

In other words, the mountains and hills of New Zealand would, if not forest-clad, be a constant source of danger to the farm lands on which the prosperity of the Dominion so greatly depends.

From the above it follows that, in order to be efficacious, the climatic reserves of New Zealand must occupy a wide area. Originally, except where conditions of soil or climate were antagonistic, a tree-covering occupied the whole land, and extended to a height of between 3,000 ft. to 4,500 ft., more or less, according to latitude. This extensive forest has now been enormously reduced, and, indeed, rightly, in order to meet wants of settlement; nevertheless, there has been much unnecessary destruction, which has extended to the steep slopes of hill and mountain, and even to the upper altitudinal limits of the forest. Thus the headwaters of many streams are no longer surrounded by forest, and the general watersheds of the larger rivers are by no means so efficiently protected as was originally the case. The time has come, in our opinion, when these mountain forests, which in nearly every instance occupy comparatively worthless ground, and contain little, if any, milling-timber, should be zealously protected, nor, except under the most pressing of circumstances, should they be interfered with. Various Commissioners of Crown Lands, as seen in the evidence, are strongly and wisely in favour of materially extending the climatic reserves of their districts.

In Appendix A there is a list of such of the forest-areas that we specifically recommend for climatic reserves as are approximately defined. The following we also desire to be made climatic reserves, but the exact areas must be fixed by the Department of Lands:—

1. The sources of the principal rivers of Canterbury which rise in the Southern Alps. We call special attention to the Waimakariri National Park. The forest of this area has been gazetted forest reserve. This reservation we strongly recommend to be lifted, and the park made climatic reserve under the Act, as proposed in Part II.

2. The upper portion of the whole of the North Island dividing range, the exact limits to be fixed by the Department of Lands. The following principles have guided our choice in recommending the above areas: (1.) All forests situated above a certain altitude, which of necessity decreases considerably in proceeding from north to south, should be constituted climatic reserves. For example, a climatic reserve of this class on Mount Ruapehu might have its lowest limit at an altitude of 3,000 ft., while one on the Longwood Range, Southland, might descend to 1,000 ft., or even lower. (2.) Steep slopes on the lower hills, which cannot be effectively grassed, together with the sources of streams, should have their forest covering left intact. (3.) Forest on the banks of creeks, and on river-terraces, although at quite a low altitude, may be in some cases of considerable climatic importance, since, under certain circumstances, removal of forest from the banks means rapid undermining of these by the river.

At the present time the existing and proposed climatic reserves are, in many places, the haunts of numerous deer, wild cattle, or goats. We will leave the two latter classes of animals out of consideration for the present, since no one could claim that their presence within the forests was beneficial, and consider the deer alone. Should it be a fact that the presence of deer in great numbers is detrimental to the undergrowth of the forest, then it is clear that steps should be taken to either do away with them altogether or to restrict them to defined areas where they can do the minimum amount of damage. In order to ascertain what part the deer played in the economy of the upland forests, on the one hand, and what value they were to the community from the sporting aspect, on the other hand, we examined such witnesses in every centre as seemed likely to afford information of moment. Especially did we seek to get a clear expression of opinion from the side of the sportsman, and, with this end in view, took evidence from the chairman and secretary of various acclimatization societies; and, taking that evidence alone, we fail to see that deer are not harmful in a forest, or that the monetary gain to the country can in any way counterbalance the damage they must eventually do to the climatic reserves.