

Fur Farming

Rearing of Beaver

IN CONFINEMENT

The beaver is an easily domesticated animal and it has been demonstrated that it will breed in captivity. Beavers will thrive on turnips, carrots, potatoes, etc., with some twigs or bark of cottonwood, willow, birch or maple thrown in by way of dessert.

Litters average about four, and the young are born in May. Breeding females should be kept in separate pens and provided with a warm nest. Beavers begin to breed when two years old.

The pens should be constructed very much as for foxes, but the fences need not be so high. Wooden fences would, of course, be useless; nothing weaker than galvanized iron sheets or heavy wire netting will stop a beaver's teeth. Precautions must be taken to prevent the animals burrowing out. All pens should contain large pools or troughs of water.

ON PRESERVES

Probably a more satisfactory way of keeping beaver would be to fence in an area which would form a natural habitat. The owner of such a preserve could prevent trapping by trespassers on his property and, with this protection, the beavers would increase and thrive without much attention. A limited number could then be trapped by the owner himself, care being taken to comply with the provincial laws.

There are several beaver ranches of this kind in Canada, but most of them have not been long enough in existence to report on the success or failure of the venture.

To Study Forestry Practice in Europe

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forest research, wood technology and wood utilization, including the development of markets for hardwood species through small wood-using industries.

While forestry conditions in Europe are widely different from those in Canada, the general principles of the science of forestry are the same the world over, though it is of course necessary to adapt the practice to local conditions in every case. In Europe, the practice of intensive methods of forestry—the systematic growing of wood crops—has been a matter of development through centuries, and foresters from other countries can learn much of direct value to them in a study of methods and conditions there.

A period of study in the forests of Continental Europe is, for example, a regular part of the curriculum of English and Scottish forest schools which prepare men for the practise of forestry in the United Kingdom, India, and other

parts of the British Empire. The desirability of such study was particularly emphasized at the Imperial Forestry Conference, held last summer in London.

Quebec is setting the pace in this direction, with the prospect that a number of scholarships may be established, under which several Quebec foresters will be sent annually to Europe for intensive study of particular problems. The value of such a programme in developing and broadening out men for wider and more useful fields of activity at home is self-evident. The four men sent this year to Europe by the Quebec Government will, upon their return, take positions of responsibility in the Forest School at Laval and in the Quebec Forest Service, thus at the same time strengthening the courses of forestry instruction and increasing the effectiveness of the Provincial Forest Service in solving its problem of how best to retain the great areas of non-agricultural Crown timber lands of the Province in a condition to produce successive crops of the more valuable timber species. To accomplish this within the limitations of practice set by the surrounding economic conditions will tax the best efforts of a large staff of the most thoroughly trained and experienced foresters, for a period of many years.

The example set by Quebec in this direction may well serve as an object lesson to other Government agencies, Dominion and provincial, which are engaged in the administration of Crown timber lands.—*Clyde Leavitt.*

Damage to White Birch

During the late summer, it became increasingly noticeable that leaves on the birch trees generally were becoming brown, drying up, and falling off.

Mr. C. B. Hutchings, of the Entomological Branch, has been devoting considerable attention to this question and has found that the damage was being caused by a very small caterpillar, *Bucculatrix canadensisella*, which feeds on both the top and the bottom of the leaf, but preferably the top. While some damage was also caused by plant lice, it was small compared to that from the attacks of this caterpillar. Both the yellow and white birch are affected, with the latter perhaps showing it more plainly. While the damage became wide-spread last summer, it need not be assumed that it will result in destroying the birch trees.

It is well known to entomologists that an insect pest assuming serious proportions often precedes the appearance of a parasite which may completely check the activity of an insect or at least confine its attacks within limits that prevent it being a serious commercial danger. The Entomological Branch is of the opinion that this is quite possible in the present instance.

Conservation of Timber

Recently there appeared in several Canadian papers an illustration, taken somewhere in the Rainy river district, of a skidway of logs left in the bush to rot, after logging operations had been completed. While instances of this kind occur in different parts of Ontario, it is not believed that any large amount of timber is left in the woods in such skidways. Such occurrences are the result of forgetfulness; woods operators are not usually guilty of such gross carelessness when it represents a plain reduction of profits.

The same cannot be said of single logs scattered throughout the woods. During the first logging of white pine in Ontario for square timber, and later, when only choice logs were taken out, great numbers of the inferior logs were left in the woods. Operators stated that they could not be brought to the mills at a profit. Due to increased values of lumber, a large percentage of these logs would be of considerable value at present. Not only would such logs be valuable if made in the woods to-day, but the fact is that many of these logs, after lying in the woods for years, are still in such good condition that they are now being taken out at a profit. They are generally rotten on the outside, but, as many of them were of great size, a large portion of very choice wood material is still sound. Some idea of the quantities of this material left in the woods may be formed from the fact that one lumber company bought a large timber license within the past few years for no other reason than to secure the "down" pine on it.

Farmers Require Fire Protection

Their Isolation Renders Fire Extinguishers Necessary to Save Life and Property

Farm homes should be provided with fire protection, in the form of extinguishers or water pails. When a fire breaks out the farmer cannot call in the services of an

organized fire department, and the water supply is usually scanty; neighbourly assistance can, therefore, only be concentrated on endeavouring to save the contents of buildings.

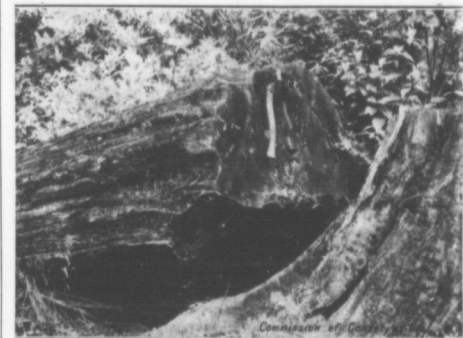
Fire extinguishers of many designs and qualities are available. The soda-acid type, however, is recommended. This must be kept from freezing, but it is the most satisfactory and serviceable. Dry powder extinguishers are not reliable. The National Fire Protection Association circular on this subject says:—

"In view of the fact that several so-called fire extinguishers, consisting generally of sheet metal tubes filled with mixtures of bicarbonate of soda and other materials in powdered form, have been widely advertised as suitable for use for fire extinguishing purposes, this committee has to report that in its opinion all forms of dry powder fire extinguishers are inferior for general use, that attempts to extinguish fires with them may cause delay in the use of water and other approved extinguishing agents, and therefore their introduction should not be encouraged."

A few pails, kept for fire purposes only, and always filled with water, should be on hand. It is generally admitted that more fires are extinguished by pails of water than by all other means combined. To overcome freezing of the water where the pails are kept in stables or outbuildings, calcium chloride, in the proportion of five pounds to the gallon of water will depress the freezing point to 40 degrees Fahrenheit below zero.

When fire protection is required it is needed badly. A little precaution against fire may save the farmer and his family being turned out of his home some intensely cold night this winter.

Ten woollen yarn plants in Canada, in 1918, employed 858 workers, and produced goods to the value of \$6,499,445. Salaries and wages amounted to \$521,968 and the investment to \$3,767,390.



WHITE PINE LOG 23 YEARS AGO AND LEFT AS DEFECTIVE ACCORDING TO STANDARDS AT THAT TIME
In some cases, lumbermen are now hauling such logs to their mill.