

THE VEGETATION OF THE SUMMIT OF LITTLE MOUNT PEEL

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On Show Weekend 1973, the Botanical Society held a weekend camp at Peel Forest, South Canterbury. The camp was very well attended and on November 11th, some 15 members of the Society climbed to the summit of Little Mount Peel. This was one of the highlights of the trip, especially as it was done under glorious weather conditions, and while at the summit it was decided to make a survey of the plants growing there.

The summit is at an altitude of 1311m and is predominantly grassland with some outcropping rock and a few small rock faces on the southern side. The area selected for study was that which came within an altitudinal radius of approximately 6m from the summit.

From the Deer Spur the track to the summit passes through a belt of sub-alpine scrub for perhaps 100m before coming out into the grassland which then goes all the way to the summit. Before dealing with the vegetation of the summit, a brief account of some of the principal plants seen on the way up would not be out of place.

The scrub was generally rather low, mainly less than 1m high and was largely composed of turpentine scrub Dracophyllum sp. with mountain flax Phormium cookianum and tutu, Coriaria sarmentosa also being rather prominent. There was also some Hebe odora and gorse, Ulex europaeus. The gorse in many instances appears to be making little or no headway against the scrub, but as long as it is there it must be regarded as a potential threat. Along the track and in open places amongst the scrub could be seen Celmisia spectabilis var. magnifica, Maori onion, Bulbinella angustifolia and two species of wild Spaniard; Aciphylla aurea with yellowish foliage, and A. scott-thomsonii with grey-green foliage. There were also some forms which appeared to be intermediate between the two. Another inhabitant of the scrub, which at times was rather less than welcome, was Rubus cissoides; always waiting to catch the unwary.

Small herbs such as Viola cunninghamii were also apparent along with Gaultheria depressa, Drapetes dieffenbachii and Pernettya macrostigma. Rather interesting was the hybrid genus x Gaulnettya specimens of which were seen in a few places along the track. At least one other species of Gaultheria was growing within reasonable proximity to Pernettya so that it is not known just which species of Gaultheria had hybridised with it.

Above the sub-alpine scrub the grassland was a mixture of

Festuca novae-zelandiae. Chionochloa rigida, C. macra and C. pallens. Among the plants that were found in the grassland were Hebe pinguifolia, H. lycopodioides and the pubescent-leaved H. allanii, an endemic to Mount Peel. The significant thing about finding H. allanii in this locality was the fact that the species is now known to occur within the boundaries of Peel Forest Park. It should also be recorded that these plants were discovered by Dr. L.B. Moore.

At first glance the summit of Little Mount Peel does not appear to support a great variety of plant life, but once a systematic search was made it became apparent that a surprising number of species was to be found. A total of 66 species have been recorded and no doubt a more diligent search will bring more to light.

One interesting find was two species of filmy fern growing on the southern rock faces. It is not unusual to find Hymenophyllum multifidum growing in such habitats, but growing in company with it and, to the casual glance, indistinguishable from it was a high altitude form of H. villosum.

The following is a list of the plants found at the summit:-  
(adventives are marked with an asterisk):

Grasses and grass-like plants:

- \* Anthoxanthum odoratum
- Carex wakatipu
- Chionochloa macra
- Chionochloa pallens
- Chionochloa rigida
- Deyeuxia avenoides
- Erythranthera pumila
- Festuca novae-zelandiae
- Koeleria sp. (prob. kurtzii)
- Lachnagrostis filiformis
- Luzula spp. (2)
- Microlaena colensoi
- Notodanthonia gracilis
- Oreobolus sp. (prob. pectinatus)
- Poa colensoi
- Shoenus pauciflorus
- Uncinia sp. (caespitosa?)

Shrubs and small woody plants:

- Cyathodes frazeri
- Dracophyllum sp. (uniflorum?)
- Gaultheria crassa
- Gaultheria depressa
- Hebe lycopodioides

Shrubs and small woody plants (Cont'd):

Myrsine nummularia  
Pentachondra pumila  
Pimelea pseudo-lyallii  
Drapetes dieffenbachii

Herbs:

Acaena sp.  
Aciphylla aurea  
Anisotome aromatica  
Anisotome flexuosa  
Brachycombe sinclairii  
Celmisia angustifolia  
Celmisia? densiflora  
Celmisia gracilentia  
Celmisia lyallii  
Celmisia x pseudo-lyallii  
Celmisia spectabilis  
Colobanthus sp.  
Craspedia ?incana  
Epilobium sp.  
Euphrasia sp. (last year's remains)  
Forstera tenella  
Geum leiospermum  
Helichrysum bellidioides  
Helichrysum filicaule  
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Hieraceum? pilosella  
Hypochaeris radicata  
Lobelia linnaeoides  
Ourisia caespitosa  
Plantago lanigera  
Pygmea? pulvinaris  
Ranunculus insignis  
Raoulia subsericea  
Rumex acetosella  
Scleranthus uniflorus  
Senecio bellidioides  
Viola cunninghamii  
Wahlenbergia albomarginata

Ferns and fern-like plants:

Grammitis armstrongii  
Hymenophyllum multifidum  
Hymenophyllum villosum  
Lycopodium australianum  
Lycopodium fastigiatum

Mosses and Liverworts: Supplied by Bryony Macmillan:

Fourteen species of mosses and one liverwort were found just around the summit trig.

On the drier rock ledges and thin soil facing the north-west:

	<i>Andreaea australis</i>	
	<i>Andreaea rupestris</i>	common
	<i>Bartramia papillata</i>	
	<i>Campylopus clavatus</i>	
*	<i>Pohlia nutans</i>	
*	<i>Polytrichum alpinum</i>	
*	<i>Racomitrium crispulum</i>	common
	<i>Racomitrium lanuginosum</i>	

Between the tussocks, especially facing south:

*	<i>Brachythecium paradoxum</i>	
*	<i>Dicranoloma robustum</i>	common
*	<i>Dicranoweisia antarctica</i>	
	<i>Lepidolaena</i>	(liverwort)
	<i>Tortula bealeyensis</i>	

On a rock ledge facing south:

*	<i>Conostomum pentastichum</i>	
*	<i>Psilopilum australe</i>	
*	Found with capsules	

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From International Code of Botanical Nomenclature

Art. 23:

The epithet of a species may be taken from any source whatever, and may even be composed arbitrarily.

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