

## Wanganui Plant List 41

### Vascular Plants of Ngamatea, Kutaroa and Otahupitara Swamps, Waiouru

List resulting from Department of Conservation survey of southern half of Ngamatea swamp, 15 September 1988; and parts of Kutaroa and Otahupitara Swamps (sometimes known collectively as "Irirangi Swamps"), 1 December 1988, 22 May 1989, 14-15 January 1992. (List excludes species seen only on adjoining high ground.) Last updated 24 December 1998

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\* indicates adventive species; j = juvenile plants only

Grid references to NZMS 260, Sheet T 21

CHR numbers refer to voucher specimens lodged with DSIR Land Resources herbarium at Lincoln.

#### Location

- N - Ngamatea Swamp (records in brackets are from banks of Waiouru Stream, not main swamp) (Grid 410870)
- K - Kutaroa Swamp : mostly north of Waiaruhe Road (swamp centered on grid 380815 Reserve)
- O - Otahupitara Swamp, south of Maukuku Road Road (swamp centered on grid 390800 Reserve)

Abundance indicated as follows -

- a - abundant and occurring over extensive areas
- c - common and widespread
- o - occasional (but may be confined to one extensive vegetation type)
- u - uncommon (very few plants seen)
- l - local (common in small areas)

#### Trees, Shrubs and Lianes

#### Location

|   | <u>N</u> | <u>K</u> | <u>O</u> |
|---|----------|----------|----------|
| Aristolelia fruticosa var. microphylla (mountain wineberry) |          | u        |          |
| A. serrata (wineberry, makomako)                            |          | uj       |          |
| Carmichaelia cunninghamii var. [C. flagellifera]            |          | u        | u        |
| Carpodetus serratus (putaputaweta)                          |          | uj       | u        |
| Clematis quadibracteolata CHR 462497 (N)                    | u        | u        | l        |
| Coprosma acerosa var. [C. brunnea]                          |          | l        |          |
| C. cheesemanii CHR 462488 (N)                               | u        | o        | u        |
| C. propinqua  |          | u        | u        |
| C. rhamnoides ssp. rhamnoides                               |          | u        | uj       |
| C. rigida CHR 464197 (K)                                    |          | u        |          |
|   | <u>N</u> | <u>K</u> | <u>O</u> |

|  |   |    |    |
|--|---|----|----|
| <i>C. robusta</i> (karamu)   |   | u  | u  |
| <i>C. rugosa</i> CHR 462488 (N)  | u | l  | l  |
| <i>C. tenuifolia</i>   |   | u  | u  |
| <i>C. propinqua</i> x <i>C. robusta</i>  |   | ?  | l  |
| <i>C. propinqua</i> x <i>C. tenuifolia</i>   |   | ?  | u  |
| <i>C. robusta</i> x <i>C. tenuifolia</i>   |   |    | u  |
| <i>C. sp</i> [unnamed, included in <i>C. parviflora</i> by Allan (1961): " <i>C. taylorae</i> "] | u | l  | l  |
| <i>Cordyline australis</i> (cabbage tree)  | u | u  | u  |
| <i>Cyathodes empetrifolia</i>  | u | o  | u  |
| * <i>Cytisus scoparius</i> (European broom)  | u | l  | u  |
| <i>Dracophyllum subulatum</i> (monoao)   | o | o  | o  |
| <i>Gaultheria antipoda</i> (snowberry)   |   | u  |    |
| <i>G. macrostigma</i>  |   | l  | u  |
| <i>G. sp.</i> [unnamed; <i>G. depressa</i> var. <i>novae-zelandiae</i> ]                         |   | u  | u  |
| <i>Griselinia littoralis</i> (broadleaf, puka)   |   | uj |    |
| <i>Hebe stricta</i> var. <i>stricta</i> (koromiko)   | o | u  | u  |
| <i>Hoheria populnea</i> var. [ <i>H. sexstylosa</i> ] (houhere, lacebark)                        |   | u  |    |
| <i>Lepidothamnus laxifolius</i> (pigmy pine) CHR (K)   |   | u  |    |
| <i>Leptospermum scoparium</i> (manuka)   | c | o  | o  |
| <i>Leucopogon fraseri</i> s.s.   |   | o  | o  |
| <i>Libocedrus bidwillii</i> (kaikawaka) CHR (K)  |   | u  |    |
| <i>Melicytus lanceolatus</i> (narrow-leaved mahoe)   |   |    | uj |
| <i>Muehlenbeckia australis</i> (pohuehue)  |   | u  |    |
| <i>Myrsine divaricata</i> s.s. (weeping mapou)   |   | u  | u  |
| <i>Olearia virgata</i> var. [small-leaved form of volcanic plateau] (shrub daisy)                | c | o  | o  |
| <i>Ozothamnus vauvilliersii</i> (golden cassinia)  | o | o  | u  |
| * <i>Pinus contorta</i>  | o | o  | c  |
| <i>Pittosporum tenuifolium</i> (kohuhu)  |   | u  | u  |
| <i>Podocarpus hallii</i> (mountain totara)   |   | uj | uj |
| <i>Pseudopanax arboreus</i> (five-finger)  |   |    | u  |
| <i>P. crassifolius</i> (lancewood)   |   | u  | u  |
| <i>Pseudowintera colorata</i> (horopito)   |   | u  | u  |
| * <i>Rosa rubiginosa</i> (sweet brier)   |   |    | u  |
| <i>Rubus schmidelioides</i> var. <i>schmidelioides</i> (bush lawyer) CHR 462500 (N)              | u | u  | u  |
| * <i>Salix cinerea</i> (grey pussy willow)   | u | u  |    |
| * <i>S. fragilis</i> (crack willow)  |   | u  |    |

### Ferns and Fern Allies

|  |          |          |          |
|--|----------|----------|----------|
| <i>Blechnum fluviatile</i> agg.        |          | u        |          |
| <i>B. minusauct.</i> NZ (swamp kiokio) | c        | o        | o        |
| <i>B. novae-zelandiae</i> (kiokio)     |          | u        |          |
| <i>B. penna-marina</i>                 | o        | o        | o        |
| <i>Dicksonia fibrosa</i> (wheki-ponga) |          | u        |          |
|  | <u>N</u> | <u>K</u> | <u>O</u> |

|  |   |   |   |
|--|---|---|---|
| D. squarrosa (wheki)                               |   | u |   |
| Gleichenia dicarpa (umbrella fern)                 | a | a | c |
| Histiopteris incisa                                |   | u | u |
| Lycopodium australianum CHR 464135 (K), 462493 (N) | o | u |   |
| L. fastigiatum                                     |   | u | u |
| L. laterale  |   | l |   |
| Paesia scaberula (ring fern)                       |   | u |   |
| Phymatosorus diversifolius (hound's tongue)        |   |   | u |
| Polystichum vestitum (prickly shield fern)         | u | u | l |
| Pteridium esculentum (bracken)                     |   | u | u |

Grasses

|   |   |   |   |
|---|---|---|---|
| *Agrostis capillaris (browntop)           | u |   |   |
| *Alopecurus geniculatus (kneed foxtail)   |   |   | l |
| *Anthoxanthum odoratum (sween vernal)     | u | c | c |
| Chionochloa rubra (red tussock)           | c | a | c |
| Cortaderia fulvida (toetoe)               | o | u | l |
| *Cynosurus dactylon (crested dog's tail)  | u |   |   |
| *Dactylis glomerata (cocksfoot)           |   | o | u |
| Elymus solandri (blue wheat grass)        |   | u |   |
| *Festuca nigrescens (chewings fescue)     |   | o | u |
| F. novae-zelandiae (hard tussock)         |   | l | l |
| *Glyceria declinata (floating sweetgrass) | u | u | l |
| Hierochloe redolens (holy grass)          | o | o | o |
| *Holcus lanatus (Yorkshire fog)           | o | c | c |
| Lachnagrostis sp. elata                   |   |   |   |
| CHR 464198 (K)                            |   | u |   |
| *Lolium perenne (perennial ryegrass)      |   | o |   |
| Poa anceps ssp. anceps                    | u | o | u |
| *P. trivialis                             |   | o | o |
| Rytidosperma gracile (danthonia)          | u | o | o |
| Trisetum lasiorhachis CHR (K,O)           |   | u | u |

Rushes

|   |          |          |          |
|---|----------|----------|----------|
| Centrolepis ciliata CHR 464128 (K)        | o        | o        |          |
| Empodisma minus (wire rush)               | a        | a        | a        |
| *Juncus articulatus (jointed-leaved rush) | c        | o        | o        |
| *J. bufonius (toad rush)                  |          |          | l        |
| *J. canadensis CHR 462485 (N)             | o        | o        | o        |
| *J. effusus                               | u        | o        | o        |
| J. gregiflorus                            | o        | o        |          |
| J. planifolius                            |          | u        | u        |
| J. pallidus                               |          | u        |          |
| J. pusillus                               | (o)      |          |          |
|   | <u>N</u> | <u>K</u> | <u>O</u> |

|   |  |   |   |
|---|--|---|---|
| *J. tenuis var. tenuis                    |  | u | u |
| *J. tenuis var. anthelatus CHR 464193 (O) |  |   | u |

|   |  |   |   |
|---|--|---|---|
| *J. sp. CHR 464131 (K)                  |  | o |   |
| Luzula migrata (woodrush)               |  | u | u |
| L. subclavata (woodrush) CHR 464196 (K) |  | u |   |

Sedges

|  |     |   |    |
|--|-----|---|----|
| Baumea arthropphylla CHR 462492 (N), (K)                 | o   | l | l  |
| B. rubiginosa  | c   | a | a  |
| B. tenax CHR 462491 (N)                                  | o   | c | o  |
| B. teretifolia CHR 464194 (O)                            |     |   | o  |
| Carex breviculmis  | (u) |   | u  |
| C. coriacea  | o   | c | c  |
| *C. demissa  |     | u |    |
| C. dipsacea var. [C. tahoata] CHR 464137 (K)             | (u) | u | l? |
| C. echinata var. [C. stellulata var. australis]          | l   | o | o  |
| C. flagellifera [red-brown form of central North Island] |     | u | l  |
| C. gaudichaudiana  | (u) | u |    |
| C. geminata s.s.   |     | l | l  |
| C. maorica   | u   | u | u  |
| *C. ovalis   | (u) | l | l  |
| C. secta s.s.  | c   | o | l  |
| C. sinclairii  |     | o | l  |
| Carpha alpina  | o   | o | o  |
| Eleocharis acuta (sharp spike sedge)                     | u   | o | o  |
| E. gracilis (slender spike sedge)                        | c   | o | c  |
| E. sphacelata (bamboo spike sedge) CHR 464125 (K)        |     | u |    |
| Isolepis crassiuscula CHR 464132 (K)                     |     | l |    |
| I. distigmata CHR (K)                                    |     | l |    |
| I. fluitans CHR 464127, 464133, 464134 (all K)           | u   | o |    |
| I. inundata CHR 464192 (K)                               |     | u |    |
| I. reticularis   |     | u |    |
| I. subtilissima CHR 464138 (K), 462494 (N)               | u   | u | u  |
| Lepidosperma australe (four-square)                      | a   | a | a  |
| Oreobolus pectinatus (comb sedge)                        | l   | o | c  |
| Schoenus fluitans CHR 464129 (K), 462495 (N)             | u   | o |    |
| S. maschalinus CHR 464136 (K)                            |     | o |    |
| S. pauciflorus   | a   | a | a  |
| Uncinia rubra  | (u) | u |    |

Monocot herbs other than grasses, rushes and sedges

|                      |          |          |          |
|----------------------|----------|----------|----------|
| Astelia grandis      |          | u        |          |
| Chiloglottis cornuta |          | u        |          |
|                      | <u>N</u> | <u>K</u> | <u>O</u> |

|   |      |   |    |
|---|------|---|----|
| Corybas rivularis agg. (spider orchid)        | (u)? | l | l? |
| Herpolirion novae-zelandiae                   | u    | o | u  |
| Lemna sp. [L. minor auct NZ] (duckweed)       | o    | u |    |
| Libertia peregrinans (sand iris) [reported by |      |   |    |

|  |          |          |          |
|--|----------|----------|----------|
| A P Druce]   | (u)      |          |          |
| Microtis oligantha   |          | o        | o        |
| M. unifolia  |          | o        | o        |
| Phormium cookianum (wharariki, mountain flax)                          |          | u        |          |
| P. tenax (harakeke, NZ flax)   | a        | o        | o        |
| P. cookianum x P. tenax  |          | u        |          |
| Potamogeton cheesemanii (pondweed) CHR 464124 (K)                      |          | o        | o        |
| P. suboblongus (pondweed) CHR 464126 (K)                               | l        | o        | c        |
| Prasophyllum colensoi  | u        | o        | o        |
| P. sp (unamed; aff. P. patens) [sent live to CHR, Jan 1992]            |          | l        | u        |
| Pterostylis "linearis" (ident. J B Irwin)                              |          | u        |          |
| P. sp. (possibly P. micromega)   |          | u        |          |
| Spiranthes novae-zelandiae   |          |          | u        |
| Thelymitra cyanea (sun orchid)   | o        | o        | l        |
| T. decora (sun orchid)   |          | u        |          |
| Triglochin striata   |          | o        | o        |
| Typha muelleri (raupo)   | l        | u        |          |
| <u>Dicot herbs</u>   |          |          |          |
| Acaena anserinifolia (bidibidi)  | u        | u        | u        |
| *A. novae-zelandiae (bidibidi)   |          | u        | u        |
| *Achillea millefolium (yarrow)   |          | u        |          |
| Aciphylla sp. [cf A. squarrosa] (speargrass)                           | u        | u        | u        |
| Anaphalioides bellidioides   | (o)      |          |          |
| A. trinervis?  | (u)      |          |          |
| *Callitriche stagnalis (starwort)                                      |          | o        | l        |
| *Cardamine pratensis (lady's smock) CHR 462498 (N)                     | l        |          |          |
| C. sp. [C. debilis agg. "Long Style" of Pritchard 1957] (bittercress)  |          | l        | u        |
| C. sp [C. debilis agg. "Narrow Petal" of Pritchard 1957] (bittercress) | u?       | u        | u        |
| Carduus tenuiflorus (wing thistle)                                     |          |          |          |
| Celmisia gracilentia (mountain daisy)                                  | (u)      | u        | u        |
| C. sp. [unnamed, cf. C. graminifolia, plants rhizomatous]              | o        | o        | o        |
| *Centaurium erythraea (centaury)                                       |          | u        |          |
| Centella uniflora  | (u)      | c        | o        |
| *Cerastium glomeratum (mouse-eared chickweed)                          | o        | u        | o        |
| *C. fontanum subsp. vulgare (mouse-eared chickweed)                    |          | u        |          |
| *Cirsium arvense (Californian thistle)                                 |          | o        | u        |
| *C. vulgare (Scotch thistle)   | u        | u        | u        |
| Craspedia minor var. minor (woolly-head)                               | (u)      | u        |          |
| C. sp. [unnamed bog sp.] (bog woolly-head)                             | o        | c        | c        |
|  | <u>N</u> | <u>K</u> | <u>Q</u> |
| Dichondra sp. [D. brevifolia agg.]                                     | u        | o        | u        |
| Drosera binata (forked sundew)   | u        | o        | o        |
| D. pygmaea (pygmy sundew) CHR 464122 (K)                               |          | u        | u        |
| D. spathulata (sundew)   | (u)      | u        |          |
| *Duchesnea indica (Indian strawberry)                                  |          | l        | l        |
| Epilobium alsinoides   | (o)      |          | u        |

|  |          |          |          |
|--|----------|----------|----------|
| E. chionanthum (willow herb)                       | u        | u        |          |
| *E. ciliatum                                       |          |          | u        |
| E. insulare  |          | u        | l        |
| E. pallidiflorum (willow herb)                     | l        | l        | l        |
| E. tenuipes  |          | u        | u        |
| Euphrasia cuneata (eye-bright)                     |          | o        |          |
| *Galium palustre ssp. palustre (marsh bedstraw)    | o        |          |          |
| G. perpusillum                                     | (o)      | u        |          |
| G. propinquum                                      |          | u        |          |
| G. trilobum CHR 464123 (K)                         |          | u        |          |
| Geranium microphyllum                              | u        | u        | u        |
| Gnaphalium audax                                   |          | u        | u        |
| G. limosum s.s.                                    | u        | u        | o        |
| G. sp. (cf. G. traversii)                          |          | o        | u        |
| G. sp.   |          | u        |          |
| Gonocarpus aggregatus                              | u        | o        | a        |
| G. micranthus ssp. micranthus                      | o        | c        | c        |
| Gratiola sexdentata                                |          | u        |          |
| Gunnera prorepens                                  | (o)      | u        | l        |
| Helichrysum filicaule                              |          | o        | o        |
| *Hieracium pilosella                               |          | o        | o        |
| Hydrocotyle microphylla                            |          | o        | o        |
| H. novae-zeelandiae s.s.                           |          | u        | u        |
| H. pterocarpa CHR 464140 (K), 462490 (N)           | u        | u        |          |
| H. sulcata CHR 464139 (K)                          |          | o        | l        |
| Hypericum japonicum agg.                           | (u)      | o        | o        |
| H. sp [unnamed; plants small, glaucous]            | (u)      |          |          |
| *Hypochoeris radicata (cat's ear)                  | o        | o        | o        |
| Lagenifera cuneata                                 |          | u        | o        |
| L. pumila  |          | u        | l        |
| *Leontodon taraxacoides (hawk's beard)             | o        | o        | o        |
| *Leucanthemum vulgare (oxeye daisy)                |          | u        |          |
| *Linum catharticum (purging flax)                  | o        | c        | c        |
| *Lotus pedunculatus (lotus)                        | c        | u        | o        |
| Mazus radicans s.s.                                | (u)      |          |          |
| Mentha cunninghamii (native mint)                  |          | u        | u        |
| Microseris scapigera                               | (u)      |          |          |
| *Mimulus guttatus (monkey musk)                    |          |          | l        |
| *M. moschatus (musk)                               |          | u        | u        |
| Montia fontana s.s.                                | u        | u        |          |
| *Mycelis muralis (wall lettuce)                    |          | u        | u        |
|  | <u>N</u> | <u>K</u> | <u>O</u> |
| <hr/>  |          |          |          |
| *Myosotis laxa ssp. caespitosa (water forgetmenot) | u        | u        | u        |
| Myriophyllum pedunculatum                          |          | u        |          |
| M. propinquum (water milfoil)                      | (u)      | o        |          |
| M. triphyllum                                      |          | u        |          |
| *Nasturtium nasturtium-aquaticum (watercress)      | o?       | l?       | l        |
| Nertera ciliata CHR 462499 (N)                     | u        | o        | u        |
| N. depressa  |          | u        | u        |
| N. scapanioides CHR 464195 (K)                     |          | o        | u        |

|   |             |     |     |
|---|-------------|-----|-----|
| N. setulosa   |             | u   | l   |
| N. villosa  |             | u   |     |
| Oreostylidium subulatum   |             | u   |     |
| Ourisia macrophylla subsp. robusta (mountain foxglove)            |             | l   |     |
| Oxalis magellanica  | (o)         |     |     |
| *Parentucellia viscosa (tarweed)                                  |             | o   | u   |
| *Plantago lanceolata (narrow-leaved plantain)                     |             | u   | u   |
| *P. major (broad-leaved plantain)                                 |             | u   | u   |
| P. raoulii var. [narrow-leaved form]                              |             | u   | u   |
| P. triandra   |             | u   |     |
| Potentilla anserinoides   |             | o   | o   |
| Pratia angulata agg.  | (o)         | o   | o   |
| *Prunella vulgaris (selfheal)                                     | u           | o   | o   |
| *Ranunculus acris (giant buttercup)                               |             | u   | l   |
| R. amphitrichus (waoriki)   | o           | o   | u   |
| *R. flammula (spearwort) CHR 464486 (N)                           | u           | o   |     |
| R. glabrifolius (waoriki)   | (u)         | u   | o   |
| R. reflexus (bush buttercup)                                      | u           | u   | u   |
| *R. repens (creeping buttercup)                                   | o           | o   | o   |
| *R. trichophyllus (floating buttercup)                            |             | u   |     |
| *Rumex acetosella (sheep's sorrel)                                |             | u   |     |
| *R. crispus (curled dock)   | u           | u   |     |
| R. flexuosus  | (u)         |     |     |
| Selliera microphylla (alpine halfstar) CHR 464130 (K), 462496 (N) | u           | c   | o   |
| Senecio glomeratus (fireweed)                                     |             | u   |     |
| *S. jacobaea (ragwort)  |             | u   |     |
| S. minimus (fireweed)   |             | u   | u   |
| Stackhousia minima  | (u)         | o   |     |
| Stellaria decipiens   |             | u   | u   |
| *S sp. (marsh chickweed)  | u           | u   |     |
| *Taraxacum officinale (dandelion)                                 | u           | u   | u   |
| *Trifolium dubium (suckling clover)                               |             | o   |     |
| *T. pratense (red clover)   |             | o   | o   |
| *T. repens (white clover)   | o           | o   |     |
| Utricularia novae-zelandiae (bladderwort)                         |             | c   | o   |
| Viola cunninghamii (NZ violet)                                    | (u)         | c   | c   |
| Wahlenbergia albomarginata (harebell)                             | (o)         | u   |     |
| <br>  |             |     |     |
| Totals: Native species  | 67<br>(+28) | 178 | 110 |
| <br>  |             |     |     |
| Adventive species   | 28<br>(+1)  | 40  | 17  |
|   | —           | —   | —   |
|   | 93<br>(+28) | 153 | 77  |
|   | —           | —   | —   |

SOME VEGETATION TYPES OF KUTAROA & OTAHUPITARA SWAMPS

1. Red tussock/sweet vernal (*Carex coriacea*) - (Yorkshire fog) : burnt and oversown tussockland with occasional comb sedge cushions, on margins of Kutaroa and Otahupitara swamps.
2. (Red tussock)/wirerush - (monoao) - [foursquare] - [*Schoenus pauciflorus*]/wirerush - (holy grass) - [foursquare] - [*Cyathodes empetrifolia*] : rushland with scattered tussocks and low shrubs.
3. Baumea rubiginosa - [B. tenax]/[*Carpha*] - [*Carex echinata*] : sedgeland.
4. Baumea arthropphylla- [B. rubiginosa]/[wire rush] - [umbrella fern]: sedgeland, with scattered *Prasophyllum patens*, *Thelymitra cyanea*, bladderwort, bog woollyhead.
5. Umbrella fern/wirerush : fern-rushland.
6. (Monoao) - [golden cassinia]/(*Baumea rubiginosa*)/wirerush : rushland with scattered emergent shrubs and sedge (unburnt in recent years).
7. Golden cassinia - [manuka] (0.5-1-2m)/monoao/wirerush - umbrella fern - (*Carex coriacea*): scrub, with a few pigmy pine (unburnt area in central Kutaroa Swamp)
8. [*Cabbage tree*]/swamp flax/Carex secta - *Baumea rubiginosa* : flax - sedge tussockland with scattered cabbage trees; small patches beside main stream of Kutaroa swamp.
9. (*Potamogeton cheesemanii*) - [*Myriophyllum* spp.] - [*Ranunculus flammula*] - [*R. fluitans*] : "herbfield" in main stream of Kutaroa Swamp (floating and submerged aquatic plants).
10. Manuka (2 - 3 m)/Baumea rubiginosa/*Juncus articulatus* : scrub in south-west of Kutaroa Swamp.
11. (*Olearia virgata*) (to 1m) - [*Pinus contorta*]/*Baumea rubiginosa*/ (*Eleocharis gracilis*):shrubland on Otahupitara Swamp.
12. *Olearia virgata* (2-4m)/(*Coprosma "taylorae"*) - (*C. tenuifolia*) - [lancewood] - [horopito]/prickly shield fern - (*Blechnum penna-marina*) : scrub in head of western arm of Otahupitara Swamp.
13. *Olearia virgata* (2-3m) - (manuka) - [flax]/(*Carex geminata*(?)) - (*C. secta*)/lotus - Yorkshire fog - (giant buttercup): scrub in arm of Otahupitara Swamp.
14. Swamp flax/wire rush - umbrella fern : flax-rushland on swamp edges in several places.
15. Manuka - [lancewood] - [*kohuhu*]/(*Coprosma "taylorae"*), with *Parsonsia capsularis*, *Rubus schmidelioides*, *Coprosma rigida*, *C. propinqua*, *C. rhamnoides*, *Myrsine divaricata*, *Pseudopanax anomalus*, *Neomyrtus* : on higher ground adjoining type 8, above.

Note: Cover contributions of each species in each vegetation stratum are indicated by, e.g.:-

|                    |   |                |
|--------------------|---|----------------|
| <u>red tussock</u> | > | 50% cover      |
| red tussock        | = | 20 - 49% cover |
| (red tussock)      | = | 10 - 19% cover |
| [red tussock]      | < | 10% cover      |

Different strata separated by slashes, e.g. [monoao]/red tussock indicates dense or moderately dense red tussocks with a thin scattering of taller monoao shrubs.