

### Grading Wool at Guelph.

Visitors to the Winter Fair building during the month of June found much of interest going on. This building is the receiving station for a large portion of Ontario's clip of wool, and there it is being graded, packed and branded ready for shipment to the mills, under the direction of R. W. Wade and his staff, who are to be congratulated upon the system worked out for handling the wool and for the efficient way in which the work is being done. Wool has been received from practically every county and district in Ontario, and the quality is higher than it was last year, thus showing that selling on a graded basis is an inducement for the wool grower to care for his flock and handle the product in the most approved manner. A large quantity of wool has been received from New Ontario. Up to June 20, around 500,000 pounds of wool had been received at Guelph, and it was expected that by the time it was all in the amount would total close to a million pounds. Low medium combing grade was running the highest, with medium combing and low combing about equal in quantity. A considerable quantity of coarse wool has been received, but a fair percentage of the wool grades clothing. As was to be expected, there is a small percentage of burry and cotted wool.

As the sacks of wool are received the name of shipper, address, county, number of sacks, charges, and weight, are marked in triplicate and each man's shipment is stamped with a letter and number so that when it comes to the grading table there is little likelihood of a portion of the shipment being missed. In front of the grader are a number of baskets for the different grades of wool. As each man's shipment is graded these baskets which are on wheels are run on to the scales and the weights of the different grades are supposed to tally with the weight at the receiving point. By this method there is very little chance for error. From the scales the wool is thrown into large bins made for the different grades. The wool is packed in large sacks. After putting three fleeces into the sack a man gets in the sack and keeps tramping the wool as it is put in until the sack is filled. By this method upwards of 300 pounds are put in a bag. The bag is then sewed up and branded with the grade. It is well worth any one's while to visit this grading station and see the efficient way in which the work is done from the time the wool enters the building until it is ready for shipping to the mill. Every wool grower might advisedly market all his clip through this association. It will be to his advantage to do so, as the maximum price is received and the wool is graded and handled at the minimum of expense. A fair price is paid for the wool when it is received and the balance is sent to the producer as soon as the books are straightened after the entire clip has been sold. Wool growers should support this co-operative wool marketing association.

### Feeding the Growing Pig.

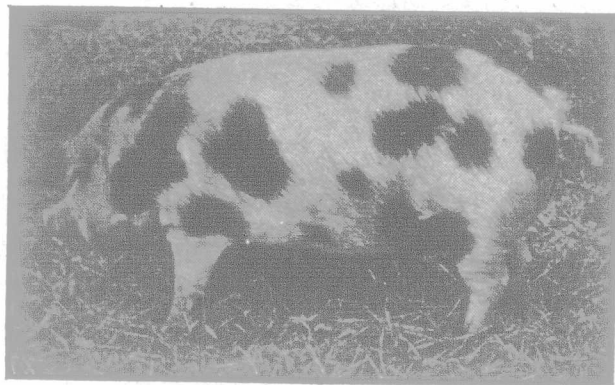
It is claimed that the number of sows farrowing this spring is about thirty per cent. above normal, and reports indicate that on the average particularly large, strong litters have been farrowed. Many of the litters have been weaned, and the growing pigs are squealing for more and still more feed to satisfy their keen appetites. The high prices and scarcity of concentrates have resulted in most granaries being pretty well cleaned out, and many feeders are confronted with the task of purchasing practically all the feed required to carry these large litters until the new crop is harvested and threshed. Millfeeds are none too plentiful, and the quality is not what it used to be. Some claim that they get very poor results with the shorts now on the market. Middlings and feed flour are scarce, barley is practically off the market, oats are sky high in price, considering the percentage of hull they contain, and corn while available is not generally considered a good feed for young and growing pigs. Under existing conditions, the man with a large herd of hogs is confronted with a difficult problem. How can he best solve it?

The digestive system of the pig does not lend itself to such a variety of feeds as can be given bovines. While a certain amount of roughage can profitably be fed, the bulk of the ration must necessarily consist of concentrates. The man with a large herd of cows from which he sells cream and retains the skim-milk has the advantage over those who do not keep cows, or who dispose of whole milk. Skim-milk and middlings or high-grade shorts make an ideal ration up to the time the pig is four or five months old. In fact, pigs have been raised and fitted for slaughter on this diet. A Waterloo County farmer raised and finished over one hundred hogs last winter on skim-milk and shorts, and secured from two hundred to two hundred and twenty-five-pound hogs at six and one-half months of age. This weigh is generally considered satisfactory for that age, although some are able to have their pigs gain so as to pass the two-hundred mark at less than six months. When this is done it reflects much credit on the feeder.

The first few weeks after weaning are important ones. Overfeeding, underfeeding, giving an improper diet, or lack of attention may result in impaired digestion of the young pig, causing unthriftiness which is difficult to overcome. It is doubtful if there is any feed that will take the place of milk, and the dairyman shipping cream should be in a position to handle a bunch of hogs to advantage and get a good price for his skim-milk. When milk is not available, an addition of ten per cent. tankage or ground oil cake to the shorts aids in balancing the ration. Some feeders mix the oil cake and shorts and pour hot water over them about twelve hours before feeding; this partially cooks the feed and it will thicken up considerably as the oil cake becomes soaked. This should be made into more of a gruel before feeding.

The most practical method of handling this feed is to mix it in pails instead of barrels. If there is a supply of oats on hand, finely-ground oats and shorts in equal parts make an ideal ration, as the oats furnish practically all the nutrients required by growing animals. The feed should be made as palatable as possible. Here is where some feeders fall down. Because it is a pig they are feeding they consider that it matters not how the meal is served to it. This is sometimes the cause of poor results in hog feeding. Care should be taken to keep within the pig's appetite. Scouring, dullness, or lack of appetite are indications of digestive trouble and calls for restriction in the ration. The fact that one feeder is able to make much more satisfactory gains than his neighbor, with the same breed of hogs fed on the same kind of ration, shows that a good deal depends on the feeder. The following table from a Bulletin issued by Prof. H. Barton, Macdonald College, gives the feed requirements of pigs of different weights.

Weight of pig.	Feed per day in meal or the equivalent.
30 lbs.	1½ to 2 lbs.
50 "	2 to 2½ "
75 "	2½ to 3 "
100 "	3 to 3½ "
125 "	3½ to 4 "
150 "	4 to 5 "
200 "	5 to 6 "
225 "	6 to 6½ "



A Gloucestershire Spotted Pig.

Brood sows of this breed have sold as high as \$625 in England.

It is estimated that six pounds of skim-milk or buttermilk will equal one pound of meal. Young pigs should be given plenty of exercise and may be allowed the run of a grass paddock; if it is sheltered by trees, so much the better. In cheese factory districts the by-product known as whey has a fairly high feeding value for hogs. Experiments have shown that from 1,000 to 1,200 pounds of whey are equal to 100 pounds of mixed grain for feeding pigs.

It is considered by some feeders that more rapid gains can be made with the minimum of feed by using a soiling crop rather than pasturing, especially with young pigs. Once the pigs reach 80 to 90 pounds in weight they may be turned on some form of pasture to advantage. Clover, alfalfa, vetch, rape, rye, or a mixture of these crops, make excellent feed for the growing hogs. This is one way of making economical gains and yet saving the grain supply. Shotes will not make satisfactory gains on pasture alone; they require grain. At the Montana Experiment Station hogs on pasture with a full grain ration required 412 pounds of grain for 100 pounds of gain, and they made 1.39 pounds gain per hog per day. Hogs on a half grain ration only gained .98 pounds per day, but they required only 291 pounds of grain per 100 pounds of gain. Thus it will be seen that if the feeder does not wish to have his hogs gain rapidly he could make a considerable saving in grain by pasturing and using half the regular ration. Similar results have been obtained at other experiment stations.

At the Ontario Agricultural College a study has been made of feeds for young pigs, with the aim in view of finding out what mixture will give the best results, or if any satisfactory substitute can be found for milk. Young pigs were divided into four groups, and the lot on meal and water alone made an average daily gain of .846 pounds at a cost of 6.58 cents. The group on meal and skim-milk made an average daily gain of .89 pounds at a feed cost of 9.15 cents per pound of gain. The group on meal and tankage made .867 pounds daily

average gain at a feed cost of 7.86 cents. The group fed meal, skim-milk and tankage made the average daily gain of 1.11 pounds at a cost of 7.54 cents. Thus it will be seen that the greatest gain was made when skim-milk and tankage were both used with meal, although fairly good gains were made with the meal and tankage. This shows that while skim-milk is one of the best feeds for young pigs, tankage can be used to supplement it with very good results. It is not considered advisable to have the tankage constitute more than ten per cent. of the meal ration, and a smaller quantity can be fed as the pigs grow older.

While shorts, finely-ground oats, and skim-milk, together with a soiling crop or pasture, make an ideal ration and possibly the most economical ration for growing pigs, it is quite feasible to finish the hogs and have them weighing around the 200-lb. mark at six months of age on the ration mentioned. Of course, it is necessary to regulate the amount according to the appetite of the pigs. The aim should be to keep just within the appetite at all times. For finishing pigs, corn or pea chop is considered an ideal feed. However, it is not always possible to secure it; in fact, all feeds are scarce at the present time. If corn can be secured at a reasonable figure, it might advisedly form half the ration when oats or shorts are used, when putting the last 75 pounds of weight on the hog. If skim-milk or a little tankage were used, this would make a fairly well-balanced ration. The new standard feed which is being compounded and will, no doubt, be on the market shortly is supposed to meet the requirements of the hog. As to the price of this feed we cannot say, but by buying and handling in large quantities as is the present plan of the committee who have the matter in charge, it should be possible to furnish this feed to the feeders at a fairly reasonable figure considering its nutritive value. When hogs are thrifty and given a balanced ration, they will make a pound of gain on from 4½ to 5 pounds of feed, and a hog should gain around a pound a day. The highest gains are usually made from 125 pounds up to 190 pounds. With hog feeds at the present price and hogs selling around eighteen cents, some feeders claim that they are making a fair profit over and above interest on investment, labor, etc., while others contend that they barely break even. Those who have an abundant supply of milk and have clover, rape, or some other pasture crop on which to run the growing hogs, will undoubtedly be able to make better returns than those who confine their hogs to the pen and rely on grain alone to grow and finish them. With corn and shorts at the present prices, it will require practically 12 cents per pound to grow and finish the pigs. This is without counting the initial price of the pigs, labor, and whatever drink the pigs are given. By using pasture or soiling crops the cost will be reduced.

Cleanliness in the pen, shelter in the pasture field, regularity in feeding, keeping the hogs and pen free from vermin, are points to consider if the most economical gains are to be made.

### Weak Market Detrimental to Increased Production.

EDITOR "THE FARMER'S ADVOCATE":

Last fall an increase in hog production was urged and farmers were advised to keep an extra sow. They have responded well, but the reduction in price which occurred recently has thrown a damper on increased production. I don't see any way in which the hog business could be ruined quite so much as for the price to drop just at the present time when the sows are being bred. In our vicinity I believe that there are fifty per cent. fewer being bred this spring than last fall. With shorts, barley and corn at an exceptionally high price hogs must remain high if farmers are to continue breeding them. The writer has 150 hogs on hand, some of which were purchased at 20½ cents per pound, which was the ruling price a few weeks ago for shotes. If the price goes much lower, I do not see how I am to meet my expenses, of feed and labor, and if I am unable to make wages and bank interest on the money invested I will certainly not keep as many hogs next year. Unless the price keeps up hogs will be more scarce in 1919 than they were in 1917. One farmer in our vicinity, who was delegated to visit the farmers on the line and inform them of the great necessity for increased meat production, kept five sows last winter, which was an indication of his belief in the need for increased production of bacon and also that the price would remain sufficiently high to permit of a slight profit being made on the busi-



Making Good Use of Bluegrass.