

**FOREST AND SCRUB FLORA FROM THE LAKE COLERIDGE
DISTRICT**

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During recent fieldwork on wetlands in the Lake Coleridge district (described in Glenny, Fry, Stout, and Burrows 1987), we have noticed interesting dryland flora. Judging by the soil types, buried charcoal, and the distributions of forest remnants, the whole district up to about 500 years ago, was well forested: probably with mosaics of mountain beech and mountain totara - matai - broadleaved angiosperms (including lancewood, broadleaf, marbleleaf, kohuhu, kowhai etc) with some southern rata around the shores of Lake Coleridge. Extensive kanuka scrub occupied drier sites. Polynesian fire destroyed most of the forest and now only a few small patches of forest and more extensive areas of scrub occur on the hillsides, in what is mainly a grassland landscape, dominated by fescue tussock and some extensive areas of tall red tussock on wetter sites.

Last December, on a brief foray to the area, the following species were noticed on the north slope of Laing's Hill (30° slope), between rock outcrops and scree, at 850m altitude, G.R. S74/075868

<i>Calystegia tuguriorum</i> †	<i>Kunzea (Leptospermum) ericoides</i>
<i>Cassinia fulvida</i>	
<i>Clematis australis</i>	<i>Muehlenbeckia australis</i> †
<i>Coprosma crassifolia</i> †	<i>M. complexa</i>
<i>Coriaria sarmentosa</i>	
<i>Corokia cotoneaster</i>	<i>Podocarpus nivalis</i>
	<i>Pteridium esculentum</i>
<i>Exocarpus bidwillii</i>	
	<i>Rubus squarrosus</i>
<i>Gaultheria antipoda</i>	
<i>G. crassa</i>	<i>Scandia geniculata</i> †
	<i>Sophora microphylla</i>
<i>Haloragis erecta</i> †	<i>S. prostrata</i> †

The species marked † are unusual for such a high altitude in inland Canterbury. Their occurrence at Laing's Hill suggests that there is little frost at the site, which is well displayed to receive maximum solar radiation, but also to allow continuous air-drainage during frosty weather. *Scandia geniculata*, *Sophora*, and *Coprosma crassifolia*, occur also, at the Rakaia Gorge and upstream on the terrace overlooking the Rakaia River on its north side, to near the Lake Coleridge Power Station 395m. *Coprosma* also occurs at Mt Algidus. *Calystegia* and *Muehlenbeckia australis* are more widespread,

occurring with *Haloragis erecta* and *Coriaria arborea* on the north-facing shores of Lake Coleridge (510m).

The following list of woody plant species is derived from records from a number of localities in the Lake Coleridge area. (1, small island in Lake Coleridge S73/986866, 2, Peninsula in Lake Coleridge S74/015844 S74/036838; 3, south side of Kaka Hill-shore of Lake Coleridge S74/033831; 4, slopes above Lake Evelyn S66/034914; 5, south side of Blue Hill S74/079871; 6, south side of hill near Scamander Stream S74/089845; 7, south side of hill between Red Lakes and Scamander Stream S74/093824; 8, north and east side of hill at Red Lakes S74/102812; 9, Benmore Stream S74/133776):

<i>Aristotelia fruticosa</i> 2,3,7	<i>Hymenanthera alpina</i> 2,3,6,7,8
	<i>Kunzea ericoides</i> 1,6,8,9
<i>Carmichaelia</i> sp. 7	<i>Korthalsella salicornioides</i> 8
<i>Cassinia fulvida</i> 2	
<i>Clematis australis</i> 2,6,7	<i>Leptospermum scoparium</i> 4
<i>C. paniculata</i> 3	
<i>Coprosma linariifolia</i> 3,7,8	<i>Metrosideros umbellata</i> 2,3
<i>C. lucida</i> 1	<i>Muehlenbeckia australis</i> 1
<i>C. propinqua</i> 1,2,3,6,7	<i>M. complexa</i> 1,2,3,7
<i>Cordyline australis</i> 1,2,3,7	
<i>Corokia cotoneaster</i> 1,2,3,6,7,8	<i>Nothofagus solandri</i> var. <i>cliffortioides</i>
<i>Cyathodes juniperina</i> 1,2,4,7	1,2,3,5,6,8,9
<i>Discaria toumatou</i> 1,2,3,6,8	<i>Olearia avicenniifolia</i> 1,2
<i>Dracophyllum</i> cf. <i>acerosum</i> 2,3	<i>O. paniculata</i> 8
<i>Exocarpus bidwillii</i> 1	<i>Phymatosorus diversifolius</i> 1,2
	<i>Pittosporum tenuifolium</i> 2,3,5,8,9
<i>Gaultheria crassa</i> 2,3	<i>Pseudopanax colensoi</i> 9
<i>Griselinia littoralis</i> 2,3,5,7,8,9	<i>P. crassifolius</i> 2,3,9
	<i>Pteridium esculentum</i> 2
<i>Hoheria lyallii</i> 4	
<i>Hebe</i> cf. <i>brachysiphon</i> 6,7	<i>Rubus squarrosus</i> 2,3,6,7
<i>H. salicifolia</i> 1,2,3	
<i>H. traversii</i> 6,7,9	<i>Sophora microphylla</i> 2,3,7

The list from the island in Lake Coleridge was compiled from specimens collected by Hugh Burrows in the 1970's.

Reference.

Glenny, D., Fry, C., Stout, V.M. & Burrows, C.J. 1987 A Biological Survey of the Lakes and Other Wetlands of the University Endowment Land at Lake Coleridge, 1984-5. University of Canterbury.