

Fig. 8 The main Paleozoic rock belts of Northwest Nelson. Inset shows distribution of lower Paleozoic rocks in the South Island. (From Cooper 1984)

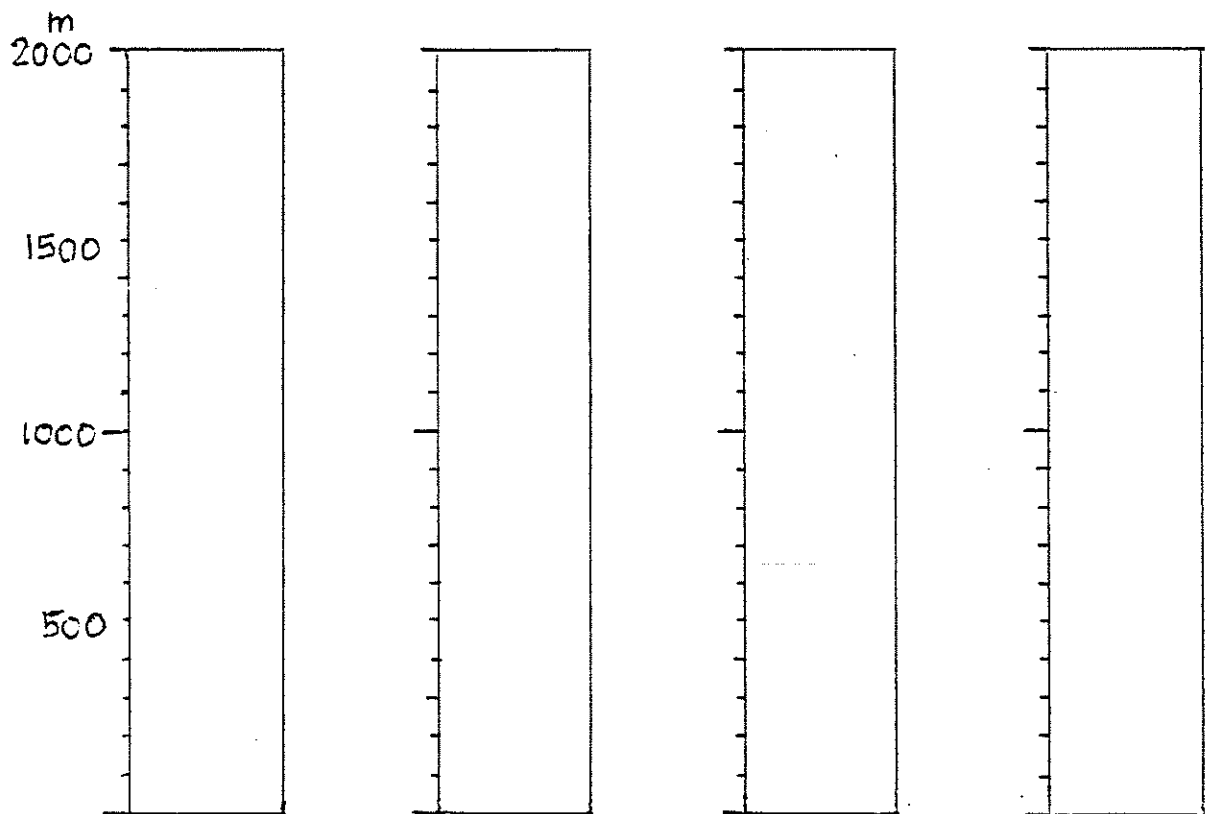
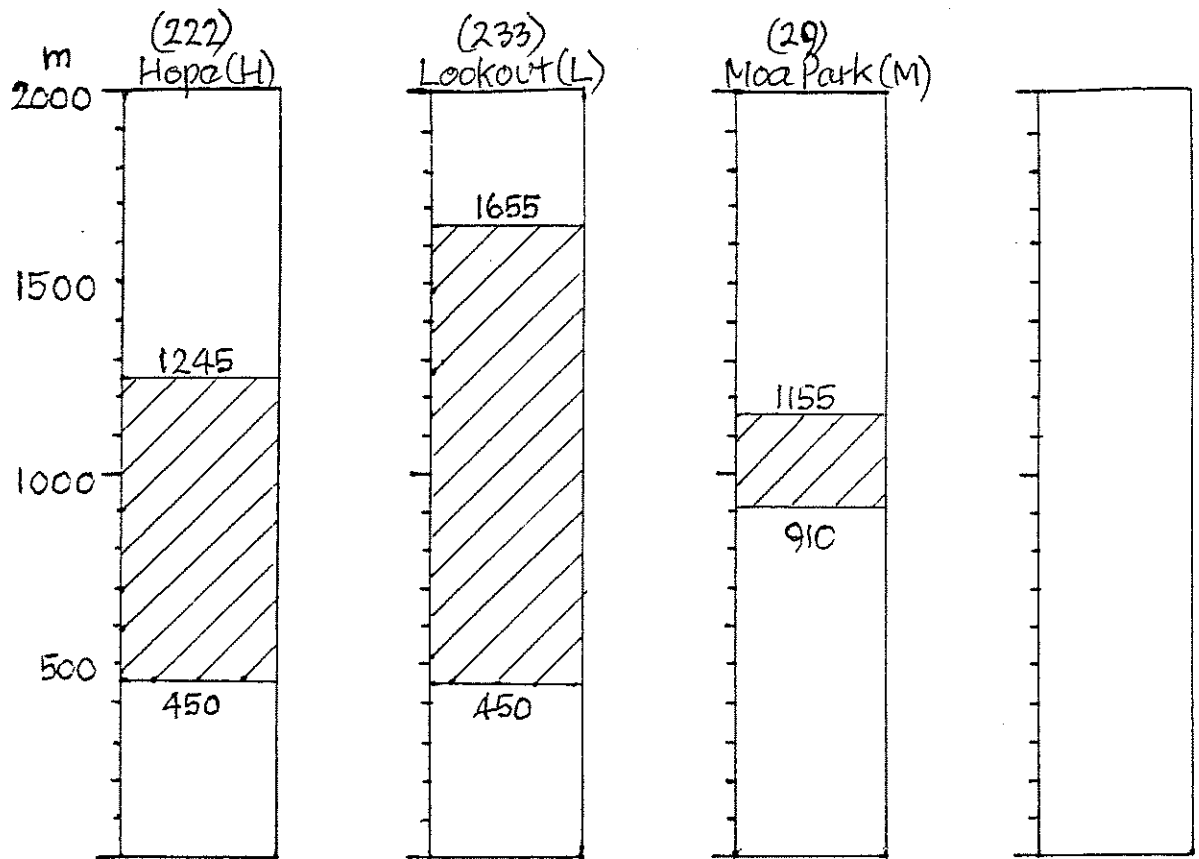
DISTRIBUTION OF EASTERN GRANITES

Areas surveyed:

- H - Hope area (S Hope Ra.)
- L - Lookout area (Lookout Ra.)
- M - Moa Park area (Pikikituna Ra.)

GENERAL LOCATION AND GEOLOGY OF EACH AREA  
(Grid refs on Infomap 262-9 are for the centre of  
each area) (Geology from Cooper 1984)

Area-Location	Geology	Grid ref.
Hope area (H), W of Glenhope	Mesozoic granite	478953
Lookout area (L), NNW of Glenhope	Mesozoic granite	477961
Moa Park area (M), NNW of Motueka	Mesozoic granite	504029



ALTITUDINAL RANGE OVER WHICH PLANTS WERE RECORDED  
IN EACH AREA

The numbers in brackets refer to lists of plants compiled for each area and filed at Landcare Research

Field work in the eastern granite mountains totalled 20 days, mostly between 1978 and 1993. The separate areas were visited at the dates indicated below.

Hope area	1 day in November 1976
	2 days in November 1978
	2 days in February 1986
	3 days in December 1987
	4 days in February 1993
Lookout area	1 day in January 1972
	1 day in January 1983
	1 day in January 1988
	2 days in February 1993
Moa Park area	1 day in May 1968
	2 days in January 1969

The following participated in the field work: Elizabeth Brown, Warren Burke, Shannel Courtney, Denise Cotter, Helen Druce, Tony Druce, Allan Fife, Kerry Ford, Arnold Heine, Roland Heine, Geoff Park, Geoff Rogers, Barbara Simpson, Neill Simpson, Barry Sneddon, Peter Williams, and members of Wellington Botanical Society.

# INDIGENOUS PLANTS (383 SPECIES)

## GYMNOSPERM TREES AND SHRUBS

Dacrycarpus dactyloides (L) [Podocarpus dactyloides]

Dacrydium cupressinum (H,L)

Halocarpus bidwillii (H,L,M) [Dacrydium bidwillii]

H. biformis (H,L) [Dacrydium biforme]

H. bidwillii X H. biformis (H)

Lagarostrobos colensoi (unc H, uncl L) [Dacrydium colensoi]

Lepidothamnus intermedius (H,L) [Dacrydium intermedium]

L. laxifolius (H,L) [Dacrydium laxifolium]

L. intermedius X L. laxifolius (H,L)

Libocedrus bidwillii (H,L,M)

Phyllocladus alpinus ss. (L)

P. sp. (a) (H,L,M) (aff. P. alpinus; "lowland" ecotype of Wardle 1969) [P. alpinus in part]

Podocarpus hallii (H,L,M)

P. nivalis (H,L)

P. hallii X P. nivalis (unc H)

Prumnopitys ferruginea (L) [Podocarpus ferrugineus]

## MONOCOTYLEDONOUS TREES AND SHRUBS

Cordyline indivisa (unc M)

## DICOTYLEDONOUS TREES AND SHRUBS

Atcheta traversii s.l. (incl. A. traversii var. australis) (unc H, L, unc M)

Aristolelia fruticosa var. (a) (unc H, uncl L)

Brachyglottis bidwillii var. viridis (unc H north end, L, unc M) [Senecio bidwillii var. viridis]

B. greyi var. (a) (incl. B. laxifolia) (unc L south end) [Senecio laxifolius]

B. rotundifolia var. (a) (incl. B. buchananii and B. cockaynei) (unc H, L, unc M) [Senecio bennettii]

Carpodetus serratus (H,L)

Cassinia vauvilliersii (H,L)

- Coprosma cheesemani s.s. (H,L,M)  
C. ciliata ssp. ciliata (unc L)  
C. colensoi s.s. (H,L,unc M) [C. colensoi and C. banksii]  
C. crenulata (H, unc except at north end, L)  
C. depressa (L)  
C. foetidissima (H,L,M)  
C. microcarpa (H,L)  
C. lucida s.s. (L)  
C. perpusilla ssp. perpusilla (H,L) [C. pumila in part]  
C. propinqua ssp. propinqua (unc H)  
C. pseudocuneata ssp. (a) (H,L,M) (lvs narrower than in ssp. pseudocuneata)  
C. thamnoides s.l. (incl. C. polymorpha) (H)  
C. robusta (L)  
C. sp. (a) (H,L,M) (described as C. parviflora var. dumosa by Cheeseman 1906, non C. parviflora var. dumosa sensu Allan 1961; lf undersurface not minutely hairy as is usual in C. parviflora; drupes usually unpigmented, occasionally purplish red) [C. parviflora in part]  
C. sp. (b) (H,L,M) (C. parviflora var. dumosa sensu Allan 1961)  
C. sp. (d) (H,L) (aff. C. pseudocuneata; low-growing shrubs with small, thick arcuate lvs) [C. pseudocuneata in part]  
Cyathodes dealbata (H,L) [C. pumila]  
C. empetrifolia (H,L,M)  
C. sp. (a) (H,L,M) (C. juniperina agg.; lvs small, usually  $< 1\text{cm} \times < 1\text{mm}$ )  
Dracophyllum longifolium var. (a) (incl. D. filifolium and D. diverti) (H,L,M)  
D. palustre (H)  
D. pronum (H north end, L)  
D. traversii s.l. (incl. D. pyramidale) (unc H, unc L)  
D. uniflorum (H,L)  
D. longifolium x D. palustre (unc H)  
D. pronum x D. uniflorum (L)  
Elaeocarpus hookerianus (H,L)

Epacris alpina (H, L, M)

Exocarpos bidwillii (H, L)

Fuchsia excorticata (H)

Gaultheria antipoda (H, unc M)

G. crassa (unc H, L)

G. depressa s.s. (H, L, M)

G. macrostigma (unc H, unc M) [Pernettya macrostigma].

G. sp. (a) (H, L, unc M) (described as G. depressa var. novae-zelandiae by Franklin 1962) [G. depressa in part]

G. antipoda X G. sp. (a) (unc M)

G. crassa X G. macrostigma

G. crassa X G. sp. (a) (unc H, unc L)

G. macrostigma X G. sp. (a) (unc H, unc M)

Griselinia littoralis (H, L, M)

Hebe canterburienensis (H, L)

H. ciliolata (L)

H. cockayneana var. a (L south end)

H. gracillima (unc H)

H. macroantha var. brachyphylla (unc L)

H. odora s.s. (M)

H. salicifolia var. salicifolia (unc H)

H. tetragona var. a (incl. H. coarctata) (H, L, M)

H. sp. (a) (incl. Leonoliebe masoniae) (H, L) [Hebe pauciramosa var. masoniae]

Kunzea ericoides agg. (unc H, L) [Leptospermum ericoides]

Leptospermum scoparium (H north of Mt Hope scarp, L, M)

Leucopogon fasciculatus var. a (H, L, M) (juvenile lvs not much broader than adult lvs) [Cyathodes fasciculata]

L. fraseri s.s. (H, M) [Cyathodes fraseri]

L. suaveolens (H, unc L, M) [Cyathodes colensoi]

Meliccytus sp. (f) (unc L) (aff. M. alpinus; shrubs taller than in M. alpinus, up to 2.4 m; spiny shoots point in all directions with average branch angle of c. 70°, whereas in M. alpinus they tend to point in one direction with an average branch angle of c. 50°; lvs broader than in M. alpinus) [Hy-

- menanthera alpina in part]  
Metrosideros umbellata (H,L,M)  
Myrsine divaricata ss. (H,L,M)  
M. nummularia (H,L)  
Neomyrtus pedunculata (H,L)  
Nothofagus fusca (H,L,M)  
N. menziesii (L,M)  
N. solandri var. cliffortioides (H,L,M)  
N. solandri var. solandri (H)  
N. truncata (H,L)  
N. fusca x N. solandri (H)  
Oleaia arborescens (unc H, unc M)  
O. ilicifolia var. (a) (unc M) (lvs broader than in var. ilicifolia:  
 laminae up to 3cm wide compared with 1.7cm, and length/  
 breadth ratio 3.0-3.7 compared with 4.1-5.8)  
O. lacunosa var. lacunosa (unc H, unc L, unc M)  
O. virgata var. implicata s.l. (incl. O. virgata var. divaricata  
 and O. virgata var. laxiflora) (unc H)  
O. arborescens x O. lacunosa (unc M)  
O. ilicifolia x O. lacunosa (M)  
Pentachondra pumila (H,L,M)  
Pimelea oreophila (unc H, unc L) [P. pseudolyallii in part]  
P. prostrata (M)  
Pittosporum anomalum (H, unc L)  
P. divaricatum (H) [P. divaricatum and P. lineare]  
P. rigidum var. (a) (incl. P. crassicaule) (H,L,M)  
Pseudopanax anomalus (H,M) [Neopanax anomalum]  
P. colensoi ss. (H,L, unc M) [Neopanax colensoi]  
P. crassifolius (H,L)  
P. lineatis (H)  
P. simplex s.l. (incl. P. s. var. sinclairii) (H,L,M) [Neopanax simplex]  
P. sp. (a) (H,L,T) (described as P. colensoi var. ternatus by Wardle  
 1968) [Neopanax colensoi in part]  
P. anomalus x P. simplex (unc H)



Pseudowintera colorata (H,L,M)

Quintinia serrata s.l. (incl. Q. acotifolia and Q. elliptica) (L,M)

Weinmannia racemosa var. racemosa (H,L,unc M)

#### DICOTYLEDONOUS LIANES AND RELATED TRAILING PLANTS

Muehlenbeckia axillaris (unc H)

Rubus cissoides var. (a) (H,L,unc M) ("form c" of Allan 1961; fits broader than in var. cissoides)

#### PSILOPSIDS AND LYCOPODS

Imesipteris tannensis (unc L)

Lycopodium australlianum (H,L,unc M)

L. fastigiatum (H,L,M)

L. scariosum (H,L,M)

L. varium (H,L,unc M)

L. volubile (H,L)

#### FERNS

Asplenium flaccidum. (H,L,M)

Blechnum chambersii (H)

B. colensoi (H)

B. discolor (H,L,unc M)

B. fluviatile agg. (H,M)

B. minus (unc H)

B. penna-marina (H,L,M)

B. procerum (H,L,M)

B. vulcanicum (unc H)

B. sp. (a) (H,L) (lowland sp.; lower pinnae reduced in length)

[B. sp. 1]

B. sp. (b) (H) (mountain sp.; lower pinnae not reduced in length; "The Dunedin-Cass Variety" of Crookes 1963) [B. sp. 3]

Ctenopteris heterophylla (L)

Cyathea colensoi (H,L,M)

Gleichenia dicarpa (H,L)

Grammitis billardierei (H,L)  
G. givenii (unc H, unc L)  
G. magellanica ssp. nothofageti (unc H, L, unc M)  
G. poeppigiana (unc H, L, unc M)  
Histiopteris incisae (unc H, L, M)  
Hymenophyllum armstrongii (unc H)  
H. bivalve (H,L)  
H. demissum (H)  
H. flabellatum (H,L)  
H. malingii (H,L,M)  
H. minimum (unc H)  
H. multifidum (H,L,M)  
H. pattatum (unc H, unc L)  
H. ratum (H,L, unc M)  
H. tofescens (L, unc M)  
H. villosum (H,L,M)  
Hypolepis millefolium (unc H, M)  
Leptopteris hymenophylloides (unc M)  
L. superba (L, unc M)  
Paesia scaberula (L)  
Polystichum vestitum (unc H, L, unc M)  
Pteridium esculentum (L)  
Schizaea australis (unc H, unc L)  
Sticherus cunninghamii (unc H)

#### MONOCOTYLEDONOUS HERBS

#### ORCHIDS

Adenochilus gracilis (H,L, unc M)  
Aporostylis bifolia (H,L, unc M)  
Caladenia catnea agg. (H,L)  
C. lyallii (unc H, L, unc M)  
Chiloglottis cornuta (H,L,M)  
Corybas cryptanthus (unc H)  
C. maeranthus (unc M)

C. rivularis s.s. (unc H) [C. orbiculatus]  
C. trilobus s.s. (H, L)  
C. sp. (undetermined) (unc L)  
Gastrodia cunninghamii (unc H, L, unc M)  
Lyperanthus antarcticus (unc H)  
Prasophyllum colensoi (H, L, M)  
Pterostylis itsoniana (unc H, unc L)  
P. venosa (unc H, L, unc M)  
Thelymitra cyanea (H, unc M)  
T. decora (unc H)  
T. formosa (unc H, unc M)  
T. hatchii (H, L, M)  
T. longifolia s.s. (H, unc M)  
T. pulchella (M)

## GRASSES

Agrostis dyeri s.s. (unc H, unc L)  
A. muscosa (M)  
A. personata (H, L, M) [A. parviflora]  
A. sp. (b) (H, L, unc M) (aff. A. dyeri but panicle not contracted)  
[A. dyeri in part]  
Chionochloa australis (H, L) [Danthonia australis]  
C. cheesemani (L vicinity of Conical Hill, unc M) [Danthonia taoulii  
var. cheesemani]  
C. conspicua ssp. conspicua (unc H, L) [Danthonia cunning-  
hamii]  
C. pallens ssp. pallens (L) [Danthonia taoulii in part]  
C. rubra ssp. occulta (H, L, M) [Danthonia taoulii in part]  
C. australis X C. rubra (unc H, unc M)  
C. cheesemani X C. rubra (unc M)  
C. pallens X C. rubra (unc L)  
C. pallens X C. sp. (a) (C. flavescens auct. South Island, non C.  
flavescens Zotov) (unc L)  
C. rubra X C. sp. (a) (unc H)  
C. rubra X C. sp. (undetermined) (unc M)

Deschampsia tenella (unc H, L, unc M)  
Dexauxia aucklandica (H, L, unc M)  
D. avenoides s.l. (incl. D. avenoides var. brachyantha) (H, M)  
Festuca sp. (b) (L) (aff. F. matthewsii; plants tufted, but not tussock-forming, glaucous)  
Hierochloa novae-zelandiae (H, L, M)  
H. recurvata (unc H)  
H. redolens (unc H)  
Lachnagrostis lyallii s.l. (incl. L. filiformis var. semiglabra) (H) [Dexauxia forsteri var. semiglabra]  
Microlaena avenacea (H, L, M)  
M. colensois s. (unc H north end, L) [Ehrharta colensoi]  
Poa breviglumis (unc H, unc M) [P. imbecilla var. breviglumis]  
P. colensoi (H, L, M)  
P. kirkii (unc L)  
P. maia (unc L, unc M)  
Rytidosperma australe (unc M) [Thiodia australis]  
R. gracile (H, L, M) [Danthonia semiannularis in part]  
R. nigricans (H, L, M) [Danthonia semiannularis var. nigricans]  
R. setifolium (unc H, L) [Danthonia semiannularis var. setifolia]  
Trisetum youngii (unc L)

## SEDGES

Baumea tenax (L)  
Carex acicularis s.l. (incl. C. allanii) (H, L)  
C. breviculmis (unc H)  
C. cockayneana (unc H)  
C. dissita ss. (L, M)  
C. echinata (H, M)  
C. gaudichaudiana (H, M)  
C. kirkii s.l. (incl. C. kirkii var. elatio) (unc M)  
C. lessoniana (?) (L)  
C. libeta (H, L, unc M)  
C. sinclairii (H, M)

C. sp. (d) (H, M) (aff. C. cotiacea but lvs slender, bright green, not becoming stiff and yellow-green in exposed sites; utricles similar to those of C. cotiacea, faintly to obscurely nerved; beak minute or absent) [C. geminata in part]

C. sp. (e) (unc H, unc L) (aff. C. dissita but plants much smaller) [C. dissita in part]

Carpha alpina ss. (H, L, M)

Gahnia procera (H, L, M)

Isolepis aucklandica (H, L) [Scirpus aucklandicus]

I. caligenis (unc H, unc L, unc M) [Scirpus caligenis]

I. habra (H, L, M) [Scirpus habrus]

I. subtilissima (H, M) [Scirpus subtilissimus]

Oreobolus impar (unc L)

O. pectinatus (H, L, M)

O. strictus (H, L, M)

Schoenus pauciflorus ss. (unc H, L)

Uncinia astonii (unc L, M)

U. divaricata (H, L)

U. egmontiana (M)

U. ferruginea (L)

U. filiformis (unc H, L, M)

U. fuscovaginata var. (a) (H, L, M) (plants glaucous)

U. involuta (H, L)

U. nervosa s.s. (H, L, M)

U. rupestris s.l. (incl. U. angustifolia) (H, L, M)

U. silvestris s.l. (incl. U. affinis) (unc M)

U. uncinata (H, L, M)

U. zotovic (H, M)

U. sp. (a) (H, L, unc M) (aff. U. nervosa but plants more slender, see Edgar 1970, p. 231) [U. nervosa in part]

## RUSHES AND ALLIED PLANTS

Centrolepis ciliata (H, L, unc M)

Empodisma minus (H, L) [Calotrophus minor]

Gaimardia setacea (H, L)

Juncus antarcticus (H, L, M)

J. gregiflorus (unc M)

J. novae-zelandiae (H, L, M)

J. pusillus (H, unc M)

Luzula colensoi (unc H, L)

L. migrata (unc M) [L. banksiana var. migrata]

L. picta s.s. (H)

L. subclavata (H) [L. picta var. pallida]

L. sp. (d) (H) [L. picta var. limosa]

L. sp. (e) (L) (plants rhizomatous; infl head smaller than in L. tufa) [L. tufa var. tufa in part]

L. sp. (undetermined) (M) (L. picta agg.)

#### MONOCOTYLEDONOUS HERBS OTHER THAN GRASSES, SEDGES, RUSHES, AND ALLIED PLANTS

Astelia graminea (L)

A. linearis s.l. (incl. A. linearis var. novae-zelandiae) (H, L)

A. nervosa s.s. (H, L)

A. nivicola s.s. (unc L)

A. sp. (b) (L, M) (aff. A. nervosa but lvs broader and not conspicuously white adaxially) [A. nervosa in part]

Bulbinella hookeri (L only near contact with marble of Marino Mts)

Dianella nigra (L)

Heteropogon novae-zelandiae (unc M)

Libertia pulchella (unc H, L, M)

Luzuriaga parviflora (unc H, M)

Phormium cookianum (H, L, M)

#### DICOTYLEDONOUS HERBS

##### COMPOSITES

Abrotanella caespitosa (H, L, M)

A. linearis s.s. (L only near contact with marble of Marino Mts)

Anaphalis sp.(a) (H,L,M) [Helichrysum bellidioides s.s.]

Brachyglottis sp.(a) (H,L) (included in B. bellidioides, as var. crassa, by Nordenskiöld 1978) [Senecio bellidioides in part]

Celmisia alpina s.s. (H,L)

C. dallii (unc H near Mt Hope)

C. hieraciifolia ssp. hieraciifolia (H,L)

C. incana s.l. (incl. C. discolor) (H,L,M)

C. laricifolia (L)

C. lateralis s.l. (incl. C. lateralis var. villosa) (unc, H except at north end, L)

C. montroi ssp. (a) (H) [C. coriacea var. semicordata]

C. montroi ssp. (b) (L) (described as C. coriacea var. lanceifolia by Cheeseman 1925)

C. petriei (unc H, L only near contact with marble of Marino Mts)

C. sessiliflora (L south end)

C. similis (H,L)

C. sinclairii s.l. (incl. C. allanii and C. dutietzii) (L south end)

C. spectabilis ssp. spectabilis (H,L, unc M)

C. travetsii (unc M)

C. sp.(a) (aff. C. gracilentata; plants tufted; lvs linear to linear-lanceolate, up to 45 x 1.2 cm) ssp.(a) (L, only near contact with marble of Marino Mts) (upper surface and margins of lf thinly covered in tomentum; lower surface densely covered) [C. gracilentata in part]

C. similis X C. spectabilis (unc H, unc L)

Craspedia sp.(c.f.c) (L) (summer-green plants, in seepages; lvs green; lamina narrowing gradually to long petiole; both surfaces clad in long multicellular non-glandular hairs, with or without cottony tips, overtopping short glandular hairs; margins ± faintly white with cottony hairs; fls white)

C. sp. (gg) (H) (summer-green plants in carpet-grass and bogs; lvs green,  $\pm$  recurved; lamina  $\pm$  folded, narrowing abruptly to long slender petiole; both surfaces clad in long multicellular non-glandular hairs, with or without cottony tips, overtopping short glandular hairs; margins  $\pm$  faintly white with cottony hairs; fls white)

Dolichoglottis lyallii (L)

Gnaphalium audax (unc M) [G. collinum in part]

G. laterale (unc H) [G. paludosum in part]

G. machayi s.s. (H, L) [G. traversii in part]

G. paludosum s.s. (H, unc L south end, M)

G. tuahinicon (unc M) [G. collinum in part]

Helichrysum filicaule (unc H, unc M)

Lagenifera cuneata (H, M)

L. pumila (L)

L. strangulata (H, L, unc M) [L. petiolata]

Leptinella pyrethriifolia agg. (L) [Cotula pyrethriifolia]

L. sp. (b) (unc H, L, M) (included in L. squalida, as ssp. mediana, by Lloyd and Webb, 1987)

Microseris scapigera (L)

Raoulia eximia s.l. (incl. R. rubra) (L)

R. glabra (H, L, M)

R. grandiflora var. grandiflora (H, L, M)

R. subsericea (unc H)

Senecio minimus (unc H) [Erechtites minima var. heterophylla and E. minima var. angustata]

S. waitavensis (unc H, L) [Erechtites waitavensis]

Taraxacum magellanicum (unc L)

#### DICOTYLEDONOUS HERBS OTHER THAN COMPOSITES

Acaena anserinifolia (unc H, unc M) [A. anserinifolia, A. pusilla, A. pusilla var. suprasericascens, and A. viridior]

A. inermis (unc H) [A. inermis and A. microphylla var. robusta]

A. profundeincisa (unc H, L) [A. anserinifolia var. sericeinervis and A. anserinifolia var. paucidens]



- Aciphylla anomala (unc L)  
A. colensoi var. colensoi (M)  
A. polita var. (a) (L) (lf segments coarser than in var. polita and stipules mostly simple; see Dawson and Le Comte, 1978)  
Anisotome aromatica (H, L, M) [A. aromatica var. aromatica, flabellifolia, incisa, major, obtusapinnatisecta]  
A. flexuosa var. flexuosa (L) [A. aromatica var. dissecta]  
A. sp. (a) (L) (aff. A. sp. b; plants rhizomatous but not usually forming dense mats; pinnæ without hair-tip or with only a short one; infls up to 5cm, not hidden amongst the lvs)  
A. sp. (b) (L) (described as A. imbricata var. prostrata by Dawson 1961)  
Cardamine sp. (i) (unc L) ("Scree Race" of Pritchard 1957)  
Chionohebe pulvinaris (L) [Pygmaea pulvinaris]  
Colobanthus affinis (M)  
C. apetalus s.l. (incl. C. apetalus var. alpinus (unc H, L)  
Coprosma talbrockiei (unc H)  
Donatia novae-zelandiae (H, L)  
Drosera arcturi (H, L, M)  
D. spatulata (H, L, M)  
D. stenopetala (unc H, L)  
Epilobium alsinoides s.s. (unc H, unc M) [E. alsinoides & E. thymifolium]  
E. brunnescens s.s. (unc H, M)  
E. chlorifolium (L)  
E. cochayneanum (H, unc L, M)  
E. linnaeoides (unc M)  
E. mactopus (unc L)  
E. narteroides (M) [E. pedunculare var. viride]  
E. pernitens (H, L, M)  
E. pubens (unc M) [E. pubens and E. pubens var. strictum]  
E. sp. (a) (unc H, L) (included in E. brunnescens, as ssp. minutiflorum, by Raven and Engelhorn, 1971) [E. pedunculare var. minutiflorum]

Euphrasia montoi (L)

E. townsonii s.s. (H,L)

E. sp. (q) (L south end) (plants perennial, up to 2cm tall, in seepages, with slender spreading and branching stems, bearing retrorse hairs above ground; lvs fleshy, 3-lobed, very variable in shape, with scattered glandular hairs on margins; calyx with dark markings on margins and keel of lobes; calyx tube, but not the lobes, densely covered in glandular hairs over dense retrorse non-glandular hairs; corolla c. 1.8 cm diam., white with yellow throat) [E. petriei in part]

Forstera mackayi (H,L)

F. sodifolia s.s. (L)

F. tenella (H,L,unc M)

Galium perpusillum s.s. (M)

Gentiana bellidifolia (unc L south end, M?)

G. montana s.l. (incl. G. montana var. stolonifera, G. patula, and G. bellidifolia var. pulchella) (H,L,M)

G. spenceti (H,L)

G. sp. (c) (L) (aff. G. divisa; plants biennial; lvs linear-spathulate; inflorescence a ball-like mass almost hiding lvs)

G. sp. (d) (L north end) (described as G. bellidifolia var. australis by Cheeseman 1925) [G. bellidifolia in part]

Geranium sp. (e) (H,L,M) (aff. G. microphyllum) [G. microphyllum in part]

Geum leospermum (unc M)

G. sp. (a) (unc L south end) (aff. G. parviflorum; stock short; terminal flt about as long as broad; fls up to 13 mm diam.) [G. parviflorum in part]

Gonocarpus aggregatus (H,M) [Haloragis depressa]

G. micranthus ssp. micranthus (H,M) [Haloragis micrantha]

G. montanus (unc H) [Haloragis procumbens]

Gunnera monoica (M) [G. albocarpa, G. monoica, and G. strigosa]

Hydrocotyle microphylla (unc H, unc M)

H. moschata (unc H)

H. sp. (a) var. (a) (M) [H. novae-zeelandiae var. montana]

Hypericum japonicum agg. (unc H)

Kelleria diffenbachii (unc H, unc L) [Drapetes diffenbachii]

K. laxa (H, M) [Drapetes laxus]

K. tessellata (H, L) [Drapetes villosus in part]

Liparophyllum gunnii (H)

Montia fontana s.s. (H, L, M)

Myosotis vanosa (unc M)

Neopaxia sp. (b) var. (a) (unc H) (described as Claytonia calycina by Colenso 1896) [Claytonia australasica in part]

Nertera batfouriana (H, L, M)

N. ciliata (H, L, M)

N. depressa s.l. (incl. N. cunninghamii) (H, L)

N. sp. (a) (H, M) (aff. N. dichondrifolia but hairs present on both surfaces of lf, straight, not hooked) [N. dichondrifolia in part]

Notothlaspi sp. (b) (L) N. australe auct., non Thlaspi australe Hook. f.) [N. australe]

Oreomyrthis colensoi s.s. (incl. O. colensoi var. hispida and O. c. var. multifida) (H, L, M)

Oreoporanthera alpina (L south end) [Poranthera alpina]

Oreostylidium subulatum (H, M)

Ourisia caespitosa ssp. caespitosa (unc H, L)

O. lactea ssp. lactea (H, L) [O. macrophylla var. lactea]

O. sp. (a) (H, L) (plants creeping, prostrate, forming extensive patches on damp banks beside streams in beech forest, occasionally in banks of sphagnum moss outside forest; lvs usually widely separated, but closely spaced in plants growing in the open; petiole slender; lamina up to 1 x 1 cm; infls slender, bearing 2-3 fls, up to 10 cm tall in fr; fls c. 2 cm diam; corolla white with a pale yellow throat)

Oxalis magellanica (H,L,M) [O. lactea]  
Phyllachne clavigera s.l. (incl. P. colensoi) (L)  
Plantago novae-zelandiae (M)  
P. uniflora (H,M)  
Pratia angulata agg. (H,L,M)  
Psychrophila novae-zealandiae (unc H,L) [Caltha novae-zealandiae]  
Ranunculus foliosus (M) [R. foliosus, R. insertus, and R. porrectus]  
R. gracilipes (L) [R. gracilipes and R. sinclairii]  
R. membranifolius (unc M) [R. hirtus in part]  
R. reflexus (L) [R. hirtus in part]  
R. verticillatus (L) [R. clivalis]  
R. foliosus x R. membranifolius (P) (unc M)  
Schizilema colensoi (unc H)  
S. haastii s.s. (L)  
S. nitens (unc H,M)  
Stackhousia minima (H)  
Stellaria decipiens s.l. (incl. S. parviflora) (H,M)  
Utricularia novae-zealandiae (H) [U. monanthos + U. novae-zealandiae]  
Viola cunninghamii (H,L,M)  
V. filicaulis (H,M)  
Wahlenbergia albomarginata var. albomarginata s.l. (incl. W. breckia and W. pygmaea var. laxa) (H,L)

No. of indigenous species listed for each area:

Hope (H) : 277

Lookout (L) : 272

Moa Park (M) : 190

## ADVENTIVE PLANTS (25 SPECIES)

### GYMNOSPERM TREES AND SHRUBS

Abies sp (juveniles only) (unc H)

Pinus contorta (juveniles only) (unc H)

Pseudotsuga menziesii (juveniles only) (unc H)

### DICOTYLEDONOUS TREES AND SHRUBS

Cytisus scoparius (M)

### MONOCOTYLEDONOUS HERBS

#### GRASSES

Agrostis capillaris (H/L, M)

Anthoxanthum odoratum (unc H/L, unc M)

Festuca nigrescens (unc H/L, unc M)

Holcus lanatus (unc H/L, M)

Poa trivialis (unc H)

#### SEDGES

Carex ovalis (M)

#### RUSHES

Juncus articulatus (unc H/L)

J. conglomeratus (H/L)

J. effusus (H/L)

### DICOTYLEDONOUS HERBS

#### COMPOSITES

Cirsium vulgare (unc H/L, unc M)

Hieracium caespitosum (unc H/L)

H. pilosella (unc H/L)

Hypochoeris radicata (unc H/L, M)  
Mycalis muralis (unc H/L, M)  
Taraxacum officinale s.l. (unc H/L)

#### DICOTYLEDONOUS HERBS OTHER THAN COMPOSITES

Cerastium fontanum ssp. vulgare (unc H/L, unc M)  
Epilobium ciliatum (unc M)  
E. obscurum (unc H)  
Rumex acetosella (unc H/L, M)  
Sagina procumbens (unc H/L, unc M)  
Trifolium repens (unc H/L, unc M)

No. of adventive species listed for each area:

Hope (H) : c. 22

Lookout (L) : c. 17

Moa Park (M) : 15

Note: H/L indicates species not separately listed for Hope and Lookout areas (probably present in both)

#### RECORDS NOT ACCEPTED

Coprosma cuneata (Esler 1962)  
C. parviflora (Esler 1962)  
Dracophyllum latifolium (Esler 1962)  
Chionochoa flavescens (Esler 1962, as Danthonia flavescens)  
C. rigida (Esler 1962, as Danthonia raoulia)  
Poa acicularifolia (Ball 1973)  
Uncinia rubra (Esler 1962)  
Luzula rufa (Ball 1973)  
Astelia patrici (?) (Esler 1962)  
Brachyglottis adamsii (Esler 1962, as Senecio adamsii)  
Leptinella minor (Esler 1962, as Cotula minor)

Aciphylla monroii (Bell 1973)

Anisotome imbricata (Bell 1973)

Diosora pygmaea (Esler 1962)

Kellaria villosa (Esler 1962, as Drapetes villosa)

Nettara didionifolia (Esler 1962)





from auto. prev. page  
+ recent spec.

EG

See Pitt Sr Bred  
Mc Park

X VOUCHER SPECIMENS FOR UNNAMED TAXA

Phyllocladus sp.(a) (CHR

Aristotelia fruticosa var.(a)

Coprosma pseudocuneata ssp.(a) (CHR 180966-7)

C. sp.(b) (CHR 180864, 180978)

C. sp.(d) (CHR 249634)

Cyathodes sp.(a) (CHR

Hebe cochayneana var.(a)

Leucopogon fasciculatus var.(a)

Malicytus sp.(f)

Olearia ilicifolia var.(a)

Rubus cissoides var.(a) (CHR 189131)

u  
^

Blechnum sp.(a)

B. sp.(b)

C. sp. (undet.)

Agrostis sp.(b) (CHR

check 189136 for M.

Chionochoa sp.(a)

Festuca sp.(b)

7  
122-148-50  
nutr?

Carex sp.(d)

C. sp.(e)

Uncinia fuscovaginata var.(a) (CHR 180985, 189137, 249939)

U. sp.(a) (CHR 189174-5,

Luzula sp.(a)

L. sp. (undetermined) (L. picta agg) (CHR 190945)

Astelia sp.(b)



Celmisia sp. (a) ssp. (a)

Craspedia sp. (cf. x) (CHR)

C. sp. (gg) (CHR)

Aciphylla polita var. (a)

Anisotome sp. (a)

Cardamine sp. (l)

Euphrasia sp. (q) (CHR)

Gentiana sp. (c) (CHR 249837-8,

Geranium sp. (e)

Geum sp. (a)

Netteta sp. (a) (CHR 189132)

Notothlaspi sp. (b)

Ouzisia sp. (a) (CHR)

Ranunculus foliosus X R. membranifolius (?) (CHR 189173)

\*voucher not from eastern granite areas, but from elsewhere in NW Nelson mountains

