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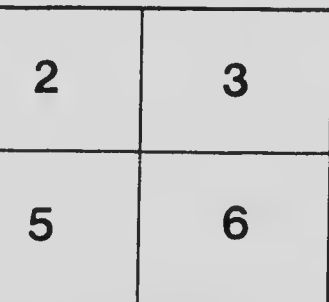
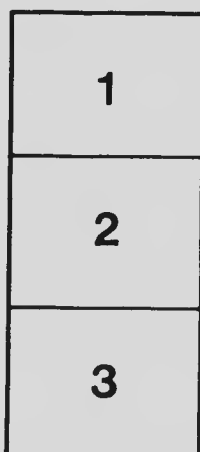
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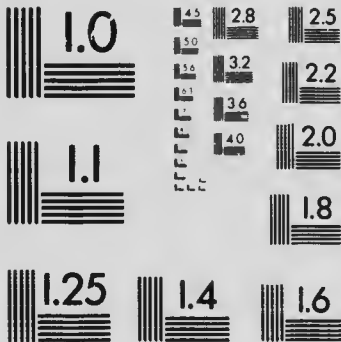
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PREPARING FARM HORSES FOR SUMMER WORK

BY

E. S. ARCHIBALD, B.A., B.S.A., *Dominion Animal Husbandman.*

Too much stress cannot be laid upon the oft-repeated statement that increased production of crops on every Canadian farm is not only an economic necessity but also the patriotic duty of every Canadian farmer.

One of the most important requisites of increased production is the employment of cheap and sufficient motive power. The horse being the principal motive power on the farm must in consequence perform more work than ever before, and his preparation therefore at this season is a most important subject.

Horses can be maintained profitably on the farm only if producing cheap motive power or producing marketable foals. The cheapness of horse labour must be measured by the work done in proportion to money invested and feed consumed.

As a producer of power the horse competes with farm engines of all kinds, and should be rated accordingly. As with the engine so with the horse, the main requisites of cheap power production are sufficient weight and strength to perform the regular work easily and, when necessary, carry a fair overload for a short time, quality of construction ensuring durability and a capacity to consume sufficient fuel (feed) to generate all the power that is possible. As also with the engine, the thorough fitting of the horse for work will ensure the production of more power at less cost.

DEVELOPMENT OF HORSE-POWER.

The power developed by a horse of the right type is made up entirely of the energy contained in his daily feed plus the reserve energy (stored fat and muscle) of the body. The storage of energy in the horse in this way is therefore advisable as preparing him for that time when most work is required. The possible available energy in the way of horse-power from a pound of oats is 425 units of power, and from a pound of timothy hay is 150 units of power, while one pound of wheat straw contains no available power, since the energy contained is less than the amount used by the horse to digest it. It is clear, therefore, that the energy must be contained in the feed and it must be in a readily available form.

For the average 1,500-pound horse at hard steady work a ration of 20 pounds oats and 15 pounds good hay produces about 11,000 units of power, which is about the work such a horse is capable of performing.

As the labour becomes heavier, so in the same proportion the food digested is diminished. Very severe work prevents digestion of food from 7 to 25 per cent. Hence, either more feed must be consumed by the horse or the reserve power of the body must be drawn upon to meet this extra demand. As an example of how extraordinary strain may interfere with digestion, it has been proven that the trotting of heavy horses even with a light load requires from one-half to four-fifths more feed per mile covered than when walking.

DOMINION EXPERIMENTAL FARMS.

J. H. GRISDALE, B.Agr.,

Director.

E. S. ARCHIBALD, B.A., B.S.A.,

Dominion Animal Husbandman.

SPECIAL CIRCULAR No. 5.

The heavy horse produces the most power for feed consumed when drawing a load at the rate of two and one-half miles per hour.

More horses, heavier horses, horses better prepared for work and fed for work will go far toward increasing and cheapening production per acre or per ton of crop. With the shortage of farm help at the present time, more and better horses will enable fewer men, when using larger and better farm implements, to maintain or even increase production at a decreased cost.

FEEDING IN PREPARATION FOR HARD WORK.

Rest and fat are always the greatest enemies of the horse. Feeding in preparation for heavy summer work after an idle winter requires care and skill. Horses fattened during the winter are in poorer condition for hard summer work than horses kept on a good maintenance ration. The soft horse withstands heavy labour and the heat of summer very poorly.

The preparation of all horses for summer work should commence at once. Horses which are yet on a maintenance ration of rough feeds should now receive a medium grain ration and better quality roughage (preferably timothy) in increasing quantities until up to a full working ration at the commencement of the hard spring work. By the middle of March the horse should be on regular light work or at least regular exercise and a grain ration of from 10 to 12 pounds daily, divided into three feeds. At the commencement of the heavy spring work he should receive from 1 to 1½ pounds of grain per 100 pounds of live weight. For example, a 1,500-pound horse should at that time receive from 15 to 19 pounds of grain and 15 pounds of hay daily. The best method of feeding is as follows:—

- 5 a.m. 6 pounds grain mixture, 5 pounds hay.
- 12 a.m. 6 pounds grain mixture, 3 pounds hay.
- 6 p.m. 4 pounds grain mixture, 8 pounds hay.

When the horses are idle for a day or so only, reduce the grain one-half.

Regularity in feeding and uniformity of feeds, both as to quantity and quality, are essential. Grain mixtures, such as oats 5 parts, bran 1 part; or oats 3 parts and barley 1 part will be found satisfactory.

One or more feeds of warm mashes per week are essential to prepare or maintain a working horse. A bran mash replacing the Saturday night grain is excellent. This might be replaced by boiled barley or other grains mixed with bran, and fed warm. If desired, saltpetre may be added as a blood tonic, and molasses as an extra laxative and appetizer.

Salt in the rock form should be in the horse manger at all times.

WATERING THE HORSES.

Water should always be given freely provided it is given frequently. Experience has proven that horses should be at liberty to drink both before and after feeding, but the larger supply should be previous to feeding.

CHANGES IN FEEDS.

All changes in feed and work must be made gradually. If not, there is danger of colic, lymphangitis, and similar derangements. Gradual changes not only build up the muscles and energy of the horse but gradually strengthen the digestion in preparation for the heavy strain on these organs during the heavy work.

CLIPPING AND GROOMING.

Clipping the horse in the spring when shedding commences will save much discomfort to the horse and much feed, and may also prevent overheating with resultant chills, colic, etc. Thorough grooming during the heavy working season will save feed and will increase the health, vigour, and power of the horse.

HARNESS AND SHOULDERS.

Many horses, especially young horses, are troubled with sore shoulders in spring. The preparation of harness and the fitting of shoulders will prevent this trouble. Clean the harness, fit the collar properly, and pay particular attention to cleaning collar pads and pounding them smooth. A careful daily washing of shoulders and withers with cold water or, better, cold salt water, will cleanse and toughen the skin in preparation for the severe work of warm weather. This washing should be continued from two to four weeks, depending on the age of the horse and the condition of the shoulders.

CARING FOR THE TEETH.

Owing to sharp corners and unevenness of the molars, many horses fail to properly masticate and digest their food. Have a good veterinarian or other experienced horse-man examine the mouths carefully and file or "float" the teeth into normal condition. By so doing, much feed and horse energy will be saved.

CARING FOR FEET.

Much valuable time and horse labour is lost annually by carelessness in attending to the trimming and shoeing of the feet of the horse. When the horse remains unshod throughout the entire year, care must be taken to keep the wearing surfaces smooth and even. When shoeing is necessary, particular attention must be paid to the frequency and correctness of trimming and shoeing. Improper care of the feet is largely responsible for much unsoundness and also for much torture to the horse, with the resulting loss of power.

PARASITES.

External and internal parasites, such as lice and worms, may cause the loss of 25 to 50 per cent of feed and horse-power. Rid the animals and stables of these pests. A few cheap window and door screens will do much to give comfort to the horses, not only in the keeping out of flies but also in the providing of good stable ventilation during the summer months.



