

GLIMPSES OF SOME SOUTH ISLAND HILLS AND THEIR VEGETATION.

Mr. G. Simpson of Dunedin. 21.2.47.

Mr. Simpson first made some brief general remarks about the South Island and its vegetation, emphasizing the contrasts with the North Island and pointing out the extent of country as yet botanically unexplored. The lecturer then showed us some hundred beautiful lantern slides, picturing places and plants that few of us have had an opportunity to see for ourselves. A list of some of the topics and notes of a few of the remarks will give some idea of the range of Mr. Simpson's travels and of the species he has studied, mostly in the company of the late Mr. J. Scott Thomson.

At Hector's Col (Matukituki Saddle) the white-flowered Ranunculus buchanani comes up bleached like celery under the snow, ready to flower as soon as the summer thaw comes so as to set its seed before the short warm season ends. The Wakatipu form of this species differs considerably, having finely-cut leaves.

At Lake Wanaka we saw a fairy ring of Lycopodium fastigiatum, twelve feet across. At the Haast Pass track beech and rimu form mixed forest in the lower parts but the rimu does not grow on the slabby higher country. By this track too Troycinetia grows luxuriantly, and Dicksonia squarrosa multiplies conspicuously by underground stolons, as Mr. Simpson and Mr. Scott Thomson showed to be the case also with Polystichum vestitum and Elechnum discolor. On the Olivone Range the peridotite belt inhibits the growth of almost everything but a few stunted ratas.

On the Rough Peaks behind Lake Wakatipu grows Ranunculus scott-thomsoni, mimicking the rocks of the shingle slopes. Haastia sinclairii also is the colour of the rocks. Colmisia renulosa, Poa novae-zelandiae, Colmisia hectori often in great masses, and Pygmaea pulvinaris were shown here. At Bold Peak Veronica birloyi was seen among slaty rocks. Colmisia petiolata here has sheathing leaf bases instead of a distinct petioles, and often covers across as does also Colmisia coriacea which spreads quickly after fire. Ourisia sessilifolia here is different from that north of Arthur's Pass.

Above the Routoburn Hut we saw Raoulia buchanani, a small bluish-green vegetable sheep with maroon flowers; and Ourisia macrocarpa, the Sounds form with a cordate leaf-base to be compared with that at Arthur's Pass where the blade runs down the petiole.

Hybrids were shown between Ranunculus lyallii and R. buchanani and between the latter and R. sericophyllus which has a yellow flower 2" across. At the Routoburn Dracophyllum menziesii with shrubby ascending stems four feet long has Colmisia walkeri 2-3 feet long scrambling through it.

In N.W. Nelson we saw coastal forest and nikau groves near Kahurangi point, and views from Lead Hill above Boulder Lake. Here there is an Astelia that is probably "new", and also Drimys traversii, and Dracophyllum pubescens, and at lower levels Sonecio hectori with huge tobacco-like leaves.

With glimpses at the pakihi land, coastal rocks at Punakaiki, and Dracophyllum traversii at the Franz Josef, we passed to the limestone cliffs of Marlborough about the Ure River. Here we saw Pachystegia in various forms, and Cotula atrata. Tapuanuku showed Haastia pulvinaris at 7000'.

At Mt. Torlesse, moving southwards again we saw the real vegetable sheep, Raoulia eximia, 8' x 5'. After a quick look at Arthur's Pass with great breadths of Colmisia coriacea and C. armstrongii we passed on to Mt. Maungatua where Colmisia argentea makes cushions four feet across, and Aciphylla scott-thomsoni showed its six-foot tall flowering stems. One picture showed lichens in broad white patches, mostly Gladonia pycnoclada (our "reindeer moss") with some Thamniola vermicularis. Here are big areas too of Herpolirion, a short herbaceous lily with flowers an inch across, sometimes white and sometimes a delicate sky-blue.

To illustrate the range of form that he had mentioned in representatives of various species Mr. Simpson had brought along specimens from different localities of Cotula pyrethrifolia, and C. dioica, Legenophora pumila, and Sonecio rotundifolia and its var. ambigua, and Sonecio bennottii. Also, from his garden, Pachystegia insignis and its var. minor, and seedlings from the former that resembled neither.