

OUTLINE OF CONSERVATION ACTIVITIES IN 1918.

WORK IS REVIEWED BY ASSISTANT CHAIRMAN

Mr. James White at Annual Meeting of Commission Summarizes Achievements in Conservation and Deals with Subject of Canada's Resources in Relation to Economic Situation.

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publications have made this information available to the public in such enduring form that they will be standard works of reference for years to come.

WORK FOR FARMERS.

"Owing to our limited financial resources, we were from the beginning forced to adopt the plan of spending more money upon one or two investigations than upon any others. Thus for a time we expended a maximum on agriculture, particularly on our illustration farms. Having demonstrated the great value of such farms as forcible educative agents, we thus proved to the farmers of the neighbourhood that one of themselves was obtaining these results without any assistance other than the advice of our experts and at no greater cost than their own farming operations. It was a demonstration that by following our advice our illustration farmer could obtain an increased yield and that practically the whole of the increase was profit.

"At another period we expended a maximum on water-power investigations. We published a general work on the water-powers of Canada in 1911, followed by the "Water-powers of the Prairie Provinces" in 1918, and the work on the "Water-powers of British Columbia" will be issued this year.

TOWN PLANNING SCHEMES.

"For a time we directed special attention to town planning and to the question of housing, and we now see the partial fruition of our efforts in an appropriation of \$25,000,000 for housing.

"Conditions created by the war have directed attention to the necessity of adopting measures of conservation. It is not too much to say that the subject of conservation is uppermost in the minds of the thinking men of the world.

"We are now endeavouring to re-adjust ourselves to post-war conditions, but it must be borne in mind that if we burden ourselves with extravagant and wasteful methods of developing or of utilizing our national resources, if we destroy our created resources by fire, if we lock up our floating capital in unremunerative works, we are fatally handicapping ourselves in the great race for world trade, or for any considerable portion of it.

RECONSTRUCTION WORK.

"Reconstruction in Canada is in the hands of a sub-committee of the Cabinet. The subject is a vast one, presenting many difficult problems. We may safely leave it in the hands of this committee, but it is of interest to note briefly what Great Britain is doing, and what she proposes to do. In a recent address Sir H. Babington Smith stated that during the present period of demobilization men described as 'demobilizers' are being released first. The demobilizers are men whose services will be required for working the mechanism of demobilization. Secondly, the 'pivotal' men; that is, men who are necessary for the re-establishment of industry on a peace basis and for preparing the way for the re-employment and reabsorption of labour.

"Special intensive educational training will be given to the men who have lost touch with their particular professions and businesses, and men who have been maimed, or otherwise incapacitated for their former employment, will receive vocational training."

Mr. White made a brief reference to the housing question, and stated that the question would be fully dealt with in an address to be given before the meeting by the expert on that subject,

Mr. Thomas Adams. He then took up the subject of public health.

"With so much evil resulting from the war", continued Mr. White, "it is a satisfaction to find that some good came of it. The Lancet states that in Great Britain, functional nervous diseases among the civil population practically disappeared during the war. In Vienna, it was found that all degrees of diabetes were favourably influenced. The Lancet does not speculate why these good effects were produced. The starvation method of treating diabetes may throw some light on the matter, but it is also not improbable that the great mental and nervous strain involved in the concentration of the mind on the outside circumstances may have reacted favourably upon the whole economy.

CURES FOR SHELL-SHOCK.

"On the other hand, many nervous affections that it is customary to call 'shell-shock', have affected the soldiers. As a result of the work of the British Research Committee, it is now possible to take wider and more hopeful views of the nervous diseases of the war. Incidentally, mental disease generally has passed from the region of mere expectancy to a reasonable anticipation of beneficial results under proper treatment. Here, again, the war has left a legacy of benefit.

From a health standpoint the most important occurrence during 1918 was a world-wide epidemic of influenza and pneumonia. Had the same death rate prevailed during the four and a half year period commencing July, 1914, it would have caused the deaths of 108,000,000 persons, or been five times deadlier than the war. The medical correspondent of the London Times, says that never since the black plague has such an epidemic swept over the world, illustrating, as never before, the need of a new survey of health measures.

"Alarmed by statements respecting the prevalence of goitre in British Columbia and Alberta the residents of these provinces requested the Commission to investigate the question. Inquiry indicated that there was no foundation for the scare, but eventually, as we were requested by the Provincial Board of Health of Alberta, and as the alarm instead of decreasing, appeared to be increasing, we agreed to investigate. We requested Dr. Shepherd, of Montreal, late Dean of the Faculty of Medicine of McGill University and one of the highest authorities in America, to undertake the investigation. Dr. Shepherd visited Alberta and calmed the fears of the people respecting the prevalence and effects of goitre. Later, Dr. Shepherd contributed a pamphlet on goitre which will be issued at an early date. It is proper also to acknowledge the indebtedness of the Commission, and of the people of Canada generally to Dr. Shepherd for his valuable services, which have been rendered without remuneration other than his travelling expenses.

FORESTS RESEARCH WORK.

"At the present time we are spending more money on the investigation of our forests than upon any other resource.

"Statesmen and business men have emphasized repeatedly the part that the further development of our natural resources must play in reconstruction, after the war. Any such programme must take full account of the forests.

"A large export trade is particularly essential to Canada, to redress her unfavourable trade balance. In this direction our forests hold a position of peculiar strategic importance both actual and potential. In British Columbia for example, it has been shown that the annual lumber cut can be increased five-

CANADIAN PULP STATISTICS PLACED BEFORE CONSERVATION COMMISSION MEETING

Value of output of Canadian pulp and paper mills, 1918	\$110,000,000
" " " " " " " " " " " "	1917 85,000,000
Exports of pulp and paper in half year ended Sept. 30, 1918	\$40,636,919
" " " " " " " " " " " "	1917 31,074,168
" " " " " " " " " " " "	1916 20,040,745
Exports of pulpwood during same half year:	Quantity. Value.
980,652 cords,	\$9,327,901
Output of 3,000 timber and pulp plants in Canada, 1917	4,142,711,000
Total cut of spruce	1,466,558,000
" " white pine	791,609,000
" " Douglas fir	706,996,000
" " hemlock	332,722,000

One-fourth of the news print used in the United States comes from Canada, and 15 per cent of the pulp wood consumed in that country is the product of Canadian forests as shown in address by James White, F.R.G.S., F.R.S.C., at annual meeting of Conservation Commission, February 18 and 19.

fold under good management, without impairing the forest capital stock.

"Britain has recently placed an order in Canada, for lumber aggregating around \$40,000,000 in value. It has been estimated that reconstruction in France and Belgium will require 25,000,000,000 feet.

"Mr. F. J. Campbell, president of the Canadian Pulp and Paper Association, estimates that the value of the output of Canadian pulp and paper mills during 1918, was from \$110,000,000 to \$115,000,000 as compared with about \$85,000,000 in 1917. During the half year ending September 30, 1918, Canada exported pulp and paper valued at \$40,636,919 as compared with \$31,047,168 during the corresponding period of 1917, and \$20,040,745 in the same half year of 1916. If our exports were maintained at the same rate during the second half of the present year, they would aggregate about \$90,000,000, or, allowing for a decrease since the signing of the armistice, say \$70,000,000. During the six months ending September 30, 1918, we exported 980,652 cords of pulpwood valued at \$9,327,901, or at the rate of 18½ million dollars per annum.

TOTAL FOREST CUT.

"In 1917, the output of the 3,000 timber and wood-pulp plants of Canada, totalled 4,142,711,000 feet. The total cut of spruce was 1,466,558 feet, that of white pine, 791,609,000 feet, Douglas fir, 706,996,000 feet, and hemlock 332,722,000 feet.

"One-fourth of the news print paper used in the United States comes from Canada, and 15 per cent of the pulpwood consumed in that country is the product of Canadian forests.

"As repeatedly stated by Dr. Fernow and Mr. Leavitt transmuted the wealth producing possibilities of our forests into permanent actualities require the acceptance by the people in general and the Government in particular, of the fundamental principle that the forest is a crop rather than a mine, and cutting operations on non-agricultural lands must be conducted always with a view to the perpetuation of the forest, as such.

IS BUSINESS PROPOSITION.

"The practice of silviculture is still in its infancy in Canada, as it is over most of the North American continent. There is still far too strong a tendency toward the practice of forestry anywhere except in the woods. At the same time it must always be realized that forestry is essentially a business proposition, and that business considerations place definite limitations upon what it is feasible to do in the direction of intensive methods.

"On the other hand, the forest lands of Canada are predominantly Crown lands and are therefore for the most part the property of the people. It follows that the public interest, from a long-time viewpoint, should govern in determining the conditions under which exploitation takes place. With the present increased stumpage values, many things

in the direction of better management are now becoming economically feasible which would have been out of the question in years past.

"Notwithstanding war conditions, remarkable progress has been made toward better forest conservation, during the past year."

PROGRESS DURING 1918.

Mr. White gave a review of progress made in this direction in the different provinces, during 1918. He said that fire losses due to railway agencies have remained satisfactorily low. He referred to the white pine blister rust and the measure taken to control it.

The very serious injury to our forests from fungous and other diseases urgently demanded the appointment of a forest pathologist to study these diseases, he said. After speaking on the subject of forest planting, and referring to the field of forest research, Mr. White mentioned aeroplane spruce production.

"British Columbia has 14,165,345,000 feet board measure, of Sitka spruce, according to estimates" he stated. "The production of spruce increased from 116,000 board feet, in January, 1918, to 6,850,000 feet in December. The production of Douglas fir increased from 209,000 in January to 1,332,000 in December. The total production in 1918 was: spruce, 26,124,000 feet, fir, 9,224,000 feet. Nearly all the aeroplane material was obtained from trees 500 to 600 years old, and such trees cannot be replaced for centuries, if ever. It has been estimated that cutting on a war basis for another year would have practically exhausted all the aeroplane wood procurable at a reasonable expenditure of money and effort."

PULPWOOD REFORESTATION.

The speaker referred to reforestation of pulpwoods in Quebec, undertaken by pulp companies.

"In Quebec" he said "the Laurentide Company and the Riordan Pulp and Paper Company have realized that nature, if unaided, makes very slow progress toward restoring the pulpwood species on cut-over lands.

"To date, the Laurentide Company has planted 680,000 trees, mostly spruce, on 453 acres. They expect to plant 500,000 in 1919, 700,000 in 1920, and 1,000,000 in 1921. The Riordan Company has planted 780 acres to spruce and pine. From 1920, they expect to plant 1,000,000 spruce and 100,000 white and red pine per annum.

ILLUSTRATION FARMS.

"During 1918 the work on the sixteen farms in Dundas county where better farming methods are being practised under the supervision of the Commission of Conservation included the following:—

"1. System and methods of farming, embracing planning, crop rotation, seed and variety selection, tests of different thicknesses of clover seeding, tillage, live stock, and manures.

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