

EGMONTA.D. PALMER

In January, 38 members of the Society spent a most interesting and rewarding six days on and around Mt. Egmont, Taranaki. It seems pointless in an account like this to merely list plants seen, especially as there is an excellent check list of the higher plants occurring on Egmont, including the Pouakai and Kaitake ranges, from sea-level to the summit, compiled by Mr A.P. Druce. On learning that we were visiting Egmont, Mr Druce kindly sent us a copy of his list and this proved to be most useful to us, though we were not allowed the pleasure and excitement of finding any plants not listed! I have therefore written a summary of our trip, including only the most interesting plants, especially those we would not normally see around Auckland.

FRIDAY, 25th. January.

Our journey down to Egmont was an uneventful one in warm, sunny weather. We stopped at the Memorial Park in Te Awamutu for lunch and had another short stop at the summit of Mt. Messenger to look for Hebe townsonii. This species only occurs on Mt. Messenger in the North Island and near Westport and Brighton in the South Island. Unfortunately we were not able to find it.

It was sad to see the devastating effect of the recently introduced rust disease of poplars. Many of the lombardy poplars were being prematurely defoliated. I understand that all species grown in New Zealand are susceptible to a varying degree.

We arrived at the Stratford Mountain House at about 5.30 p.m. and stepped out of the coach into some very cold air, cold enough for the top of the mountain to be covered with a generous sprinkling of fresh snow! After settling into our rooms we enjoyed a most welcome hot meal. Short walks in the area around the Mountain House familiarised us with some of the many interesting plants we were to see. Herbs of interest in flower included Senecio rufiglandulosus growing alongside the road at the edge of the bush, Helichrysum bellidioides and the beautiful Ourisia macrophylla var. macrophylla with its whorls of white flowers - this variety is endemic to Mt. Egmont. There were also many fine specimens of the striking mountain cabbage tree, Cordyline indivisa, some bearing their enormous hanging conical flower heads.

SATURDAY.

We woke to a beautiful sunny day and the sound of the bellbirds. The mountain was clear of cloud and looked very striking with its sprinkling of snow. In the morning the coach took us up to the Plateau from where a party of us set off along the track to Dawsons Falls.

We saw some very interesting plants along this track which runs through alpine scrub at first, dominated by the leatherwood

Senecio elaeagnifolius, Hebe sp., Pseudopanax simplex var. sinclairii, P. colensoi, Cassinia vauvilliersii and Coprosma pseudocuneata. Herbs growing along the edges of the track here included two mountain daisies - firstly Celmisia glandulosa var. latifolia, a variety of glandulosa described by Cockayne and thought to be endemic to Mt. Egmont, though Druce doubts whether it can be maintained as endemic or even as a distinct variety; apparently similar plants grow in the Ruahine Range and representative plants are being grown to try to resolve the problem. Secondly, one listed by Druce as C. gracilentia var. - this varies greatly in size, particularly in the width of its leaves. (See article by Mr Druce in this issue).

As we dropped lower we started to enter the taller forest zone, with trees such as Weinmannia racemosa, Fuchsia excorticata and Griselinia littoralis forming the upper storey, and Pseudowintera colorata almost dominant in the understorey. A small plant that was new to many people was the dainty little lily-like plant with the far from dainty name of Luzuriaga parviflora. It would probably be overlooked when not bearing its beautiful little white lantern shaped flowers. This is the only New Zealand representative of the family Philesiaceae and is usually found on mossy forest floors, or sometimes on rocky banks or moss covered tree trunks. Even smaller was Oxalis lactea, one of three native Oxalis and the only one with white flowers.

After a quick look at the Falls themselves, unfortunately not carrying much water, we came out onto the road and walked up to the Dawsons Falls parking area, a pleasant spot where we ate our picnic lunch. A visit to the barely finished, though informative, Interpretation Centre (many didn't like the name!), and we were off on our tramps again, this time on a supposedly round trip from the parking area. The track virtually disappeared (or we were lost) and we had to retrace our steps. We saw our first prince of wales feathers fern Todea superba on this track, and a good specimen of Pseudopanax edgerleyi.

In the evening after tea Mr Heddich, a friend of our hosts at the Mountain House Mr and Mrs Mace, very kindly came up and gave us an illustrated talk on the natural history of the Egmont area. Mr Heddich is a very keen amateur botanist and obviously also an excellent photographer, as we were treated to some of the best slide that I think many of us had seen for a long time, including some very fine ones of fungi and many of the local orchids. We saw everything from Dactylanthus taylori (wooden rose) to the caterpillar of the puriri moth in its burrow, from earth stars and vegetable caterpillars to hinau flowers, not to mention lovely views of the mountain from all angles. All were presented in a most entertaining manner and I'm sure we greatly enjoyed our evening, thanks to Mr Heddich.

SUNDAY.

Once again we were taken up to the Plateau in the morning and from there we set off in cold, wet, swirling mountain mist, our destination the Manganui ski field. It was easy to see how dangerous this mountain can be during unfavourable and changeable

weather conditions. The first half mile of the track to the entrance to Manganui Gorge is a fairly wide closed vehicle track, along the edges of which grow large patches of the two species of Raoulia or vegetable sheep which grow on Egmont. One, Raoulia tenuicaulis, in fairly large dense close growing patches, contrasted with the larger leaved more lax Raoulia glabra which was in bud. In places we saw the pretty mountain harebell Wahlenbergia albo-marginata. We reached the end of the vehicle track where the aerial ropeway crosses the Manganui Gorge to the Ski Lodge. Many turned back at this point as the track ahead was shrouded in mist, but a few of us took the chance and continued on up to the ski fields, the vegetation of which is modified considerably by yearly mowing - more about this later on.

We returned to the Mountain House for lunch and then went back up to the Plateau again, this time to do the Enchanted Walk track. The notice on the track seemed to us to be unduly optimistic in its estimate of $1\frac{1}{2}$ hours for the time needed, and we were all quite certain that it badly underestimated the distance at $1\frac{3}{4}$ miles - it seemed at least twice as far anyway! However, it was very well worth the effort.

The first part of the track along the top of a ridge was fairly open and we had good views of the surrounding countryside. Dominant species were Hebe sp., Senecio elaeagnifolius, Pseudopanax simplex var. sinclairii and P. colensoi, Coprosma pseudocuneata, C. parviflora, Cassinia and Dracophyllum filifolium var. A little further down the bush started to get taller with Podocarpus hallii and Griselinia littoralis dominant, plus the odd Libocedrus bidwillii and miro, with many species in the understorey such as Coprosma tenuifolia, C. australis, Pseudowintera colorata - many beautifully tinted, Carpodetus serratus and Melicope lanceolata. On the ground plenty of Blechnum fluviatile and Histiopteris incisa, rice grass, Asplenium bulbiferum and Polystichum vestitum.

Lower down we started to see kamahi, and all the trees were sculptured into fantastic and wierd shapes, festooned with mosses and lichens - enchanted and enchanting. These areas are sometimes aptly called the goblin forests, although some of the steps cut in the track seemed more suitable for giants than goblins!

We passed the junction with the Waingongora Track which leads to Dawsons Falls and were now in what Mr Warren called the land of a thousand bridges - we seemed to be everlastingly crossing streams on a great assortment of bridges, having to descend to and ascend from each one. On the bank of one such stream we were thrilled to find the lovely little Jovellana repens with its tiny white flowers, spotted with purple, like small calceolarias to which it is closely related. In some places we saw some Blechnum colensoi with barren and fertile fronds hanging down the steep banks. We were pleased to see many specimens of Todea superba, also Hypolepis rugulosa and Blechnum discolor. At one point, in fairly deep shade, we found the beautiful and distinctive Leptolepia novae-zelandiae with its very finely divided fronds - Miss M. Crookes in her book gives its range as sea level to two thousand feet, but here it was growing at about 2,800 feet.

The streams finally ended and we came out on the road by the Mountain House - a truly delightful walk.

MONDAY.

Today we went up the road to North Egmont and parked at the attractive Mangaoraka picnic area. From there we took a track which leads through forest to a lookout above the Waiwhakaiho-River. The main trees were large rata and kahikatea, huge kamahi and the odd tawa. Smaller trees and shrubs included Myrsine salicina, Carpodetus serratus, Schefflera digitata, Pseudopanax crassifolius, Brachyglottis repanda and Pseudowintera axillaris in some quantity. On the ground there was more Asplenium bulbiferum than I have seen before in any one area, in places almost forming a complete ground cover.

We had a very pleasant lunch in the picnic area in hot sunshine, and saw there a fine plant of Dendrobium cunninghamii with an incredible number of flowers.

In the afternoon we continued up the North Egmont road to the Chalet, from where we went on the Connett Walk round trip. The main interest of this track was the contrast between its vegetation and what we had seen in the morning, particularly the complete absence of Pseudowintera axillaris, replaced here by P. colorata.

Its worth mentioning here the large areas of one of New Zealands biggest mosses, Dendroligotrichum, which we had seen on most of our walks. They look almost like small rimu seedlings, very different from the other giant moss, Dawsonia superba, which is more like a pine seedling.

As we walked between the Chalet and the upper car park, we were excited to find a single plant of Bulbinella hookeri the maori onion, as Druce lists it as occurring only in the Ahukawakawa Swamp and the Pouakai Range. Unfortunately we later learnt that it was just a relic of an alpine garden, now uncared for and overgrown. This probably also explained the presence of Parahebe catarractae growing nearby.

The evening passed quickly with a talk and slide show given to us by the Chief Ranger of Egmont National Park, Mr Mawhinney, mainly on the origin and aims of the Park, the interesting geology of the area, erosion and noxious animal control.

TUESDAY.

We went first into New Plymouth and were given some free time for shopping etc. before going on to Pukekura Park. A very fine park this, with attractive display glasshouses and an unusually well laid out fernery. After a good look round we continued on to the Pukeiti Rhododendron Trust gardens. After lunch on the uncharacteristically brown lawns near the Lodge, the Curator, Mr G. Smith, gave us a talk on the history and aims of Pukeiti. We then split up into several groups,

each group being led by a member who had previously visited Pukeiti and knew the layout. Some concentrated on the native bush, others being more interested in the exotic plantings, although the rhododendrons and azaleas were of course mostly finished. Some very fine work is being done in this lovely setting, and the plants generally looked very healthy, in spite of the unusually dry weather. Full credit for this must go to the Curator who has to maintain it with only a tiny staff.

We were farewelled by Mr and Mrs Smith and their two little girls, and returned to the Stratford Mountain House via the long way round the southern end of the mountain, thus completing a full circle. Fine weather gave us good views of Egmont from all angles.

Miss Anderson, a local amateur geologist and photographer, kindly showed us some slides in the evening, including some real beauties of the mountain in all seasons.

WEDNESDAY.

Many of us had an interesting and energetic day with Mr Mawhinney, who led us up from the Plateau car park onto Curtis Ridge. We had fine weather on the mountain, but we were looking down onto cloud covering the lowlands. To the East we had good views of Tongariro, Ruapehu and Ngaruahoe rising above the cloud layer.

We saw many plants of Ranunculus nivicola and were fortunate that a late one was still bearing its large, golden yellow flowers. Orchids were fairly frequent, including Pterostylis irsoniana with its almost striped leaves, fitting well the description in Flora of N.Z. Vol. 2 - "the rather narrow flowers are often elegantly striped with green, red and white"; Chiloglottis cornuta the flowers of which were just finished, Adenochilus gracilis and Prasophyllum colensoi.

After a stiffish climb we had morning coffee amongst tussock and herbfield type of vegetation. We left our packs etc. here and carried on walking in the direction of the Kapuni Stream. At one point we crossed some scree and saw a couple of flowering plants of Montia fontana. An exciting find was the fern Polystichum cystostegia, which is only found on Mt. Egmont in the North Island (two unconfirmed records are mentioned in Cheeseman, 1925). It is a very distinct species with pale membranous brown scales on stipes and midribs, and bladder-like indusia. It seemed to be growing mainly amongst rocky outcrops.

We had now reached our destination - circles of tutu, Coriaria plumosa, showing very clearly the effect of nitrogen fixation on the growth of herbs. This perhaps showed most clearly with the Celmisias which were so much more lush within the circles than elsewhere. We also saw here a beautiful small bush of Hebe odora in full flower. Our height was about 4,700' and the tussock had thinned right down, herbs becoming dominant. Close study of the herb mat revealed Coprosma pumila, a small creeping mat plant with relatively enormous flowers, Pentachondra pumila a member of the Epacridaceae with small, white flowers and large, red berries, Wahlenbergia albo-marginata, Viola cunninghamii,

Celmisias etc.

On our return we stopped for lunch where we had left our packs - we found several Gentiana grisebachii flowering in this area and also Drapetes dieffenbachii. We had had a most enjoyable day and thanks for this must go largely to Mr Mawhinney who so kindly gave us some of his very valuable time.

The following is an account, written by Mr Beaver, of the days activities of those who did not climb Curtis Ridge:-

While the more active group went to Curtis Ridge with the Ranger, the rest moved slowly up the road towards the ski fields, examining and admiring the mountain flowers that grew at that altitude, about 4000 ft. For quantity Ourisia macrophylla still took pride of place, but Wahlenbergia albo-marginata, Forstera bidwillii, Pratia angulata, Celmisia gracilentia var., Celmisia glandulosa, Euphrasia cuneata all stood out star-like against the dark background of leatherwood, Cassinia vauvilliersii, Dracophyllum filifolium, Coprosma pseudocuneata etc. now so familiar to us.

At the road end some of us went on round a rocky but most interesting track to the ski fields and Manganui Hut. The cliff face proved most interesting, especially the Pterostylis orchids which had just finished flowering. Their leaves suggested P. irsoniana rather than P. banksii, but it was not possible to be sure. Some had very short flower stalks and wide leaves close together with almost no internodes. Perhaps the altitude had caused this dwarfing. On the lower ski fields we had our most pleasant surprise - dozens and dozens of gentians (G. grisebachii) growing in the grassy sward so that even though we tried to avoid them we could not but stand on some of them. Some Ranunculus nivivola, not in flower, and a solitary Microtis unifolia completed our finds here.

After lunch back at the bus an informal T.A.B. on the progress of the returning mountaineers from Curtis Ridge kept things lively, especially when front runners Mrs White and Belinda went off course and upset the punters calculations.

The bus went back down to the Mountain House, dropping some of us off en route to do the Moss Walk. Of particular interest was a huge clump of Tmesipteris.

In this account I've mentioned little about the bird life. During the day they often seemed strangely quiet and absent, but those keen and hardy souls who did extra walks in the vicinity of the Mountain House each evening after tea, and the even keener ones who did similar things well before breakfast, were rewarded with the sight and sounds of bellbirds, tomtits (very tame), riflemen in large groups, waxeyes, fantails and pigeons.

THURSDAY.

Time to say thankyou and goodbye to our hosts Mr and Mrs Mace who had fed us so well during our stay, also the waitresses who had

been so efficient. Then a hot and sticky journey home, stopping at Te Kuiti for lunch and some shade! A memorable holiday thanks to Mr Warren who did most of the organizing, Mr Beever, Harry our driver who ferried us around safely and put up with us so uncomplainingly and the weather which never really put a foot wrong.

LEAF SIZE IN ARISTOTELIA SERRATA

R.E. and J.E. BEEVER.

Aristotelia serrata (makomako or wineberry) grows as a shrub or small tree in lowland forest throughout New Zealand. It is especially common in disturbed habitats such as road edges, or ground recently cleared of forest.

During a recent trip to the East Cape region we found it growing abundantly near the roadside in Nothofagus truncata forest inland from Te Kaha. Our attention was attracted by the vigour of these plants and the size of their leaves, the leaf blades being about twice as long as those seen near Auckland. In the Table the leaf dimensions of a specimen we collected at Te Kaha are compared with those given in the "Flora of New Zealand" (H.H. Allan, 1961).

Table
Leaf dimensions (in cm.) of Aristotelia serrata

	<u>Te Kaha</u>	<u>Flora of New Zealand</u>
	Mean (Range)	Range
petiole length	8.7 (4.7 - 10)	approx. 5
blade length	17.0 (15.5 - 18.8)	5 - 12
blade breadth	12.6 (11.3 - 13.5)	4 - 8

The Te Kaha dimensions are based on six leaves, measured after pressing, on a specimen collected from a one metre high sapling in May 1974. The leaves on saplings appeared to be slightly larger than those on adjacent adult trees.
