

Bush remnant beside
Makauka Stream beside
Gladstone Rd., nr Levin

List by
A. Townsend

On bibliography

Esplanade Reserve
Native Species

Study Area A
GRID REFERENCE: NZMS ~~225~~ 092 587
S 260

Podocarps
Prumnopitys ferruginea Miro
Dacrydium cupressinum

Lycopods
Lycopodium uarium
Lycopodium scariosum
Lycopodium volubile
mesipeteris tannensis

Ferns
Dicksonia squarrosa
Pheumatopteris pennigera
Pteridium esculentum
Asplenium bulbiferum var bulbiforum
Phymatosorus scandens
Blechnum chambersii
heptopteris hymenophylloides
Phymatosorus pastulosus
Hymenophyllum reudutum
Hymenophyllum dilatum
Blechnum discolor
Hymenophyllum flabellatum
Hymenophyllum bivalve
Asplenium flaccidum
Cyathea dealbata
Cyathea smithii
Asplenium polyodon
Hymenophyllum demissum
Trichomanes reniforme
Paesia scaberula
Blechnum fluviatile
Rumonra adiantiformis
Pyrrosia eleagnifolia

Dicot: trees and shrubs
Melicytus ramiflorus subsp. Ramiflorus
Coprosma rotundifolia
Coprosma rhamnoides
Coprosma grandifolia
Geniostoma rupestre var hgustnfolium
Aristotelia serrata

Carpodetus serratus
Elaeocarpus dentatus
Pennantia corymbosa
Schefflera digitat
Coprosma lucida
Hedycarya arborea
Bielsch media tawa
Nestegis lanceolaturs
Weinmannia racemosa
Brachyglottis repanda
Knightia excelsa
Coriaria arborea
Gaultheria antipoda
Myrsine australis
Pittosporum eugenoides
Aebe stricta var stricta
Myrsine sahchina
Pseudopanax crassifolius
Griselinia lucida
Pseudopanax arboreus
Leptospermum scoparium

Dicot herbs
Nertera depressa
Acaena anserinifolia
Gnaphalium keriense
gunnera monoica
Gnaphalium gumnosephalum
Pratia angulata
Hydrocotyle novae-zeelandiae
Epilobium nummularifolium
Hydrocotyle a moschata

Dicot lianes
Rubus schmidelioides var subpauperatus
Metrosideros perforata
Metrosideros diffusa
Metrosideros fulgens
Parorisa heterophylla

Monocot lianes
Ripogonum scandens

<u>Freycinettia baueriana</u> subsp <u>banksii</u>	<u>Pinus radiata</u>
Rashes	
<u>Juncus gregiflorus</u>	(<u>Macrocarpa</u>)
Orchids	Dicot shrubs
<u>Dendrobium cunninghamii</u>	<u>Ulex europaeus</u>
<u>Earina autumnalis</u>	
<u>Microtis unifoliat</u>	Dicot herbs
<u>Thelymitra longifoliat</u>	<u>Digitalis purpereus</u>
<u>Peterostylis montanat</u>	<u>Prunella vulgaris</u>
<u>Pterostylis banksii</u> var <u>banksii</u> +	<u>Trifolium repens</u>
Sedges	<u>Taraxacum officinale</u>
<u>Uncinia uncinata</u>	<u>Plantago lancedata</u>
<u>Uncinia gracilenta</u>	<u>Conyza albida</u>
Grasses	<u>Lotus pedunculatus</u>
<u>Microlaenia avenacea</u>	Rumex (sheep sorrel)
<u>Cortaderia toetoe</u>	<u>Ranunculus repens</u>
Monocot herbs	<u>Oxalis</u> (white weed)
<u>Dianella nigra</u>	
<u>Astelia solandri</u>	Dicot lianes
<u>Colospermum hastatum</u>	<u>Rubus fruticosus</u> agg
<u>Astelia fragans</u> +	
84 native spp	Other Monocots
+ = noted on previous trips in the area, throughout the 1980's	<u>Crocosmia x crocosmiiflora</u> (montbretia)
Introduced Species	Grasses
	<u>Dactylis glomerata</u>
	<u>Festuca arundinacea</u>
	<u>Lolium perenne</u>
	18 naturalised spp

Summary

STUDY AREA A:

- Study Area A contains vegetation typical of the lowland western Tararua Range, and even though it is relatively small (ha) it has a relatively high diversity due to the presence of riparian habitat as well as forest (and pasture) habitats.
- The presence of Powelliphanta traversii is not unexpected as it is known from a number of sites up-stream.
- A number of weed species one present, and include montbretia, gorse and lotus, as the most significant threat to the study area's naturalness. Fantail, grey warbler, whitehead, silveryeye, magpie and blackbird were heard or observed.
- Vegetation comprises tawa-kamahi forest with occasional rewarewa and scattered hinau as the major components in the canopy of the forest vegetation type. A few examples of rimu and miro are also presented, but the vegetation is not old enough to contain any emergents.

A herbfield comprising (Gnaphalium keriense) / Nortera depressa - Blechnum Chambersii - moss dominates the rocks and slip faces to 2m above the water line. A small area of pasture is also present.

Study Area	A	B	C	D
Size	Low	High	Moderate	Mod-high
Species Richness (Diversity)	87 native spp Moderate high	111 native spp high	80 native spp Moderate-high	69 native spp Moderate
Naturalness	Moderate	Mod-high	High	Moderate-high
Rarity/special features	High confirmed <u>Powelliphanta</u> <u>traversii</u> records*	High <u>Molopsida</u> <u>cordipennes</u> **	Don't know	Don't know
Buffering	Low	Moderate-high	High	Moderate
Representativeness	Mod-high	Mod-high	High	Moderate-high
Corridor	HIGH	HIGH	HIGH	LOW
Rank	..	2	1	3

* Powelliphanta traversii was recorded here. One dead and possibly possum damaged shell was collected for measurement. No other specimens were recorded.

** Molopsida cordipennes is a ground beetle (Carabidae), discovered and described from Mount Quoin in 1912. Circa five specimens have been subsequently found in the western part of Tararua e.d. and Manawatu Gorge south ed. One of these records was from study area B. (J I Townsend, pers comm).

Threats	A	B	C	D
Browsing animals	High: Cattle, Sheep, deer possums	Moderate: Deer, possums	Moderate: Deer, possums	Moderate: Deer, possums
Needs	Moderate-high 18 naturalised spp. This area contains pasture and river gravels. These areas contain a number of weed species	Moderate-high 25 naturalised spp. Presence of significant weed threats eg <u>Borberis darwinii</u>	low/moderate 11 naturalised spp	Moderate 7 naturalised spp