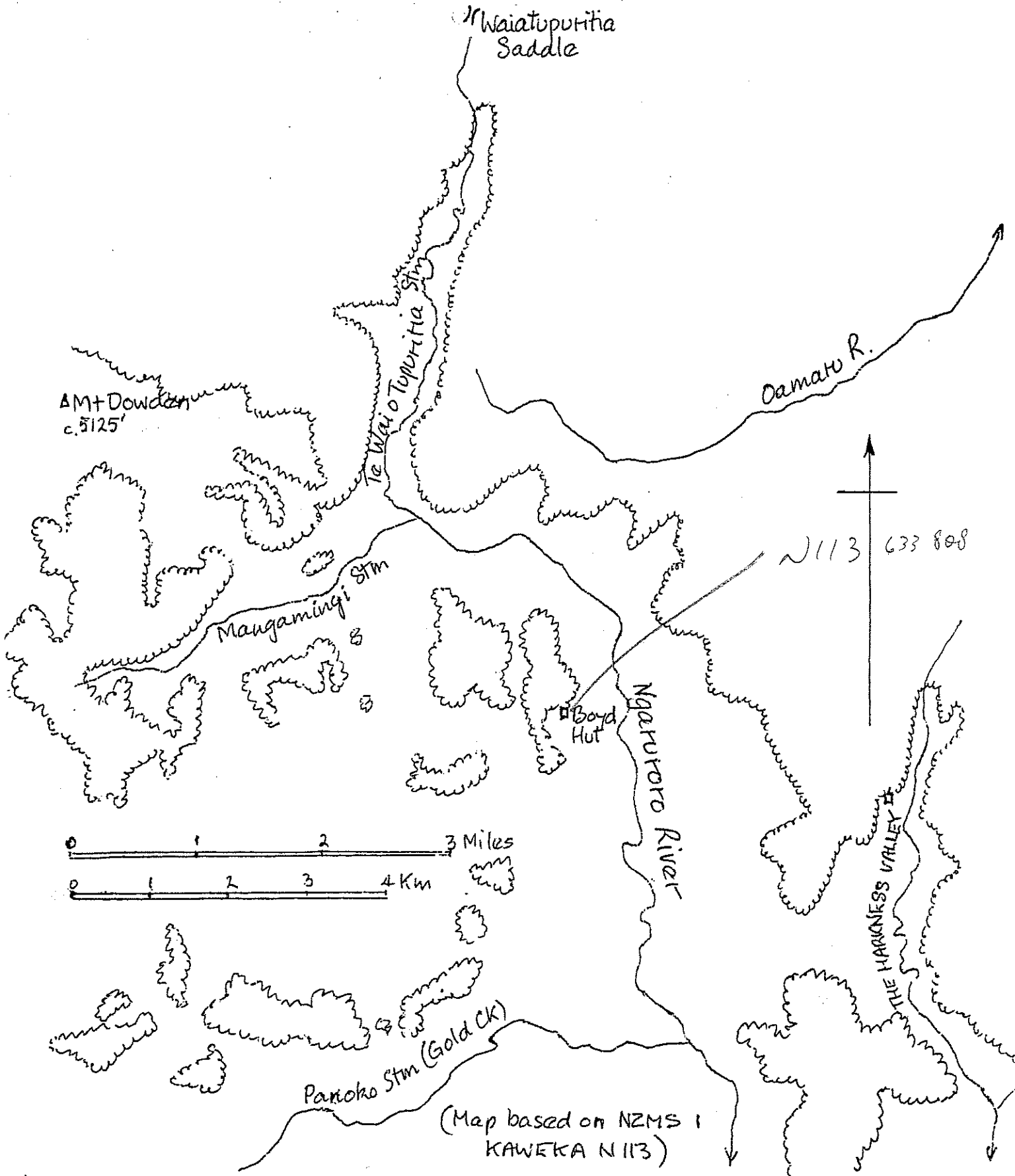


HIGHER PLANTS (LYCOPODS, FERNS, GYMNOSPERMS (263)
FLOWERING PLANTS) OF NGARURORO, MANGAMINGI, TE WAI O
TUPURITIA AND HARKNESS VALLEYS, KAIMANAWA MTS,
2900-3700 FT / 880-1120 M

A.P. Druce, Wellington, May 1985 (revised July 1985,
May 1986, Oct. 1986, Nov. 1986, June 1987, June 1990, July 1991)
Based on visits Dec. 1948-Jan. 1949, Feb. 1957, Dec. 1984, Feb. 1985)



(Map based on NZMS 1
KAWERA N 113)

INDIGENOUS SPECIES

GYMNOSPERM TREES AND SHRUBS

Halocarpus bidwillii
Lepidothamnus laxifolius
Phyllocladus alpinus

Podocarpus hallii (unc)
P. nivalis (unc)

MONOCOT TREES

Cordyline indivisa (unc)

DICOT TREES

Aristolelia serrata
Fuchsia excorticata (unc)
Griselinia littoralis
Nothofagus fusca
N. menziesii
N. solandri var. *cliffortioides*
Pittosporum tenuifolium ssp.
colensoi (unc)
Pseudopanax colensoi ss. (unc)
P. simplex (incl. *P. s.* var. *sinclairii*)

DICOT SHRUBS

Alepis flavida (unc)
Aristolelia fruticosa var. *microphylla*
Brachyglottis bidwillii var. *bidwillii*
Carmichaelia arborea var. (incl. *C.*
flagelliformis and *C. hookeri*)
Cassinia leptophylla var. (*C. vauvilliersii*)
Coprosma acerosa spp. (unc)
C. cheesemanii ss.
C. colensoi ss.
C. foetidissima
C. microcarpa
C. propinqua ssp. *propinqua* (incl.
C. p. var. *latiuscula*)

C. pseudocuneata ssp. *pseudocuneata*
C. rugosa ssp. *rugosa*
C. tenuifolia
C. sp. (i) (unnamed; included in *C.*
parviflora by Oliver, 1935, and others)
(If undersurface not minutely hairy
as is usual in *C. parviflora*; drupes
vs. unpigmented, occ. purplish red)
C. sp. (ii) (unnamed; aff. *C. cheesemanii*) (lvs broader than in *C.*
cheesemanii)
Coriaria pteridoides
Corokia cotoneaster var. *cotoneaster*
Cyathodes empetrifolia
C. sp. (C. juniperina egg.) (lvs small, vs.
 $< 1 \text{ cm} \times < 1 \text{ mm}$)
Diacophyllum recurvum
D. subulatum
D. recurvum x *D. subulatum*
Epacris alpina
Gaultheria sp. (unnamed; included in *G. depressa*, as var.
novae-zelandiae, by Franklin
1962)
G. sp. x *Permettya macrostigma* (unc)
Hebe macrocarpa var. (*H. corriganii*)
H. odora ss.
H. stricta var. *stricta* (?)
H. tetragona var. *tetragona*
H. venustula (incl. *H. brachysiphon*)
H. sp. (i) (unnamed; included in
in *H. stricta*, as var. *lata* and
as var. *egmontiana*, by
Mootz 1961)
H. sp. (ii) (*Veronica arborea*) [absent
from Mangamingi V.]
H. sp. (iii) (*Veronica squalida*)
H. venustula x *H. sp.* (*H. stricta*
or *H. sp. (i)*) (unc)

Meliccytus alpinus s.s. (unc)
Leptospermum scoparium var.
Leucopogon fraseri s.s.
Myrsine divaricata s.s.
Neomyrtus pedunculata
Oleaia arborescens (unc)
O. ilicifolia (unc)
O. nummularifolia var. *nummularifolia*
Pentachondra pumila
Peraxilla tetrapetala (unc)
Pimelea prostrata
Pittosporum anomalum (Te Wai o
 Tupuritia V.)

DICOT LANES AND RELATED TRAIL- ING PLANTS

Clematis forsteri (unc)

C. quadriacteolata (unc)
Muehlenbeckia axillaris
Rubus cissoides var. (leaflets
 narrower than in var. *cissoides*)

LYCOPODS

Lycopodium australianum (unc)
L. fastigiatum
L. scariosum

FERNS

Asplenium flabellifolium agg. (unc)
A. flaccidum
A. hookerianum (unc)
A. richardii (unc)
A. flaccidum x *A. hookerianum* (unc)
Blechnum chambersii
B. fluviatile agg.
B. penna-marina
B. procerum
B. vulcanicum (unc)
B. sp. (unnamed) (mountain sp.;
 lower pinnae not reduced) ("The
 Dunedin-Cass Variety" of Creeches
 1963)

Cystopteris tasmanica (unc)
Gleichenia dicarpa
Grammitis billardierei
G. magellanica ssp. *nothofageti*
G. patagonica (unc)
Histiopteris incisae (unc)
Hymenophyllum multifidum
H. ratum
H. rufescens (unc)
H. sp. (cf. *H. sanguinolentum* & *H. villosum*)
Hypolepis millefolium (unc)
Leptopteris superba (unc)
Ophioglossum coriaceum agg.
Paesia scaberula (unc)
Phymatosorus novae-zelandiae
Polystichum vestitum
Pteridium esculentum (unc)
Pyrosia cleagnifolia (unc)
Sticherus cunninghamii

ORCHIDS

Adenochilus gracilis (unc)
Aporostylis bifolia
Caladenia catenata
Chiloglottis cornuta
Corybas trilobus ss.
Gastrodia cunninghamii (unc)
Microtis oligantha (unc)
Prasophyllum colensoi
Pterostylis patens
Thelymitra cyanea (unc)
T. decora (unc)
T. hatchii
T. longitolla

GRASSES

Agrostis dyeri s.s. (unc)
A. muscosa
A. personata
Chionochloa rubra
C. pallens x *C. rubra* (unc)

Cortaderia fulvida
Deschampsia caespitosa var.
mactantha (unc)
D. tenella
Deyeuxia avenoides (incl. *D. a.* var.
brachyantha)
Dichelachne erinita (unc)
Elymus hardyoides
E. tenuis (unc)
E. sp. (aff. *E. rectisetus*) (Series 2,
 Group Waiouru, of Löve & Connor, 1982)
Festuca novae-zelandiae
F. sp. (unnamed; aff. *F. rubra*)
Heterochloe redolens
Lachnagrostis striata
L. sp. (undetermined)
Poa anceps ssp. *anceps*
P. breviglumis
P. cita ssp.
P. colensoi

P. pusilla
Rytidosperma clavatum (unc)
R. gracile
R. pulchrum (unc)
R. setifolium
Trisetum sp. (unnamed; aff. *T. ant-*
arcticum) (If sheath densely hairy;
 If blade margins with hairs)

C. testacea s.s.
C. dipsacea x *C. rubicunda*
Carpha alpina s.s.
Fleocharis acuta
E. gracilis
Isolepis caligenis (unc)
I. crassiuscula
I. habra (unc)
I. peltisii
I. subtilissima
Lepidosperma australe
Oreobolus pectinatus
Schoenus fluitans (unc)
S. pauciflorus s.s. (= "slender form"
 of Edgar 1970, p. 194)
Uncinia clavata
U. divaricata (unc)
U. egmontiana
U. filiformis (unc)
U. gracilentia
U. longiflorus (unc)
U. rubra
U. tupestis (incl. *U. angustifolia*)
U. zotovii
U. sp. (unnamed) (*U. affinis* sensu
 Hamlin 1959, non *U. tiparia* var.
affinis Col. ex Clarke) (unc)

SEDGES

Carex astonii
C. breviculmis
C. comans
C. coriacea
C. dipsacea var. (*C. tahoata*)
C. echinata var. (*C. stellulata* var.
australis)
C. rubicunda
C. secta s.s.
C. solandri

RUSHES

Centrolepis ciliata
Empodisma minus
Juncus antarcticus
J. griseiflorus
J. novae-zelandiae
J. pusillus
Luzula decipiens
L. migata
L. subclavata
L. sp. (unnamed; included in
L. picta, as var. *limosa*, by Edgar 1966)

MONOCOT HERBS OTHER THAN ORCHIDS, GRASSES, SEDGES, RUSHES

Astelia sp. (unnamed; aff. *A. nerv-*

osa) (lvs not conspicuously white ad-
axially as in *A. nervosa*) (unc)
Bulbinella hookeri
Herpolition novae-zelandiae
Luzuriaga parviflora (unc)
Phormium cookianum
Potamogeton cheesemani
P. suboblongus
Triglochin striata

COMPOSITE HERBS

Brachyscome radicata (unc)
Brachyglottis lagopus var. *lagopus*
Celmisia glandulosa var. *glandu-
losa* (incl. *C. g.* var. *latifolia*)
C. gracilentata var.
C. spectabilis ssp. *spectabilis*
C. sp. (unnamed; aff. *C. gracilentata*)
(plants strongly rhizomatous)

Craspedia minor var. *minor* (incl. *C. major*)

C. sp. (unnamed) (plants summer-green)
(glomerules 0.8-1.5 cm diam.)

Gnaphalium audax

G. delicatum

G. limosum s.s.

G. ruahnicum

G. traversii

G. sp. (cf. *G. paludosum*) (unc)

Anaphalis sp. (i) (unnamed; aff. *A. keriensis*)
(lvs shorter, and capitula smaller,
than in *A. keriensis*)

A. sp. (ii) (*Helichtysum bellidioides* s.s.)

A. sp. (iii) (unnamed; aff. *H. bellidioides*)
("H. alpinum" of Cochayne 1928)
(lvs and capitula larger than in
H. bellidioides)

Helichtysum filicaule

Lagenifera cuneata

L. pinnatifida

L. pumila

L. strangulata
Leptinella perpusilla (unc)
L. sp. (*L. squalida* ass.)

Microseris scapigera
Pseudognaphalium sp. (unnamed; aff.
luteoalbum) (mountain sp.; lvs mostly
oblong spatulate to narrowly oblong,
rounded)

Raoulia albosericea

R. glabra

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

R. sp. (unnamed; aff. *R. australis*)

Senecio glaucophyllus ssp. *toa*

S. rufiglandulosus var. *rufigland-
ulosus* (unc)

S. waitavensis

Vittadinea australis ass.

DICOT HERBS (OTHER THAN COMPOSITES)

Acaena ansetnifolia

A. microphylla s.s.

Aciphylla colensoi var. *colensoi*

A. sp. (unnamed; aff. *A. squarrosa*)

Anisotome aromatica

Cardamine sp. (a) (*C. debilis* ass.)
("Glossy Leaf" of Pritchard 1957)

C. sp. (b) (*C. debilis* ass.) ("long
Style" of Pritchard 1957)

C. sp. (c) (cf. *C. corymbosa*)

Centella uniflora (unc)

Dichondra sp. (cf. *D. brevifolia*)

Drosera arcturi

D. binata

D. spatulata

Epilobium alsinoides s.s.

E. astonii (unc)

E. atriplicifolium s.s.
E. brunnescens s.s.
E. chionanthum (unc)
E. hectorii s.s. (unc)
E. insulare (unc)
E. komarovianum (unc)
E. macropus (unc)
E. melanocaulon
E. microphyllum
E. heteroides
E. pallidiflorum (unc)
E. pedunculata agg.
E. pubens
E. tenuipes s.s.
E. sp. (unnamed; included in *E. brunnescens*, as ssp. *minutiflorum*, by Raven & Engelhorn, 1971)
Euphrasia cuneata
E. zelandica var. *<Galium perpusillum* s.s.
Gentiana grisebachii s.s.
G. sp. (unnamed; aff. *G. spenceri*) (discussed by Allan 1961, p. 769)
Geranium microphyllum
G. potentilloides var. *potentilloides*
G. sessiliflorum var. *novae-zeland*
G. potentilloides x *G. sessiliflorum* (?) (unc)
Glossostigma elatinooides
Gonocarpus micranthus ssp. *micranthus*
Gunnera dentata var. *dentata*
Hydrocotyle heteromeira
H. microphylla
H. moschata
H. sulcata
H. sp. (unnamed; included in *H. n. 3.*, as var. *montana*, by Kirk 1899)
Hypericum japonicum
H. sp. (unnamed) (smaller than *H. japonicum*)
Lilaeopsis ruthiana
Liparophyllum gunnii (unc)
Mentha cunninghamii (unc)
Montia fontana s.s.

Myosotis sp. (i) (cf. *M. tristata*)
Myosotis sp. (ii) (unnamed; included *M. pygmaea*, as var. *drucei*, by Moore 1961)
M. sp. (iii) (unnamed; aff. *M. pygmaea*)
Myriophyllum pedunculatum spp *novae-zelandicum*
M. propinquum
Neopaxia sp. (unnamed) (petals subacute; seeds dark red brown, slightly longer than wide)
Nertera battouriana
N. ciliata
N. sp. (unnamed; aff. *N. dichondrifolia*)
Oreomyrrhis colensoi s.s. (incl. var. *hispida* & *O. var. multifida*)
O. ramosa
Oreostylidium subulatum
Ourisia lactea ssp. *drucei* (unc)
Oxalis exilis
O. magellanica agg.
Parakebe hookeriana s.s. (?) (possibly *P. h. x P. catarractea*) (unc)
Plantago raoulii var. (vs narrowly elliptic)
P. triandra s.s.
Pratia angulata agg.
Ranunculus glabrifolius
R. membranifolius
R. reflexus
R. rayi
R. simulans
R. sp. (unnamed; included in *R. lappaceus*, as var. *macrophyllus*, by Kirk 1899) (unc)
Rumex flexuosus
Schizaelema colensoi
S. nitens
Scleranthus uniflorus
Stackhousia minima

Stellaria decipiens (incl. *S. parviflora*)

Urtica inaequalis

Viola cunninghamii

V. filicaulis

Wahlenbergia albomarginata var. *pygmaea*

W. rupestris

ADVENTIVE SPECIES

(H) - near huts and airstrips only

GRASSES

Agrostis capillaris

Alopecurus caryophyllus

Anthoxanthum odoratum

Cynodon dactylon (H)

Dactylis glomerata (H) (unc)

Festuca nigrescens

Holcus lanatus

Poa annua (H)

P. pratensis

Vulpia bromoides

SEDGES

Carex ovalis

RUSHES

Juncus articulatus

J. effusus

J. tenuis

COMPOSITE HERBS

Achillea millefolium (H)

Bellis perennis (unc)

Cirsium arvense

C. vulgare

Crepis capillaris

↑ *Hypochaeris radicata*

↓ *Mycelis muralis*

↓ *Hieracium pilosella*

Senecio jacobaea

S. sylvaticus (unc)

Taraxacum officinale s.l.

DICOT HERBS OTHER THAN COMPOSITES

Cerastium fontanum ssp. *vulgare*

Epilobium ciliatum (unc)

Hypericum humifusum (unc)

Linum catharticum

Lotus pedunculatus

Plantago lanceolata (H)

P. major (unc)

Prunella vulgaris

Rumex acetosella

Sagina procumbens

Trifolium dubium

T. repens

Veronica sp. (undetermined)

No. of indigenous spp.: 307.

No. of adventive spp.: 38.

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