

# Conservation

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## Bad Roads are Costly

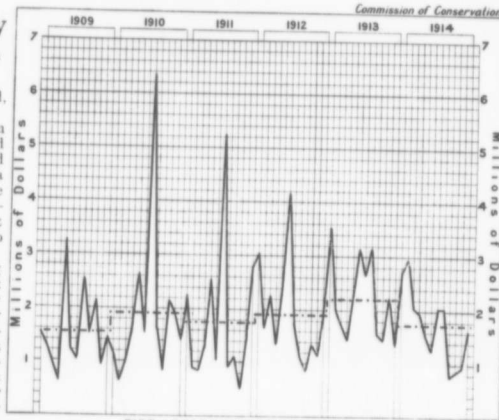
Farmers Handicapped by High  
Cost of Haulage

The question is often asked, "What do good roads cost?" If this question were put in another form, viz., "What do bad roads cost?" the answer would bring home to the people of Canada what they are paying as a sacrifice to poor transportation facilities—this, in addition to the discomfort and dissatisfaction of having to travel over them.

One of the chief causes of young people leaving the farm is the lack of good roads. Rough and muddy roads retard social life, especially when, associated with the unpleasantness of driving, is the fact that the equipment becomes mud-spattered and requires constant washing. To avoid these and other inconveniences, farmers and their families remain at home, more or less in isolation, and, when the first opportunity arises, many of them leave the farm. There is but one remedy for this isolated condition—by means of good roads farmers and their families must be placed in touch with the social advantages of the larger communities. Just as soon as this condition is reached, the drain of population from the farm will decrease.

Of the economic losses due to bad roads separating the farmer from his market, that of cost of transport is most important. A comparison of the load one horse can haul on good and bad roads, respectively, shows that, on a muddy earth road, the amount varies from nothing to a maximum of 800 pounds; on a smooth, dry earth road, from 1,000 to 2,000 pounds; on a gravel road in bad condition, from 1,000 to 1,500 pounds; on a gravel road in good condition about 3,300 pounds; on a macadam road, from 2,000 to 5,000 pounds; and on a brick or concrete road, from 5,000 to 8,000 pounds. In 1906, the Bureau of Statistics of the United States Department of Agriculture, from about 2,800 county reports, deduced an average cost of 22.7 cents for hauling one ton over one mile of unimproved roads. The equivalent cost of haulage per ton over different roads, taking 2,000 pounds over smooth earth roads as a basis, would be as follows:

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Average Loss Line shown thus - - - -

## March Fire Record

A Large Increase in the Number of  
Small Fires

The Canadian fire record for March, of this year, is not one to be proud of. The year started well, and hopes were entertained that Canadians were going to make a considerable reduction in the fire waste. Compared with February the number of fires is as follows:

	Feb.	March
Fires over \$10,000.....	24	20
" \$1,000 and under \$10,000.....	79	106
" \$100 and under \$1,000.....	187	198
" under \$100.....	291	364
	581	688

It will be noted that the greatest increase occurred in the smaller losses. The conclusion to be drawn from this is that a large proportion of them were preventable, and were discovered and put out when still in their incipient stages.

It is also a regrettable fact that during the month of March twenty-six persons lost their lives through fires.

Looking at the situation in even its most favourable light, there will be a demand for food that the world will find great difficulty in supplying.—Hon. Martin Burrell,

## Vacuum Street Cleaning

An Ideal System for Canadian  
Roadways

In Huddersfield, England, recently a demonstration was given of a motor-vacuum street cleaner, the invention of an Italian.

The machine is operated upon the principle of a rotary brush and suction, together with a system of pumps and jets for spraying atomized water on the road surface in front of the brush, thus insuring dustless and hygienic sweeping. The tests were made on various conditions of roadways, some being specially prepared to give the machine a stiff test. It is stated that the result was excellent, and apparently it will not be long before a much-needed revolution in street cleaning will be wrought about by the motor-vacuum system.

Canadian cities and towns are intensely interested in this question, as, owing to climatic conditions, the vacuum system of street-cleaning is particularly adapted to this country.

Canada, if she carries out the wheat-growing problem which has been recommended, will become the dominant factor in the grain market after this year's harvest. Will Greater Britain rally to the Motherland's assistance?—English Edition World's Work.

## Cultivation and Care of Corn

Attention Early, Late and Often  
Necessary for Successful Yield

Corn is one of the greatest of the fodder crops of this country. It can and should be grown more extensively on Canadian farms. If it is planted on a warm, well drained soil, a suitable variety chosen, and its habits and preferences catered to, it will give a good yield even in a district where the growing season is short. No agricultural plant will more readily respond to generous treatment in the way of thorough cultivation and care. The land should be worked well and a good seed bed prepared before planting, as no amount of cultivation after the corn is planted can make up for the poorly prepared field.

Successful growers begin to cultivate after planting, before the corn is up. Countless weeds will have germinated before the corn, and, unless these are destroyed while small, they will cause serious trouble. For this purpose the weeder is a splendid implement to use before the corn is up and until it is seven or eight inches high. If a weeder is not available, a light drag harrow may be used and will do effective work. Of course, a small amount of the corn will be destroyed, but the loss of the extra seed which should be sown to permit harrowing, is more than compensated for in the fewer weeds, in the conserved moisture and in aeration of the soil. The regular corn cultivator should be started just as soon as the rows are visible. The first cultivations should be deep and wide, and, as the corn roots develop, the cultivations should be more shallow.

Too many farmers stop cultivating too early, which is a great mistake. When the corn becomes too tall for the two-row cultivator, the one-horse cultivator may be used.

Corn requires an immense amount of water at all stages of its growth, and just when it is making its heaviest demands upon the soil many farmers stop cultivating, with the result that when rain comes it packs the soil, and if the ground is heavy it will bake and crack. After the corn has received its early thorough working, *Cultivate shallow, often and late*, is a motto that every farmer can safely follow.—F. C. N.