

from overseas service of many men experienced in the various lines of work with which the Forest Service is charged.

Particular attention has been paid to the revision and enforcement of regulations calculated to minimize unnecessary waste of merchantable material in logging operations. That such waste has in the past resulted in a drain upon the forest resources of the province as serious as it is unnecessary, is fully recognized.

Revenues Reach High Level.

The forest revenues have more than doubled during the past year, it being estimated that they will return a total of around \$1,500,000 to the provincial treasury. This is approximately three times the amount of the forest revenue for 1917, and closely approximates the forest revenue of Quebec. It falls only a few hundred dollars short of the forest revenue of Ontario. This is on a cut of some 343 million feet of logs, ties, poles and pulpwood, supplemented by some minor sources of revenue.

In fire protection, the work of the regular staff has been supplemented in a very valuable way by making 60 of the woods superintendents of the licensees, co-operative fire wardens, with full authority to call out men to fight fires. To the same end, there are 154 voluntary fire wardens. The co-operation of 490 Road Commissioners was made available through the Minister of Public Works. Forest rangers and inspectors numbered 40, and temporary fire wardens 32, making a grand total of 776 men throughout the province directly interested, in an official way, in forest fire protection.

The Public Works Department has issued special instructions relative to the burning of slash along all new road construction, thus greatly reducing the fire hazard.

The permit system of regulating settlers' clearing fires continues to give admirable results. In New Brunswick, during 1919, 2,053 such permits were issued, of which in only five cases did the fires escape and require extra assistance to extinguish. On the other hand, of 36 settlers fires reported set without permit, 28 escaped and caused serious damage.

Considerable progress has been made in the construction of lookout towers, telephone lines, ranger cabins, and other forest improvements.

Progress of the Survey.

The forest survey and classification of Crown lands continues to progress, 830 square miles having been covered during the past year, so that approximately 30 per cent. of the entire Crown land area has now been covered in this way. The results secured are proving of the great-

est value in the every day administration of Crown lands, besides furnishing the foundation for a comprehensive plan for the handling of the Crown forests on a permanent basis. Where licensed lands are included in areas being surveyed, licensees can, upon the payment of certain fees, secure reports on their holdings. The revenue secured in this way is to a considerable extent helping to defray the cost of the survey.

In the soil classification, the Agriculturist of the Commission of Conservation has co-operated by personally directing the work. The object is, of course, to direct settlement to areas suitable for that purpose, while reserving non-agricultural lands for permanent timber production.

The Commission has also co-operated in the study of natural regeneration and rate of growth of commercially valuable forest species, upon which the Forest Service has been engaged. Dr. C. D. Howe, of the Commission's forestry staff, has directed the work in its general aspects. The Commission has further co-operated with the New Brunswick Forest Service and with the Bathurst Lumber Company by furnishing the chief of party for the conduct of an experimental cutting upon the Company's limits. The area in question has been set aside by the Provincial Government as a permanent experimental plot, and the results of the different methods of cutting and of slash disposal will be under careful observation for many years to come.

Professor R. B. Miller of the Forestry Department of the University of New Brunswick having resigned to become State Forester of Illinois, the position has been filled by Professor A. V. S. Pulling. This school has filled and is filling a very valuable service in providing trained foresters, not only for provincial and private work in New Brunswick, but in the other forest services in Canada as well. It is to be regretted that lack of finances has prevented the employment of additional men upon the teaching staff of the Forestry Department.

Incidental to the regular courses of instruction, a forest ranger course for returned soldiers has been maintained by the Forestry Department of the University, in co-operation with the Vocational Board.

NOVA SCOTIA.

Action is still pending with reference to the appointment of a Provincial Forester for Nova Scotia. Particularly during recent months, the matter has been receiving most careful consideration at the hands of the Provincial Government. An aggressive educational campaign has been carried on by the Canadian Forestry Association, calculated to enlist public sup-