

FORESTRY IN ONTARIO.

COMPREHENSIVE REPORT ON THE PRESERVATION OF OUR TIMBER LANDS.

THE question of practical forestry is one which is receiving considerable attention at the present time by all civilized countries, and yet, perhaps, its importance is not recognized to the extent desired. True it is that rapid advancement has been made in this direction within the past few years, and the public are gradually becoming convinced of the necessity of the systematic preservation of forest lands.

In the province of Ontario the subject received recognition at the hands of the Provincial Government some years ago. In the year 1883 the Department of Forestry was created, the late R. W. Phipps becoming chief clerk. Mr. Phipps was an ardent student of forestry, and held the position up to the time of his death in February, 1894. A considerable interval elapsed between the time of his death and the appointment of a successor in the person of the late Hon. C. F. Fraser, who held the position for only a few months previous to his death in the fall of 1894. He was succeeded by the present incumbent, Mr. Thomas Southworth, and upon his appointment the office was transferred to the Crown Lands Department, where it is believed the work can be more advantageously carried on.

MR. THOMAS SOUTHWORTH.

Mr. Southworth is a thorough Canadian, a native of the soil. He was born in 1855 in the



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County of Leeds, Ontario, and was a continuous resident of that county until his removal to Toronto to assume the duties of Clerk of Forestry. Mr. Southworth's mother, Diantha Stoddard, was born in the same county, her parents, who migrated from Connecticut, having been among the pioneer settlers of Leeds. His father, Stephen J. Southworth, of Brockville, was a native of Vermont, but came to Canada over sixty years ago.

Mr. Southworth was educated at the country school in Kitley and the high school at Athens. Removing to Brockville, he was employed as local reporter on the Brockville Recorder, and afterwards as editorial writer. In 1879 he was married to Miss Mary Taylor, of Gananoque, sister of George Taylor, M. P. for South Leeds, and in the following year embarked in business as a job printer. In 1881 his business was amalgamated with the Recorder, a partnership being formed between him and the late Col. David Wylie, and from that time until he accepted his present position the business and most of the time the editorial management of the paper was in his hands.

ANNUAL REPORT.

The annual report of Mr. Southworth, which has just been issued, proves conclusively his qualifications for the position. In the introduction it is stated that the transfer of the position to the Crown Lands Department contemplates the establishment of a bureau under the direct control of the Department, with a well-defined sphere in the work of administration. Though the policy of the government in this regard has not been fully developed, the character of the work accomplished during the last few months will indicate in a measure the enlarged scope of the operations of the bureau.

From the report the following extracts are taken:

FOREST SUPPLY.

The object of forestry is two-fold. Hitherto, so far as this continent, at least, is concerned, it has usually been considered merely as a means of ensuring favorable agricultural conditions and preventing the deterioration of soil and climate. We have been so habituated to regard the forest wealth of America as practically inexhaustible, that while the disastrous effects of forest destruction upon agriculture forced themselves upon the attention of the public, and procured a receptive hearing for forestry proposals as a remedy for these very obvious evils, the other, and more important aspect of the subject, has hardly been accorded its due weight. Apart altogether from the influence of the forests in distributing moisture, regulating temperature, and in other ways maintaining favorable conditions for cultivation, the industrial interests of the country imperatively require their preservation as a perpetual source of timber supply. The forests of America, as a matter of fact, are very far from being inexhaustible, so far, at least, as the finest and most useful kinds of timber are concerned.

With the development of the country, moreover, the home demand for timber and wood products of all kinds is proportionately increasing, and as our United States neighbors are using up their forest supplies much more rapidly than ourselves, increased requirements for shipment across the line will soon enhance the value of our timber products. How extensive that demand is likely to be in the near future, and what inroads it will make upon our supplies, may be in a measure estimated from the report of Prof. B. E. Fernow, Chief of Forestry Division at Washington for 1893, in which he states that the consumption of wood in the United States is more than fifty per cent. over what their forest area could produce as an annual yield, and that the demand for wood material increases at the rate of over twenty-five per cent. every ten years. It requires, therefore, no great foresight to understand that in the course of the next generation the price of wood, especially of the more valuable kinds, is certain to rise enormously. As our staple manufacturing and mechanical industries are largely dependent upon an adequate and cheap timber supply, the preservation of this prominent factor in our national wealth is an equally important aim of forestry with the coincident benefit to agriculture.

FORESTS AS CAPITAL.

Owing to the lavishness of nature beyond all immediate requirements, and the earlier necessity of rapid clearance of the woods to provide for cultivation, Canadians have become habituated

to wasteful methods of lumbering. Under the influence of the old associations and conditions we are accustomed to regard the axe as the precursor of the plough and to look upon forest utilization as synonymous with the forest destruction. Current discussion respecting the timber policy of the Dominion and Provincial Governments illustrates this habit of thought. The timber resources belonging to the public are correctly enough spoken of as "capital," but when it is sought to turn these resources to practical account it is often charged that in so doing the Government are "drawing upon their capital." There is no reason why this form of capital, like others, should not perpetually reproduce itself and yield ample interest from year to year without diminishing or impairing the original endowment. Judicious forest management involves no waste of capital. To preserve the forests, in the sense of leaving them untouched, is a waste from year to year of their natural increase, as the trees pass through the stage of maturity to decay and death. Without the interference of man there is a constant consumption of the forest products by the decomposition of the trees which have reached their term of existence, the only difference being, that under a regime of practical forestry, such trees, when they had reached their prime, would be selected for removal, while under natural conditions their decadence is gradual. To allow the forest trees to mature and decay under the erroneous idea that thereby timber resources were being rebanded for the future would be a waste.

ANNUAL GROWTH OF TIMBER.

The United States Department of Agriculture, through its forestry branch, has for some years been preparing returns of "timber physics," and among other things, something like close figures have been obtained of the actual annual growth of timber on an acre of forest land under ordinary forest conditions. These figures were derived from a very extensive series of actual measurement over a term of years on different lots in Maine and New Hampshire forests. The conclusions reached by the United States authorities differ materially from the estimate given by Brown and Nisbet, eminent English authorities in the matter of annual growth. While "Brown's Forester" estimates the annual growth on an acre of Scots pines at 100 to 150 cubic feet, the United States Division of Forestry places the annual growth in a New Hampshire spruce forest at only fifty-nine and a half cubic feet. In comparing these two estimates it must be borne in mind that Brown's estimate is for a Scotch plantation in which the trees have been carefully tended, and in which, because of this, the growth would be greatly in excess of that in an ordinary American forest, where overcrowding and other causes retard the growth. For the purpose of estimating the annual growth in Ontario, where the conditions are much the same as in the states mentioned, we will take the United States figures fifty-nine and a half cubic feet, or for facility computing, sixty cubic feet per acre as the average annual growth in the Crown forests under ordinary conditions.

The area of the timber-bearing lands still belonging to the Crown in Ontario can only be approximately estimated. According to a return to the House in 1893, there are about 21,000 square miles of pine lands under license, and