

## Commission of Conservation CANADA

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CONSERVATION is published monthly. Its object is the dissemination of information relative to the natural resources of Canada, their development and proper conservation, and the publication of timely articles on housing and town planning.

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## Fur Farming in Canada

### The General Outlook

The Commission of Conservation is repeatedly in receipt of enquiries from correspondents regarding the raising in captivity of various fur-bearing animals. A few words will not be out of place, therefore, on the general position in the fur-farming industry.

About 90 per cent, or more, of the fur farmers of Canada are fox farmers. To be more specific, there are some 500 odd fox ranches in the Dominion and barely 50 ranches engaged in raising other fur-bearers. It is evident that, at the present time, fox farming is practically synonymous with fox ranching.

The reason for this is not far to seek. The silver black fox, provided it be of superior quality, is the highest priced pelt on the fur market today. Even the famous Russian sable is lower in price per skin and the almost extinct sea otter has not exceeded the highest-priced silver fox in value. Though prices have declined considerably from the peak of March, 1920, they are still remunerative and there is a general feeling that they have now reached a stable basis. A single fox skin is worth as much as the skins of, say 50 to 100 skunks, yet the amount of food and care required by a single skunk is almost as great as that necessary for a fox. So that, although the live fox represents a much heavier investment of capital and therefore of overhead charges, it is a far better paying proposition to raise fox than to raise skunk or any other low-priced peltries.

Fox ranching is now a well established industry. Though principally located in Prince Edward Island, it is now represented in all the provinces and in the northern States. There is a Canadian Silver Fox Breeders' Association, with headquarters at Summerside, P.E.I., and pure-bred foxes can be registered, like any other domestic animals, in the National Live Stock Records, at Ottawa. Last year a large live silver fox exhibition was held at Montreal; a

magazine specially devoted to the industry is published in New York; the Health of Animals Branch has its experts investigating vulpine diseases; much is known of the fox's needs and habits and good systems of feeding, management and ranch lay-out have been worked out. In short, fox ranching is past the experimental stage and has taken rank as a recognized branch of live stock industry.

The mink was the first fur-bearing animal to be raised for its fur on this continent. "Forest and Stream," in 1874, published descriptions of "minkeries" which were in successful operation at that early date. It is rather strange that mink raising has not developed to a greater extent. It is doubtful if there are as many as 20 mink ranches in Canada at the present day. Some of these, however, have been in existence long enough to demonstrate the feasibility of raising minks both successfully and profitably. Mink ranching may, therefore, be looked upon as a sound business for a man equipped with the necessary knowledge and aptitude. It can be carried on with much less capital and on a much smaller area than fox ranching.

Muskrats are not kept in captivity, but some persons own or lease marshes in which they monopolize the trapping privileges. All the care they give the animals is to trap their natural enemies and perhaps to supply some extra food in times of emergency or to plant aquatic herbs to increase the natural food supply.

Skunks and raccoons can be easily raised, but they are big eaters and the value of their skins is not high enough to pay for their keep in most cases.

The Karakul sheep, which yields the skin known as "Persian lamb," can be successfully reared in Canada. A few specimens have been imported from Bokhara and fairly satisfactory crosses have been made with long-wool sheep like the Cotswold, Lincoln and Leicester breeds. Pure-bred Karakuls are, naturally, very difficult to obtain.

Martens and fishers are not difficult to keep in confinement but show a decided disinclination to breed. Further experimentation may overcome this difficulty and then these valuable fur-bearers will, like the silver fox, be added to our list of domestic animals.

The logical way to rear beavers is in game sanctuaries; keeping them in small enclosures is impracticable. Nobody seems to have experimented with otters. Rabbits are prolific and easily raised, but do not yield sufficiently valuable fur. It may be stated, generally, that foxes, minks and Karakul sheep are the only fur-bearers now being raised in captivity which are "worth while" from a business point of view.

The forests of British Columbia in 1920 yielded products to the value of \$92,628,807, an increase of \$22,000,000 over 1919.

## Asbestos

### Quebec the Chief Source of World's Supply of This Mineral

Asbestos is one of the better known of Canada's non-metallic minerals. It is useful as an insulating material and enters into the production of many every-day appliances. It is found chiefly in the Eastern Townships of Quebec, the deposits there being the chief source of the world's supply. Asbestos is a fine, flexible fibre of silky appearance. It occurs in the fissures of the serpentine rock, which in this area is of a dark green or brownish color, so badly shattered that it is almost impossible to secure a block of the stone six feet long. Veins of asbestos, sometimes from four to five inches in thickness, are found with the fibres at right angles to the walls of veins.

Properly speaking, asbestos is not mined, but is recovered by the open-cut method from quarries, similar to stone quarrying. The over-burden is removed by steam-shovels.

Owing to its non-conducting properties and to the fact that it is resistant to common acids, asbestos has many and varied uses. It is largely used as insulation for heating plants and of refrigeration installations. Asbestos enters largely into the manufacture of electrical equipment, such as electric irons, toasters, fuse boxes, switchboards, etc. Other purposes for which it is used are as wall-board, sheathing under shingles for fire prevention, as gas logs in fire-places, as filament for kerosene and gas mantles; and as table mats and utensil holders.

The motor car industry has become a large consumer of asbestos, for insulation purposes and for brake linings, etc.

Owing to the facility with which asbestos fibre can be spun and woven, considerable use is made of it for filtering purposes in laboratories. Its resistance to the common acids renders it of special value for this purpose.

The production of asbestos in the province of Quebec in 1920 amounted to 177,605 tons, of a value of \$14,674,372. By far the greater proportion of this is exported, mostly to the United States.

## Prevent Smut by Formalin Treatment

Oats were free from smut last year—on some farms. On other farms they contained as much as one-third smut. The difference was not in the land or, altogether, in the seed, but in the farmer. Those who carefully treated their seed oats with formalin escaped this severe loss. Smut is more or less common in practically all untreated oats, and many farmers who know about the treatment simply neglect to treat the seed. Those who have been persuaded to apply the treatment express

surprise at its simplicity and ease and are convinced that a gain of from one dollar to five dollars per acre has been made. The treatment for an acre requires only a few cents worth of formalin, a bucket of water and a few minutes work. The following method is recommended: Mix one pint of formalin with 40 gallons of water. Place the grain to be treated in a heap on a clean canvas or floor. Sprinkle the formalin solution over the grain, then shovel the grain over into another pile so as to mix it thoroughly, then sprinkle and shovel again. Repeat this until every grain is moistened by the solution; then cover the pile with sacking and leave for three or four hours. At the end of this time, spread the grain out thinly to dry; shovelling it over three or four times will hasten the drying. Forty gallons of the formalin solution is sufficient to sprinkle between thirty and forty bushels of grain.

Never expose wet grain to a temperature below freezing. If the grain is sown while moist, it will not run as freely as dry grain; for this reason open up the drill somewhat or the stand will be too thin.—F. C. Nunnick.

## Tamarack Displays Marked Discovery

To any one who has travelled extensively through the forested regions of Ontario and has seen the timber areas where the tamarack was totally destroyed by the larch saw-fly a few years ago, it is very gratifying to see the wonderful recovery the tamarack is making in its excellent reproduction in portions of the Province. This is in evidence along the main lines of the Canadian Pacific railway and Canadian Northern railway east of lake Superior, a region which was extensively burned in the days of railway construction.

The most encouraging feature of the young tamarack is its rapid rate of growth as compared with its common associate, black spruce. An officer of the Commission of Conservation examined several young tamarack trees which were growing on a sand ridge a few feet above the level of an adjoining swamp. These trees averaged 22 years old and were from 15 to 18 feet high. They were between three and four inches in diameter at the ground. The interesting feature of their growth was its rapidity during the last few years. Of six saplings examined, two had grown two inches in diameter in the last six years and one had grown three inches in diameter in the last eight years.

At the present rate of growth of these young trees, there will in the near future be a new supply of tamarack fence posts and even railway ties in the territory described above. It must be noted, however, that the trees growing in the swamps are not growing as rapidly as those on sites with better drainage.—A. V. Gilbert.