

tuating scarcity, is also noted, though latterly a disposition is manifested to keep the sows and breed hogs more extensively. From this, it argues wisely, that the present is not a particularly opportune season to embark in commercial pig-raising. "But if you do start," it adjures, "don't sell out the first time that prices go down, and wait for another period of high prices to buy back. Give the old sow a steady job on your farm; feed her and her pigs liberally, and she will be one of the best money-makers in your possession."

Silage for Beef Cattle.

The Purdue University Experiment Station (Indiana) has been investigating the value of silage as a roughage for fattening steers for several years, and enough data have been obtained to justify the statement that, when properly supplemented with some nitrogenous concentrate, corn silage is one of the most economical roughages which the cattle-feeder can use, declared H. P. Rusk, of the Station, before a meeting of 200 Indiana cattle-feeders, at the third annual spring meeting, last month.

"During the last winter the experiments were carried on with three objects in view: first, to make a further study of the influence of corn silage in the ration; second, a study of the influence of different proportions of the supplement in the ration; third, a continuation of a study of long and short feeding periods. Ninety head of steers were used in this experiment, two lots of 15 each, and six lots of 10 each. In every case, cattle receiving corn silage in the ration made more rapid and cheaper gains than those which did not receive corn silage in the ration. Of the six lots of cattle which were fed 160 days, the lot receiving a ration of shelled corn, cottonseed meal, and a full allowance of corn silage, with what clover hay they would consume, in addition to corn silage, made the most rapid gains. The average daily gain of this lot was 2.63 pounds, and cost \$9.56 per hundred. They returned a profit of \$18.09 per steer, without including the pork made from the droppings.

"Where silage was included in the ration, two and one-half pounds of cottonseed meal per 1,000 pounds of live weight daily proved more economical than one and one-fourth pounds of cottonseed meal per 1,000 pounds live weight. However, this was not true where clover hay was the only roughage used. Owing to market conditions, the results of the long vs. short feeding trial were in favor of the short-fed cattle."

Pigpen Questions.

1. I would like if you would give me a plan of pigpen to accommodate about 70 pigs. Would like to have a passage, and pigs at both sides.

2. Are you in favor of raised beds? How should they be built?

3. Also, size of pens, windows and doors for pigs going in and out. W. F.

1. Pigpen to accommodate 70 pigs should be at least 35 to 36 feet wide, and 56 feet in length. This would allow for a 5-foot central passage, and pens on each side would be 14 to 15 feet in depth. On one side there would be five pens, each 10½ feet in width, and, on the other side of passage, four pens of similar size might be built, leaving a 10½ x 15-ft. space for a feed room. Each pen would accommodate eight pigs. A larger

building and roomier pens would be better, but above size would do. Floors should slope away from trough.

2. The upstairs beds, so common some years ago, are not in much favor now. A bed in back corner of each pen, raised to a height of six or eight inches by means of scantlings on edge, planked over, is quite satisfactory.

3. Every pen should have a door leading outside to yard, and others to connect with pens on each side. Doors opening to central passage should also be placed in some of the pens, at least. As loading is usually done from a door at the end of central passage, access to this passage from the pens is essential. Doors need not be large; a size of 2½ feet wide by 3½ feet high being quite sufficient. Let windows be numerous, and fairly large, say 3 feet square. They should be so hung as to allow of being opened for ventilation. A straw loft at a height of eight feet, with not too tight a ceiling, also tends to promote ventilation and dryness, but some outlet or outlets for the escape of foul air through the roof should also be provided. We prefer a cement-concrete base, but walls proper of double boards, with tar-paper between. Members of our staff have found cement floors, with raised plank sleeping-places, quite satisfactory, but pigs, like other stock, should be kept perfectly clean, by removal of manure every day or so. Use litter freely, and keep them dry.

Big Returns from One Calf.

Editor "The Farmer's Advocate":

Hand-raising calves is preferred, if you wish to get good dairy cows, especially if the breed you have in hand be Shorthorns. In Cumberland and Westmoreland, in the north of England, where it is generally admitted that some of the finest specimens of the dairy Shorthorns are raised, all breeders are thorough believers in the pail-raised calf. Their objection to the sucking process is that the calf gets too fat, and tends too much to go to beef, and we all know the doctrine of "Train up a child," etc.

There seems to be something in the north-country belief. I know from experience that one scarcely ever finds hand-raised Shorthorns over there to fail to be excellent dairy cows. I remember my late father going to a sale of pedigreed Shorthorns, about 40 years ago, when he was endeavoring to form a herd of dairy cows. He could not find anything to his liking at the place, but in looking over the farm next morning he came across a heifer calf that took his fancy, and, as he saw the dam was what he wanted, the next thing was to see the dam of the sire of the calf. This he succeeded in doing with quite a lot of trouble, and as all came up to his requirements, he decided to purchase the calf, if money could get it, and he bought it for about \$100. For a two-weeks-old calf, it certainly looked risky, but it turned out all right. We raised quite a large family from this strain, mated always with bulls selected from Shorthorns possessing great dairy qualities, with the result, in my 20 years' handling of these cattle, that I never knew a failure as a dairy animal amongst them. To-day you will find them with the highest yields at the London Dairy Show. On several occasions winners were found to have been produced from this strain, so practically raised by a north-country tenant-farmer, when Shorthorns were anything but a success at dairying. You can find specimens from this illustrious calf in

Lord Rothschild's and several other noted dairy-men's herds, and it is doubtful if there is a more valuable strain in the Shorthorn breed to-day than these descendants of my late father's purchase of forty years ago. In addition, several bulls from this strain have taken the highest awards at all the principal shows in the Old Country. Therefore, I feel confident, with care and attention, it is possible for us in Canada to do the same, if we will only persevere. TOM RAWLINSON.

Alta.

THE FARM.

Weed Seeds in Western Oats.

Editor "The Farmer's Advocate":

My experience with Western seed oats this spring may not be without interest to some of your readers, more especially to those who, like myself, have thought to improve the yield of our grain fields by sowing seed obtained in another locality.

The oats I bought came from Saskatchewan, and were brought East by a milling concern, to be sold for seed. They have been successful in disposing of a large quantity.

Upon ordinary inspection, the oats seemed to be perfectly clean, and it was not until I had sown about four bushels that I noticed some small black seeds sticking to the inside of the grain bag. I then ran the remaining four bushels through the fanning mill, and got about two quarts of weed seeds, of which I sent a sample to the Botanical Department of the O. A. C., at Guelph. The following is the report I received from them: "In the screenings we found the following weed seeds: Lamb's quarters, in large quantities; ball mustard, in large quantities (this is a nasty weed in the West in grain fields); wild Western sunflower, also a troublesome weed in the West; false flax, a nasty weed both in the West and in Ontario; black bindweed, a very large quantity, a very common weed; wild oats, a few; also volberry, corn cockle, and prairie rose. Seed containing these weed seeds would, if sown, contaminate a whole farm."

The above will give anyone who has sown Western oats this spring an idea of what a varied harvest they will be likely to reap in the course of two or three months.

I do not know that the spreading of weed seeds in this way by milling companies and seedsmen generally is classed in our statute books as a criminal offence, but it is pretty safe to say that there are men in our penitentiaries that might well be released to make room for the individuals who take the farmers' good money and give them weed seeds in exchange for it. J. E. M. Glengarry Co., Ont.

[Those who heeded the editorial warning in "The Farmer's Advocate" of March 17th will have occasion to congratulate themselves on their prudence.—Editor.]

Press despatches state that a resolution of the British Columbia Fruit-growers' Association, endorsed by the Provincial Minister of Agriculture, was forwarded last week to Finance Minister Fielding, asking that the duty on American fruit seeking a Canadian market be made at least equal to the duty levied on Canadian fruit entering the United States.



A Plowing Match in New Ontario.

Last plowing match held by the North Shore Plowing Association, on the farm of John Armstrong, Laird Township, Algoma District, Ont.

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