

BOULDER LAKE AND PITTOSPORUM DALLII.

Boulder Lake and Pittosporum dallii in situ had for long seemed attractive. No one had been there except in the distant past. It was like Far Cathay. And the question of whether the trees were still there and in what numbers required settling. Early January seemed to promise suitable conditions in a district of heavy rainfall, and Collingwood was chosen as the jumping-off point. An early-morning taxi was used for the first 24 miles to a swing bridge over the Aorere River, here flowing between unscalable rocky walls and very impressive. The river crossed, the route lay east over gradually rising "pakihī" country - heath-land economically useless - to 2000' at the beginning of a plateau called "Cedar Ridge". This proved to be a sombre forest of beech and conifers stretching for 3 miles to the base of a granite range - Lead Hill - at probably 2500'. Cedar Ridge plants of interest were Dacrydium colensoi, Libocedrus plumosa, Phyllocladus alpinus, Archeria traversii, Nothopanax linearis, unfamiliar forms of Pseudowintera colorata and Quintinia acutifolia, and colonies of Alsophila colensoi. This gloomy bush is the habitat of a noble-looking snail, Paraphanta superba, with a polished brown shell of incredible size. The plateau ends in a jumble of boulders at the foot of a formidable-looking rock strewn face of 600' or 800'. Well up on this the first Celmisias were met with. The top is a pile of weathered rocks and boulders. Progress is laborious. In deep clefts and between rocks where they are protected from the weight of winter snow, were such frost-resisting plants as Olearia colensoi, Senecio bidwillii, a short-growing leathery Nothopanax, various unidentified Hebes, and some unhappy looking Manuka. This top was followed by a wearying series of ridges and other tops piled with rocks, until the highest point of the range was reached at slightly over 5,000'. From here Boulder Lake could be seen very small and distant, far below in a pocket of the hills. The route was now obvious but a climb out of an ice-worn gulch to the final ridge provided a surprise. 500' below in a basin of polished granite walls was Lake Clara - obviously gouged out by some ancient glacier. The elevation is 4,337'. There was a fascination about this ageless lake with its hostile steel-blue glitter. From here the route dropped 1,000' by way of an old moraine to the marshy flats west of Boulder Lake, seven miles from Cedar Ridge. From the moraine the crescent-shaped lake looked placid and peaceful in the late sunlight. The Pratiias, Cotulas, Euphrasias and bog plants of the flats could only be spared a passing glance and camp was made a mile away in a beech forest above the sandy shore. The name of the lake is quite inappropriate. On the floor of this remnant of bush were a number of plants unknown in warmer Northern forests - patches of Rubus parvus, lichen-covered Suttonia divaricata, a red-leaved Carex, Coprosma parviflora, a short gahnia-like Arundo, colonies of the exceedingly beautiful Hypolepis millefolia, white next day with early-morning frost. Growing on rocks beside the lake were Gaultheria rupestris and Helichrysum bellidioides in full flower, Olearia avicenniifolia, Cassinia vauwilliersii, and some unidentified Hebes.

The second day was dedicated to a search for Pittosporum dallii. The route chosen was the southern branch of Portia Creek (east of the Lake) but the creek was soon abandoned in favour of the hillside above the northern bank until the saddle was reached at its head. This saddle, 1,000' above the lake, is a ridge of the Brown Cow - a mountain of evil repute. The vegetation in the basin of Portia Creek was richer than on the more exposed Lead Hill Range. Great masses of the silvery Celmisia incana made the same appeal as of old. Flowering with these were the noble C. traversii and C. verbascifolia. Here too were some interesting low growing Hebes, tough bushes of Aristotelia fruticosa, Coprosma pseudocuneata, and a tall Anisotome flowering between boulders. High up towards the saddle the slaty Ordovician rock was very unstable, apparently as the result of frost, and cut into deep ravines. The sense of desolation was increased by numbers of Satanic jet-black butterflies fluttering among the rocks. From the top of the saddle various bush-filled creeks could be seen running into Snow's River 800' below. These were difficult to identify from maps so it was decided to investigate each creek beginning from its outlet into the river. On the way down a colony of dark-leaved Dracophyllum traversii dominated the hillside. Snow's "River" proved to be a pretty alpine creek, easily crossed on boulders, and running through narrow flats and terraces dominated by Danthonia flavescens. Here too were some intriguing bog plants, the bright-red Drosera spatulata, and great masses of Hypolaena lateriflora, and in gravelly places the pale blue of Wahlenbergia albomarginata. On a terrace was a miniature forest

of the bronze Coprosma rugosa. In the first creek flowing into the river - it turned out to be Bray Creek - two trees of the Pittosporum were met with at once. They were growing in an exposed position and looked rather hoary and battered, like old olive trees, with a multiplicity of stems - eight in one case. The larger tree was perhaps 12' high and 20' across. In both trees many dead branches indicated some kind of borer. A good deal of bark was missing - presumably eaten by deer. One tree bore immature fruit, arranged in umbels, and the remains of the previous year's fruit, in the form of cone-shaped masses of seed from which the capsule-valves had fallen. The seeds were closely packed despite very scanty mucilage. A peculiar feature of the leaves was the absence of the characteristic aromatic scent of the genus. No young plants could be found other than a few seedlings, with two cotyledons only, under the fruiting tree. A deer hunt interrupted the full investigation of this creek but there appeared to be no further trees. A block of heavy bush further up Snow's River was next visited. Here were numbers of sad-looking Suttonia divaricata, an unfamiliar form of Pittosporum rigidum, and the semi-prostrate Pseudowintera traversii. The position of this bush disposed of the identity of the creeks on the maps. Specimen Creek was therefore approached with confidence - since all the books said the Pittosporum occurred there. Nine trees were met with. These were younger than the trees in Bray Creek and since they were growing in thick bush had not the spreading habit of the older trees. One with a single stem appeared to be 20' in height. No young plants could be found. In both Specimen Creek and Bray Creek conditions appeared unfavourable for the germination of seed which, before it could get a footing, would be washed away among the boulders of the stream.

N.Potts.

NOTE: The writer's thanks are due to Mr. W.J. Jamieson of Collingwood for much kindly help and to Miss L. Moore for the identification of plants. He will be happy to give to members more detailed information as to the route to Boulder Lake. The distance from the swing bridge over the Aorere River was said to be 15 miles and this takes 12 hours. Other trees of P. dallii are reputed to occur in Snow's River.

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THE RINGS OF A NIKAU PALM.

It is usual to estimate the age of a nikau palm by counting the number of rings encircling the trunk - one ring for every year of growth.

Twenty years ago a tiny nikau seedling was taken from the bush and planted in a large flower pot. Six years later, the palm, a sturdy specimen, was transplanted into an open but sheltered garden at Eastbourne.

The leaf that dropped early in December 1945 left a scar that formed the first ring a few inches from the ground. The cluster bud that had been hidden at the leaf base soon expanded - the large triangular spathe split and fell off, and we had the unusual sight of a nikau inflorescence at ground level.

Late in January another leaf fell, and again a leaf scar, this one two inches above the first. There was also another cluster bud that blossomed freely.

Before the year was out two more leaves had fallen - one in early winter and the other in late spring (the cluster bud exposed in winter failing to open). This made four rings for the year with a growth of eight inches in height.

It would be interesting if observations could be taken of a nikau palm growing in the shade of the forest - one might then find out whether the one ring one year of growth theory holds good when the palm is growing in its natural habitat.

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