Conservation

Published monthly for eight months in the year by the Commission of Conservation, Ottawa, Canada.

VOL. II FEBRUARY, 1913 No. 1

Water-Works Inefficiency

Startling Divergence in Cost of Supplying Water to Canadian Cities—Wa-te Excessive

Ninety-five and a half million dollars are invested in waterworks systems in Canadian towns and cities. The annual outlay for maintenance, exclusive of interest, amounts to $3,435,199. There are, in all, 5,215 miles of mains in use, and the total daily consumption of water passing through these, reaches 360,477,638 imperial gallons.

These are the figures obtained by an investigation just completed by the Commission of Conservation, the results of which are being published as a report on the Water-Works of Canada. They indicate something of the magnitude of the investments that are placed in Canadian public service utilities. By far the larger number, of these plants are owned by the municipalities themselves, but there are a few of the smaller ones that are owned and operated by private individuals or corporations.

A Glimpse at the Details

An examination of the details going to make up these totals present some interesting conditions. Thus, the estimated cost of supplying water varies from seven cents per 1,000 gallons for the municipalities of Nova Scotia, to 23 cents per 1,000 gallons for those of Saskatchewan, with costs in the other provinces ranging

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Those Weeds!

In 1910 one hundred farms were surveyed in each of the provinces of Manitoba, Saskatchewan and Alberta. Wild oats were found on practically all the farms visited in Manitoba; on seventy-one per cent. in Saskatchewan; and on only three per cent. in Alberta. In 1911, the same farmers were visited in Alberta. Thirty-one per cent. of them reported having wild oats, while in 1912 eighty-two per cent. report having wild oats on their farms and eleven per cent. say they are increasing. In Alberta in 1910, stinkweed was not reported, less than five per cent. reported it in 1911, while, in 1912, twenty-two per cent. report having it on their farms.

In 1911, less than five per cent. reported Canada thistle, while twenty-seven per cent. report it in 1912.—F. C. N.

The diminishing supply of fur from the more valuable wild fur-bearing animals will soon be increased by the fur farmer

The Speculation in Silver Foxes

Prices of Foxes for Breeding Purposes Exceeds that for Their Fur Value—Short Selling Practised—Prince Edward Island the Centre of the Industry

A return of three hundred per cent. on the capital involved is what silver-fox farmers in the Maritime provinces received during the past year according to a report on Fur-Farming in Canada soon to be issued by the Commission of Conservation. The fur value of a silver fox varies from about $300 to about $2,500 according to the quality of the pelt, but the prices paid for foxes for breeding purposes far exceed this. In 1910, foxes were sold for breeders at from $3,000 to $4,000 per pair, *i.e.*, not far above their fur value. In 1911, prices rose to $5,000 a pair and about littering time, early in 1912, one pair sold for $20,000. In the latter part of 1912, old breeders were variously valued at from $18,000 to $35,000 a pair.

This remarkable rise in the prices has been due to the keen demand for breeding stock by persons or companies wishing to establish themselves in the fox-ranching business. So keen is this demand for "breeders" that not a fox fit for breeding purposes is being slaughtered for its fur. Ultimately, the value of the silver fox must be determined by its fur value and not by the prices now being paid for breeders. It is plain, also, that, in the course of a few years, the numerous ranches in process of formation and which, at the present time, are creating such a demand for breeding stock, will be producing pelts for the market. The resultant increase in supply is certain to lower the prices paid for skins of this kind in the fur markets. While there is undoubtedly a sound basis for building up a paying industry in fox-farming, the public should weigh the matter very seriously before investing their money in companies whose capitalizations are based on the remarkably high prices now prevailing for breeding stock. It should not be overlooked that nearly all those who have made large fortunes in the business have done so by selling stock for breeding purposes, not for their pelts.

It is estimated that in October, 1912, there were about 800 silver foxes in captivity in Canada, of which about 650 were in Prince Edward Island. The principal points at which the industry is carried on are around Alberton, Summerside, Charlottetown and Montague in Prince Edward Island; Quebec city in Quebec; Port Elgin in New Brunswick and Wyoming in Ontario. Each pair of foxes produces one litter a year consisting of from one to nine pups, and averaging about 3½ pups to a litter. They are sold for delivery in the first week in September and the fur is at its best the last week in December. So high is the speculative fever running in the industry that many of the unborn pups of 1913 have already been purchased and are partly paid for.—M.J.P.

An Efficient Farm Power

Something about the Electric Plant of an Ontario Farmer

Farmers everywhere are interested in improvements in farm power. The old way of grinding roots and cleaning grain, etc., by hand-power has become obsolete. The windmill and the gasoline engine have done a great deal to lessen the labour problem on the farm, but both these powers have disadvantages that have prevented their universal adoption. Consequently, more than ordinary interest is centred on experiments that are being made from time to time with electricity as a farm power.

A number of farmers in Ontario have developed private electric power-plants, and the results of their work should prove of value to many others. For this reason there is given, herewith, a brief descriptive outline of Mr. F. L. Green's plant at Greenwood, Ontario.

The dynamo is driven by water-power developed on the farm, and furnishes between four and five horse-power. The interest on the cost of installation is, therefore, practically the only cost in providing the power.

The power developed is put to the following uses:

(1) Lighting a grist mill, house, stables and dairy.

(2) Operating a milking machine that milks 45 cows, separating the milk, and running a pasteurizer, churn, etc.

(3) Running a small circular saw and an emery wheel.

(4) Connections are being made to use the vacuum pump of the milking machine, so as to use it for a vacuum cleaner in the house.

The cost of installation, including special water wheel, dynamo, motor and wiring,—but not the building of the dam, amounted to about $600.

Concerning the advantages of the power Mr. Green says:

"It is a surer power than gasoline engine—and compared with steam it is much more convenient—. The insurance companies do not object to it as much as to gasoline.

"Where a farmer has a small water-power and can afford to build a dam and put in a small water wheel properly, there is no question but that electricity will give better satisfaction than any other power, and it really does not require as much mechanical skill to run it as a gasoline engine does."