

Live Stock

POTATOES AS CATTLE FEED

Several inquiries have been received this season asking what value is possessed by potatoes as a feed for stock, especially cattle. The low price of potatoes this year had left a great amount of the crop in the producer's hands, and to realize any profit on the crops many were obliged to find some other outlet than the regular market. One farmer in Dakota gives his experience in feeding potatoes as follows:

"Having a dairy, and plenty of small potatoes this winter, I thought I would try feeding them to my cows. I had no pigs to feed them to, and even if I had, I should have fed them to the cows, if the value had been equal, and it is a good deal more trouble to cook and mash the potatoes, and mix in meal than to feed them raw. Out of the dairy of ten cows, two were fresh, and two were farrow, the rest being due to freshen before April 20th, except one, due in May. The ten were fed one bushel per day among them, beginning early in January, but the fresh cows, which were getting one pound of grain to three pounds of milk, showed no effect. The other eight were getting one pound of grain to four of milk, and after one week of feeding potatoes, they came right up on their yield. I will give their record of the six cows with calf, and also that of the two farrow ones, three weeks before, and one month after I started the potatoes.

Week	Six Cows	Two Cows
Commencing		
Dec. 12	605	204
Dec. 19	610	209
Dec. 26	541	208
Jan. 2	573	208
Jan. 9	628	232
Jan. 16	637	240
Jan. 23	530	232

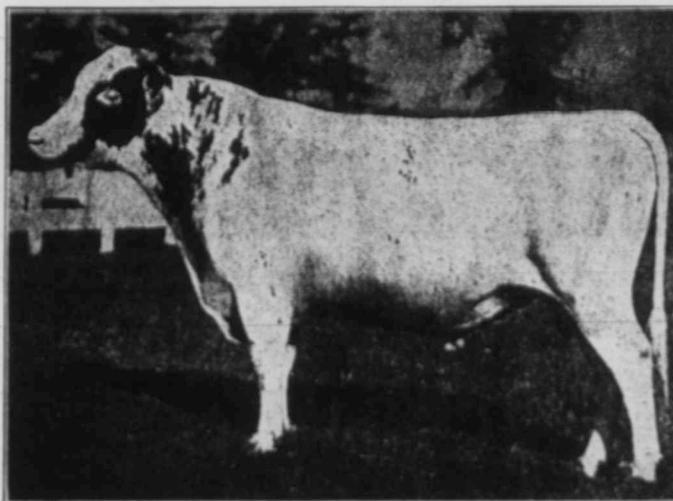
"It was during the week of January 2nd, that the regular feeding of potatoes began, although some had been fed before that time. It will be noticed that although the farrow cows did not fall appreciably during the two weeks beginning December 19th and 26th, respectively, the six with calf dropped from 610 lbs. to 541 lbs., or 69 lbs. It is only fair to suppose that this drop was not due to any outside condition or the farrow one would have fallen off to the same extent, whereas, their difference was only one pound, a negligible quantity. It is also fair to suppose, that had the potatoes not been fed, these six would have continued to drop, and the two farrow ones would have remained the same during the whole time. We find, however, a gain of 16 pounds a week for each cow between December 26th and January 16th, including those which were farrow. At the price I received at this time for milk, \$1.78 per 100 pounds, this figures out to 40.9 cents per bushel apiece per week. This is the amount the potatoes brought, owing simply to the increased production caused by them. Since, without potatoes they probably would have continued to fall off, still more should be credited to the potatoes, but 41 cents per bushel is pretty good. Many of these potatoes were unsalable, even as small ones, there being many of them which had been partly frozen. They were not even cut, so the only labor was that of feeding them. These cows have 40 pounds of good silage per day, so that they were not in need of succulent food. If they had been they would come up even more on their milk yield.

"I thought at first that perhaps their ration was too narrow to furnish them sufficient carbohydrates, as the grain fed was cotton-seed meal and pea meal—but had this been the case the two fresh cows would have shown more gain; and their ration was narrower; whereas, they showed none. If I had fed these eight cows one pound of grain to three pounds of milk, and they had risen on their milk flow as much as they did on the potatoes, the grain equivalent of one bushel of these potatoes would have been 13 pounds, worth 20 cents. As after trial with more grain than one pound to four of milk, I had decided that that was the most profitable ratio, for cows that were drying up, I feel certain that the amount of grain would have had no more than that much effect, and it might have had less. Under these circumstances, I feel justified in

concluding that potatoes are worth at least, 20 cents a bushel, to feed cows."

MANITOBA STUDENTS WIN AT ST. PAUL

The team of students from the Manitoba agricultural college, who take part in the judging competition at the Chicago International Fat Stock Show on Nov. 26, made a clean up at the St. Paul Fat Stock Show on November 15, when they captured the grand total and individual honors for stock judging. Four colleges were entered with teams composed of five men. The following colleges took part: North Dakota, South Dakota, Minnesota and Manitoba. The contest was superintended by Professor Andrew Boss, of the University of Minnesota.



The Ayrshire Bull "Pearlstone of Glenora," first in aged class and Champion Western Fair, London, Ont.

H. O. Tellier and A. J. Wallace, editor and manager of the Minnesota Farmer, with A. J. Lovejoy, of Illinois, acted as the committee of judges for the competition. Four animals in each of the following classes of stock, market hogs, fat lambs, fat steers and draft geldings, were judged by the contestants, and reasons were given orally to the committee.

Sixty per cent. was allowed for placing and forty for reasons. In the grand total on all four classes Manitoba won first with a score of 1,600 points, Minnesota second with 1,528, North Dakota third with 1,273, and South Dakota fourth with 1,200.

Lead Individually

In individual standing, A. J. McMillan, of Manitoba, was first with 324 points, L. E. Paterson, Minnesota, second with 347 and J. C. Smith, Manitoba, third with 344. C. H. Krahler, Minnesota, was fourth, with 324 points, L. E. Paterson,



"Dairymaid of Pinckney," Champion three-year-old cow of the world. Owned by W. W. Marsh, Iowa

Minnesota, fifth with 314, and R. G. Kerr, North Dakota, sixth with 308.

A. Blackstock and E. W. Jones, the other members of the Manitoba team, stood tenth and twelfth respectively. The class of stock used in the competition was of a very high order, and was representative of the general run of exhibits to the show.

A new feature this year is the splendid grain exhibit.

The Manitoba team spent Wednesday and Thursday studying types of stock found at the show, and Friday and Saturday were occupied in visiting the Minnesota Agricultural college and several large stock farms in the vicinity of Minneapolis, after which they proceeded on their journey to Chicago, stops being made at several stock farms en route.

CROSS-BREDS VS. PURE-BREDS

Everyone engaged in general farming ought to be interested in the production of pork on account of the high prices prevailing. There is every probability of these figures being maintained for some

time. The number of hogs now in the hands of the farmers is said to be much smaller than eighteen months ago, many having been tempted to sell off their stock hogs.

One of the first questions asked by the farmer going heavily into hog-raising is: "Shall it be cross-breds or pure-breds?" A great deal has been said by the agricultural press about the crossing of breeds. For some years the writer raised cross-breds and for many years raised registered Berkshires, so he claims to be in a position to compare relative results.

If you go into the business of raising pure-bred hogs in these days of competition, you must get stock with long and noted pedigrees, and with a certain conformation of body and color markings; these cost a great deal more than the average farmer can afford to pay. But the buying and raising is the easiest part; the tug of war comes when you offer your hogs for sale. You have to spend a large amount in advertising and keep everlastingly at it until you get a reputation, when you can cut the "ad." account to some extent. Most buyers do not come to your farm to see your stock, but write, asking descriptions, etc., and end by requesting that you ship the hogs to them "on approval." If the animal strikes their fancy, they keep him; if not, they send the hog back at the owner's expense.

Now, take the other side of the case. In buying purebred hogs to cross it is only necessary to get large young sows, not too ragged in conformation, but with no requirements as to points. They must, however be pure-bred. These can be bought for less than half price from almost any reputable breeder, as there are always pigs in every litter whose only defect is markings. The same rule applies to the boar. Be careful to see that he is not related to any of the sows.

It has been my experience that if you mate a Berkshire boar to a Poland-China sow or any of the pure-bred sows the pigs of this union grow faster and are much larger when six months old than pigs the same age by parents of the same breed. But if the cross is repeated the same results do not follow; it seems the offspring of cross-breds commence to degenerate.

As a rule a sow will produce thrifty pigs until she is eight years old and the male will retain his vigor equally long. When your sows are six years old, serve to some pedigreed boar of the same breed and keep the best of the pigs to replenish your stock when their old age compels you to sell your sows to the butcher.

I made more money on my registered Berkshires than on my cross-breds, because I could only get three and a half cents per pound gross for the latter. If I could have gotten the prices now ruling for pork, the cross-breds would have come out ahead. Where anyone has plots sown in alfalfa, rape and cow-peas, respectively, grazing them in the order named and then turning the hogs into the sweet-potato patch—which ought to be large enough to feed the hogs two months—the cost of raising pork today won't exceed more than four cents per pound gross, under our Virginia conditions. Of course you have to feed a little corn all the time and a good deal in finishing off.

Altogether I think it much more satisfactory to raise hogs to sell as pork than to sell as breeding stock, because you always have a good pork market at your command.—The Farmer.

THE FATTENING OF SHEEP

During this month, cool enough weather is likely to prevail to warrant starting the process of fattening such old ewes or lambs as are to be sold for mutton. Cool weather is preferable to warm for sheep fattening, for the reason that it usually whets the appetite, as well as makes it possible for the sheep to be confined in small quarters and still be comfortable. While exercise is highly essential for all breeding stock, fattening stock will be found to make more rapid gains when confined to a small place where little energy is expended in moving about.

In case of warm weather, however, sheep are so uncomfortable when crowded together that their appetite is considerably retarded. Cool weather is quite an essential feature of economic fattening.

Fattening sheep should be given a ration that appeals to their appetites. It should consist of good roughage, such as second crop clover, which gives bulk and some nutrients; grain, such as corn and barley, screenings, which supply the fattening elements; roots which are succulent and serve as an appetizer; and lastly, oil cake, or some such material, which furnishes nitrogen to build up and repair body tissue. In addition, plenty of both salt and water should be given.

Of roughage, the sheep should be given about all they will eat. This is something which keeps them busy and satisfies them, yet is not likely to oversupply them with nutrients. The rack in which the roughage is fed should be cleaned out every day and the stems, stalks, or other coarse stuffs which the sheep have rejected should be given either to the horses or cattle.

Of the grain, only a little should be given at first, and this amount be gradually increased from day to day until at the end of two or three weeks the lamb of average size is receiving from one and a half to two pounds of grain daily. If put at once onto full feed the sheep are likely to become foundered and are often permanently injured; in any event, they