

of Canada's wealth lies in Canada's forests; the nature of the soil and climate in the northern districts of the eastern and central Provinces is, to a large extent, not fit for anything but forest growth. Yet Canada is utilizing the natural growth in such a manner as to deteriorate her forest capacity, and often even her agricultural possibilities. Timber growing will eventually become an economic necessity for Canada; few lumbermen, under existing conditions, can see any advantage in utilizing supplies with other views than those of immediate gain—a man's life seems too short to enter upon such extended enterprise as forestry—interest in future supplies can concern the State alone; at least, so it seems at present.

"The time for a wiser forest policy has come and the Government should lay now, while it still retains land and forest, the foundation of systematic forest management—at least, to set, as in Germany, the example after which private owners may form their forestry.

"There seems to be a misunderstanding as to the position which the different Governments of Germany hold in respect to their forests. Only one-third of the entire forest area is State forest, not quite one-fifth belonging to communities is under restrictive State supervision, and the balance, very nearly one-half (in Prussia 53 per cent.) is in private hands, to the unrestricted use of their owners, excepting a few cases, where the danger to neighbouring agricultural lands from the indiscriminate removal of the forest makes its management under restrictive rules necessary. Yet the good example set by the management of the Government forests has largely induced a similar management of private forests by their owners, who frequently employ the neighbouring Government officer at a small remuneration to make their working plans.

"In Germany, where empiric forestry has been practised for more than two centuries, the necessity of experimentation upon a scientific basis, though recognized long ago, has found practical expression only recently. France has followed, and we may say that with the year 1870, when the first experimental stations were established, one in Baden and another in connection with the forest school at Tharana, in Saxony, a new epoch in the art of forestry has been inaugurated.

"The other Governments soon followed, so that there are now eight central forest experiment stations, with a large number of secondary stations. All these, except the Austrian, have formed a union, called the Association of the German Forestal Experimental Stations, and work under a common plan harmoniously together, to furnish a scientific foundation for a rational management of forests, based upon exact experiments and careful investigation.

"Your Government may congratulate itself that it can build upon the experience of older nations. For although European administrative methods and local management may not be translated into Canadian practice, their study will be no small aid in devising a system for your own use. As for their methods of scientific research, and for the establishment of the general natural laws governing forest growth, we may not hesitate to adopt the former and apply the latter as well in forestry as we do in agriculture.

"The natural laws being uniform all over the world, their practical application will depend only on sound judgment of local conditions. These we have to study here. What we do not know and cannot learn from the extensive European libraries of forestal literature is the capacity of our native species—not less than 95 in Canada (some 20 only in Germany); their rate of growth in different periods of life; their adaptability to conditions of soil and climate; the best mode of propagation and treatment in the forest generally; the time of their maturity; their value as timber; their value as conservers of forest capacity; their yielding capacities; their behaviour towards each other (a most important and, in this country, almost entirely disregarded consideration for the forest grower), and many other points essential to a successful forestry. In the face of the utter ignorance on the forestry of our native species, I will not mention the subject of acclimatization of desirable foreigners.

"Close observations and scientific experiment are needed to arrive at this fundamental knowledge.