

seems equally difficult to account for the absence of the North Island species; but it can possibly be explained either on the supposition that it was a bird of the extreme north of New Zealand and had not reached Kapiti at the time of the land connection with the South Island, or—which is the more reasonable view—that the South Island robin (*Petræca albigrons*) is the parent species from which the North Island robin (*P. longipes*) was evolved after the separation of the North and South Islands.

7. KAPITI AS A PLANT AND ANIMAL SANCTUARY.

Kapiti, as shown earlier on, although of limited extent, is so cut into by deep and precipitous gullies (Plate II) that much of its surface is extremely difficult of access. Now, this is a condition of extreme importance with regard to its function as a sanctuary for its plant and animal inhabitants, since it puts them out of the way of the human intruder. Also, the trees are usually such as bear abundant succulent fruit, a plentiful food-supply being thus afforded for the birds at different seasons.

These birds are very numerous, and extremely tame for the most part. The pigeon (*Carpophaga novæ-zelandiæ*), now extinct in many parts of the colony, is present in great numbers, and so fearless of man are these beautiful birds that they perch on the trees at the forest's outskirts quite close to the Caretaker's dwelling, and at only a few feet above the ground. Everywhere one goes can be heard the songs of the tui (*Prosthemadera novæ-zelandiæ*) and the makomako (*Anthornis melanura*). The South Island robin (*Petræca albigrons*), tamest and friendliest of birds, is quite common. The white-head (*Orthonyx albigilla*), reported by Buller as extinct on the mainland, is by no means rare. In short, most of the original birds of southern Wellington are present, and in as great abundance as in a primeval New Zealand forest.

Nor is the avifauna the only source of zoological interest. The more lowly animals, whose existence depends entirely upon the presence of the forest, are of just as much interest to science as their vertebrate relatives, and some, such as *Peripatus*, which is quite common, in its way is every whit as important as the tuatara or the kiwi. Among the stones of the coast are hosts of lizards. The long-eared bat is abundant. Mutton-birds breed at two places on the summit of the high cliffs, and near the shore is the nesting-place of the little blue penguin.

As for the plants, what has gone before, and the list at the end of this report, show that Kapiti contains much of interest, and is indeed a very valuable natural botanical museum.

All that now remains is to carry out the purpose of the sanctuary with scrupulous exactitude. The greatest caution should be observed in allowing visitors to land on the island. The merely curious have no business there. It is no place on which to picnic. Only those really interested in animal and plant life should be permitted to land, and they should be compelled to exercise every care not to destroy anything or to disturb the birds in any way.

But before the sanctuary can be kept actually inviolate it is absolutely necessary that the whole island should be acquired by the Government. So long as the northern end, and especially that portion in the south, remain in the hands of its Native owners it is quite impossible for the Caretaker, however vigilant he may be, to keep away intruders.

The animals foreign to the island should be destroyed. Up to the present it is quite astonishing how very little damage the goats have done to the forest. But there can be no doubt that as their numbers increased this would not be the case; and even as it is, some of the bareness of the forest-floor must be attributed to these animals, the sheep, and the cattle. The cats also, the enemy most deadly, next to stoats and weasels, to bird-life, must be destroyed. The Californian quail also should be attacked, and if any opossums are present they should most certainly be exterminated.

On the other hand, such native forest birds as are not at present on Kapiti should be introduced. The Chatham Island pigeon and bell-bird, the endemic species of the New Zealand subantarctic islands, the huia, and the flightless birds of various kinds should all find there a sanctuary.

As for the plants, I can see no reason why as complete a collection of the New Zealand forest plants as possible should not be planted in the sheltered valley towards the north of the island when this is finally acquired from its Native owners. Of course, the present forest should not be interfered with; a plant formation is as much a natural object as is a species. But where I have suggested no harm could result, and the climate is mild enough for the trees of northern Auckland, while the more hardy would thrive equally well, and finally a most interesting and valuable addition to the natural museum of Kapiti would be established.