

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

PUBLISHED WEEKLY BY
THE WILLIAM WELD COMPANY (LIMITED)

JOHN WELD, MANAGER

AGENTS FOR THE FARMER'S ADVOCATE AND HOME JOURNAL,
WINNIPEG, MAN.

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It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.
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Ripened Wheat for Seed.

Many of our readers will remember that an agitation in favor of cutting grain early was carried on in the agricultural journals of a quarter of a century ago. The advice was strongly given never to let grain get really ripe, and many good reasons were put forward in support of this view. There was less loss from shelling, a fact of which we were all well aware, and it was pointed out that the straw was more valuable for feed, which is especially true in the case of oats. One of the chief reasons advanced was that, with wheat in particular, the sample was brighter and clearer, and, therefore, would sell for more money. The agitation was possibly carried to an extreme, however, when it was argued that wheat cut in the late-milk stage not only made a finer-looking sample, but that the yield was just as good as if left to become more mature. Many of our best farmers were so much influenced by the arguments advanced as to change their practice somewhat, and early cutting has been in favor with them ever since. Probably the best time at which to cut wheat for market purposes is when the grain has passed the milk stage altogether, and has become doughy and rather firm.

But in regard to the value of wheat for seed purposes, experiments conducted by Professor Zavitz, at the O. A. C., for fourteen years, show that it is better if left until fully ripe. Seed taken from wheat cut when very ripe produced a greater yield of both grain and straw, and a heavier weight per measured bushel than that produced from wheat which was cut at any one of four earlier stages of maturity. Why should not our farmers make use of this knowledge? It could be done in many cases with very little extra trouble. As a rule, if there is much difference in the crop, the best portions will be found to be the earliest, and will probably be fully ripe when the field is cut, and it would be easy, when hauling in, to leave enough of such portions until the last, and stow away and thresh separately, using the product for seed. If the grain is of nearly equal ripeness, a strip of sufficient size, selected

from the part where the crop is best, might be left for a few days after the rest of the field is cut, and, when fully ripe, cut and kept separate, and threshed specially for seed, as before suggested. This may seem to be more trouble than it is worth, but a very slight increase in yield, and more than that might be expected, would be more than sufficient to pay well for the extra time and labor involved. It is, after all, more a question of taking thought, than of taking time.

HORSES.

Comparison of Corn and Oats for Work Horses.

From Ohio Agricultural Experiment Station, Bulletin No. 195, by B. E. Carmichael.

Problems connected with the feeding of work horses are doubtless of as wide interest as any problems in live-stock management. Practically all farmers, whatever particular branch of farming they may be engaged in, have occasion to feed work horses. Besides farmers, commercial firms of various classes keep horses in large numbers for work purposes, and they, too, have a deep interest in methods of feeding that will lessen the cost of maintaining work horses, without decreasing their efficiency.

Whether feeds are high or low in price, it is well worth while for feeders to exercise great care in the selection of rations, so as to use the ones that are most efficient and economical. With the present exceedingly high market prices for all kinds of grain feeds, it is especially important that a judicious selection of feeds be made, for much waste may result if attention is not given to this phase of stable management.

Of all grain feeds used in this country, none is in higher repute with horsemen than oats. Many horsemen believe oats to be the best single grain feed for horses, whether kept for draft or for road purposes. It has been stated time and again by practical horsemen and others, that horses fed upon oats display more life, keep in condition and endure work, especially during hot weather, better than do horses which receive a grain ration made up largely or exclusively of corn. And this belief in the efficiency of oats as a grain feed for horses is so strong with some horsemen that they are willing to pay exorbitant prices for oats rather than feed corn.

A study of the chemical composition of corn and of oats fails to show any good reason for the exceedingly high favor in which oats are held, or for corn being considered so totally unfit for the use of horses, especially when at hard work. It has been claimed that oats contain a stimulating principle known as "avenine," which gives great spirit to horses. The existence of this stimulating principle has not been proved, and it is safe to say that its existence is very improbable. Even if it does exist, there is no evidence to indicate that it would have any special bearing upon the practical feeding of work horses.

On account of the widespread prejudice against corn, and in favor of oats, an experiment, from which it is hoped that definite data may be secured in regard to this important subject, has been undertaken at this Station. The plan of this work calls for a long-time experiment—not one of a few days' or weeks' duration, but one that will continue for a number of years.

The work was begun in the spring of 1907, and the results of the experiment up to the present time are so striking that it has been thought best to give them to the public at once, with the understanding that further work is being done along this line, and that there is a possibility of different results being secured later.

SUMMARY.

While the work reported in this bulletin has not been conducted for a sufficient length of time, nor with enough animals to justify any very comprehensive statements, yet it seems that some facts have been pretty well established. The work is being continued, and it is hoped that the cumulative effects, if any result, of the long-continued use of grain rations made up exclusively of corn and of oats may be determined. The following statements, based upon the work done thus far, seem to be warranted by the data presented heretofore. It must be understood that the horses were mature geldings, and that mixed clover and timothy hay was fed.

The corn-fed horses endured hard work during hot weather as well as did the oats-fed horses.

The use of corn, to the exclusion of other grain for a period of forty-eight weeks, was not detrimental to the health of work horses.

The use of corn for work horses did not induce laziness and lack of endurance. Neither did the use of oats induce increased spirit and endurance.

When mixed (clover and timothy) hay was fed

to mature geldings at general farm work, ear corn was practically as efficient, pound for pound, as oats.

On the basis of the results of this experiment and statistical records of farm values of grains, corn has, since 1866, been cheaper than oats as a grain feed for work horses.

The drop in weight of the corn-fed horses, coincident with the beginning of the use of shelled corn, indicates that ear corn is to be preferred above shelled corn for work horses.

Farm animals should be fed according to their needs. Their needs depend, of course, upon the product that they yield. Work horses are kept for applying energy, and should be supplied with feeds that will furnish the required energy at the least possible cost, all things considered.

There is a wide difference in the efficiency of horses in utilizing feed. This is well illustrated by the record of the horse, Tom, used in this experiment. There is an "individuality" in work horses, as well as in other farm animals. Horses that are notably hard to keep in good condition should be replaced by others that may be maintained at less cost.

The data presented do not prove that, for use with pure timothy hay, ear corn is as efficient, pound for pound, as oats. Neither is any evidence at hand to indicate that a grain ration made up exclusively of corn is suitable for brood mares with foal or in milk, or for young, growing horses.

When the weights of the horses for the year previous to the experiment are compared with the weights secured during the experiment, it is seen that the exclusive use of either corn or oats has not had any bad effect upon the horses. There is no positive proof, however, that a mixed ration would not be more efficient than one made up exclusively of corn or of oats. This experiment does show, nevertheless, that corn is a valuable feed for work horses, and should be given a large place in their rations, whenever market conditions warrant its use.

It is obvious that feeds for work horses should be palatable, efficient, and economical. As far as palatableness is concerned, corn seems, in the experience of this Station, to have a slight advantage over oats, although this will depend to a considerable extent upon the individual appetite. The results obtained thus far in the experiment reported in this bulletin, indicate that corn is an efficient feed for work horses. The bulk of an amount of ear corn equal in feeding value to the usual amount of oats is small—so small that a casual observation might lead one to believe that too little corn was being used. As regards economy, ear corn is usually cheaper per pound than oats, while this experiment indicates that ear corn and oats are worth approximately the same per pound for feeding under the conditions stated previously.

What the Farm is For.

Editor "The Farmer's Advocate":

The relative cost and profit of raising colts and steers all depends on the dam and sire, and the luck the breeder has. There are not so many unsound steers as there are colts. I have bought three-year-old colts for less than the price of a three-year-old steer.

The feed of the steer and that of the colt do not differ very much up to three years of age. The steer is sure sale, while one colt out of three is sound, and will command a good price. If a man likes horses, and does not care for cattle, he had better stick to horses; if he likes cattle, let him breed cattle. No one can estimate the value of feed of either steer or colt up to three years old. All depends on how you feed them. I have seen them raise good colts and give them no care, while others would spend the price of a horse and have nothing. One thing is sure, the farmer who does not try to raise both, and the very best he can get, both by selection of dam and sire of cattle and horses, had better go out of the farming business, as that is what the farm is for.

Ontario Co., Ont.

J. F. LAVERY.

Why Not Work the Stallions?

Editor "The Farmer's Advocate":

Dr. Hopkins' letter on horse-breeding, in your issue of June 10th, is good advice to breeders and exhibitors of that class of stock. How can you expect to get working stock when the stallion is idle, and cooped up, nearly ten months of the year? Practically none of the stallions are made to work in harness in this country. When on the road, the most of them slouch along, until they are so spoilt that they cannot walk smartly at all. Why not have them in a good strong cart, and make the stallion walk up properly, and save the extra pony? By all means, work the breeding stallion on the plow, and in other places, and show people he can do a day's work or pull a load. You will improve the breed by doing so.

Manitoba.

O. KING.