

HIGHER PLANTS (LYCOPODS, FERNS, GYMNOSPERMS, FLOWERING PLANTS) ON CONGLOMERATE¹, ON BASALTIC TO ANDESITIC LAVA AND AGGLOMERATE², AND ON ARGILLITE³, S. ARTHUR RANGE, NW NELSON, 3000-5350 FT/900-1633 M, FROM E OF BATON SADDLE TO LOUGH SADDLE.

A.P. Druce, Botany Division, D.S.I.R., May 1982
(revised Sept. 1982, May 1983, June 1984, Nov. 1984, Oct. 1986, June 1988)
(revised and extended by A.P. Druce; and P.A. Williams, Botany Division, Nelson, 1990)
(revised and further extended by A.P. Druce; P.A. Williams; and S.P. Courtney, D.O.C., Nelson, 1991) (revised Aug. 1992, Aug. 1993)

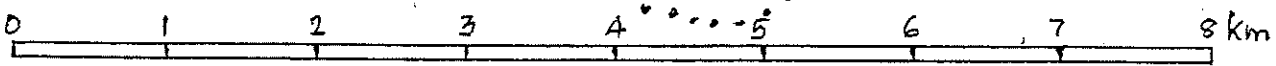
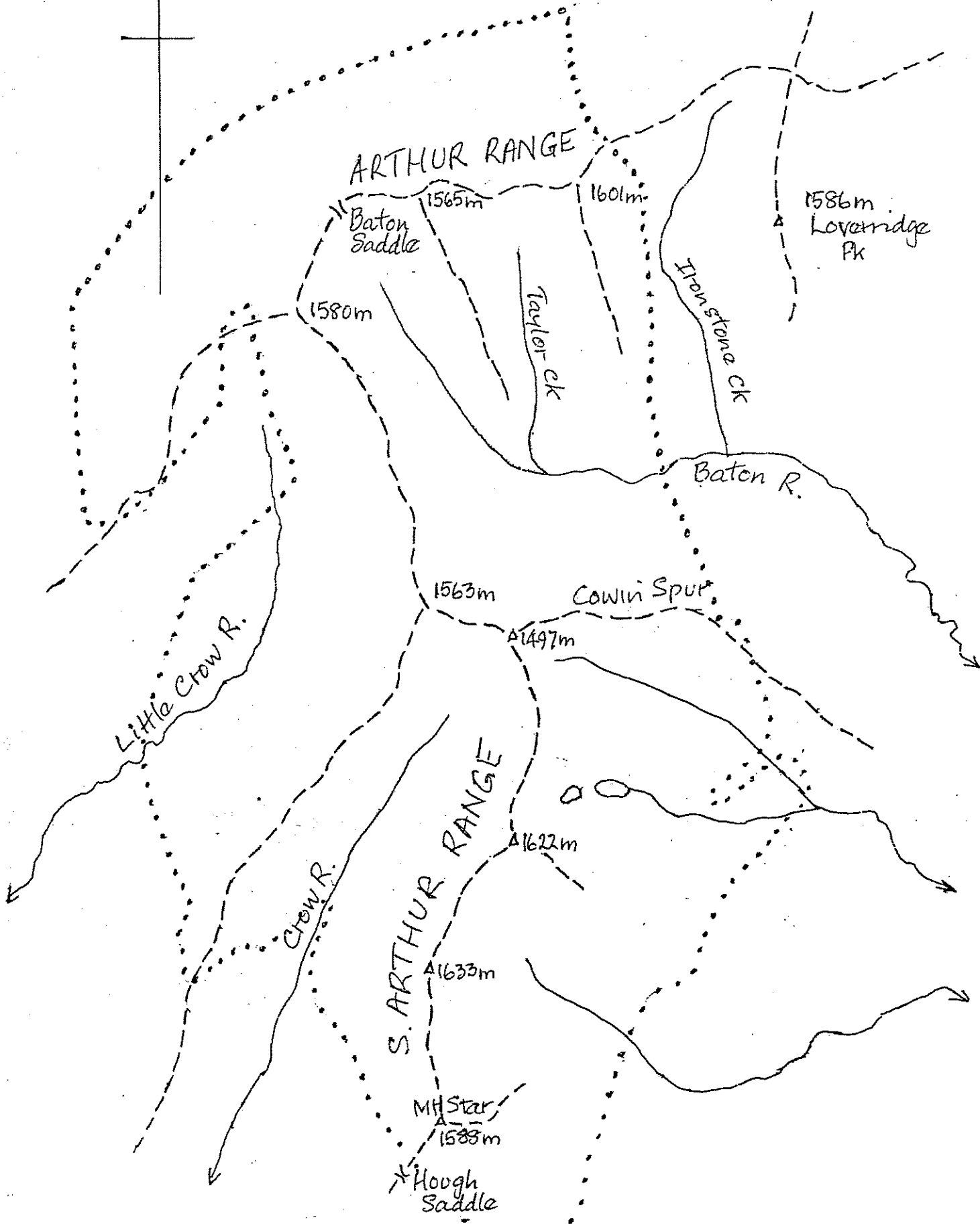
(Based on visits March 1982, March 1983, Feb. 1990, and Feb. 1991)

Rocks: ¹Lockett Conglomerate } Formations
²Devil R. Volcanics }
³Tasman }

Highest point: unnamed peak, 1633 m,
grid ref. NZMS 260 M27 755871

Note: as the flora on argillite has not been examined to any extent the list below is effectively a flora on Lockett Conglomerate and Devil R. Volcanics

approx. limit of Lockett Conglomerate, Devil R. Volcanics, and Tasman Formations, S. Arthur Ra.



(unc) - uncommon or local

INDIGENOUS PLANTS

GYMNOSPERM TREES AND SHRUBS

Halocarpus bidwillii (unc - head of

Moran Cr.)

Lepidothamnus laxifolius

Libocedrus bidwillii (unc - head of Baton R.)

Phyllocladus alpinus agg. (unc)

Podocarpus hallii (unc)

P. nivalis

P. hallii x *P. nivalis* (unc)

DICOT SHRUBS

Archeria traversii (incl. *A.t.* var. *australis*) (unc)

Aristotelia fruticosa var.

Brachyglottis adamsii (Baton Saddle FNE-wards)

B. bidwillii var. *viridis*

B. rotundifolia var. (incl. *B. buchananii* and *B. cockaynei*) (unc - seedlings only)

Cassinia vauvilliersii

DICOT TREES

Aristotelia serrata

Carpodetus serratus

Dracophyllum traversii (incl. *D. pyramidale*)

Fuchsia excorticata

Griselinia littoralis

Hoheria lyallii var. (*H. glabrata*)

Nothofagus fusca

N. menziesii

N. solandri var. *cliffortioides* (unc)

Pittosporum tenuifolium

Pseudopanax simplex (incl. *P.s.* var. *sinclairii*) (unc)

P. sp. (unnamed; included in *P. colensoi*, as var. *ternatus* and as var. *fiordensis*, by Wardle 1968) (unc)

Coprosma atropurpurea

C. cheesemani s.s.

C. ciliata ssp. *ciliata*

C. colensoi s.s.

C. crenulata (unc)

C. depressa

C. foetidissima (unc)

C. perpusilla ssp. *perpusilla*

C. propinqua ssp. *propinqua*

C. pseudocuneata ssp. (lvs narrower than in ssp. *pseudocuneata*)

C. rhamnoides (incl. *C. polymorpha*)

C. rugosa ssp. *rugosa*

C. serrulata (unc)

C. sp. (i) (unnamed; aff. *C. colensoi*) (low-growing shrubs with trailing branches) (unc)

- C. sp(ii) (unnamed) (C. parviflora var. dumosa sensu Allan 1961, non C. p. var. dumosa Cheeseman)
- C. sp(iii) (unnamed; aff. C. pseudocuneata) (low growing shrubs with small, thick arcuate lvs)
- C. sp(iv) (unnamed; included in C. parviflora by Oliver 1935, and others) (lf underside not minutely hairy as is usual in C. p.; drupes vs unpigmented)
- Coriaria angustissima (unc)
- C. plumosa (unc)
- C. sarmentosa (unc)
- Cyathodes dealbata (incl. C. pumila)
- C. empetrifolia (unc)
- Dracophyllum longifolium var. (incl. D. filifolium and D. oliveri)
- D. pubescens var. pubescens (unc)
- D. uniflorum
- Gaultheria crassa
- G. depressa ss. (unc)
- G. rupestris (incl. G. subcorymbosa) (unc)
- G. sp. (unnamed; included in G. depressa, as var. novae-zelandiae, by Franklin 1962)
- Hebe albicans var. albicans (unc)
- H. cantaburiana
- H. ciliolata
- H. cockayneana var.
- H. haastii var. (aff. var. humilis; see Moore 1961, p. 940)
- H. macrantha var. brachyphylla

- H. odora ss.
- H. salicifolia var. salicifolia (unc)
- H. tetragona var. (H. coarctata)
- H. topiaria
- H. vernicosa
- H. sp. (aff. H. glaucophylla)
- Helichrysum intermedium var.
- Leucopogon fraseri ss.
- L. suaveolens (incl. Cyathodes colensoi)
- Melicactus sp. (unnamed)
- Myrsine divaricata ss.
- M. nummularia
- Olearia arborescens
- O. aricenniifolia
- O. capillaris (unc)
- O. colensoi var. colensoi
- O. lacunosa var. lacunosa
- O. nummulariifolia var. (lvs distinctly longer than broad, rather than suborbicular as in var. nummulariifolia)
- O. arborescens X O. capillaris (unc)
- Pentachondra pumila
- Pimelea oreophila
(two forms: one with many hairs on lvs, the other with few)
- Pittosporum anomalum
- Pseudopanax anomalus
- Pseudowintera colorata
- Traversia baccharoides (unc)
- Urtica ferox (unc)

DICOT LIANES AND RELATED

TRAILING PLANTS

- Clematis forsteri* (unc)
- Muehlenbeckia australis* (unc)
- M. axillaris*
- Rubus cissoides* var. (flts broader than in var. *cissoides*)
- R. schmidelioides* var. *schmidelioides*

LYCOPODS

- Lycopodium australianum*
- L. fastigiatum*
- L. scariosum*
- L. varium* (incl. *L. billardierei* and *L. novae-zelandicum*) (unc)

FERNS

- Asplenium flaccidum*
- A. hookerianum*
- A. terrestre* ssp. *terrestre* (unc)
- A. richardii*
- A. sp.* (*A. bulbiferum* or *A. gracillimum*) (unc)
- Blechnum fluviatile* agg.
- B. penna-marina*
- B. procerum*
- B. sp.* (unnamed) (mountain sp.; lower pinnae not reduced in length) ("The Dunedin-Cass Variety" of Crookes 1963)
- Cyathea colensoi*

- Cystopteris tasmanica*
- Grammitis billardierei*
- G. givenii* (unc)
- G. magellanica* ssp. *nothofageti*
- G. patagonica*
- G. poeppigiana*
- Hymenophyllum multifidum*
- H. pettatum* (unc)
- H. pulcherrimum* (unc)
- H. villosum*
- Hypolepis millefolium*
- Ophioglossum coriaceum* agg. (unc)
- Phymatosorus pustulatus* (unc)
- Polystichum cystostegia* (unc)
- P. vestitum*

ORCHIDS

- Aporostylis bifolia*
- Caladenia lyallii* (unc)
- Chiloglottis cornuta*
- Corybas trilobus* s.s.
- C. sp.* (*C. macranthus* or *C. rivularis*) (unc)
- Microtis oligantha* (unc)
- Prasophyllum colensoi*
- Pterostylis itsoniana* (unc)
- P. oliveri* (unc)

GRASSES

- Agrostis dyeri* s.s.
- A. muelleriana*
- A. sp.* (1) (unnamed; aff. *A. dyeri*) (panicle broad, not contracted as in *A. dyeri*)

Chionochloa australis
 C. cheesemani (unc)
 C. conspicua ssp. conspicua
 C. pallens ssp. pallens

C. rubra ssp. occulta
 C. sp. (unnamed) (C. flavescens auct.
 South Island, non C. flavescens
 Zetov)

C. australis X C. pallens (unc)
 C. australis X C. rubra (unc)
 Deschampsia novae-zelandiae (?)
 (unc) (thachillas have a few
 hairs towards base)

D. tenella
 Deyeuxia Aucklandica
 D. avenoides (incl. D. a. var. brachy-
 antha) (unc)

Elymus enysii
 E. sp. (aff. E. rectisetos) (plants
 glaucous; awns 4-6 cm long)

Festuca sp. (i) (aff. F. matthewsii)
 (tufted but not tussock-forming,
 glaucous)

F. sp. (ii) (unnamed; aff. F. rubra) (unc)

Hierochloa novae-zelandiae

Koeleria cheesemani

Lachnagrostis sp. (unnamed;
 included in L. filiformis, as var.
 semiglabra, by Zetov 1965)

Microlaena avenacea

M. colensoi s.s.

Poa breviglumis
 P. celsa
 P. cita ssp. cita

P. colensoi
 P. imbecilla (unc)
 P. kirkii
 P. maia

P. subvestita
 P. sp. (unnamed; aff. P. novae-zeland-
 iae) (scree plants with narrow lvs)
 (unc)

Rytidosperma gracile
 R. setifolium

Simplicia buchananii (unc)

Trisetum youngii

T. sp. (i) (unnamed) (plants slender;
 lf sheath glabrous or nearly so)

T. sp. (ii) (unnamed; included in T.
 antarcticum, as ssp. tenellum, by
 Petrie 1912)

SEDGES

Carex aciculatis

C. cockayneana (unc)

C. comans

C. echinata var. (C. stellulata var.
 australis)

C. enysii (unc)

C. flaviformis (unc)

C. gaudichaudiana

- C. libera (unc)
- C. pyrenaica (unc)
- C. sinclairii
- C. trachycarpa
- C. wakatipu s.s. (unc)
- C. sp. (i) (unnamed; aff. C. testacea)
(lvs broader than in C. testacea,
usually reddish; utricle margins
not scabrid)
- C. sp. (ii) (unnamed; aff. C. coriacea)
(lvs slender, bright green, not
becoming stiff and yellow-
green in exposed sites)
- Carpha alpina s.s.
- Isolepis aucklandica
- Ihabra
- Oreobolus pectinatus
- O. strictus
- Schoenus pauciflorus s.s. (= "slender
var." of Edgar 1970, p. 194)
- Uncinia astonii
- U. caespitosa
- U. clavata
- U. divaricata
- U. drocei
- U. filiformis
- U. fuscovaginata var. (plants
glaucous)
- U. gracilentata (unc)
- U. involuta
- U. longifructus
- U. nervosa s.s.
- U. rubra

- U. rupestris (incl. U. angustifolia)
- U. silvestris (incl. U. affinis)
- U. viridis (unc)
- U. sp. (unnamed) (U. affinis sensu
Hamlin 1959, non U. hiparia var.
affinis, Col. ex Clarke; see Nootz-
boom 1978)

RUSHES AND ALLIED PLANTS

- Gaimardia setacea
- Juncus antarcticus
- J. novae-zelandiae
- Luzula colensoi
- L. migrata
- L. tufa s.s. (unc)
- L. cf. subclavata
- L. sp. (i) (unnamed; included in L. chin-
ita, as var. petricana, by Edgar
1966)
- L. sp. (ii) (unnamed; included in L.
picta, as var. limosa, by Edgar 1966)
- L. colensoi X L. migrata (unc)
- Marsippospermum gracile

**MONOCOT HERBS OTHER THAN
ORCHIDS, GRASSES, SEDGES, RUSHES**

- Arthropodium candidum (unc)
- Astelia graminea
- A. linearis var. linearis
- A. nervosa s.s.
- A. nivicola s.s.
- A. petrici

A. sp. (i) (unnamed; included in *A. nivicola*, as var. *moriceae*, by Moore 1966)

A. sp. (ii) (unnamed; aff. *A. nervosa*) (lvs broad, not conspicuously white adaxially as in *A. nervosa*)

Bulbinella hookeri (Crow V. only)

Libertia peregrinans (unc)

Phormium cookianum

COMPOSITE HERBS

Abrotanella linearis ss.

Anaphalis sp. (*Helichrysum bellidioides* ss.)

Brachyglottis lagopus var. (cottony hairs on both surfaces of lf, dense at first, but becoming sparse)

B. sp. (unnamed; included in *B. bellidioides*, as var. *crassa*, by Nordenstam 1978)

Brachyscome radicata

B. sinclairii ss.

Celmisia alpina ss.

C. bellidioides (unc)

C. dallii

C. gibbsii

C. incana (incl. *C. discolor*)

C. laticifolia

C. lateralis (incl. *C. l. var. villosa*) (unc)

C. monroi sp.

C. petraei (Crow V. only)

C. sessiliflora

C. sinclairii (incl. *C. allanii* & *C. durietzii*)

C. spectabilis ssp.

C. traversii

C. sp. (i) (unnamed; aff. *C. gracilentata*) (plants strongly rhizomatous)

C. sp. (ii) (unnamed; aff. *C. gracilentata*) (plants tufted; lvs linear to linear-lanceolate; upper surface and margins thinly covered in tomentum; lower surface densely covered)

C. sessiliflora X *C. spectabilis* (unc)

C. spectabilis X *C. traversii* (unc)

Craspedia sp. (i) (unnamed; included in *C. lanata*, as var. *elongata*, by Allan 1961) (unc)

C. sp. (ii) (unnamed) (plants summer-green; lvs green with short broad petiole; both surfaces densely clad in short glandular hairs, with or without longer, multicellular, non-glandular hairs with cottony tips; margins conspicuously white with cottony hairs; fls white)

C. sp. (iii) (plants summer-green; lvs green; both surfaces sparsely clad in multicellular, non-glandular hairs; midrib on under-surface glabrous; fls white)

C. sp. (iv) (unnamed) (plants summer-green; lvs green, both surfaces clad in multicellular, non-glandular hairs with cottony tips, over short glandular hairs; margins ± white with cottony hairs; fls white)

C. sp. (v) (unnamed) (plants summer-green; lvs green; both surfaces densely clad in short glandular hairs; margins ± white with cottony hairs; fls white)

± white with cottony hairs; fls
white)

Gnaphalium aurdax (unc)

G. machayi s.s.

G. roahimicum (unc)

Helichrysum filicaule

Lagenifera cuneata

L. petiolata

L. pinnatifida

L. strangulata

Leptinella pyrethrifolia agg.

L. sp. (unnamed; aff. *L. squalida*)
(pinnae entire or nearly so)

Leucogenes grandiceps (unc)

Microseris scapigera var.

Raoulia apicinigra s.s.

R. eximia var. (*R. rubra*) (unc - except *C. sp. (ii)* (*C. debilis* agg.) (cf. "Long
Style" of Pritchard 1957)

R. glabra

R. grandiflora var. *grandiflora*

R. subulata (unc)

R. tenuicaulis (incl. *R. t.* var. *di-*
morpha and *R. t.* var. *pusilla*)

Sanecio glaucophyllus ssp. *glaucophyllus*

S. waitavensis

Taraxacum magellanicum

A. profundeincisa

A. ansetinifolia X *A. inermis*
(unc)

Aciphylla anomala

A. ferox

A. glaucescens s.s.

A. polita var. (unc, except
towards Mt Star)

Anemone tenuicaulis

Anisotome aromatica

A. deltoides

A. filifolia

A. haastii

A. pilifera

Cardamine sp. (i) (aff. *C. corym-*
bifera) (unc)

C. sp. (ii) (*C. debilis* agg.) (cf. "Long
Style" of Pritchard 1957)

C. sp. (iii) ("Scree Race" of Pritchard
1957)

C. sp. (iv) (unnamed) (lvs mostly
simple; blade ± reniform)

C. sp. (v) (*C. debilis* agg.) (siliques
hairy) (unc)

C. sp. (vi) (*C. debilis* agg.) ("Glossy
leaf" of Pritchard 1957) (unc)

Cheesemanina latisiliqua (incl.
C. gibbsii)

Colobanthus affinis

C. apetalus (incl. *C. a.* var. *alpinus*)

C. canaliculatus

C. strictus (unc)

Drosera arcturi

D. spathulata (unc)

DICOT HERBS OTHER THAN
COMPOSITES

Acaena ansetinifolia

A. fissistipula (unc)

A. inermis

- Epilobium brunnescens* s.s.
 (Crow V.)
E. atriplicifolium s.s. (unc)
E. chlorifolium
E. cockayneanum
E. glabellum s.s.
E. gracilipes
E. linnaeoides
E. matthewsii
E. pernitens (unc)
E. pubens (unc)
E. sp. (i) (unnamed; aff. *E. glabellum*) (unc)
E. sp. (ii) (unnamed; included in *E. brunnescens*, as ssp. *minutiflorum*, by Raven and Engelman, 1971)
Euphrasia cheesemanii
E. townsonii s.s.
E. zelandica agg. (corolla 4-5mm wide) (unc)
E. sp. (i) (unnamed; aff. *E. laingii*)
E. sp. (ii) (unnamed; aff. *E. petriei*) (calyx with glandular hairs, corolla pure white; lobes orientated to form a flat surface)
Forstera mackayi
F. sodifolia s.s.
F. tenella
Gentiana bellidifolia
G. filipes
G. gracilifolia (incl. *G. vernicosa*)
G. sp. (i) (unnamed; aff. *G. corymbifera*)
G. sp. (ii) (unnamed; aff. *G. bellidifolia*) (plants forming small to large patches; lvs very glossy; fls large, creamy white)
Geranium sp. (aff. *G. microphyllum*)
Geum leiospermum (unc)
G. uniflorum
G. sp. (*G. parviflorum* agg.) (stock short; terminal leaflet about as long as broad; fls up to 13 mm diam.)
Guigidia decipiens
G. montana
Gonocarpus aggregatus
Hydrocotyle heteromeria (unc)
H. microphylla (unc)
H. moschata (unc)
H. sulcata
H. sp. (unnamed; included in *H. novaezeelandiae*, as var. *montana*, by Kirk 1899)
Kelleria dieffenbachii
K. laxa (unc)
K. multiflora
Mentha cunninghamii
Montia fontana s.s.
Myosotis forsteri
M. macrantha
M. sp. (i) (*M. australis* agg.) (fls small, white) (unc)
M. sp. (ii) (unnamed; included in *M. pygmaea*, as var. *drucei*, by Moore 1961) (unc)

- Neopaxia sp. (incl. Montia calycina and Claytonia australasica var. biflora)
- Nertera balfouriana
- N. ciliata (unc)
- N. sp. (i) (unnamed) (lvs larger and more fleshy than in N. depressa)
- N. sp. (ii) (unnamed; aff. N. dichondrifolia) (hairs present on both surfaces of lf, straight, not hooked as in N. dichondrifolia)
- Notothlaspi sp. (unnamed) (N. australe auct., non Thlaspi australe Hook. f.)
- Oreomyrrhis colensoi s.s. (incl. O.c. var. hispida and O.c. var. multifida)
- O. sp. (unnamed; aff. O. ramosa)
- Ourisia caespitosa ssp. caespitosa
- O. lactea ssp. lactea
- O. simpsonii (Mt Star)
- Oxalis magellanica
- Parahebe decora (unc)
- P. linifolia ssp. linifolia
- P. lyallii
- Phyllachne clavigera (incl. P. colensoi)
- Plantago lanigera s.s.
- P. raoulii
- P. uniflora
- P. sp. (cf. P. novae-zelandiae)
- Pratia angulata ass.
- Psychrophila novae-zelandiae
- Ranunculus altus
- R. cheesemanii var. cheesemanii
- R. foliosus
- R. insignis
- R. membranifolius
- R. mitus (unc)
- R. verticillatus
- R. sp. (undetermined) (unc)
- Schizaelema haastii s.s. (?)
- S. nitens
- S. trifoliolatum (unc)
- S. sp. (unnamed; included in S. haastii, as ssp. cyanopetalum, by Domin 1908)
- Scleranthus brockiei
- S. uniflorus (unc)
- Stellaria decipiens (incl. S. parviflora)
- S. gracilentia
- Urtica incisa
- Viola cunninghamii
- V. filicaulis
- V. lyallii
- Wahlenbergia albomarginata var. albomarginata (incl. W. pygmaea var. laxa & W. brockiei)

ADVENTIVE PLANTS

GRASSES

- Agrostis capillaris
- Anthoxanthum odoratum
- Cynosurus cristatus

Dactylis glomerata
 Festuca arundinacea
 F. nigrescens
 Holcus lanatus
 Lolium perenne (near hut)
 Poa annua
 P. pratensis

Cirsium arvense
 C. vulgare
 Hieracium lepidulum
 H. sp.
 Hypochaeris radicata
 Mycelis muralis
 Taraxacum officinale s.l. (unc)

SEDGES

Carex ovalis

RUSHES

Juncus effusus

COMPOSITE HERBS

Achillea millefolium (unc)

DICOT HERBS OTHER THAN COMPOSITES

Cerastium fontanum ssp. vulgare
 Prunella vulgaris
 Rumex acetosella (unc)
 Sagina procumbens (unc)
 Trifolium repens
 Veronica setpyllifolia

No. of indigenous spp.: 384.
No. of adventive spp. : 26.

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