

## APPENDIX D.

## REPORT ON THE MOKAU RIVER.

(By W. R. JOURDAIN, Secretary to the Scenery Preservation Board.)

*Scenic Appearance.*

IN many respects the Mokau River is unrivalled from a scenic point of view, and it undoubtedly presents one of the finest examples of natural vegetation in the Dominion. The comparative lowness of the immediate banks, and the gradual rise of the land at their back, together with the height of the ranges and cliffs which bound the valley through which the river runs, combined with the luxuriance of the forest-growth on most of the land within sight, renders a trip up the river one of the most enjoyable and interesting that can be taken. The many picturesque reaches and bends of the Mokau, and the general narrowness of the stream, makes it difficult to get an extended view of the river from any place, and one is continually coming round a bend to view a fresh picture of delight. The vegetation seen from the stream includes such a wealth of ferns of all varieties, nikau palms, ratas, and the many species of forest-trees that the eye is never satiated whilst viewing the beautiful banks which confine the placid waters of the Mokau, occasionally broken by a rippling rapid, but for the most part gleaming in untroubled blue, with a thousand lovely reflections on their surface of the surrounding trees and ranges. There are few long straights; there are few expanses of bare and frowning cliffs, so frequently seen on other rivers in New Zealand; but mile after mile is traversed through a densely wooded and picturesque valley shining in the sunlight in every shade of living green, varied here and there by a flaming rata-tree ablaze in its crimson blossoms, or the creeping convolvulus with its snowy flower-bells, the wild clematis, and the numerous native flowering plants and shrubs which tend to diversify the sombre green of the dense bush, and the few clearings and traces of settlement met with serve to show to the best advantage the scenic beauty of this hitherto-unspoilt part of our Dominion, so rich and famous in its botanical wealth.

*Character of Vegetation.*

One noticeable feature of the vegetation on the Mokau is the apparent lack of milling-timber in close proximity to the river, and it would appear that most of the trees suitable for sawmilling purposes are to be found outside the belt of 40 chains which forms the limit of scenic recommendation. The only sawmill now in operation is situated on the bank of the Manga-awakino Stream, and operates up the course of that valley. Consequently there is no commercial reason for the destruction of the bush that now clothes the banks and preserves them from denudation occasioned by the strong freshes in the river, and heavy downfalls of rain that periodically visit the locality. The loose nature of the soil on the banks renders some such protection imperative, and if the bush is cut down some sort of close sward or vegetation must replace it in order that the banks may not continually "cave in" and assist to choke the channel, and render navigation very difficult. Even at present it frequently happens that willow-trees, which have been indiscriminately planted on the banks, have no secure hold on the soil, and, their roots becoming undermined by freshes, whole trees, with a large portion of the bank, fall headlong into the river, and require to be removed at heavy expense, as otherwise they form dangerous snags. No doubt the Department of Agriculture can suggest a suitable grass to plant along the banks, such as the "buffalo-grass" used for that purpose at Mildura, Victoria, or "cow-grass" (a species of red-clover, *Trifolium protense*, variety *perenne*), or a creeper such as ice-plant, ivy, &c., or a suitable small shrub. Particularly just above the coal-mines these willows have proved most detrimental, as their roots do not extend deep enough to grip the firm soil beneath the covering of the banks, and the trees jut out far into the channel.

Mr. E. Phillips Turner, Inspector of Scenic Reserves, has furnished the following interesting report on the botany of the river:—

*Botanical Sketch of the Mokau Valley.*

"The forest which covers the deep valley through which the Mokau River takes its sinuous course is remarkable for the variety and tropical luxuriance of its vegetation; and at this time of the year, when most plants are putting forth new fronds and shoots, the nature-lover finds here his paradise. In ascending the river from the estuary the eye wanders from beauty to beauty: here it is caught by the gorgeous crimson blossoms of a huge rata displaying its brilliance above the tops of smaller trees; here it is a tall tree-fern spreading its feathery fronds in graceful curve; here it is the nikau palm peeping through the roof of lower trees; here it is the native convolvulus, with its beautiful snow-white campanulate flowers, or the soft leafage of the muehlenbeckia hanging in festoons or draping the smaller trees; here the scandent rata, in search of light, completely clothes with its light-green leaves the trunks of tall trees; on this small opening in the bush the toetoe-kakaho waves its silky plumes; on this steep face hang in beautiful imbrication the young fronds of the piupiu fern (*Lomaria capensis*), shaded from coppery-red to light green; here it is the dark, glossy green of the karaka or the epiphytic puka, or the feathery pendulous foliage of the kowhai; all this varying beauty simply fascinating the eye of the beholder.

"The plants that compromise the flora of this district are not equally distributed: as the course of the river is at right angles to the sea, so climatic conditions fast change. On the whole, tawa, tawhero, and rata are the dominant trees; but for the first five miles from the mouth of the river pukatea, karaka, mangeao, rewarewa, puriri, houhere, ake-rautenga, and kowhai are plentiful; while there are also in small quantity heketara, wharangi, ngaio, titoki, akepiro, and *Olearia Solandri*, with most common bush shrubs in greater or lesser quantity.