

## Commission of Conservation

CANADA

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CONSERVATION is published the first of each month. Its object is the dissemination of information relative to the natural resources of Canada, their development and the proper conservation of the same, together with timely articles covering town-planning and public health.

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## PROTECTION OF MIGRATORY BIRDS

The recent successful conclusion of a treaty providing for co-operation between Canada and the United States in protecting migratory birds constitutes a substantial advance toward the effectual conservation of North American wild life.

At the North American Conservation Conference, held in Washington, in 1909, and attended by representatives of Canada, Newfoundland, United States and Mexico, the international problems presented by the proper protection of natural resources were clearly recognized. With regard to migratory wild life the necessity for co-operative action is especially obvious. In Canada and the United States the protection of this invaluable resource is vested in the individual provinces and states, respectively. Protective laws were extremely diverse in both character and efficiency, with the result that the beneficial effects of adequate protection in one portion of the continent were largely nullified by the lack of similar measures in other sections. To secure stricter and more uniform protection negotiations between Canada and the United States were undertaken. The arrangement has now been satisfactorily concluded, the recent ratification by the United States Senate constituting the final step.

The treaty does not affect the administration of the provincial game laws, but insures in Canada, as in the United States, the minimum of protection regarded as essential to the permanent preservation of the wild life resources of North America.

## Regulation of Settlers' Fires

Legislation Under which the Forest Provinces Protect their Timber

A comparison of the following extracts from provincial legislation will show that Quebec, British Columbia and Nova Scotia have much more adequate provision for the regulation of settlers' land-clearing fires than has Ontario. It is claimed by many that the recent disaster in the "clay belt" could hardly have occurred if Ontario had had in effect a provision for regulating settlers' fires, similar to that of the other provinces. On the Dominion Forest reserves of the west, as well as in a part of New Brunswick, there are provisions similar to those quoted for Nova Scotia, British Columbia and Quebec.

THE NOVA SCOTIA LAW

"No person shall make, kindle or start a fire for the purpose of clearing land, or other like purposes, nor set up nor operate a portable steam engine within sixty rods of any woods, between the fifteenth day of April and the first day of December next following in any year, without first having obtained leave in writing from the chief ranger or sub-ranger. It shall be the duty of such chief ranger or sub-ranger on being requested to grant leave to start such fire, or to set up or operate such portable steam engine, to examine the place at which it is intended to start the fire, or to set up or operate the steam engine, and the adjoining lands, and the timber, trees and other property thereon, and to refuse such request and decline to grant leave, or to grant it only on conditions to be performed by said persons, if in his opinion it would not be safe by reason of the danger of fire spreading thereon or otherwise."

BRITISH COLUMBIA

"During the close season (between May 1 and October 1) no person, firm or corporation shall set out, or cause to be set out, fires in or near slashings or forest debris, standing or fallen timber, or bush land for the purpose of burning slashings, brush, grass, or other inflammable material, or for any industrial purpose, without first obtaining a permit therefor: Provided that no person shall be convicted who shall have set, in good faith and with reasonable care, a back-fire for the purpose of stopping the progress of a fire then actually burning."

QUEBEC

"No person shall, in the forest or less than a mile from a forest, set fire to, or burn, any pile of wood, branches or brushwood, or any tree, shrub or other plant, or any black loam or light soil, or any tree trunk or tree that has been felled,

at any time, except for clearing purposes between the 16th of November and the 31st of March of the following year, but between the 1st of April and the 15th of November, it is necessary to first obtain the written permission of the Minister, or of any other officer of the Department thereto authorized by the Minister, or of the fire ranger."

ONTARIO

"Every person who, between the 1st day of April and the 1st day of November, sets out or starts a fire within a fire district for the purpose of clearing land, shall exercise and observe every reasonable care and precaution in the setting out or starting of such fire and in managing of and caring for it after it has been set out or started, in order to prevent the fire from spreading."

From the foregoing, it will be seen that, in every forest province of Canada, except in Ontario, the governmental fire-protective agency on the ground assumes some degree of responsibility for protecting the general public against the careless or reckless settler, by preventing him from setting out clearing fires at an unsafe time. Ontario assumes no such responsibility.—C. L.

## Co-operative Threshing

Electric Power Utilized on Farms and Cost Materially Reduced

The benefits from modern methods of utilizing waterpowers are not confined to cities and towns or industrial centres. A recent undertaking in a Kansas rural district illustrates the manner in which the progressive farmer may secure the advantages of hydro-electric service.

Nine farmers along the transmission lines of a hydro-electric plant formed a co-operative Electric Threshing Association, purchased equipment, and are doing their threshing with electric power. The service is reported to be very satisfactory, and the cost to the farmers is about one-half of that charged for steam threshing, despite the fact that the rate paid for electrical energy is 5 cents per kilowatt-hour, or about double the charge that would be made in many localities in Canada. The energy required is approximately a quarter of a kilowatt a hour per bushel, varying with the nature of the grain threshed. The power company, as well as the farmer, benefits from this undertaking, deriving a handsome revenue from energy which might otherwise go unutilized. It is expected that the same electrical equipment will be used for filling silos and will produce an equal additional revenue from that source.

The farmers have also utilized the equipment for baling hay, and for threshing for neighbours who are near the company's transmission lines.—L. G. D.

## Selection of Seed Potatoes

Greater Production and Improved Quality Results from Care with Seed

Thousands of farmers have suffered heavy losses at various times from fungus diseases attacking potato crops. Weak, spindly hills make breeding places for the diseases which would never get started otherwise. These spindly hills are often caused by planting weak seed, the result of carelessness in selecting the tubers for seed. Like begets like and the sooner persons planting small or diseased potatoes realize this the better it will be for their crop yields.

Remarkable results have been obtained by investigators in seed selection work with potatoes. Lucrative methods are not necessary to obtain marked improvement in the ordinary field crops. It is a good plan to go over the field when the tops are about half ripened off and mark with a stake or twig the hills which show exceptional vigour and resistance to disease, to drought or to heat. At digging time these hills can be kept apart for seed. Any of the marked hills not yielding smooth or superior potatoes should be discarded. Farmers may think it too much trouble to save all their seed in this way but enough can easily be selected to plant a special seed plot each year from which seed for the main crop the following year may be obtained. If the farmer neglects to mark the vigorous hills he should, at least, note and keep apart the high yielding hills of smooth, uniform tubers for a seed plot next year.

Potato growers will find that it is highly profitable to select their potatoes for seed carefully and intelligently as it will mean greater productiveness, vigour and uniformity in shape and size.—F.C.N.

## Study of Water Powers in Chile

Chile has appointed a Commission to make a study of the water powers of that country available for the purpose of hydro-electric development. Prof. Don Arturo E. Salazar, of the University of Chile, estimates that proper development would reduce the cost of electricity to the small consumer for commercial purposes from 25¢ to 1c.

Canada, through the Commission of Conservation, has already taken steps to have an inventory made of our hydro-electric resources. *Water Powers of Canada* was published in 1911. A new work, entitled *Water Powers of Manitoba, Saskatchewan and Alberta* is now in press and this will be succeeded by a report on the water powers of British Columbia.