

The forest contains also totara, miro (*Podocarpus ferruginea*), tanekaha (*Phyllocladus trichomanoides*), puriri, red and white pine, some of the totara attaining fair dimensions. I observed also, for the first time, the *Santalum Cunninghamii* (Maori maire), the epiphytic plants *Astelia Cunninghamii* and *A. Solandri*, *Coprosma robusta* and *grandifolia*, and *Corynocarpus laevigata*—the two last-mentioned shrubs, under their Maori names of karamu and karaka, being well known.

I am indebted to Mr. Dargaville, proprietor of a portion of these forests, for much valuable information. He informed me that he had from eighty to one hundred men at work felling and floating, and calculates on delivering one million of superficial feet monthly (83,333 feet cube).

The price in log as delivered to the mill was then 3s. 3d. per 100 feet, cost of sawing 2s. per 100, making, with an allowance of 1s. 3d. for wastage in conversion, the net cost 6s. 6d. per 100 feet of sawn timber, the selling price being when I was there 8s. 6d. per 100 feet superficial, delivered at the mill. Mr. Dargaville was also shipping spars and baulk timber to England for the Admiralty, in execution of a contract which Mr. Russell had obtained. I found it impossible to ascertain or arrive at even approximately the average yield of the forest per acre, as it varies greatly, especially under the present irregular system of working. My time did not admit of a detailed valuation survey, nor did it appear necessary, as the forest is private property. On the plains behind Kaihu, on the right bank of the Wairoa River, a good deal of digging for the kauri gum is carried on, causing the surface to present a broken and irregular appearance.

From Kaihu we proceeded *viâ* the Mangonui Bluff to Pukeha, on the Hokianga River. Our road on the first day ran along the banks of the Kaihu stream, with fine white-pine forest on the left, and here and there a little kauri and puriri, the latter of large dimensions.

On the second day the country was more hilly and undulating, chiefly open land, covered with fern, and interspersed with clumps of forest, chiefly kauri, at intervals. It presented in fact a fine park-like appearance, and, were communications opened out and Native claims settled, would doubtless be found suitable for settlement, though the soil is not so good as could be wished. The path across the Mangonui Bluff itself is very steep and muddy, running through heavy forest of kauri, puriri, totara, &c., the clearing through which is too narrow to admit of the sun penetrating sufficiently to dry up the track. It would appear very advisable to make a wider clearing, but a better line for a road could probably be found by a careful survey. North of the Bluff our road lay along the sea shore to Pukeha, which we reached at midnight.

Next day we visited the South Heads, where Mr. Kirk found *Veronica speciosa* growing wild, and brought to my notice the *Coprosma acerosa*, a creeping plant common throughout the colony on sandy soil, which it is useful in binding. We may find it of value in operations to restrain and settle the shifting sand, which is encroaching here and further south.

From Pukeha we went *viâ* Oenoke, where we spent an evening with Judge Maning, to Herd's Point and Mr. Yarborough's forest on the Koku.

Returning to Herd's Point, we crossed to Russell, on the Bay of Islands, by the Kaheke and Ohaeawai. Betwixt the Kaheke and Ohaeawai are extensive plains, covered with the scrub known as manuka or tea-tree (*Leptospermum scoparium*), which must not be confounded with the other species also known as tea-tree, the rawiri (*Leptospermum ericoides*), which attains a height of forty or fifty feet, and is of some value, especially for marine piles.

On these plains the gum-digging industry is largely carried on: its dimensions throughout the province may be gleaned from a consideration of the exports, which were 3,230 tons, valued at £138,523, in 1875. The demand is, I believe, in excess of the supply. Until recently the Government have derived no direct revenue from this produce, but during the past year a small amount was realized by leasing out a tract of Government land to the diggers, and I think this course should be adhered to, and some simple rules enforced in order to husband and regulate the supply of this valuable forest product. To the south of our road there are extensive kauri forests, mostly in Native hands, of which one large block known as Mungakahia has, I was informed, recently been acquired by Government.

I may here mention that the greatest difficulty was experienced in ascertaining what was Government forest and what was not, which led me greatly to abridge my investigations, pending the collection of fuller and more accurate information. The inclemency of the weather at this season (June) induced me to give up the trip further north to Ahipara, where I understand there are extensive forests of *Fagus fusca* in the hands of the Government; and from the Bay of Islands we returned to Auckland, and went next by Mercer to Hamilton, Cambridge, and Matamata, where I saw Mr. Firth's plantations of *P. pinaster* and *insignis*, which well repaid a visit. The seedlings were planted out direct from the mother beds, into furrows 18 inches broad and 10 inches deep, run at 15 feet apart. The growth has been excellent, averaging 25 feet in five years, but it would have been better to have had the trees closer together. Mr. Firth has not as yet been successful in planting deciduous trees, but, with careful nursery treatment and planting out, I believe they would also succeed. On our way we saw the land at Meremere on which Mr. Firth has advocated planting by Government. It appears well adapted for the purpose, and its situation in a country (between Mercer and Hamilton) almost destitute of timber, tapped by the River Waikato and main road, and shortly to be traversed by the railway, is unexceptionally good. I refer to this point further on in its proper place.

On our return to Auckland we spent two days in visiting the plantations and nurseries in the environs, in which I was much interested, and was particularly gratified with the excellent selection of pines and other forest trees in the stocks of Mr. Mason and Mr. D. Hay. The growth of acclimatized trees, especially the Californian pines, is very rapid. It appears unnecessary to particularize the varieties here, but the *Pinus insignis* and *radiata*, the *Araucaria excelsa* or Norfolk Island pine, and the *Pinus austriaca*, may be looked upon as types.

I re-visited the Auckland Province in October, entering it from the east at Lake Taupo, and passing through the Hot Spring district to Tauranga, and thence to Auckland town. The land and forests between Tapuaeharuru and the Oropi bush between Ohinemutu and Tauranga being almost entirely in Native hands, I did not specially inspect the forests, but would strongly recommend that steps should be taken to acquire such forests as exist throughout this generally bare country with a view to their conservation.