

ridges. Time and labor is also saved in seeding and harvesting on land plowed in wide ridges, as the operator can drive the machines faster, with less horse power, less strain on himself and the machinery and in every way with far more satisfaction and profit than if he worked on land plowed in narrow high ridges.

IN FAVOR OF WIDE RIDGES

In view of these facts that I have tried to make clear and others that might be considered, the advantages, chiefly better drainage, to be gained by narrow ridged plowing are more than offset by its disadvantages as a rule. Farmers generally have come to realize this fact, yet there may be much to say in favor of the narrow ridge in some conditions. Every farmer knows his own conditions best and it is for him to study these problems and adopt whatever practice he finds to be best for him.

Note.—Farm and Dairy welcomes discussion on the points raised in this article. What is your experience in the matter of wide and narrow ridges?—Editor.

A Prize Winning Farmer Talks

"Our system of rotation," said Mr. J. W. Richardson, of Caledonia, whose farm won second place in the Provincial Dairy Farms Competition this year, when speaking to an editor of Farm and Dairy, who visited his place, "is to take off two crops and then seed down. Corn follows sod, barley or peas. Manure is applied as a top dressing. The bulk of the manure is kept under cover and drawn out in the winter. We leave our alfalfa down generally for six years, although some of it has been down for ten years. We find that June grass and alfalfa make a great feed for dairy cattle. It stands pasturing.

HOGS AS A BY-PRODUCT

"We find it profitable to keep enough hogs to consume the feed that would otherwise be wasted. About 100 hogs are turned off each year. They are fed pasteurized whey, which we believe is nearly as valuable as skim milk. During the winter they are fed considerable quantities of roots. We aim to have our litters come during February and March. That enables us to market one of the main litters about August when the price is high. The young pigs are fed whey, skimmed milk, roots and a little shorts. We exercise care when feeding, as growing pigs will not consume many roots, when heavily fed on shorts or mixed grain.

As soon as clover is good in the spring, we turn growing pigs out and let them run. When pasture gets short they are fed a mixed chop of oats and barley, and some shorts. This mixture is fed also to finish them.

We prefer Yorkshires and aim not to keep more than we will have plenty of feed for. We aim to carry less hogs during the winter than summer, as we can grow the hogs on good clover pasture cheaper than any other season of the year. Under these conditions we have proved that we can produce pork for four cents a pound when the value of the grain and mill feed only are taken into consideration. We do not charge for the by-products as we would have no other use for them. Many farmers keep too many hogs and lose money on them in consequence. A man cannot keep 40 or 50 pigs profitably if he has only 10 cows. When grain is high, it is a mistake to keep more hogs than just enough to consume the by-products of the dairy, along with a reasonable amount of grain.

THE LABOR QUESTION

"In our section the farm labor problem continues to be a very serious one. It is driving farmers out of the business. The Provincial Governments in the west and the railway companies continue to put forth every effort to draw our men to the West. We feel that our Ontario Provincial Government should do more to advertise our province, as there are many men who go out

west who could do as well here if they only realized the opportunities that this province offers.

Quality and other Points about a Horse

The first point to be considered when we talk of quality in horses is that of general appearance. In noting this characteristic, the student studies the size and weight of the horses before him, noting the symmetry of body, to see that the forehand is not too long or too short, and the student makes a study of the style and "air" exhibited by the horse, together with his disposition and character.



Horses of Some Considerable Value

The illustration shows the prize winning heavy draft team at the Norwood fair. The team is owned by a Northumberland Co., Ont., farmer, Mr. Henry Waters, who may be seen seated on the wagon.

Conformation is the next point noted, and this includes, of course, the build of the horse in detail. It includes the shape of the head, neck, forehead and barrel, croups, thighs, hocks, and in fact every part of the horse in detail. Constitution is a point I always lay special stress upon, including therein the size of the nostril, width and cleanness of throat latch, cleanness about the windpipe, width of chest and spring of ribs, together with the correlated point, width through the heart and the size of the heart girth.

Then comes the point in question, quality, which includes the fineness and denseness of the bone about the head, with veins apparent, evidencing a fine mellow skin, and fine hair, then fineness and denseness of bone about the canon, knees, hock and hind legs. I would consider a horse that is meaty about the hock as lacking in quality, and probably he would lack quality in other parts as



General Utility Horses of Popular Breeding

This splendid team of Percheron grades were first in their class at the Norwood (East Peterboro) fair. They are owned and were exhibited by Mr. John Doherty, of Peterboro Co., who may be seen holding the reins. Photo by an editor of Farm and Dairy.

well. The horse that has quality is one that has refinement and denseness of texture throughout. A horse lacking quality is coarse in hair, bone and skin and has not the refinement desired. A dense hoof is another indication of quality.

In my work I have the students particularly examine the feet and legs and report thereon. This includes the conformation of feet and legs, the proper muscling of forearm and wrist using the uppermost joints examined under this special heading. Then the set of limbs, size of bone below the knee and flatness thereof, size and shape of feet are considered.

The heading "Quality in Horses", includes an

examination for unsoundness and the students are particularly taught to guard against any malformation that would give rise to unsoundness. When the horse is put in motion, his wind is observed as well as the eye when standing still.

Action is the last, but one of the most important points considered; and this includes a consideration of trueness of the gait, discrimination being made against winging or paddling or closeness of gait. The saddle horse is scored on his ability to go properly the three or five gaits. During the time that the horse is in action particular attention is paid to the first characteristic mentioned above—namely, the general appearance (style and vigor).

I am writing this article merely to give my ideas in regard to what is meant by each of the above terms used by the horsemen. It is necessary that we should have some universally understood terms in order that every one may understand what is indicated when each term is employed.—Professor Hooper, United States Department of Agriculture.

Harvesting Roots in Nova Scotia

J. R. Semple, Colechester Co., Ont.

In harvesting the turnip crop we do all the work of pulling and trimming by hand. Two rows are pulled at a time. We pull with one hand and with a sharp knife in the other hand the turnip is quickly trimmed and dropped outside of the rows the operator is working on. Coming back on the next two rows the turnips are dropped in the same row, making four rows of turnips piled together. When the next four rows are piled in the same way a sufficient space is left between for the horse and cart.

If the turnip tops are to be hauled off for feeding they are thrown in a windrow outside of the space left for horse and cart making eight rows of tops in a windrow. If they are not intended for feeding they are dropped as cut which leaves them spread evenly over the ground for plowing under. The loading is done by hand. We have tried loading with a fork but find it to be too slow. We find the dump cart the most convenient style of wagon for hauling.

Mangels are handled in about the same way as turnips excepting that the knife is dispensed with, especially for the globe and tankard varieties. The tops are twisted off with the hands. Sugar beets can be pulled taking a row in each hand, and with a quick jerk the work of topping is quickly done. The roots are stored in the barn cellar where they are convenient for feeding.

The Cost of an Inferior Bull

Prof. M. W. Harper, Cornell University

The average farmer who is raising his own dairy calves little appreciates the net cost of a cheap or inferior bull, when in search of an animal to head his herd. This is well illustrated in a herd of dairy cattle of which we have very accurate data as to the flow of milk and the amount of butter fat produced during the past four generations.

In this particular herd the condition, such as the breeding of the cows, the feeding and the management were as even throughout the four generations as could be obtained in practice, so that any marked increase or decrease in the production of the offspring can be credited to the sire used.

The first sire under observation got three producing females that averaged 300 pounds of fat a year. The second bull even exceeded the first, as he got nine producing females that averaged 392 pounds of fat a year. The third bull used was rather inferior, and illustrates the point at issue. He got eight producing females that averaged only 285 pounds of fat a year. This is a falling off of 107 pounds per cow a year. For the eight females this means a loss of 856 pounds of Lutter fat a year, which at 40 cents

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