

4 insectivorous plants (2 Utricularias, and Drosera binata and spathulata); and 2 shrubs (Leptospermum scoparium and Epacris pauciflora).

The remarkable association of Corybas carsei with Lycopodium serpentinum which have never so far been found away from each other or from Sporodanthus, never fails to amaze me. The bog flora on the whole reflects the high acidity and low mineral content of the peat. E.D.H.

LABOUR DAY WEEKEND - TE AWAMUTU - M.Barr

Eight-thirty a.m. on Saturday 23 October saw a bus full of Bot.Soc. members commencing another memorable trip. Fine weather accompanied us as we sped through a green countryside, with lambs aplenty gambolling on the hills, and the Waikato looking her best with her banks robed in the spring green of the willows and alders. At 11am we reached our rendezvous at Whata Whata with Mr. Caldwell, our leader for the weekend, and the rest of the Waikato party. Our way now led by devious roads to the southern slopes of Karioi at Raglan, but as we were well in the hills all the way we didn't once catch a glimpse of Raglan Harbour. A welcome stop was made at mid-day for lunch, at the entrance to the farm whose owner's permission we had received to wander up the slopes to Karioi main peak. Luncheon finished we set off on the two mile up hill trek through cleared farm land. Remnants of bush in the gullies told us what had once covered the hill. From the top of the ridge we obtained beautiful views of Aotea Harbour, with Kawhia and its long jutting headland ending in Albatross Point beyond. The bush seemed a long way up but was well worth the climb. Rimu, Hinau, Rewarewa, Mangeeo, Miro and Kohekohe seemed to be the main trees in the area. The wineberry (Aristotelia serrata) with a myriad clusters of small white and pink flowers was everywhere in the gullies, and on the fringe of the bush the air was sweet with the scent of hangehange (Geniostoma ligustrifolium). Ramarama (Lophomyrtus bullata) was plentiful, there being quite a thicket of it on the main ridge leading to the summit. We found the old familiar Aspleniums, Blechnums and filmies among the ferns which were growing on trees, fallen logs and on the forest floor, while Cyathea smithii, medullaris, dealbata and Dicksonia squarrosa vied for a place among the tree ferns. We were thrilled to find a large patch of Hymenophyllum flexuosum and one only small Trichomanes strictum. This rather rare little fern seems to form the habit of growing by itself, at least I have never found more than one plant in an area, although I have searched carefully. Our orchid lovers were pleased to find large patches of Corybas rivularis, C.trilobus and Pterostylis trullifolia. Blechnum nigrum was discovered in its usual gloomy haunt. Other plants of interest were Olea lanceolata, Pseudopanax edgerleyi, Metrosideros carminea (this last in flower), Olearia solandri and Coprosma colensoi. Unfortunately time did not allow us to reach the top although our advance party made a valiant effort.

All too soon we had to turn our faces homewards, which in this case meant the Commercial Hotel at Te Awamutu, which we reached at 5.30 pm. in time for hot baths before a welcome dinner.

On Sunday the weather gods were still kind to us and in brilliant sunshine we were soon on our way to the Walter Scott Reserve, which was presented by the Valder sisters to the Royal Forest and Bird Society some three years ago. This reserve, consisting of some 160 acres on the southern slopes of Pirongia near Ngutunui, is a fine stand of native bush preserved by the Valders as near as possible in its original state. Before entering the bush Mr. Caldwell told us its history and showed us maps of the area. He also said that the path he proposed taking that morning was part of the original Maori track from Kawhia to the Waipa, called the Oparau track. This was the route taken by Hochstetter, in company with Haast and Koch, on March 28 1859, and it was most interesting to hear Hochstetter's own description of it as read to us by Mr. Caldwell. We were very thrilled to be following in such famous footsteps. The track was downhill for about a mile through very tall forest, Tawa, rata, pukatea, mangaeo, hinau, rimu, miro and kamahi being the predominant trees. We were surprised at the number and size of the mangeao which were very tall with trunks some 4 feet in circumference. The kamahi were in flower as were the makomako and hangahane, scenting the air with sweetness. Mahoe (*Melicytus lanceolatus*) *Cordyline banksii*, *Podocarpus hallii* and *Quintinia serrata* were found near the beginning of the track and later we were pleased to discover *Alseuosmia pusilla* with its small dark rose flower, perching in the fork of a tree. Ferns and mosses were plentiful everywhere, in the places the ground was carpeted with *Hymenophyllum demissum*. The orchids *Earina autumnalis* and *mucronata* hung from the trees while the tiny *Corybas rivularis* and *Pterostylis trullifolia* were again in evidence. Here also we found the ferns *Lindsaea trichomanoides* and *Rumohra adiantiformis*. In the afternoon we took another track through very similar bush to the stream. On the way the orchids *Chiloglottis cornuta*, *Microtis unifolia*, *Pterostylis banksii* and *Acaianthus forniciatus sinclairii* were noted. A search on the banks of the stream rewarded us with *Blechnum nigrum* and the bristle fern *Trichomanes elongatum*. We returned to the bus on a very good track which skirted the road up hill and passed many fine tree ferns including *Cyathea cunninghamii*. The orchid *Corybas macranthus* var *longipetalus* and the giant moss *Dawsonia superba* were found here, as also was *Pseudowintera axillaris* in flower.

An unprecedented Labour Day of glorious sunshine greeted us on Monday morning as we said farewell to our pleasant hotel and Te Awamutu. We followed the winding hilly road to Kawhia with golden broom on the hills and tempting bush in the valleys. About 16 miles from Kawhia, from a high ridge, we had a wonderful view of the snowy summit of Ruapehu. Finally just about 12 miles from Kawhia we climbed a steep little hill and there we were at the Oparau Lodge, the headquarters of the Waikato Junior Naturalist movement. We were welcomed by Mr. Devlin the leader, and while morning tea was getting under way he showed us through the finished part of the lodge, and the plan for the remainder. The movement began 4 years ago in Hamilton, and this lodge, commenced in September 1963, is the outcome.

The building has reached stage 2 and can at present accommodate up to 30 children and adults, but when finished will have room for 74 children and 16 staff. The children come in groups at weekends and are being trained to love and appreciate the native flora and fauna. Already much good work has been done, 200 plant species have been classified in the area, including 26 species of orchids. There are also 26 native snail species and numerous birds, among them tuis, bellbirds, kiwis and the rare kokako, the blue wattled crow. The movement owns 1½ acres; there is a 40 acre reserve, and 300 acres nearby are under negotiation for a wildlife sanctuary.

After a welcome cup of tea Mr. Devlin took us into the reserve. He hoped to let us hear the call of the kokako, but it was rather late in the morning and Mr. Kokako wouldn't perform. We followed an old logging track down a steep hill and were rewarded with the sight of a rather unusual stand of kamahi. On the track we saw Podocarpus hallii, Pittosporum elliptica, Griselinia lucida, Carpodetus serratus, tanekaha and several large rimu. There were also orchids including Corybas macranthus longipetalus, and on the forest fringe the fern Hypolepis rugosula. We were lucky to find Mida salicifolia in flower, and to be shown a bush of golden rata with Metrosideros fulgens in bloom nearby. We saw a sole puriri near our luncheon site and also Neopanax laetum. Once again time was our enemy and we could not linger, but our host assured us we were very welcome to return. After thanking Mr. Devlin for his hospitality, we had a quick lunch, turned our backs regretfully on Te Kauri Park, Oparau, and sped homewards with more pleasant memories to add to our collection. Our thanks are due to Mr. Caldwell for his excellent leadership.

AN INTERESTING FIND IN THE WAITAKERES

During the Science Congress which met in Auckland about a year ago, a botanical field day was held in the Piha valley and, on the trip, Dr L.B. Moore, head of the Botany Division of the D.S.I.R. (affectionately known to many of us as Lucy) noticed at an elevation of slightly under 1000 feet, a solitary plant of a species of Astelia not previously reported in the Waitakere Ranges, though its identification was not certain from the leaf only. Later in the year, Mr Mead led a small party of members of this society in a search of the vicinity for any more plants, but without success. Mr Mead kept an occasional watch on the lone plant and, in early December, found that it had flowered. The flowers were female, on a raceme deeply set among the leaves, not on a stalk as in the Astelia trinervia, so plentiful in the area. On a later visit it appeared doubtful whether seed was developing. He sent a colour slide to Miss Moore and received this interesting letter in reply.

"Thank you for your letter received today and for the colour slide which arrived in good order. Your picture shows the female flowers of the Astelia perfectly and confirms the identification as the A. cockaynei of Cheeseman. It was lucky that there was a flower so soon after you began to watch the plant, as every