

As to the necessity and importance of this step there can be no two opinions. Obviously it was essential to ascertain the extent, character and location of the natural resources of the region with some measure of definiteness, in order to determine the best means of opening up the country and the districts which would best repay the outlay upon railways or colonization roads. Previous to last year's exploration the information obtainable upon these points was exceedingly vague and unreliable. It was known in a general way that some good land and very considerable quantities of spruce timber were to be found on the northern slope, but no accurate knowledge as to the extent or situation of either was accessible to the public.

The plan pursued involved the division of the territory to be explored into ten districts. One of these was assigned to each exploration party, consisting of a surveyor, land and timber estimator and geologist, with the necessary assistants, canoe-men, etc. The ground was covered just as thoroughly as the time and resources at the disposal of the parties would permit, and the results have just been given to the public in the report of the exploration published by the Department of Crown Lands, comprising some 300 pages, including a number of photographic views. The main facts established by the exploration have for some time been known and have fully justified the progressive policy of the administration, and the energy which has been displayed in the work of opening up the Northern country and encouraging its industrial development. Interest in this great undertaking has been immensely stimulated by the revelations of the explorers as to the enormous wealth in natural resources and fertile soil possessed by a region which many people have hitherto regarded as little better than a sterile wilderness with an inhospitable climate. The most significant discovery recorded is that of the great extent of the belt of good clay land running from the eastern portion of Nipissing district across Algoma and into Thunder Bay district, which has been found to comprise about 24,500 square miles or 15,680,000 acres. This area, nearly all of which is admirably adapted for agriculture, is three-fourths the size of the settled portion of Ontario south of Lake Nipissing. Before the explorers ascertained its dimensions little was known beyond the fact that a clay tract of similar character to the soil of the Temiscaming township extended from Nipissing into Eastern Algoma, but no one supposed that it embraced more than three or four million acres at the outside. To definitely establish this one point alone, proving that the Province has lands available for homes for many hundreds of thousands, is well worth all the cost of the exploration. A noteworthy service performed by the careful and painstaking investigations of the explorers is the gathering of data as regards the climate, which effectually dispel the erroneous impression that the shortness of the season and the prevalence of summer frosts are likely to form a serious drawback to successful agriculture. At the Hudson's Bay posts visited by the parties it was ascertained that for many years all the ordinary vegetables which flourish in Southern Ontario had been easily and successfully grown there. The season is but little shorter than in the settled portion of Ontario, and the extensive forests and large areas of water surface considerably mitigate the severity of the winter.

The short-sightedness of the onslaughts made on the policy of the government in granting pulp-wood concessions in order to encourage the pulp and paper making industry has been abundantly exposed by the reports as to the vast quantities of pulpwood timber existing throughout the territory. The total is estimated at 288,000,000 cords, and as the exploration

was far from being an exhaustive one, and some large areas were necessarily left unvisited, this is merely an approximation to the actual growth of spruce, jack pine and poplar. So far, therefore, all the concessions which have been made have merely touched the fringe of our immense resources in the raw material of the paper industry which is destined shortly to attain enormous proportions. There is every prospect that with the encouragement of judicious regulations compelling the working up of this material within our own borders, Ontario may before long rank as the leading pulp and paper producing community of the world. The presence of iron pyrites in large quantities in many localities will be an important factor in securing this result, as it is capable of being utilized in the manufacture of sulphuric acid and other lye products. There are many splendid water-powers on the rivers which will materially aid in the establishment of manufacturing industries.

So far as pine timber is concerned few discoveries have been made, as that tree does not flourish to any extent north of the Height of Land. An estimate of the extent of the pine-bearing tract in the southern part of Nipissing district surrounding Lakes Temagami and Lady Evelyn, and extending for some distance northward, gives a total of some 1,650 square miles with a yield of nearly three billion feet b.m. Large areas in this vicinity have been destroyed by fire, and in order to preserve that which remains from a like fate the government has set aside a large tract surrounding Lake Temagami as a permanent forest reserve, from which settlement is excluded, special precautions being observed for preventing fires. By this means the incoming population in the adjoining agricultural districts will be assured of a continual supply of timber, which will be cut on forestry principles so as to maintain the reproductiveness of the forest.

The discovery of large deposits of peat in several localities, the most extensive of which is in Nipissing district north of Lake Abitibi, is important as affording an assurance that the future population will have a plentiful supply of excellent fuel. An analysis of samples taken from these peat bogs, which are ten feet in depth in some places, showed them to be rich in carbon and combustible material, while possessing an unusually small percentage of ash and moisture.

Although no very notable discoveries of mineral deposits of great commercial value were made, the geologists who examined and classified the rock formations have done valuable practical work. In many places the presence of gold and other metals was observed, and though the samples secured did not make it certain that mines would repay the cost of development, nevertheless the results are of an encouraging character, and the report will be a useful guide to prospectors, as to the localities in which their labors are most likely to command success. The accounts of the game, fur-bearing animals and birds of the region, and the fish which abound in many of the lakes and rivers, will be read with much interest by the naturalist and the sportsman.

The work of which we have only indicated some of the leading features has been well and thoroughly done, showing great care and fidelity to duty on the part of the large staff engaged. Hon. Elihu J. Davis, the Commissioner of Crown Lands, and Mr. Aubrey White, Assistant Commissioner, upon whom rested the responsibility for the selection and equipment of the explorers, and the arranging of the system under which their work was carried out, are to be heartily congratulated upon the highly successful results of the undertaking, which have already had a marked influence in connection with the development of New Ontario.