

PLANT RECORDS FROM CASS AND COLERIDGE ECOLOGICAL DISTRICTS

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Introduction

The following are records of species which are uncommon in Cass and Coleridge Ecological Districts. The records were collected on the 1987-1988 Protected Natural Area survey of the districts, and the University survey of Coleridge in 1984 - 1985. A few of these records from Coleridge have already been published (Burrows 1977, 1979, 1987 and elsewhere) but have been repeated here for completeness.

Coleridge Ecological District extends from the Rakaia gorge up to Gargarus Saddle north of the Harper River and from the Rakaia River to the foot of the Craigieburn Range. Cass Ecological District includes Cass and Broken River basins (from the Waimakariri River to Broken River) and the mountains between the Poulter and Esk Rivers up to the East Branch of the Poulter.

The two districts have a great deal in common: large areas of both districts are at about 600 m but the lowland forest element (shown well by the distribution of *Cordyline australis*) is much more significant at Coleridge because of the broad lower part of the Rakaia Valley, in contrast to the Cass and Broken River basins which are enclosed by mountains on all sides. The Waimakariri gorge restricts entry by lowland species to these basins. Stringybarked totara seems to have been a much more significant forest type at Coleridge than at Cass where mountain beech dominated the basins.

Podocarpus hallii

Cass: Grasmere homestead, S66 215146, 715 m

Betwixt, S66 184170, 908 m,

Betwixt, S66 168173, 700 m,

Gorge Hill limestone tors, S66 221965, 808 m (Castle Hill Nature Reserve)

Coleridge: Scattered throughout the district with large groups of trees (about 90 trees altogether) found at Big Ben station, 700 m S74 130755 and Upper Dry Acheron 680 m, S74 145713

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Metrosideros umbellata

Cass: Waimakariri gorge near Broken River junction, S66 383955, 365 m.

Rata Stream on Broken Hill, S66 26-03- (Colin Burrows, pers. comm.)

Coleridge: There are three sites at Lake Coleridge, below Kaka Hill, below Peak Hill and on the tip of the peninsula (Burrows, 1986 and pers. comm.). Haast (1866) records it on the island in the middle of the lake but it appears to have gone from that site. Lady Barker (1883, letter 16) saw it at a site close to the Kaka Hill site. She also mentions maidenhair fern (*Adiantum cunninghamii*) underneath the rata. This is still present at the Kaka Hill stand, its only record in the district.

Pseudopanax ferox

(At Coleridge two stands were seen, one above the Rakaia gorge on the river bank, the other in the middle of the gorge with a dense *Microlaena polynoda* grassland underneath.)

Coleridge: Rakaia gorge, S74 104662, 310 m

Rakaia gorge, S74 113607, 315 m

Cordyline australis

Cass: Castle Hill tors, S66 196939, 760 m one young tree

Waimakariri gorge, S66 399977, 365 m & S66 394968, 365 m (about ten trees)

Below the Broken River junction it becomes common but these records are the upper limit for the species in the gorge. It is curious that the species is absent in the upper half of the gorge at altitudes well within its range.

At Coleridge it is common throughout a large proportion of the district with an upper altitude limit at 690 m on Round Hill.

Coprosma intertexta

Cass: Porter River true left above the stockbridge, S66 208938, 690 m

Porter River true right below the stockbridge, S66 217950, 690 m (about 15 shrubs).

Opposite Craigieburn Railway Station, S66 320088, 608 m

Lake Grasmere, northern end, S66 242145, 625 m (about 50 shrubs)

Lake Sarah, east side, S66 249157, 610 m (about 50 shrubs)

Lake Sarah, west side, S66 245158, 600 m (about 30 shrubs)

Lake Sarah, on Long Hill, S66 245150, 590 m

Magog, near the road, S66 285113, 620 m

Remus, north and east sides, S66 228166, 590-620 m

Coleridge: not seen in the district at all

Pittosporum anomalum

- Cass: Lake Pearson, S66 260080, 792 m
 Enys Reserve, S66 207958, 685 m
 Little Flora, S60 500260, 750 m
 Waterfall Terrace, S66 204178, 660 m
 Misery Stream, S66 178166, 1070 m (C.J. Burrows pers. comm.)

Halocarpus bidiwillii

- Cass: Little Flora, S60 500260, 700-790 m, (hundreds of plants over a large area)
 The Lazyman, S67 490185, 915 m, (over 100 plants)
 Enys Reserve, S66 207958, 700 m, (about 20 plants)
 Coleridge: Mt Georgina, S74 079830, 680 m (about 30 plants)
 Lake Evelyn, S74 036904, 580 m, (one male plant) & S74 033895, 600 m, (4 mature plants and seedlings)

Coprosma virescens* and *Coprosma wallii

- Cass: Waimakariri gorge: S66 398032, 400 m & S66 402031, 500 m (a large number of plants of each species)
 Coleridge: *Coprosma wallii* at Ford Stream, S74 168687, 550 m

Sophora prostrata

- Cass: Broken River mouth, S66 368968 430 m
 Present in patches on the Waimakariri gorge walls below Broken River junction
 Coleridge: Acheron River mouth, S74 071728, 370 m
 Big Ben station, S74 112722, 590 m
 Laings Hill, S64 064874, 900 m
 Red Lakes, S74 101815, 640 m
 Mt Hennah, S74 044897, 1030 m
 Mr Barker, S74 090795, 600 m

Carmichaelia uniflora

- Cass: Cass Flats opposite field station, S66 222165, 590 m
 Upper Esk valley, near Mounds of Misery, S60 464297, 700 m
 Coleridge: Snowdon station, S74 163684, 520 m
 Avoca Riverflats, S66 043999, 640 m
 Glenthorne, S65 972953, 555 m
 Ryton River, S74 053894, 630 m

Scandia geniculata

- Cass: Whale Hill, S66 395103, 460 m
 Broken River, S66 322976, 470 m
 Broken River at mouth, S66 352975, 460 m

Coleridge: Common in the lower half of the district, its highest occurrence on the Redoubt at 825 m. It is particularly common in the Rakaia gorge and the Acheron River gorge.

Einadia allanii

Coleridge: Rakaia gorge at two sites at S74 113607, 315 m
Lake Coleridge below Peak Hill, S73 975850, 570 m

Baumea rubiginosa

Cass: Lake Hawdon, S66 090310, 590 m
Coleridge: Mt Georgina, S74 079830, 780 m & S74 069832, 780 m
Harper Road, S74 077807, 590 m
Lake Evelyn, S66 036904, 580 m
Mt Hennah Swamp, S66 040903, 580 m
Mossburn Swamp, S66 985945, 560 m
near Coleridge Road, S74 046765, 405 m

Triglochin striatum

This species and the following two species are coastal species which are occasionally found inland.

Cass: Lake Marymere, S66 318072, 615 m
Coleridge: Coleridge stream mouth, S74 074796, 507 m

Selliera radicans

Cass: Lake Marymere, S66 318072, 615 m
Coleridge: Hennah Stream, S74 037877, 518 m

Schoenoplectus pungens

Coleridge: Lake Lilian, S66 015002, 700 m

Iphigenia novae-zealandiae

Connor (1964) found this small member of the lily family at two sites at Coleridge, at the Lake Hill tarns (S74 063782) and on the terrace above Simois Stream (S74 046850). It is confined to Canterbury and Otago but has not been seen in Otago recently nor at Cass where it was once recorded.

The species can be found in two kinds of site: in the turf of seasonally dry tarns and on bare soil in deflation areas on ancient glacial outwash or moraine surfaces. It is illustrated, in flower, in Given (1981, plate 22).

Coleridge: Mt Barker moraine downs, at four of the tarns, S74 098776, 600 m
Near Mt Hennah swamp, S66 045906, 630 m
Lake Lilian, S66 010003, 715 m.

Scamander valley, at three tarns, S74 068845
 In turf and on bare soil at S74 068848, 600 m.
 Mt Georgina, S74 075828, 730 m.

Carex enysii

This species is rarely collected because it is so inconspicuous. It occurs in turf on lake margins and in seasonal tarns. It is a very small, fine *Carex* which is hard to identify at these sites because it rarely flowers but its dark purple-brown sheaths are distinctive. It is rhizomatous.

Cass: Lake Hawdon, S66 313081, 575 m.

Little Flora, S60 512256, 790 m.

Coleridge: "Spectacles" (two large kettlehole ponds), S74 088770, 610 m.

Kettleholes by Simois Stream, S74 043848, 530 m.

Pond by the Harper Road, S74 082804, 530 m.

Kettlehole tarn near Lake Evelyn, S74 050906, 640 m.

East end of Lake Georgina, S74 062825, 640 m.

Two of the Mt. Barker tarns, S74 098776, 610 m.

Three of the Scamander Valley tarns, S74 069843, 580 m

Tarn at Lake Henrietta, S65 995934, 570 m.

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