

HIGHER PLANTS (LYCOPODS, QUILLWORTS, FERNS, GYMNO-SPERMS AND FLOWERING PLANTS) OF DOUGLAS RANGE, † 250 N.W. NELSON, 3500-5413 FT (1060-1650 M)

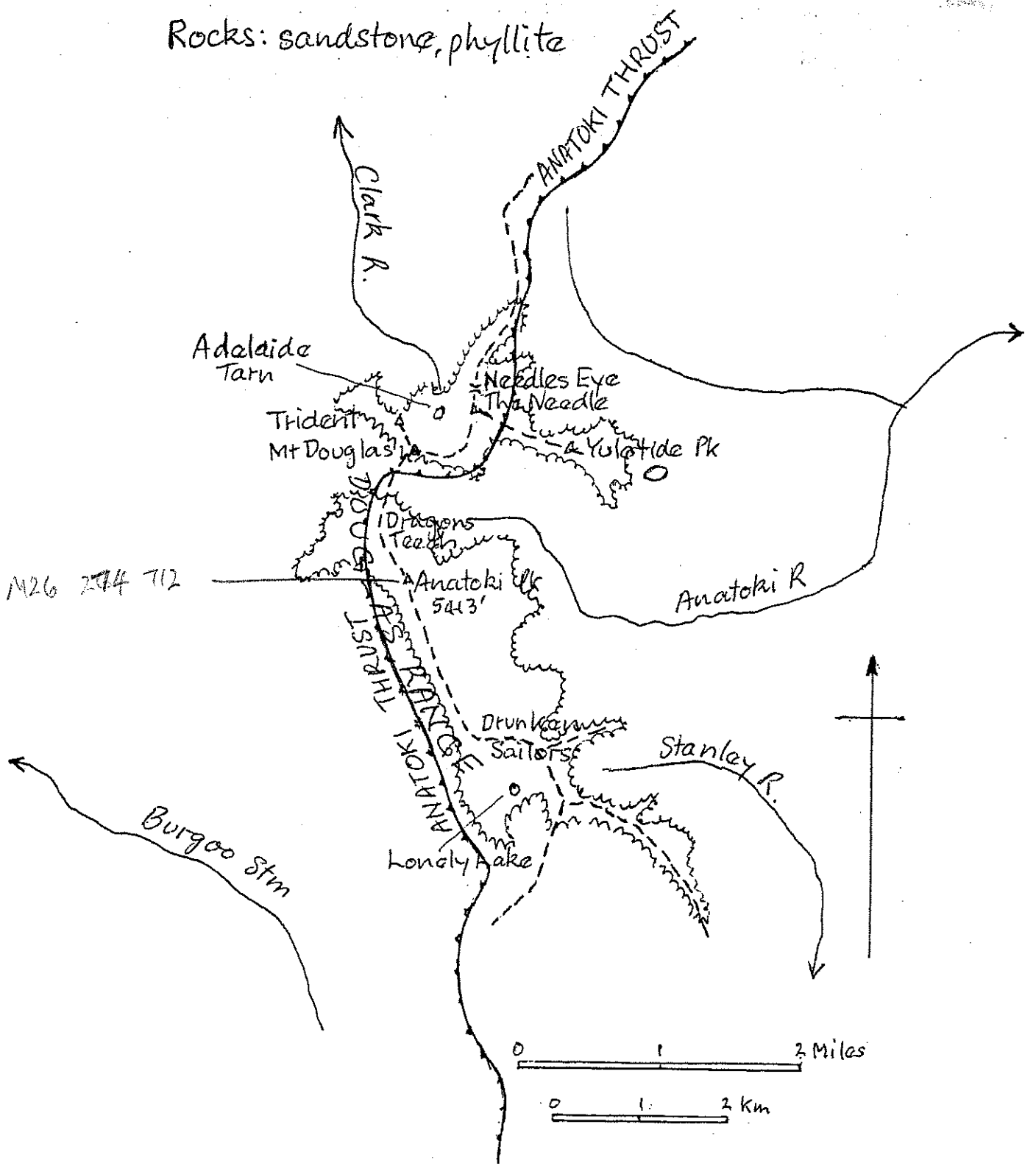
† (East of Anatoki Thrust)

A.P. Druce, Wellington, April 1983 (revised May 1984, May 1985, July 1985, July 1986, June 1988, Sept. 1990, June 1991, July 1992)

Highest point: Anatoki Peak, grid ref. S8 958687, alt. 5413 ft

(Based on visits Jan 1977, Apr 1983, March 1984, Feb 1985)

Rocks: sandstone, phyllite



Pseudowintera colorata
Urtica ferox

GRASSES

Poa cita ssp. *cita*
P. imbecilla

DICOT LIANES

Metrosideros colensoi (incl. *M.c.*
var. *pendens*)
Muehlenbeckia australis
Parsonsia heterophylla
Rubus cissoides var. (leaflets
broader than in var. *cissoides*)
R. schmidelioides var. *schmideli-*
oides

SEDGES

Carex solandri
Uncinia ferruginea
U. uncinata

COMPOSITE HERBS

Craspedia minor var. *minor*
(incl. *C. major*)
Lagenifera pomila
L. strangulata

FERNS

Adiantum cunninghamii
Asplenium bulbiferum
A. flaccidum
A. hookerianum
Blechnum chambersii
B. discolor
B. fluviatile agg.
B. membranaceum
Histiopteris incisa
Hymenophyllum bivalve
H. flabellatum
H. pulcherrimum
H. sanguinolentum agg.
Hypolepis rufobarbata
Leptopteris hymenophylloides
Pellaea rotundifolia
Phymatosorus pustulatus
Pneumatopteris pennigera
Polystichum richardii
P. silvaticum
P. vestitum

DICOT HERBS

Acaena ansetiniifolia
Cardamine sp. (*C. debilis* agg.)
("Narrow Petal" of Pritchard
1957)
Colobanthus apetalus (incl.
C.a. var. *alpinus*)
Epilobium nummularifolium
E. linnaeoides
Hydrocotyle elongata
H. heteromeria
H. moschata
Hypericum japonicum agg.
Nertera depressa (incl. *N. cunn-*
inghamii)
Stellaria decipiens (incl. *S. parvi-*
flora)
Urtica incisa
Viola lyallii

No. of species: 74.

Leptolepia novae-zelandiae

REFERENCE

Pritchard, G.G. 1957: Experimental
taxonomic studies on species of *Card-*
amine Linn. in N.Z. Trans. R. Soc.
NZ. 85: 75-89.

INDIGENOUS SPECIES

(unc) - uncommon or local

GYMNOSPERM TREES AND SHRUBS

Halocarpus bidwillii (unc)

H. biformis

Lepidothamnus laxifolius

L. intermedius XL *L. laxifolius*

Libocedrus bidwillii

Phyllocladus alpinus agg.

Podocarpus nivalis

DICOT TREES

Dracophyllum traversii (incl. *D. pyramidale*)

Grisebinia littoralis (unc)

Hoheria lyallii var. (*H. glabrata*) (unc)

Metrosideros umbellata

Nothofagus menziesii

N. solandri var. *cliffortioides*

Pseudopanax linearis (unc)

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

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

DICOT SHRUBS

Archeia traversii (incl. *A. t.* var. *australis*)

Aristotelia fruticosa var.

Brachyglottis adamsii

B. bidwillii var. *viridis*

B. rotundifolia var. (incl. *B. burchan* *anii* and *B. eckaynei*) (unc)

Cassinia vauvilliersii

Coprosma atropurpurea

C. cheesemanii ss.

C. ciliata ssp. *ciliata* (unc)

C. crenulata

C. depressa

C. foetidissima (unc)

C. papusilla ssp. *papusilla*

C. pseudocuneata ssp.

C. serrulata (unc)

C. sp. (i) (unnamed; aff. *C. pseudocuneata*) (low-growing shrubs with small, thick, arcuate lvs)

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

C. sp. (iii) (unnamed) (*C. parviflora* var. *dumosa* sensu Allan 1961, non *C. p.* var. *dumosa* Cheeseman)

C. cheesemanii X *C. ciliata* (unc)

Cyathodes dealbata (incl. *C.*

pumila)

C. ampetrifolia

C. sp. (*C. juniperina* agg.) (unc)

Dracophyllum longifolium var.
(incl. *D. filifolium* and *D. oliveri*)

D. pubescens var. *pubescens*

D. uniflorum

D. sp. (unnamed; aff. *D. kirki*) (low-growing shrub; branches often rooting; infl of few-fl'd racemes)

Epacris alpina

Exocarpus bidwillii

Gaultheria antipoda (unc)

G. crassa

G. depressa s.s.

G. sp. (unnamed; included in *G. depressa*, as var. *novae-zealandiae*, by Franklin 1962)

G. crassa X *G. sp.* (unnamed) (unc)

Hebe albicans var. *albicans*

H. canterburienensis

H. ciliolata

H. cockayneana

H. haastii var. (aff. var. *humilis*; see Moore 1961, p. 940)

H. macrantha var. *brachyphylla*

H. tetragona var. (*H. coarctata*)

H. topiaria

H. sp. (i) (*Leonohebe masoniae*)
(incl. *L. m.* var. *rotundata*)

H. sp. (ii) (*Leonohebe mooreae*)

H. tetragona X *H. sp.* (i) (unc)

Melichthysum intermedium var.

Leptospermum scoparium

Leucopogon fraseri s.s.

L. suaveolens (incl. *Cyathodes colensoi*) (unc)

Meliclytus alpinus s.s.

M. sp. (unnamed; aff. *M. alpinus*)
(prostrate shrubs; branches up

to 40cm long, often rooting; lvs linear-oblong) (unc)

Myrsine divaricata s.s.

M. nummularia

Oleaia arborescens (unc)

O. colensoi var. *colensoi*

O. lacunosa var. *lacunosa*

O. nummularifolia var. (lvs distinctly longer than broad, rather than suborbicular as in var. *nummularifolia*) (unc)

Pentachondra pumila

Pimelea suteri var. (*P. oreophila*)

(forms with densely hairy lvs, and forms with sparsely hairy lvs - occ. glabrous; the former us. in more fertile sites)

Pittosporum rigidum var. (*P. crassicaule*)

Pseudopanax anomalus

Pseudowintera traversii (unc)

DICOT LIANES AND RELATED

TRAILING PLANTS

Muehlenbeckia axillaris

Rubus parvus

LYCOPODS AND QUILLWORTS

Lycopodium australianum

L. fastigiatum

L. scariosum

L. varium (incl. *L. billardierei* and *L. novae-zelandiae*) (unc)

Isoetes alpinus (unc)

FERNS

Asplenium richardii (unc)

Blechnum fluviatile agg.

B. penna-matina

B. procerum

B. sp. (unnamed) (mountain sp.; lower pinnae not reduced in length; ("The Dunedin-Cass Variety" of Crookes 1963))

Cyathea colensoi

Cystopteris tasmanica

Gleichenia dicarpa (unc)

Grammitis billardierei

G. givenii (unc)

G. magellanica ssp. *nothofageti* (unc)

G. patagonica

G. poeppigiana

Histiopteris incisa (unc)

Hymenophyllum armstrongii (unc)

H. multifidum

H. peltatum (unc)

H. villosum

Hypolepis millefolium

Polystichum cystostegia

P. vestitum (unc)

Schizaea australis

Sticherus cunninghamii (unc)

ORCHIDS

L. Aporostylis bifolia

Chiloglottis cornuta (unc)

Corybas macranthus

C. trilobus ss.

Prasophyllum colensoi

Pterostylis venosa (unc)

Thelymitra cyanea (unc)

GRASSES

Agrostis dyeri s.s.

A. muelleriana

A. sp. (i) (unnamed; aff. *A. dyeri*) (panicle spreading, not contracted as in *A. dyeri*)

A. personata

Chionochloa australis

C. conspicua ssp. *conspicua*

C. pallens ssp. *pallens*

C. rubra ssp. *occulta*

C. sp. (unnamed) (*C. flavescens* auct. South Island, non *C. flavescens* Zotov)

C. australis X *C. sp.* (unc)

C. conspicua X *C. pallens* (unc)

C. pallens X *C. rubra*

Deschampsia novae-zelandiae

D. tenella

Deyeuxia aucklandica

Festuca sp. (aff. *F. matthewsii*)
(tufted but not tussock-forming;
glaucous)

Microchloa novae-zelandiae

H. recurvata (unc)

Koeleria cheesemani

K. sp. (*K. novozelandica* agg.)
(plants slender, rhizomatous)

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

Microlaena colensoi s.s.

Poa breviglumis

P. celsa

P. colensoi

P. dipsacea

P. kirkii

P. maia

P. sp. (i) (*P. novae-zelandiae* s.s. or
P. subvestita)

P. sp. (ii) (unnamed; aff. *P. novae-*
zelandiae)

Rytidosperma australe (unc)

R. gracile

R. nigricans

R. setifolium

Trisetum youngii

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

T. sp. (ii) (unnamed) (plants slender;
if sheath usually glabrous;
if blade flat, up to 2.5 mm wide,
margins smooth)

SEDGES

Carex acicularis

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

C. gaudichaudiana

C. libera

C. pyrenaica var. *cephalotes*

C. sinclairii

C. wakatipu s.s.

C. sp. (unnamed; aff. *C. coriacea*)
(lvs slender, bright green) (unc)

Carpha alpina s.s.

Eleocharis acuta (unc)

Gahnia procera

Isotopis aucklandica

I. caligenis (unc)

I. habita

Oreobolus impar (unc)

O. pectinatus

O. strictus

Schoenus pauciflorus s.s. ("slender
form" of Edgar 1970, p. 194)

Uncinia astonii

U. caespitosa var.

U. divaricata

U. ducei (unc)

U. filiformis

U. fuscovaginata var. (plants
glaucous)

U. involuta

U. nervosa s.s.

U. sp. (unnamed) (*U. affinis* sensu Hamlin 1959, non *U. riparia* var. *affinis* Col. ex Clarke; see Nootboom 1978)

RUSHES AND ALLIED PLANTS

Empodisma minus (unc)

Gaimardia setacea

Juncus antarcticus

J. novae-zelandiae

J. pusillus (unc)

Luzula colensoi (unc)

L. migrata

L. rufo s.s.

L. sp. (unnamed; included in *L. etnita*, as var. *petricana*, by Edgar 1966)

L. colensoi X *L. migrata* (unc)

Marsippospermum gracile

MONOCOT HERBS OTHER THAN ORCHIDS, GRASSES, SEDGES, RUSHES

Astelia graminea

A. linearis var. *linearis*

A. nervosa s.s.

A. nivicola s.s.

A. petriei

A. skottsbergii

A. sp. (i) (unnamed; aff. *A. nervosa*)

(lvs broad, not conspicuously white adaxially as in *A. nervosa*)

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

Bulbinella hookeri

Libertia peregrinans (unc)

Luzuriaga parviflora

Phormium cookianum

COMPOSITE HERBS

Abrotanella linearis s.s.

A. pusilla

Anaphalis sp. (*Helichrysum bellidoides* s.s.)

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

Brachyscome radicata

B. sinclairii s.s.

Celmisia alpina s.s.

C. bellidoides

C. dallii (unc)

C. gibbsii (unc)

C. hieracifolia ssp.

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

C. laticifolia

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

C. monroi ssp. (*C. cortacea* var. *lanceifolia*)

C. petriei

C. sessiliflora

C. similis

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

C. spectabilis ssp.

C. traversii

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

C. sp. (i) (unnamed; aff. *C. gracilentata*)
(lvs linear to linear-lanceolate,
up to 45 x 1.2 cm; lower surface
white with cottony hairs) (unc)

C. alpina x *C. sessiliflora* (unc)

C. sessiliflora x *C. traversii* (unc)

C. similis x *C. spectabilis* (unc)

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

{ *Leptinella sp. (i)* (*L. pyrethriifolia* agg.)
L. sp. (ii) (unnamed; included in *L.*
sp. valida, as ssp. *mediana*, by
Lloyd and Webb, 1987) }

Craspedia sp. (i) (unnamed; in-
cluded in *C. lanata*, as var.
elongata, by Allan 1961) (summer-
green; lvs elliptic-spathulate, white
or greenish white, both surfaces ±
covered in cottony hairs; fls white)

C. sp. (ii) (unnamed) (summer-
green; lvs green, both surfaces
clad in nonglandular, multicellular hairs;
margins faintly to distinctly white
with cottony hairs; fls white)

C. sp. (iii) (unnamed) (summer-green;
lvs green, both surfaces densely
clad in short non-glandular
hairs, or almost glabrous; fls white)

C. sp. (iv) (unnamed) (summer-green;
lvs green, both surfaces densely
clad in short glandular hairs < 0.3
mm long; lf margins ± faintly white
with cottony hairs; fls white) (unc)

Dolichoglottis scorzonoides
Gnaphalium laterale

Gnaphalium mackayi s.s.

G. paludosum s.s.

Lagenifera strangulata

Leucogenes grandiceps

L. g. x *Raoulia eximia* (unc)

Microseris scapigera var.

Raoulia eximia var. (*R. rubra*)

R. glabra (unc)

R. grandiflora var. *grandiflora*

Senecio waitauensis

Taraxacum magellanicum

DICOT HERBS OTHER THAN

COMPOSITES

Acaena anserinifolia

A. fissistipula (unc)

A. profundeincisa

Aciphylla anomala

A. colensoi var. *colensoi*

A. ferox

A. polita (a range of forms)

A. colensoi x *A. polita* (unc)

Actinotis novae-zelandiae (unc)

Anisotome aromatica

A. deltoidea

A. haastii

A. pilifera

A. sp. (i) (unnamed; included in

A. imbricata, as var. *prostrata*,
by Dawson 1961)

A. sp. (ii) (unnamed) (mat-forming,
us. in seepages; in fls up to 5 cm
tall)

- Callitriche petrici* ssp. *petrici* (unc) *E. margaretiae*
Cardamine sp. (i) (unnamed) (lvs mostly simple; blades ± reniform) *E. pernitens*
C. sp. (ii) (unnamed) ("Scree Race" of Pritchard 1957) *E. porphyrium*
C. sp. (iii) (*C. debilis* agg.) (cf. "Long Style" of Pritchard 1957) *E. pycnostachyum*
C. sp. (iv) (unnamed) *E. rubromarginatum*
Cheesemania latisiliqua (incl. *C. gibbsii*) *E. vernicosum* (Mason 1949)†
Colobanthus affinis *E.* sp. (i) (unnamed; aff. *E. glabellum*)
C. apetalus (incl. *C. a.* var. *alpinus*) *E.* sp. (ii) (unnamed; included in *E. brunnescens*, as ssp. *minutiflorum*, by Raven and Engelhorn, 1971)
C. canaliculatus *Euphrasia townsonii* ss.
C. wallii (incl. *C. masoniae*) (unc) *E.* sp. (i) (unnamed; aff. *E. petrici*)
Crassula sinclairii *E.* sp. (ii) (unnamed; aff. *E. laingii*)
Donatia novae-zelandiae *Forstera mackayi*
Drosera arcturi *F. tenella*
D. spathulata *F.* sp. (i) (unnamed; aff. *F. sedifolia*)
D. stenopetala *F.* sp. (ii) (unnamed)*
Elatine gratioloides agg. (unc) *Galium perposillum* ss.
Epilobium alsinoides ss. (unc) *Gentiana bellidifolia* var.
E. brunnescens ss. (unc) *G.* sp. (i) (aff. *G. corymbifera*)
E. chlorifolium *G. filipes* (unc)
E. cockayneanum *G. graciliifolia* (incl. *G. vernicosa*)
E. glabellum ss. *G. montana* (incl. *G. m.* var. *stolonifera*)
E. komarovianum (unc) *G. patula*, & *G. bellidifolia* var. *pulchella*
E. matthewsii (unc) *G. spenceri* (unc)
E. pernitens *G.* sp. (ii) (unnamed; aff. *G. bellidifolia*) (plants forming small to large patches; stems decumbent; fls large, creamy white)
E. pycnostachyum *Geranium* sp. (aff. *G. microphyllum*)
E. rubromarginatum *Geum leiospermum*
E. vernicosum (Mason 1949)† *G.* sp. (i) (*G. parviflorum* agg.) (stock)

* (lvs closely placed, not recurved, persisting well down stem & becoming thin & translucent; costa not apparent)

† plants probably *E. matthewsii*

Short; terminal leaflet about as long as broad; fls upto 13mm diam.)

- G. sp. (ii) (G. parviflorum agg.) (stock creeping and branching; terminal leaflet slightly longer than broad; fls up to 8mm diam.) (unc)
- Gingidia decipiens
- Gonocarpus aggregatus
- G. micranthus ssp. micranthus (unc)
- Hydrocotyle microphylla
- H. moschata (unc)
- H. sulcata
- Kelleria dieffenbachii (unc)
- K. laxa (unc)
- K. multiflora (unc)

Limosella lineata (unc)

Mentha cunninghamii

Neopaxia sp. (incl. Montia calycina and Claytonia australasica var. biflora)

- Myosotis forsteri (unc)
- M. lyallii (incl. M. elderti)
- M. macrantha
- M. sp. (M. australis agg.) (fls small, white) (unc)

Myriophyllum triphyllum (unc)

Nertera balfouriana

N. ciliata

N. sp. (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)

Oreostylidium subulatum (unc)

Ourisia caespitosa ssp. caespitosa

O. lactea ssp. lactea

O. macrocarpa ssp. calycina (unc)

O. sessilifolia ssp. sessilifolia

O. simpsonii

O. caespitosa X O. simpsonii (unc)

Oxalis magellanica

Parahebe decora (unc)

P. lyallii

Phyllachne colensoi var.

Plantago lanigera s.l. (incl. P. n3)

P. raoulii

P. uniflora

Pratia angulata agg.

P. macrodon (Mason 1949)

Psychrophila novaezealandiae

Ranunculus altus (unc)

R. cheesemanii var. cheesemanii

R. foliosus

R. gracilipes (unc)

R. insignis

R. membranifolius

R. verticillatus

R. sp. (unnamed; aff. *R. foliosus*)
(unc)

Schizaelema haastii s.s.

S. nitens

S. sp. (unnamed; included in *S. haastii*, as ssp. *cyanopetalum*, by Domin 1908)

Scleranthus brockiei

S. uniflorus

Stellaria decipiens (incl. *S. parviflora*)

S. gracilentata (unc)

Viola cunninghamii

V. filicaulis

Wahlenbergia albomarginata var. *albomarginata* (incl. *W. pygmaea* var. *laxa*, *W. brockiei*, and *W. simpsonii*)

ADVENTIVE SPECIES

GRASSES

Agrostis capillaris (H)

Anthoxanthum odoratum (H)

Festuca nigrescens

Holcus lanatus (H)

RUSHES

Juncus effusus (H)

COMPOSITE HERBS

Hypochoeris radicata

DICOT HERBS OTHER THAN

COMPOSITES

Cerastium fontanum ssp. *vulgare*

(H) - only near hut

Record not accepted: *Oxysia glandulosa* (Mason 1949).

No. of indigenous species: 354.

No. of adventive species: 7.

REFERENCES

- Allan, H.H. 1961: "Flora of New Zealand". Government Printer, Wellington. Vol. 1. 1085 pp.
- Crookes, M. 1963: "New Zealand Ferns". Ed. 6. Whitcombe and Tombs. 408 pp.
- Dawson, J.W. 1961: A revision of the genus Amsctome (Umbelliferae). Univ. Calif. Pub. Bot. 33: 1-98.
- Domin, K. 1908: Engl. Bot. Jb. 40: 573-85.
- Edgar, E. 1966: Luzula in New Zealand. N.Z. J. Bot. 4: 159-84.
- 1970: Cyperaceae. Pp. 167-285. In "Flora of New Zealand." Government Printer, Wellington. Vol. 2. 354 pp.
- Franklin, D.A. 1962: The Ericaceae in New Zealand (Gaultheria and Pernettya). Trans. R. Soc. N.Z. Bot. 1: 155-73.
- Hamlin, B.G. 1959: A revision of the genus Ucunia (Cyperaceae-Caricoidae) in New Zealand. Dom. Mus. Bull. 19. 106 pp.
- Lloyd, D.G.; Webb, C.J. 1987: The reinstatement of Leptinella at generic rank, & the status of the 'Cotuleae' (Asteraceae, Anthemideae). N.Z. J. Bot. 25: 99-105.
- Mason, R. 1949: Station records of indigenous plants. Trans. R. Soc. N.Z. 77(5): 175-80.
- Moore, L.B. 1961: In "Flora of New Zealand". Government Printer, Wellington. Vol. 1. 1085 pp.
- 1966: Australasian asteliads (Liliaceae). N.Z. J. Bot. 4: 201-40.
- Nooteboom, H.P. 1978: A taxonomic revision of the Malesian & Australian species of Ucunia (Cyperaceae). Blumea 24: 511-20.
- Nordenstam, B. 1978: Opera bot. 44: 1-84.
- Pritchard, G.G. 1957: Experimental taxonomic studies on species of Cardamine Linn. in New Zealand. Trans. R. Soc. N.Z. 85: 75-89.
- Raven, P.H.; Englehorn, T. 1971: New taxa and new combinations in Australasian Epilobium (Onagraceae). N.Z. J. Bot. 9: 345-50.
- Wardle, P. 1968: The taxonomy and distribution of the stipulate species of Pseudopanax in New Zealand. N.Z. J. Bot. 6: 226-36.
- Zotov, V.D. 1965: Grasses of the subantarctic islands of the New Zealand region. Rec. Dom. Mus. Wellington 5: 101-46.