

Potash and Wood Ashes

Some Valuable Products for Land Improvement Available from this Source

With the supply of potash from the German mines shut off by war conditions, Canada should now give attention to the large quantity of this fertilizing agent which is allowed to go to waste through want of care and conservation of the annual production of wood ashes.

Throughout a large part of Canada the chief fuel at all seasons, but more especially in winter, is wood. In the eastern provinces, hardwoods are chiefly used. These woods, especially beech and maple, are rich in potash, varying from 5 to 13 per cent, according to conditions of dryness of the wood and care of the ashes. Other valuable ingredients of wood ashes are a small proportion of phosphoric acid and about fifty per cent of carbonate of lime.

In the clearing of wood lots and in the burning of debris after taking out the fuel supply, large amounts of ashes are produced. These as a rule are left where the burning is done, and are consequently wasted.

Wood ashes should be carefully stored, in fire proof receptacles if possible; in any event away from any danger of fire, and should be kept dry to avoid leaching. In the spring they should be spread upon the land. They are especially valuable as a fertilizer and to encourage the growth of clover and the better grasses.

Wood ashes, by hastening the decay of organic matter in soils, render more readily available the nitrogen contained therein. In sandy soil, wood ashes supply the phosphoric acid and lime in which these soils are deficient, while, on clay lands, the lime content of the ashes tends to render available the potash salts already present in abundance. Potash as supplied to the land through the medium of wood ashes has a distinct advantage over the potash salts as imported from Germany, in that it is in a very soluble form, and hence is at once available for plant food.

The importance of wood ashes, as shown above, as a fertilizer can hardly be over-estimated. It is consequently of first interest to the agriculturists and lumber interests of Canada to conserve the supply wherever and by what process produced.

During the present winter large undertakings in land clearing and right-of-way clearing of railway lines will be in progress from the burning of the debris of which large amounts of ashes will accumulate. Some steps should be taken to provide that these ashes are not wasted, as apart from the difficulty of securing potash supplies, the market value of ashes at present is from \$8.00 to \$12.00 per ton, depending upon quality.—D.

The Annual Meeting of the Commission of Conservation will be held in Ottawa on the mornings and afternoons of January 19 and 20.

The Annual Meeting of the Canadian Forestry Association will be held in Ottawa on Tuesday evening, January 19.

The Annual Meeting of the Canadian Society of Forestry Engineers will be held in Ottawa, at 5 o'clock on Wednesday, January 20.

Farm Losses

POOR SEED

Only nineteen out of one thousand Canadian farmers visited last year by the representatives of the Commission of Conservation were found to be following a systematic selection of seed grain.

An alarming state of affairs is disclosed, when investigation demonstrates that less than two per cent of the farmers visited follow a systematic selection of seed similar to that followed by members of the Canadian Seed Growers' Association. It is true that quite a number keep the best part or parts of their fields for

Brunswick, seventeen varieties were found on forty farms and, in one district in Ontario, there were nineteen varieties on fifty farms. The farmer will buy these new varieties without knowing their strength of straw, susceptibility to disease or general suitability to his district.

Seed selection is not costly. If the farmer will save the best portion of his crop and then thoroughly clean that portion, by running it several times through the fanning mill, he will not find it necessary to pay out money for seed no better than, and often not so good as, his own, well cleaned. In many tests on the Illustration Farms of the Commission, it has been clearly demonstrated that it pays to sow good seed. In the case of clover, the crops from home-grown seed have proved, in nearly every instance, to surpass those produced from purchased seed. In many districts where farmers think clover and grass seeds can not be grown, it has been proven that these seeds can be successfully produced. They are often found growing to perfection on roadsides and in fence corners, which goes to show that, with care, they will grow in the fields.

During the winter months is the time to prepare the seed grain for the spring sowing. Clean out all the weed seeds and poor and shrunken kernels so that the good grain will have a chance to do its best. The question of the quality of seed a farmer shall sow is largely in his own hands. It rests with him whether it shall be clean or dirty, good or poor. *Good and clean seed will pay.*—F. C. N.



FIG. 83
Corn grown from selected seed on one of the Commission's Illustration Farms.

seed only, in Prince Edward Island, less than one-third of the farms visited do even this and only fifty per cent claim to do it on the two hundred farms visited in Ontario. In Nova Scotia, forty per cent of the farmers and, in Quebec, thirty-one per cent, bought their seed grain. Too often this purchased seed is only feed grain shipped in from the west and sold as seed. Frequently it contains foul weed seeds and, when, as in Nova Scotia, only sixty-four per cent of the farmers claimed to clear their grain in any manner whatever, these weeds are introduced to the farms. The western oats are sometimes frosted, and, as the farmer does not test for germinating power, a poor and thin stand often results.

The purchasing of seed often brings in new and unsuitable varieties. In one district in New

Such an industry might well be developed in Canada. The country possesses great areas of marsh land, at present of little direct value, which might be made to produce considerable revenues. Muskrat fur is steadily growing in favour. The aggregate offering on the London market in March, 1914, exclusive of the Hudson's Bay Company's sales, was 4,646,500 skins. While this figure probably shows an accumulation from the previous year, still the price quoted for April was 50 cents a skin. The demand for muskrat meat would be confined almost solely to the Indians unless it was a flesh diet for other fur-bearers that are being farmed. Such an undertaking should prove of special value to the Indian and other trappers who carry on their work in the more remote portions of the country. At the same time, many areas of marsh land in the settled sections which now are of little or no use might easily be made to yield considerable financial returns.—A. D.

Conservation of Fish

Increase Required in the Use of Smaller and Cheaper Grades

Dealers in fish find it difficult to dispose of the inferior varieties and the smaller grades of fish that are brought in by the fishermen. Consumers forget that little fish are taken in the nets as well as large ones and that all are delivered to the merchants. It follows, therefore, that, if there is only a small demand for the less choice fish, the dealers must obtain higher prices for the better grades. This is an aspect of the high cost of living which deserves the serious consideration of the public.

Except for the slight extra labour involved in preparing small fish for the table, they are in no way inferior to the larger fish, their flavour and nutritive qualities being quite as good. Similarly, many of the so-called coarser grades of fish, when skillfully cooked, are not only very palatable, but are very nutritious.

Consequently, it will be seen that greater economy can easily be practised in the use of this very important natural resource. The fisheries of Canada are both varied and extensive and should prove to be an important factor in reducing the cost of living. What is needed is more conservation in connection with them, or in other words, more careful and intelligent use.—A. D.

In the United States the federal government, twenty of the States, and thirty timber owners' associations maintain a system of patrol and take other preventive measures on their lands during danger seasons of the year.

Muskrat Farming

A Profitable Industry on Marsh or Waste Lands

Muskrat farming has proven to be a profitable business in the United States. Large areas of marsh lands in Ohio and Maryland are made to yield good returns through the production of muskrat fur. Indeed it has been stated by competent authorities that many of these marsh lands are worth more, measured by the actual income from them, than cultivated farms of like acreage in the same vicinity. Owners of such marsh lands usually lease the trapping privilege, uniting with the trappers to prevent poaching. The returns from the sale of the muskrat fur are divided equally between the owner and the trapper, the latter securing whatever extra he can from the sale of the flesh.