

dunes south of the Rangitikei River, and Dalrymple's run on the north of the Rangitikei. On the 26th May Wanganui was visited in the morning, and Messrs. Veitch, M.P., Cummins, Macfarlane, and others on the River Trust, together with a deputation from the Scenery Preservation and Beautifying Society of Wanganui, made representations to the subcommittee regarding the conservation of the headwaters of the Wanganui. The subcommittee reached Wellington on the evening of the 26th. Since that date the full Commission has been engaged in the consideration of the final report.

The total distance travelled by your Commission was seven thousand miles.

As seen from the order of reference, the ten questions therein fall into two distinct categories, the one dealing with the existing natural forests of the Dominion, and the other with afforestation. It might be thought that these two phases of forestry should not be separated, and such would be the case in many other countries, but in New Zealand, as we explain at some length further on in this report, the natural forests belong, with perhaps one exception, to a class which cannot regenerate sufficiently quickly to allow them to be kept as permanent forests yielding a succession of crops.

Though each of the questions we are asked to answer is obviously of high importance, two matters stand out prominently—namely, that of climatic reserves and that of afforestation—since both concern not only the present but also the future prosperity of the Dominion. With regard to afforestation, the financial aspect is one of great moment, and in order to assure financial success the greatest economy must be practised, since the expenditure of an additional £1 per acre yearly would mean, at 4 per cent. compound interest, no less a sum at the end of fifty years than £152.

At first thought it might seem that the ground covered by your Commission in so brief a period as some ten weeks had been altogether too extensive, and that the forests and plantations visited could have received but a cursory examination at best. This might well have been the case but for the fact that various members of your Commission had been over much of the route previously, and in a more leisurely manner. Further, the members of your Commission generally have, in a private capacity, examined many other parts of the forest lands of the Dominion impossible to have been visited by your Commission in the allotted time, and that, moreover, they have had for many years a first-hand acquaintance with New Zealand forests in general, and with various private plantations. The above statement is illustrated by the appended map, which shows not only the route taken by your Commission, but also those parts visited previously by the members.

From the earliest days of settlement up to the present time there has been a great deal of tree-planting by private landowners and public bodies, whose activity in this direction is abundantly manifest throughout most of the settled parts of the Dominion. These plantations, indeed, are much greater than is generally supposed, since they total no less than 44,910 acres.*

Such plantations, great and small, are not only of importance for their commercial or climatic value, but they afford the most valuable testimony as to the trees suitable for afforestation, or other purposes, in different parts of the country. Also, they supply undeniable evidence as to the relation of the different species to the soil and the climate; the rate of growth of such species; the quality of their timber under different conditions and different ages; the results of planting at different distances; the effect of thinning; their liability to disease; and in many other matters of the highest importance with regard to forestry operations in the future. Regarding these private plantations very little has been published, notwithstanding they have so much of import to tell. The owner frequently is ignorant as to the names of his trees, and it is not infrequent that they have been supplied to him under wrong names. Quite early in our quest for information we recognized how important a full knowledge of the plantations of the Dominion as a whole would be; so, in order to make a commencement of a much-desired work, we invited, through the Press

* "New Zealand Official Year-book," 1912, p. 600, but deducting the 18,870 acres of State plantations.