sire into the whole flock, without first testing his suitability by using him on a few ewes selected with great care, the breeder having in his mind a well-defined ideal of the proper type to be established in his flock. Continued perseverance on these lines will be a great factor towards bringing about that uniformity of character so much to be desired. The second point I notice is a lack of sufficient weeding out of the flock all animals which do not come up to the proper standard of the breed; also all young and breeding animals are not sufficiently induced to lie out of doors by providing for them sheltered, well littered, roomy yards, where they can lie down through the day—in fact, you will find many will prefer lying outside during the night, except in stormy weather. This I consider very conducive to the raising of vigorous, healthy stock, and the development of robustness of constitution, which, combined with large growth of fleece and aptitude to fatten, symmetry and fecundity, should be the flockmaster's aim and ideal. Tups of this class and character will find a ready sale anywhere, and the breeder will find he cannot afford to breed or sell poor specimens of his breed. Carefully bred stock will bring millions of money into the pockets of the farmers of this country, and furnish healthy, delightful and profitable employment for the young farmer who now seeks employment in towns and cities.

The third weak point I wish to name is breeding from excessively fat animals, which have been got up for exhibition purposes. If you will exhibit, and I suppose someone must exhibit to keep the different breeds before the public, I unhesitatingly say sell such animals and not breed from them to the injury of your flock, producing, as they do in many instances, a lot of poor, weakly, scrubby lambs, and these are bred from simply because they are pure-bred. In place of this let the breeder select the quantum of ewe lambs for his own use, and set them aside, and let no price tempt him to dispose of them, when in a few years the whole of his flock will be uniform and the best. This line of management being persevered in, there will be no necessity of running home to the Old Country to import either ewes or rams, except as an occasional change. The time has come when I think the sheep breeders of this country should set to work in earnest to breed sheep of such a type, and of such excellency of form and character, that they can, not only supply the whole farming community, but each other, with such different breeds of sheep as may be required. We have a country and climate well adapted to sheep raising, and thousands of acres of land which to-day would be vastly more remunerative to the owners if turned into sheep farms and conducted somewhat on the lines here laid down, instead of being rooted over with the plow in a vain attempt to grow wheat at a profit. In conclusion, let me say, gentlemen, breeders, farmers, try to introduce into sheep husbandry better management, better sheep, and more of them.

GARDEN AND ORCHARD.

Horticultural Brevities.

1. Stir the soil to conserve moisture and promote plant growth, as well as to kill weeds.
2. Use hardwood ashes liberally on all garden truck, small fruits and orchard trees.
3. Apply liquid manure to force rapid and full maturity of choice crops.
4. Nitrate of soda can be used with benefit on all crops. It is immediately available, and should therefore be only employed in connection with plants in their active stage of growth.
5. We must spray with Paris Green and copper compounds to produce sound, marketable fruit.
6. There is far too little mulching done. Small fruits, trees and garden crops are given a most favorable opportunity for attaining the highest perfection and development when their roots are covered with a thick mat of leaves, wet straw, or other suitable material.
7. A good mulch keeps down weeds, and renders the soil loose, moist and porous at all times, and that, too, with little labor of cultivation.
8. Be sure and commence early to thin fruit on trees and vines that have set the same too freely.
9. Remember that oftentimes by the removal of fully half the fruit, the remainder produces as much bulk and sells for more money than the whole would if all had been left on.
10. When fruit is thinned, the parent plant is exhausted far less than when the entire crop is permitted to remain.
11. Let the sheep and poultry run in the orchard to consume the wormy fruit and insects.
12. Sort all fruit very carefully, and send same to market neatly packed in attractive packages. This must not be neglected.
13. In making sales, get as near the consumer as possible. Many commission and middlemen's profits leave little for the producer to receive for his products.
14. Live off the best your land produces. Do not stint yourself for the sake of having more produce to sell. Get all you can out of life.—E.E.

FARM.

Notes from England.

Sir Chas. Tupper expects to leave Liverpool for Canada, by the "Parisian," on August 17th, on a visit concerned, we understand, with private business.

We learn from the Canadian Gazette some important matter concerning the Canadian exemption of live cattle. Though the British Board of Agriculture has given its decision denying the Canadian cattle admission into this country, it is evident that the question is not to be allowed to rest in its present unsatisfactory position. That Canadian herds are free no one can deny. Equally indisputable is it that since the arrival of the suspected cases in 1880 and last year, many thousand head of Canadian cattle have been received in this country and been subjected to the most rigorous inspection, with the discovery of only one case of suspicion, as to which the experts entirely disagree. Did contagious pleuro-pneumonia really exist in Canada, not one, but hundreds of cases of undoubted disease must have occurred among British herds, as well as among the herds of Canada. Such facts as these have been persistently pressed upon the President of the Board of Agriculture by Sir Chas. Tupper, but despite their admitted force Mr. Gardner felt compelled to abide by the opinion of his veterinary advisers, contradicted though it was by equally high expert authorities; and Canada, the British consumer and the British grazier have, for the moment, to bear the consequence. The Board has issued an order, which takes effect forthwith, cancelling the orders of April and June, which secured the segregation and slaughter of Canadian cattle at British ports of landing, under special supervision, and Canadian cattle now stand on the same footing as cattle from the United States, and are subject to the same slaughter regulations. This action of the Board is based upon one case out of 30,000 received since last autumn—part of the cargo of the steamer Lake Winnipeg, which left Montreal on May 10th, and arrived at Liverpool May 22nd. The animal in question was fed in and shipped from Manitoba, where a close examination took place by veterinary surgeons, who failed to discover a single case of disease or even suspicion. The 250 animals which formed the cargo of the steamer Lake Winnipeg travelled under conditions favorable to the development of contagious disease. Had the disease really been contagious pleuro-pneumonia, the confinement of it to one animal would have been impossible under such circumstances. Animals in Canada do no doubt suffer occasionally from inflammation of the lungs and pleura, and extremes of temperature and long journeys may set up a condition of the lungs in which the appearances are somewhat similar to those of contagious pleuro-pneumonia, but in the present case the animal showed no symptoms of distress, and nothing suspicious was discovered until the examination of the lungs took place.

The Earl of Aberdeen has again evinced his interest in child emigration. He is a prominent supporter of Dr. Barnardo, and has now placed at the disposal of the Young Colonists' Aid a sum of £1,000 to enable this association to begin work. The first party of lads sent out to the colonies left London last week for Manitoba, in charge of the director, Mr. John T. Carrington. These boys, it is explained, are not waifs, but respectable lads of the lower, middle and artisan classes, and were chiefly selected from the eastern counties. In Canada they will be apprenticed to farmers for a term of years. When the whole cost of their establishment has been deducted from their wages, they receive the balance earned on completing their indentures. A party, chiefly of girls, will leave at the end of August also for Manitoba.

Estimates of the wheat crops have already been given, not only for England, but also for France. So far as England is concerned we do not think it likely that the crops actually gathered in will much exceed 500,000,000 bushels, which is 10,000,000 bushels less than last year, 24,000,000 bushels less than 1891, and 32,000,000 bushels less than 1884. In France the wheat crop this year is expected to reach about 275,000,000 bushels. This is below the average yield of the country, which has been for the ten years, 1881-1890, 300,400,000 bushels. The trade with Canada seems to be steadily increasing. For the eleven months ending May 31st, the imports were valued at \$103,500,000, an increase of more than \$10,000,000 compared with last year's figures. Up to May last the exports were nearly \$102,000,000, an increase of over \$5,000,000 compared with 1892.

The value of animals other than horses exported from England during the six months ending June 30th was £60,521, against £32,000 last year. The gratifying increase is doubtless due to the number of sheep and pigs bought for exhibition at Chicago.

Swine fever has reduced the number of pigs kept in England 25 per cent.; in Wales, 27 per cent.; in Scotland, 29 per cent.; and in Ireland, 18 per cent., or a total reduction for 1891-92 for Great Britain, Ireland and the Channel Islands of over 1,000,000, or 24 per cent.