

Farm Experiences

GROWING AND FEEDING TURNIPS

I have been growing roots for feeding to stock for thirty-five years, six of which were in this country, and it seems rather peculiar to me that more farmers have not taken up this valuable line of work. I have grown fall turnips, mangolds, swedes and sugar beets successfully. Fall turnips give more chance to kill weeds in the spring because they can be planted later. They are also the most suitable for sheep feeding on the land where they are grown. Sheep will eat them up, tops and all, in the fall. For storing, however, they are of absolutely no use. Mangolds are more satisfactory for milking cows since they do not taint the butter no matter what time they are fed and they are equally suitable for either cows or hogs. My best success, however, has been with swedes. They are very hardy and will stand a lot of frost, are easily planted and grown, are suitable for any class of stock and will keep up to April or May at which time the stock needs roots most. They are particularly useful for young stock in the spring.

I found it best not to grow swedes too far from the place I wished to store them. I like to manure the land one year ahead, but good land well prepared does well without manure. It should be plowed eight or nine inches deep early in the fall and then a cultivating after it has lain for a time. Do not cultivate when wet or it will spoil your job. If left rough in the fall it should be harrowed early in the spring both ways to kill weeds, in fact as soon as dry enough, if not before. I don't like deep cultivation in the spring, but the early harrowing gets some weeds and starts the others to grow. If the light harrowing does not remove the weeds, I use a cultivator or disc harrow. The whole secret in growing roots is to get a deep, well worked mould to hold moisture while the roots get a start, to kill the small weeds and save time and labor as much as possible. The land should be made firm while dry with harrows and packer because small seeds like turnips should not be sown in deep dry dust.

From May 24 to June 1 is a good time to plant. I put them in on the flat with the grain drill and a seeder adjustment, four or five pounds to the acre. About two feet six inches apart between rows is a good width. I stop up such holes in the drill as are not required and run the drill very light, just deep enough to reach the moisture, and then pack or harrow lengthwise of the drills and not crosswise. If they come up good and thick they can be harrowed again when you can see the rows well up, but if they are thin it is best to hand hoe just one stroke on each side of the drill. Later when they get a fair size they can be thinned out to about twelve inches apart by leaving about one single root or one or two if it saves pulling by hand. Turnips are the reverse to potatoes. They should have the earth pulled away from them. The most important thing is to kill small weeds in the spring before planting. It is most easily done at that time. I don't think it is much more work than in growing corn, but the land must be prepared well ahead. Turnips will grow without much more cultivation after they are once hoed and thinned out to one single root in a place.

Storing and Feeding

Take up turnips about October 20 so as to get them stored in October. I usually store swedes in the stock barn. They will stand a certain amount of frost. Mangolds should be lifted two weeks sooner than swedes, but they will not stand the frost like the turnips before lifting. They should be well covered with their own tops and lifted in time. They do not stand being knocked about and should be kept free from frost after being pulled. Fall turnips are not worth storing, but are good for sheep. The seed is cheap and it could be planted in the summer-fallow as late as July 1 if there is plenty of moisture in the ground. They make good feed that way for cattle also. It is hard to tell just what it costs to grow turnips, but I do not consider they cost but very little more than corn. I grow both side by side and also potatoes. They are certainly all three first class cleaning crops and there is good profit in the first two in particular for stock. The land is just right for sowing wheat the next year. Corn and root land often grows better and cleaner wheat than summerfallow. Men who have never fed roots cannot realize their

We are anxious to secure your experiences in all practical phases of farming for publication on this page, and are willing to pay for them. The description of your best methods should be very useful to other farmers. Such subjects as wintering livestock, from housing or feeding standpoints; growing and marketing potatoes; taking care of machinery; work saved by the gas engine; producing eggs in winter; feeding dairy cows or any other of a dozen subjects. The only requisite of such contributions is that they be from practical experience.

value for stock. There is no other feed to my mind can take their place for either cattle or sheep. I feed them to my milking cows and even the swedes do not taint the butter if they are fed just after milking and after the milk has been taken out of the stable. There is nothing better for fattening steers. A few once or twice a day will make any class of feeding stock thrifty, particularly if chop is not too plentiful. Even for working horses, a few in the winter time is good. For feeding to pigs they are best pulped and put into tubs or tanks with just water enough to cover them. When left for a few days this way they will become quite soft and when mixed with chop or swill hogs will eat them much more readily than if fed whole or even freshly pulped. Mangolds can better be fed without pulping than turnips.

This year I had ten good wagon loads to the acre and I have had them frequently go fifteen without being a bumper crop at all. I consider them more valuable amongst a mixed stock of cattle, sheep and hogs than corn. I fed twenty-two large weaned calves and yearlings for two weeks with swede tops from a crop of three acres. They much improved with this feed and nothing else this fall. Just a few swede tops will greatly improve weaned lambs or grown sheep in the fall and sheep do mighty well when simply turned in on the land where they have been grown.—E. B. Man.

RESULTS OF LAMB FEEDING

The large percentage of Canadian lambs are marketed in the fall direct from the pastures. The selling of the most of our Canadian lambs during the fall months practically always causes a slump in price, due largely to lack of finish and lack of uniformity in them. Lambs not required for immediate consumption are held in cold storage to the profit of the wholesaler, usually at an increase of \$1.00 to \$3.00 per hundred pounds between the months of November and April.

Many farmers with abundance of roughage could well afford to finish from one to three carloads of lambs during the winter months, thereby making top market prices on the farm produce and a good margin of profit in addition.

In the six years' work of the Dominion Experimental Farm system, the profits on the winter finishing of lambs have ranged from 25 cents per head to \$2.10 per head over the cost of feed. In other words, the experimental farms and stations have purchased unfinished lambs on the open market or from drovers, and, after charging good prices for marketable farm

feeds and cost prices for other roughages, have made from 3 to 33 per cent. on the investment in the lambs, labor not included. Even allowing a fair margin for labor, this is as profitable a line of feeding work as can be carried on and shows a return on investment greater than is usual in the finishing of steers or shoats.

Usually the well-bred lamb showing plenty of constitution and thrift and weighing from 60 to 80 pounds is the best stocker lamb to put into winter quarters. Lambs weighing from 80 to 100 pounds, if thin, may be profitably put in the feed lot for a short finish and if good fall pastures are available this may be as profitable a line of work as any. The finished lamb weighing from 80 to 110 pounds should never be purchased for feeding purposes. The time when greatest profits can be made in purchasing lambs is usually between the months of August and November. However, the condition of the pastures and of the lambs themselves as well as the markets will regulate the time for purchase. The proper time to sell the lambs is when they are finished, whether this be November or April or any intervening month. This applies also to the selling of lambs off grass. Finished lambs will make small gains at a very high cost per pound, which cost will usually be far in excess of the market price at that season. In addition to this the markets are demanding a well-finished lamb, not overdone, and ranging from 85 to 105 pounds live weight, depending upon the breed and season of the year. This, of course, does not apply to the young lamb trade of the spring and early summer.

The following table shows the average profits over the cost of feed in the feeding of lambs on the experimental farms throughout Canada during the past six years:—

AVERAGE PROFITS IN WINTER LAMB FEEDING

Experimental Farm at	No. of Years	Weight of Lamb when put in Feed Lot, Lbs.	Buying Price per cwt.	Selling Price per cwt.	Spread between Buying and Selling Prices	Profit over Feed, per Lamb
Ottawa, Ont.	5	99	\$6.65	\$8.25	\$1.60	\$1.28
Charlottetown, P.E.I.	4	63	4.65	6.25	1.60	.70
Nappan, N.S.	3	84	5.80	7.53	1.73	.90
Lennoxville, Que.	2	90	6.00	8.00	2.00	1.63
Indian Head, Sask.	1	70	5.00	6.00	1.00	.34
Lethbridge, Alta.	5	60	5.50	7.57	2.07	1.35
Average	3	79	5.79	7.50	1.71	1.03

*Most of the lambs at this station finished on pasture.

This shows an average profit over feed in the feeding of many carloads of lambs of \$1.03 per lamb when the spread between buying and selling prices is approximately \$1.70. Since the spread between buying and selling prices has exceeded this amount during the past two years and promises a still further rise during the next two years, one is safe in anticipating a reasonable profit in lamb finishing, in spite of the very high price of lambs at the present time. If this applies to the purchasing of stocker lambs for winter feeding, it should apply more so to the farmer or shepherd with lambs of his own in an unfinished condition.

Feeds for Winter Finishing

A large number of feeds have been tried in this work and these may be briefly treated under the four headings—dry roughages, succulent roughages, grains and mill feeds.

Of the dry roughages, alfalfa hay is an easy leader, closely followed, however, by fine clover hays and fine mixed hays. Alfalfa hay alone or with meal is less profitable than when succulent roughages, such as roots (turnips and mangolds) or green oat sheaves, are also fed. What applies to the rich alfalfa hay also holds true with clover hays. Good quality clover hay is worth from 10 to 50 per cent. more in lamb feeding than timothy or similar grass hays. It was found also that good quality timothy hay plus mangolds gave from 15 to 20 per cent. more profitable gains than clover hay alone. A hay made from peas and oats, well cured, will produce satisfactory gains, but at about 10 per cent. less profit than alfalfa or clover or a mixture of these with oat sheaves. Coarse hays commonly found in marsh lands are about 50 per cent. less valuable in lamb finishing than good quality

Continued on Page 20



Pigs Feeding on Swedes in Alberta. They are very valuable in carrying pigs or any class of livestock over winter, particularly in the Spring when feeds become dry and uncertain.