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FARM MANAGEMENT

Alfalfa, Manure, Wintering Cattle

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You would favor me by replying to the following questions:
1. How to grow and handle alfalfa?
2. How to distribute manure on the farm. What crops return the greatest value when manured?
3. What is the value of a ton of good mixed hay for manure?
4. Would you advise buying feed hay at \$13 a ton to feed cattle on your own farm, rather than having the cattle wintered on straw by some neighbor for \$5 or \$6 a head.—A. M. S., Waba, Ont.

Horse Soc-
14th, at

1. Alfalfa requires well tilled land and a good heart and thoroughly drained, and at the same time, well manured the previous season, preferably with a hoed crop. It should be thoroughly worked in the spring, then seeded down with about 25 lbs. of seed per acre. If a few bushels of surface soil from an old alfalfa field could be scattered over the field in question, better results might be anticipated. Do not use any nurse crop. Do not remove any crop first year. Clip with a scythe or a high cutting mower two or three times during the season. Do not clip later than the first or second week in September.

Challenge
& Bond

2. Manure should be applied fairly frequently to different fields, rather than in large quantities, and at long intervals. Following a four or five year's rotation, applying manure on the hoed crops, such as roots, corn or potatoes, will give the most profitable returns. If the hoed crop cultivated is not sufficient to utilize all the manure, then it should be applied on meadows rather than on grain.

Associa-
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3. Good mixed hay contains about 30 lbs. of nitrogen, 9 lbs. of phosphoric acid, and 12 lbs. of potash. At current manurial value this would make the hay worth about \$6 per ton for manure. But, in addition to this, its value as a producer of humus is considerable, so that I should say that a ton of hay when consumed on the farm, should be worth about \$10 a ton as fertilizer.

viser

4. I should very certainly advise buying hay at \$13 a ton to feed stock on your own farm rather than having them wintered at \$5 or \$6 a head on straw at a neighbor's. My experience is that \$5 or \$6 a winter cattle look like \$5 or \$6 a winter cattle look like.—J. H. Grisdale, Agriculturist, C. E. F., Ottawa.

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Hints on Caring for Horses

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essional.
W. L. B.

Give some hints on care and management of horses.—A. M. S., Waba, Ont.
On such a general question only few remarks can be made. In the first place, horses should be fed so as to keep them in good health; in the second place, they should be fed in such a way as to insure their being in condition to do the most work possible. To insure good health, a moderate quantity of good feed is necessary, say for a 1200 lbs. horse at moderate work, 8 lbs. oats, 3 lbs. bran, 10 lbs. hay, 3 lbs. straw, 5 lbs. of roots, preferably carrots, a day. Feed most largely of grain and hay in the morning, and at noon give a similar portion of grain, a fair portion of hay, and the straw at night. Water before feeding the grain. See that hay is free from dust. A mixture of clover and timothy hay is the most satisfactory. Where horses are not working, straw may replace at least half the hay. Where horses are working very hard, grain should be increased slightly and the straw taken off.
Groom thoroughly every day, bed comfortably and keep stable well ven-

tilated. Where heavier horses are used, rations would need to be increased. A fair ration for a hard working horse is a little better than 1 lb. of oats a day and a little less than a lb. of hay a day for each 100 lbs. in weight of the horse. That is, a 1600 lbs. horse should have around 17 lbs. oats or meal, and around 16 lbs. of hay a day when at hard work.—J. H. Grisdale, Agriculturist, C. E. F., Ottawa.

Queries Re Cattle

1. What breeds of cattle are best for raising stock for the market?
2. What month is best for having the cows calve in?
3. What breed of milk cows give the largest net gains, and yet are fair in the best market?
4. Do you know of any man who has a good milking class of cows? Give his address.—A. E. M., Waba, Ont.

1. Shorthorns, Herefords and Aberdeen Angus are the cattle that produce the best steers.

2. Cows to produce calves intended for beef had better drop them in March, April or May, preferably April.

3. There is no breed of milk cows that gives a large net gain for milk, and at the same time a fair carcass of beef for the market. The milking Shorthorn probably comes nearest filling the bill.

4. Any breeder of pure-bred Ayrshires, Holsteins or Jerseys, could supply you with such animals as you require, or if milking Shorthorns are needed, then I might refer you to the Central Experimental Farm, Ottawa. See the live stock advertisements in this issue.—J. H. G.

Feeds for Young Animals—

Draining Land

1. What are the best feeds for young animals, say, calves and lambs? (1) For growth; (2) Fitting for exhibition?
2. How should I proceed to drain some low land?

1. Good, clean, mixed hay, clean oat straw, bran, oats, roots and ensilage are all suitable for calves and fillies for good growth. Where they are to be fitted for exhibition, then the addition of oil cake meal, corn meal and in some cases barley to the bran and oats would prove advantageous. For growth, one or two pounds of bran with a little oats added would be sufficient for either calves or fillies. For feeding for show, two or three pounds, and even slightly more, might be fed during the last part of the feeding period.

2. To drain low land, the first requirement would be to find a good outlet for the water, then if underground grading is intended, to lay a good main tile along the lowest lying part of the field. Later on laterals at regular spaces, if the whole field is to be drained, or along the lowest lying parts, if it is intended to drain only the worst spots, should be laid. The main should be about four feet below the level of the surface soil, and should have a fall of about one inch in a hundred feet; somewhat less of a fall will do but a somewhat greater fall will prove more satisfactory. The laterals may come up to within 1 1/2 ft. of the surface soil, if necessary, provided always that there is a good fall. Deep laid drains carry off surface water somewhat more slowly than shallow laid tiles, but are much more satisfactory in the long run, since they give a deeper bed, and are less subject to displacement by frost or rush of water in spring.—J. H. Grisdale.

Autos on the Farm.—According to the best information of the manufacturers and dealers there are more than a thousand automobiles owned and used by farmers in Indiana.

Farmers seem to have caught the spirit of doing things quick as well as lown people. In several instances we have heard of farmers starting to their nearest town markets with their butter, eggs and light articles for market, at 6 a.m., and getting back

home for the farm work by 7.30. They could not do that with Old Tom, and so to do things quick the auto is rapidly going to the farm. It seems to be catching all over Indiana as well as in other States.—Indiana Farmer.

ALL AUTHORITIES

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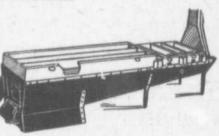
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