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FARMS AND FARMING

Good Roads.

Good roads are one of the country's best assets. No other public expenditure, outside of that for agricultural extension and education, gives as much direct benefit to the farmer. The adjoining farms are increased in value, and the farmer is in closer touch with his market and with social activities.

Within the next few years Canada should see great development along the line of road improvement. The day of the earth road as a permanent main thoroughfare, while not ended, is fast passing away. The returned soldiers having seen the good roads and their advantages in England will demand an active policy for the extension of permanent roads, but the enormous mileage of roads in Canada in comparison to her population makes this a difficult problem. The reform must of necessity be gradual and may cause dissatisfaction in certain sections where the farmers think they ought to have the road immediately. By first taking over the main roads and gradually building up a network is the only feasible plan. There is always the danger of the road policy of any Government being used for political purposes. To ensure fairness, however, the United Farmers' Associations throughout the Dominion will see to it that the road policy is in the best interests of the farmers and the Province, and it naturally follows that it is up to every farmer to become a progressive member of these Associations.—A.E.H.

* * *

Results from Underdrainage.

Owing to a stiff clay subsoil underlying the Fredericton Experimental Station very little land sufficiently dry for early spring cultivation. Extensive drainage, both surface and underdrainage, was necessary before the farm could carry out experiments.

At some points stone drains were put in and gave excellent results. The next job was a six acre field at the foot of a slope. The traction ditcher was employed, but owing to rocks it was found that it did not pay and the ditches were dug by hand. This land was converted from a late unproductive piece of land to an early field, and 178 bushels per acre of Green Mountain potatoes were taken off this field the next year without manure or fertilizers.

The most remarkable results were obtained from a black mud swamp with a stiff white subsoil. This land produced nothing, till after draining carefully it was one of the earliest and most productive fields on the farm.

It was found that the tile should not be covered with clay as this formed an imperious casing about the tile, but by putting surface soil over the tile clay land could be well drained.

The results have been that with ordinary fertilizing the unproductive wet land, when drained, gave 300 bushels of potatoes per acre, 900 bushels of turnips, 50 bushels of oats and 2 tons of hay. The cost of drainage was from \$30 to \$40 per acre.—"Farm and Dairy."

Acid Phosphate with Manure.

Barnyard manure is deficient in phosphoric acid and is not a balanced food for plants. Barnyard manure should be supplemented by acid phosphate to obtain the best results. It has proved a very paying investment in nearly every experiment, and is well worth a trial. It is the cheapest element of plant food that has to be supplied and very necessary, especially for grain and root crops. Acid phosphate should be supplied from 20 to 40 lbs. per ton of manure to balance the plant foods, according to the crop for which it is intended.

* * *

Have You Considered.

Stumps occupy valuable land; foster the growth of weeds, since in order to keep the land in their vicinity clean much hard labour is necessary; mar the appearance of otherwise smooth fields, and hence reduce the selling price of a farm; furnish shelter for harmful insects and animals, and prevent the efficient use of modern machinery.—"The Maritime Farmer."

* * *

Demand for Livestock.

The salvation of agriculture lies in good stock, and the best type of citizen which the country produces is the stock farmer. After the war there will be an inevitable slump in the price of grain, but the depletion which has taken place in the livestock supplies of the world would assure the stockman of continued high prices.—HON. DUNCAN MARSHALL.

* * *

When this war is finished the demand for dairy products will be twofold, fourfold tenfold, greater than the supply. Europe will come with outstretched hands—every country in Europe—and say "We must have milk: give us canned milk; give us dry milk; give us butter; give us cheese; give us dairy cattle; give us animals to build up our dairy herds again."—CARL VROOMAN.

* * *

Useful Hints for Farmers.

1 cubic foot contains $6\frac{1}{4}$ gallons.

32 cubic feet of water weigh a ton.

A gallon of water weighs 10 pounds.

A flour barrel contains $31\frac{1}{2}$ gallons.

To find the number of gallons in a rectangular tank, multiply the length in feet by the width in feet by the depth in feet by 25 and divide by 4.

To find the number of gallons in a cylindrical tank, multiply half the diameter by half the diameter, by the depth, by 275 and divide by 14.

To find the number of tons of hay in a mow, find the number of cubic feet of space occupied and divide by 450. Straw, divide by 600 to 1,000 according to compactness, and for wild hay 400.

To find number of bushels of grain, potatoes, roots, etc., in a bin, multiply number of cubic feet occupied by 25 and divide by 32.

To find number of tons of ensilage in a silo, find the number of cubic feet first by multiplying half the inside diameter by itself by $31\frac{1}{7}$ th, and by the depth and divide by 40.