Sheep -- Advantages and Wintering.

"The sheep has a golden hoof," so saith the Spanish proverb. "One thousand sheep will in one night manure an acre of land sufficient for any crop," says a German authority. "The manure of a sheep and lamb is worth ten cents a week," says a Canadian authority. It will thus be seen that sheep are great manure makers. But sheep are not generally kept for the manure they may excrete. There are two other attributes to the sheep of much vaster importance — wool and mutton, or, perhaps, rather wool and lamb. Many writers have waxed enthusiastic on sheep as the "great scavengers of the farm," but my experience with sheep go to show that they require more care and attention than this. To keep a flock of sheep for the purpose of scavenging the farm—keeping down weeds, eating underbrush and suckers—does not pay. Sheep, to be profitable, require attention and an abundance of good feed. In the growing season, if one has a sufficiency of pasture fields, with water and shade in them, there need not be much anxiety about extra feed. It is from the time of the coupling season—in November—till the lambing time that the flockmaster must give his attention to the sheep. The coupling season will, of course, depend on the time one wants the lambs to come. I do not want the lambs to come before the middle of April, hence about November 1st we begin feeding the ewes about a pint of oats each per day till the fifteenth, when the ram is let with them at night only. At this time we gradually reduce the amount of oats till the end of the month. When the ewes are all with lamb they are on their regular winter feed.

Wintering the Flock.—I have wintered sheep on nothing but oat straw and took them through in good condition; that is, the breeding ewes. The lambs, of course, would require some extra feed. That strong breeding ewes could be wintered on oat straw may seem paradoxical to many of the readers of the FARMER'S ADVOCATE I am prepared to believe. But I believe our oat straw is much more nutritive than the average sample of this feed. Grown in proximity to the salt breezes of the Gulf of St. Lawrence and in a climate particularly suited to the growth of oats — Prince Edward Island oats are the finest in the world—no doubt our oat straw is about equal in nutrition to average meadow hay. The front of our farm is washed by the waters of the Gulf of St. Lawrence on the north side of the island, and the breezes blowing from over the Gulf on our farms make the herbage, as well as the straw of the oat crop, salty and pleasant to the palate of the sheep. Ewes require roots fed regularly in winter. Roots are inseparable with the growth of sheep. A flock of sheep can be wintered, and wintered well, till lambing time on bright, early-cut oat straw and roots, with an occasional feed of hay; the lambs, however, require an addition of bran and oats—about a half pint each per day.

The late Prof. E. W. Stewart says:—Thrifty sheep may be wintered on one and a half pounds of grain per head, beginning at one pound and increasing to two pounds last month; preferably a mixture of corn, barley and oats, costing one cent per pound. They will eat per head 75 lbs. straw per month and 45 lbs. grain — value: straw, 15 cents; grain, 45 cents, making the cost per head per month 60 cents. The manure should pay for labor and profits, and is worth one-third cost of feed. English feeders are always satisfied if they can get the manure over cost of food.

Henry Stewart:—When oat straw was plenty and hay was dear I have used at times 10 lbs. of roots, sprinkled with one pound of bran, per head, and all the straw that would be eaten, leaving the waste for litter and manure. The same authority says: I have fed sheep successfully on clover hay alone; 3 lbs. per day until lambing time, when I always fed grain, wishing to grow the lamb as quickly as possible. Again: I have fed sheep at a cost of 75 cents for the whole winter, when the hay and grain has been charged at actual cost price, which I think is the only right and satisfactory way, unless the feeder is only satisfied with two profits, one on the feed and another on the sheep. "For winter feed I would recommend oat straw and clover hay, with some grain ground coarsely. The straw will cost but little and the one and a quarter hay may be sufficient each day." "*I have done the cheapest feeding on oat straw and mangels or turnips, the latter costing not more than 1 cent for the 10 lbs., fed daily to each sheep with one-half pound bran, costing less than one-half cent, and counting the straw at nothing, this will cost but 45 cents per month.*"

J. A. MACDONALD.

No Money in Frozen Mutton.

Frozen mutton in England has come down to an almost ruinous price to shippers. Messrs. Weddel, in their latest circular, quote the very best Canterbury mutton at 3⅜d. per lb., few carcasses touching over 3¼d., while fine mutton from the north of New Zealand sells at 3d., and heavy or inferior carcasses at 2⅜d. to 2⅞d., Australian at 2⅝d. to 2¾d., and River Plate at 2¾d. The cheapness of New Zealand lamb, worth only 2¾d. to 3¼d., is one reason assigned for the extreme dullness of the frozen mutton trade. At 3d. per lb. or less, we imagine, the breeders get little, if any, more than boiling-down price for their sheep or lambs.

The Dominion Breeders' Associations and the Central Experimental Farm Staff.

In connection with the subject of live-stock husbandry at the Central Experimental Farm, Ottawa, dealt with on a previous page of this issue, it should be stated that the position we have taken has the endorsement of the Dominion Cattle Breeders' Association, which, at the regular annual meeting in Guelph, on December 7th last, passed the following resolution:

"That this association respectfully memorialize the Minister of Agriculture in the Dominion Government to appoint to the position of agriculturist at the Central Experimental Farm, not only a practical farmer, but also a man thoroughly in touch with and acquainted with the needs of the live-stock raisers of the country, and that a copy of this resolution be forwarded to the Minister of Agriculture for the Dominion."

The Dominion Sheep Breeders' Association adopted a similar resolution.

Crossing Buffalo with Domestic Cattle.

To the Editor FARMER'S ADVOCATE:

SIR,—I was pleased to see the letter of Mr. R. M. Traill on this subject in your last issue. It recalled a matter in which I took a great interest some years ago, and I thought others might be interested as well, so that I give you my experience in this line, trusting that it will give a little information that has not yet appeared. I will lead off with a little history. The largest herd of domesticated buffalo in Canada, owned by the late S. L. Bedson, of Stony Mountain, Man., originated in this way: About 1875 the late Hon. James McKay, of Silver Heights, Man., brought a bull and two females down from Prince Albert. They were placed in a park and bred until Mr. McKay's death, the winter of 1879, when, with the rest of his stock, the buffalo were sold by auction, Mr. Bedson buying them at a nominal figure. At that time the herd numbered thirteen, all pure-bred buffaloes. It was only known to a few intimate friends of Mr. Bedson that Sir Donald A. Smith, now Lord Strathcona, was the silent partner in the transaction, or to put it plainer, Mr. Smith had furnished the money to purchase the buffalo on condition that Mr. B. feed and care for them, the profits, if any, to be equally divided; but after two or three years the herd increased to such an extent that it was almost impossible to keep them within bounds. Sir Donald relinquished all claim to them on account of numerous claims for damages presented by settlers in the district. When Mr. Bedson made the sale of half the herd to "Buffalo" Jones, an American, it numbered about eighty. I was then living on the adjoining farm, a neighbor of Mr. Bedson, until about the time of the sale to the American. My occupation was stock-raising. My herd consisted principally of pure-bred Shorthorns, which suffered from the depredations of the buffalo bulls, but all loss was covered by check from Sir Donald's agent. Mr. Bedson and I experimented for five years, crossing with all kinds of cattle, and the only calves we got alive in this cross-breeding experiment was from the native cattle of the country; the only exception was from a Canadian cow imported from this Province (Ontario), one which showed no breeding. The Shorthorn cows always dropped their calves before maturity or died in calving, the fœtus of the buffalo seeming too coarse for the finer bred cattle. One conclusion we came to, and which I have never seen touched upon in this connection, is that *a domestic cow that has given birth to a buffalo calf will never breed again.* We tried several cows continually for from three to five years without success. They ran constantly with the buffalo and were tried time and again with Shorthorn bulls and even scrubs, but all to no purpose, proving conclusively that having once bred to a buffalo their fecundity is destroyed. This fact in itself will shatter the highfaluting schemes often advocated on crossing the buffalo with the domestic breeds for their hides. We could never get a domestic bull to cover a buffalo cow, so that I never saw a cross in that way. Mr. Bedson persisted for years to get such a cross, shutting a pair up for months at a time. He also let bulls run with the herd, which usually ended in their getting killed by the buffalo bulls.

A peculiar feature of the male bison is that in the calving season the bulls all leave the herd and go off together for a couple of months. The only cross-bred bull calf raised by Mr. Bedson was changed to an ox when three years old, having proved no use for breeding purposes. He was afterwards broken to drive in a sled, but never became very tractable. I think the reason Mr. Goodnight's cows only bred every other year is that they do not roam at will as in their natural state. The same difficulty was experienced at Stony Mountain when the buffaloes were confined. I noticed in to-day's *Globe* that Mr. T. G. Blackstock had presented the Government with three magnificent specimens of the breed, which had been placed in the National Park at Banff, to be preserved, and which will ensure the perpetuation of this noble animal; but I do not agree with the statement therein that they were brought from Texas at great expense *because no pure specimens could be obtained in Canada.* If Lord Strathcona's herd is part of Mr. Bedson's, which there is no doubt, they must be pure, for in that herd were some of the finest buffalo that ever crossed the prairies of the "Great Lone Land."

Wellington Co., Ont. WM. W. MACALISTER.

FARM.

Inside Watering Approved After Three Years' Trial.

To the Editor FARMER'S ADVOCATE:

SIR,—I notice your recent article upon the watering of cattle during the winter, which I consider very timely. In order to reap the greatest returns in the feeding of beefing animals and milk cows, it is absolutely necessary that at all times they be allowed free access to pure water.

After an experience of three years in having water continually before our animals in winter, we consider that no individual inexperienced in this method can form any real estimate of its great benefit. With the exception of our milk cows, and a few other animals which are tied in the stall, we keep our cattle in large loose boxes, where water is supplied from a trough in the corner of each pen. For our cows we have a long water trough in the front of the manger above the feed box, and forming a part of the face partition between feed passage and stalls. The bottom of this trough is just two and one-half feet above the floor of the feed box. The water is forced into these troughs by means of a windmill, and we have a large tank in the barn above in one of the straw mows, from which water is supplied in case of a dead calm for a day or two. As a precaution against frost, our tank in the barn is packed around with the refuse from a flax mill, and our pipes leading to the tank and water troughs are boxed around and similarly packed. All other pipes are sufficiently underground to prevent freezing. In our experience we have had no trouble from allowing the animals to drink at their pleasure, and I consider the practice well worthy the attention and approval of the stock-feeding farmers.

Huron Co., Ont. THOS. MCMILLAN.

Advantages of Inside Watering on the Annandale Farm.

To the Editor FARMER'S ADVOCATE:

SIR,—We find indoor watering to have many great advantages over outdoor watering. In the first place the cows have all the time before them fresh spring water of an even temperature both summer and winter, varying only a few degrees—standing from forty to fifty degrees in winter, and fifty to sixty degrees in summer — which we consider far better for the cows than drinking a larger quantity of ice cold water at one time out of doors on a winter day. Under our system the water is continually running through the pipes, and is always fresh. Some of our boxes have a hinged cover that the cow lifts up when drinking, which falls back tight on the box when not drinking. This keeps the feed from getting in. We find it quite an improvement, and intend to cover all the boxes this winter. In watering a large herd of cows outside we found it necessary to have quite a number of long watering troughs in order that they may all drink in a reasonably short time, and then they are inclined to hook and drive one another about, and some of the weaker and the more timid ones will not get a chance to drink at all unless left out a long time, which is bad for them on cold, stormy days. We have no trouble in keeping our water boxes clean, as we have such an easy way of drawing the water all off from all the boxes in two minutes' time, and having the waterworks pressure and a rubber hose attached to pipe with valve, we can flush and clean them all quickly. We do not use the water from our waterworks for supplying cattle inside, but have flowing spring water brought from hillside in iron pipes sufficient for all purposes, except fire protection, which we get from the waterworks system, also brought into the barn in pipes. There are many advantages in watering cows in their stables, particularly in the winter season. It must make considerable difference in the quantity of milk during a winter, but I have not tested exactly how much. At the same time we have a most abundant supply of natural running spring water in all our yards and all around our premises, which never freezes over in the troughs in the coldest winter weather.

Norfolk Co., Ont. E. D. TILLSON.

Hydraulic Ram Successfully in Use Since 1888.

To the Editor FARMER'S ADVOCATE:

SIR,—There is probably no question of greater importance to successful winter feeding than a proper system of watering stock. After seven years' experience, I consider a proper indoor system the most practical, economical, satisfactory way of watering stock in winter. Since the ingenuity of man has so perfected conveying water either by gravitation, wind, hydraulic or other powers, there is little excuse for any farmer not having some proper plan, and I am positive in a very short time, from a labor-saving standpoint only, all the money invested will be repaid, besides the many other advantages gained.

I have successfully used a hydraulic ram since 1888, conveying water about sixty rods with very satisfactory results. In the first place I had it under the shed adjoining the barn, where the cattle were given a chance to drink twice a day. It was quite an improvement to the old system of using a pump or driving to a stream, but the new system is as far ahead as the former was of the latter.