

Protection of N. B. Forests

Imperative Need of Adequate Fire Protection Shown by Survey

The thorough survey of Crown lands undertaken by the New Brunswick Government has already revealed very important facts. The progress report recently submitted calls attention to the fact that while one-third of the total stand consists of hardwood species, including maple, beech and birch, yet these species form only 1.5 per cent of the annual cut of the province. This indicates clearly the opportunity and the need for the development of industries to utilize this class of material. Those hardwoods are eminently suitable for the manufacture of flooring, chairs, turnery, etc. There is also a large amount of poplar suitable for the manufacture of soda pulp.

It is estimated roughly, on the basis of present information, that on the entire Crown land area fires have, during the past 40 years, caused a loss of stumpage that would now be worth \$14,280,000, with a potential manufactured value of some \$80,000,000. These figures indicate the enormous losses that result from repeated forest fires. The results thus far secured from the investigation amply prove the wisdom of the New Brunswick Government in starting and continuing this study, which will furnish a scientific basis for the administration of Crown lands for many years to come.

As elsewhere throughout the forest sections of Canada, the immediate imperative need is for adequate protection against fire. The New Brunswick Government now has this whole matter under consideration, and it is to be assumed that modern and up-to-date methods will be put into effect, following the progressive lead taken in some of the other provinces.—C.L.

Expansion of Fishing Industry

Under the stimulus of exceptionally high prices, the exploitation and food production of Canada's fisheries during the coming year should be substantially increased, despite the absence of many fishermen on military service. It is gratifying to note from the fishery statistics for the last two or three years that the marked decrease in the number of fishermen actually fishing in Canadian waters appears to have been arrested. During 1915, as compared with 1914, the total number of fishermen increased by nearly 5,000 and the number of persons employed in all branches of fisheries' work was the

highest on record. For many years the development of the fishing industry has encountered serious difficulties. While there has been a steady and even rapid growth in capital investment and in the secondary operations, such as canning, similar progress has not been in evidence with regard to the primary occupation of catching fish. With improved equipment and organization and with a continuance of current market conditions the industry may be expected to evince a productive capacity far beyond any yet attained.

Summer Camps in the Forests

Fresno, California, has secured the use of 15 acres on the shores of Huntington lake, in the Sierra national forest, on which to establish a camp to provide summer outings for 11,000 school children and their parents. California State Normal School now occupies a portion of the same forest. In connection with the regular six-weeks summer course, this school gives a course in woodcraft and general forestry subjects. The students visit the nearby Forest Service ranger stations and lookout towers, and study the Government's methods of fire protection.

Los Angeles was the first city in California to establish a vacation camp in the national forests. A tract of land in the Angeles forest has been rented, and a large camp built, costing about \$8,000. This camp consists of a log and stone lodge, four furnished cottages, tennis and croquet courts, baseball grounds and handball courts. A ten-day trip can be made at a cost which is within the reach of practically everyone. By this means thousands of residents of the city have been able to spend their vacations in the mountains.

The careless housewife, with the table not cleared for hours after each meal, assists the flies very materially in contaminating food, by allowing them to settle and feed on milk, sugar, butter, etc.

CIVIC IMPROVEMENT LEAGUE CONFERENCE

The Commission of Conservation is co-operating with the Dominion Civic Improvement League in the organization of a conference to be held in Winnipeg on Monday, Tuesday and Wednesday, May 28, 29 and 30th. The conference will be held in the lecture room of the Industrial Bureau under the presidency of Sir John Willison. Addresses will be delivered by Sir James A. M. Aikins, Lieutenant-Governor of Manitoba, Hon. T. C. Norris, Premier of Manitoba, Mayor Davidson of Winnipeg, and Sir Clifford Sifton, Chairman of the Commission of Conservation. The conference is one of exceptional importance. It is believed that, apart from the prosecution of the war, there is no more urgent national question than that of securing greater efficiency and economy in connection with municipal government. The conference will assist in achieving that object by the opportunity it offers for an exchange of views and by its general educational value. A joint session will be held with the National Council of Women which holds its annual meeting in Winnipeg during the same week.

Purification of Water Supply

Sewage Treatment Essential to Protection of Primary Source

Progress in water purification constitutes one of the brightest pages in the history of sanitary engineering in America during the past 25 years, but much remains to be done both as regards its general adoption and its application where local conditions call for special treatment. Apparently, progress in water filtration has been somewhat retarded through efforts to make chlorination serve as a substitute under conditions where it is not entirely adequate. Chlorination has done much to improve public water supplies. But it is not a cure-all, and its limitations are far more clearly appreciated with the practical proofs now existing than when academically recited six or eight years ago.

Under certain conditions chlorination secures public water supplies of good quality without filtration. The great difficulty lies in gauging the proper amount to be introduced. For many water supplies subject to chlorination without filtration, real difficulties are encountered in so adjusting the dose of chlorine as to guard against objectionable taste and odours on the one hand, and inadequate destruction of objectionable bacteria on the other.

Present day consideration of sewage disposal as related to water supplies assumes that the primary source of supply is not grossly polluted and that any sewage affecting its purity has been treated so that its filtration for domestic use may not be rendered ineffective through the overloading of the filters. The methods adopted must involve the recognized principle that any water filtration process must begin by the treatment of the sewage before it is allowed to contaminate the source of water supply.—L.G.D.

Railway Fire Protection Work

Satisfactory Results have been Secured under Competent Direction

The railway fire protection work in the establishment and administration of which the Commission of Conservation has co-operated, the Dominion Railway Commission, has produced remarkably satisfactory results. Under provisions of the Railway Act and the regulations of the Board, railways subject to its jurisdiction have assumed full responsibility for the extinguishing of fires, sumably due to railway causes. Admirable co-operation has existed between the railway organizations and the several Dominion and provincial fire-protective agencies, with results thoroughly satisfactory to all concerned. Railway fires have been reduced to a position of very minor importance, and railways have also rendered a service in the extinguishing of many fires, for the origin of which they were in no wise responsible.

During 1916, 558 fires were reported as originating in 76 sections, within 330 feet of subject to the Railway Commission's jurisdiction, being fires less than in 1915. Of the 69 per cent were definitely attributed to railway causes, 18 per cent to known causes other than railways, and 13 per cent to unknown causes. Of the 388 chargeable to railway causes, fires of 26 per cent were incendiary fires which did no damage, 57 per cent or 74 per cent are larger which burned over 11,290 and valued at \$35,566. The damage from all fires is estimated at \$39,482. Of this the railways are charged with 90 per cent known causes other than railways 8 per cent, and unknown 2 per cent. Thus, on all subjects to the jurisdiction of the Board throughout Canada, the forest fires definitely attributable to railway agencies did damage amounting to only \$35,566, a remarkably good showing, considering the unfavourable weather conditions.

Of all fires reported, the percentages were as follows: Locomotive 1 per cent; railway employees 1 per cent; campers and travellers 1 per cent; settlers, 8 per cent; unknown causes, 3 per cent; unknown causes, 13 per cent.

The use of tank cars for fighting purposes is now in evidence on the Canadian Pacific, Grand Trunk, Temiskaming and Northern Ontario, and Canadian Government railways. Such equipment has proved its effectiveness, and wider use is to be hoped for.

Fight the fly with cleanliness and ventilation.