

## Commission of Conservation CANADA

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## Let Us be Glad We are Canadians

We are asked for increased production. This does not mean for the individual more work or harder work, but it does mean more efficient work and a new attitude towards work, a desire to make every stroke tell to the utmost. In a word it means willing, painstaking, and well-directed effort, backed by capital and guided by science, to bring our acres to the fullest fertility, to build up and utilize adequately our forest resources, our fisheries and our mines, to develop and co-ordinate our transportation systems, to develop our water-powers advantageously and to distribute widely the resulting power, to check reckless waste and encourage the effective use of all our resources, to the end that we may establish better and more satisfying types of rural life.

The waste of lumber is deplorable. Take pine; the value of resin, turpentine, ethyl alcohol, pine tar, charcoal, lost in this waste, represents three or four times the value of the lumber produced, but, great as is this loss, it is modest compared with our colossal fire waste. We have been prodigal wasters, reckless destroyers, mere skimmers of cream. If we are to meet our national needs, and build up sanely our superstructure, we must change the policy which has guided us in the past. Unrestricted individualism must now give way to controlled co-operation guided by a constructive economic policy which shall be nation-wide in scope. We must bring to the solution of peace problems the unity and cohesive power developed throughout the war. Let us be a nation of builders, creators, and distributors. Let us be proud of our country. It is time to build, time to unite, time for trade and for brotherhood. Let us be glad we are Canadians and let us stand for Canadian institutions. Let us have a little more patience, a little more charity for all, a little more devotion, less bowing down to the past and more looking forward to the future when Canada will be ripe for a great burst of light and life.—*Extract from speech by S. F. Glass, M.P., in House of Commons, March 24, 1920.*

## Our Natural Resources

Their Protection and Conservation a  
Debt We Owe to Future  
Canadians

The country which would guard its future must exercise the greatest care in the utilization of natural resources. Prodigality has too often been mistaken for development. The fact that capital comes to a country for profitable investment is not an unmixed benefit, and may mean that greedy eyes are seeking new fields to conquer after home industry has been "developed" to a standstill. The supply of some resources cannot, of course, be maintained forever, as in the case of coal, the formation of which is beyond human power. But our forest resources, our fisheries and the fertility of our agricultural areas must be preserved. That such has not been done in the past is indicated by the fact that the older wheat-growing districts of the West must now be used for mixed farming, some of our fisheries have declined greatly in value, and good lumber has increased enormously in price.

The protection of these resources assumes a consideration of the future, too distant to permit of the problem being handled in the ordinary political field. *The connection between ordinary government departments and the demands of the public is too close to allow them to handle the problem.* It is for this reason that conservation can be best carried out by a body such as the Commission of Conservation in Canada, which was established for the purpose.—*The Monetary Times.*

## Are We Wasting Too Much Timber?

Cutting Shorter Logs and use of Tops  
to Smaller Diameter would Increase  
Pulpwood Supply

In the virgin pulpwood forests of Ontario, a balsam tree 10 inches in diameter at breast height, is, on an average, 90 years old, with a total volume of 14.6 cubic feet. White spruce of the same diameter is 114 years old, with a total volume of 14.9 cubic feet. Black spruce is 144 years old, and has a volume of 14.7 cubic feet. Seedlings grown in a nursery, and transplanted in the open, will make a much better growth than those in the virgin forest, but, even if they reach a diameter of 10 inches in 40 years less time, it would still make the total age 50 years for balsam, 74 years for white spruce, and 104 years for black spruce. It is advisable, therefore, that, in all logging operations, the fullest utilization possible be made of every tree cut, and that every precaution be taken to avoid injury to those left standing, in order that they may produce a second crop in the shortest possible time.

Where logs of only one length, 16 feet, are being cut for pulpwood, there is a loss, due to waste in stumps and tops, of 25 per cent of the total volume of the tree in

balsam, 14 per cent in white spruce, and 20 per cent in black spruce. These figures are based on actual measurements, where the stump height averages about 18 inches. Where winter cutting is done, stumps cannot be cut much below 18 inches, owing to the depth of the snow, but the waste in tops can be reduced by cutting to smaller top diameters. This would necessitate the cutting of different lengths of logs, say, 10, 12, 14 and 16 feet, the increased cost of which would be more than offset by the greater production per acre. A 3-inch top diameter makes a gain over the 4-inch of one cord for every 223 trees, a gain over the 5-inch diameter of one cord for every 89 trees, and over the 6-inch diameter of one cord for every 53 trees.

The short logs in the water will not support a man's weight, and may, therefore, be harder to drive, but, on the other hand, because they dry out more quickly, they float higher in the water than the long lengths and are not so liable to form jams.

Cutting shorter log-lengths increases the number of cords which may be cut per acre; it lengthens the cut of any given area; it gives the unmerchantable trees that much more time in which to grow to a size sufficient to enable the area to be cut a second time, and it decreases the fire hazard through the fuller utilization of the tops.—*C. R. Mills.*

## Sugar Beets

Shortage of Sugar Supply and High  
Prices Warrant Increasing Production

A recent bulletin by the Department of Trade and Commerce on the sugar industry in Canada states that 204,017 tons of sugar beets was used in sugar manufacture in 1918. The cost of the beets at the works was \$2,593,715, or \$12.22 per ton.

In 1918, Canada had 18,000 acres in sugar beets, which yielded 10 tons per acre, at a value of \$10.25 per ton. In 1919, the acreage was increased to 24,500, the yield averaged 9-80 tons per acre, and the price advanced to \$10.85 per ton.

In 1919, sugar was approximately 11 cents per pound; at present, granulated sugar is 23 cents per pound and may be higher. The enormous demand for sugar, and the fact that Europe will not for some years produce anything approaching her pre-war quota of sugar beets, promises to continue a serious shortage in the world supply.

Conditions in the beet-growing countries of Europe have materially changed since the close of the war. Previously, large holders of land devoted much of the acreage to beets. The large estates in Russia, Poland, Hungary and in many parts of Germany have in many cases broken up into small holdings, which will be used by their new owners for growing other crops. The small

farmers are not so well equipped with implements and tools, and the lack of fertilizers is also being severely felt. These conditions will have a serious bearing upon the production. There thus appears to be a good opportunity for Canada to again this year largely increase the acreage devoted to this crop.

A by-product in the manufacture of beet sugar is the residue known as beet pulp. When mixed with residual molasses, a by-product of the refining process, this beet pulp makes an excellent cattle food.

## Fur Farming

### RAISING MINK

At the recent fur auctions in Montreal, the price of mink skins averaged \$20. The better skins sold for \$30 upwards to \$75 for one very choice lot.

Mink is a handsome, durable fur. It has been demonstrated that minks can be kept in captivity. They require little space and can be cheaply fed, provided one can obtain fresh fish or fresh meat practically all the time. Persons who live near the sea-coast would appear to be in an advantageous position for the rearing of this animal. One of the difficulties of obtaining stock, which, for purposes of domestication, must be taken young, has been overcome, the prospective raiser of minks ought to be in a fair way to succeed.

The principal diet of minks should always be meat or fish. English sparrows, mice, frogs, rabbits, scraps of butcher's meat, small or coarse fish and fish heads, may be mentioned as examples of the sort of feed for minks. They will also learn to eat cereals readily and they may be given well-cooked graham mush with milk, together with ground meat or meat broth. In feeding cereals, however, care should be taken not to cause diarrhea. In winter the food is best served warm. As to quantity, about 4 ounces of meat daily is sufficient for an adult.

Cages may be about 4 feet by 8 feet and 16 inches high. They can be made of 1-inch mesh, No. 16 gauge, poultry netting. These cages are to serve as a runway. The dens should be quite warm. A good den can be made by putting a box about 12 in. x 12 in. x 12 in. inside a similar, but larger box, and packing the intervening space with straw. The entrance should be in the form of a passage sloping downwards toward the outside. Fine hay should be provided for the nests.

The mating season is in February and March. The young are born in April and May, about 4 to 6 in a litter. The females, while with young should always be kept separate from the males.