

Forest block between Gladstone Rd
and Kohitee Pine Forest, nr Levin.

Study Area B
Area 33ha

GRID REF NZMS 260 ~~00~~ 090590
17/7/96

S25

Podocarps	<i>Clematis paniculata</i>
<i>Dacrydium cupressinum</i>	<i>Metrosideros diffusa</i>
<i>Prumnopitys ferruginea</i>	<i>Metrosideros fulgens</i>
Lycopods	<i>Metrosideros perforata</i>
<i>Lycopodium scariosum</i>	<i>Parsonsia heterophylla</i>
<i>Lycopodium volubile</i>	<i>Rubus cissoides</i>
<i>Lycopodium varium</i>	Dicot trees and shrubs
<i>Tmesipteris tannensis</i>	<i>Aristotelia serrata</i>
Ferns	<i>Beilschmiedia tarawai</i>
<i>Asplenium bulbiferum</i> var <i>bulbiferum</i>	<i>Brachyglottis repanda</i>
<i>Asplenium flaccidum</i>	<i>Carpodetus serratus</i>
<i>Asplenium oblongifolium</i>	<i>Cassinia leptophylla</i>
<i>Blechnum chambersii</i>	<i>Coprosma foetidissima</i>
<i>Blechnum colensoi</i>	<i>Coprosma grandifolia</i>
<i>Blechnum discolor</i>	<i>Coprosma lucida</i>
<i>Blechnum ex. capense</i>	<i>Coprosma rhamnoides</i>
<i>Blechnum fluviatile</i>	<i>Coprosma robusta</i>
<i>Cyathea cunninghamii</i>	<i>Coriaria arborea</i>
<i>Cyathea medullaris</i>	<i>Dracophyllum longifolium</i> +
<i>Dicksonia squarrose</i>	<i>Elaeocarpus dentatus</i>
<i>Grammitis billardieri</i>	<i>Fuchsia excorticata</i>
<i>Hymenophyllum dilatatum</i>	<i>Faultheria antipoda</i>
<i>Hymenophyllum ferrugineum</i>	<i>Geniostoma rupestre</i> var. <i>ligustrifolium</i>
<i>Hymenophyllum multifidum</i>	<i>Griselinia lucida</i>
<i>Hymenophyllum pulcherrimum</i>	<i>Hebe stricta</i> var. <i>stricta</i>
<i>Lastreopsis hispida</i>	<i>Hedycarya arborea</i>
<i>Leptopteris hymenophylloides</i>	<i>Knightia excelsa</i>
<i>Phymatosorus pustulosus</i>	<i>Laurelia novaezealandiae</i>
<i>Phymatosorus scandens</i>	<i>Leptospermum scoparium</i>
<i>Pneumatopteris pennigera</i>	<i>Lophomyrtus bullata</i>
<i>Pteridium esculentum</i>	<i>Macropiper excelsum</i>
<i>Pyrrosia eleagnifolia</i>	<i>Melicytus ramiflorus</i> subsp. <i>Ramiflorus</i>
<i>Rumohra adiantiformis</i>	<i>Nestegis lanceolata</i>
<i>Sticherus cunninghamii</i>	<i>Olearia rani</i>
<i>Trichomanes endlicherianum</i>	<i>Pittosporum eugenoides</i>
<i>Trichomanes reniforme</i>	<i>Pseudopanax arboreus</i>
<i>Trichomanes venosum</i>	<i>Pseudopanax crassifolius</i>
Dicot Lianes	<i>Pseudowintera axillaris</i>
<i>Clematis forsterii</i>	<i>Pseudowintera colensoi</i>
	<i>Schefflera digitata</i>
	<i>Weinmannia racemosa</i>

Monocot. Trees	<i>Earina mucronata</i>
<i>Rhopalostylus sapida</i>	<i>Microtis unifolia</i>
Monocot. Lianes	<i>Orthoceras strictum</i>
<i>Ripogonum scandens</i>	<i>Pterostylis banksii</i> var. <i>Banksii</i> +
<i>Freyanettia baueriana</i> subsp <i>banksii</i>	<i>Pterostylis montana</i> +
<i>Molopsida cordipennes</i>	<i>Thelymitra hatchii?</i>
Dicot. Herbs	<i>Thelymitra longifolia</i>
<i>Acaena anserinifolia</i>	<i>Thelymitra pauciflora</i> +
<i>Epilobium</i> sp	ADVENTIVE SPECIES
<i>Galium propinquum</i>	Dicot. trees and shrubs
<i>Gnaphalium luteo-album</i>	<i>Cotoneaster franchetii</i>
<i>Gunnera monoica</i>	<i>Cytisus monspessianus</i>
<i>Hydrocotyle elongatum</i>	<i>Cytisus scoparius</i>
<i>Hydrocotyle novae-zeelandiae</i>	<i>Lupinus arboreus</i>
<i>Ranunculus hirtus</i>	<i>Ulex europaeus</i>
Monocot. Herbs	Dicot. Lianes
<i>Astelia fragrans</i>	<i>Rubus fruticosus</i> agg.
<i>Astelia solandri</i>	Dicot. Herbs
<i>Dianella nigra</i>	<i>Callitricha stagnalis</i>
Grasses	<i>Cirsium arvense</i>
<i>Cortaderia toetoe</i>	<i>Cirsium vulgare</i>
<i>Microlaenia avenacea</i>	<i>Conyza albida</i>
Rushes	<i>Digitalis purpureus</i>
<i>Juncus gregiflorus</i>	<i>Lotus pedunculatus</i>
<i>Juncus procerus</i>	<i>Mimulus moschatus</i>
Sedges	<i>Orobanche minor</i>
<i>Carex geminata</i>	<i>Plantago lanceolatus</i>
<i>Carex secta</i>	<i>Prunella vulgaris</i>
<i>Carex virgata</i>	<i>Ranunculus repens</i>
<i>Gahnia pauciflora</i>	<i>Solanum nigrum</i>
<i>Uncinia gracilenta</i>	<i>Taraxacum officinale</i>
<i>Uncinia uncinata</i>	Rushes
Orchids	<i>Juncus effusus</i>
<i>Corybas macranthus</i> +	<i>Juncus acuminatus</i>
<i>Corybas orbiculatus</i> +	Grasses
<i>Earina autumnalis</i>	<i>Agrostis capillaris</i>
	<i>Dactylis glomerata</i>
	<i>Festuca arundinacea</i>
	<i>Holcus lanatus</i>

STUDY AREA B

B is a 33ha block of forest between Gladstone Road and the proposed covenant (study area c) in Kohitere forest. Vegetation present is typical of steep hill-side veg throughout the western Tararua Range. The study area has a high species diversity (relative to the other sites) due to its large size and history of modification. Very few podocarps are present in the canopy, and no emergent podocarps were noted, suggesting logging has occurred at some stage. The southern part of the study area is dominated by a fernland (comprising Dickserna squarrosa / Blechnum ex capense) which has regenerated as a result of felling or fire.

The presence of a ground beetle (Molopsida cordipennes) J.I.T. pers comm is significant as it has only been recorded half a dozen times since its description in 1912.

Powelliphanta traversii was not noted here, however this may be a result of the poor searching conditions rather than its absence. Ian Cooksley (pers comm) thought that the snail would be throughout all these study areas. Grey warbler, fantail, silvereye, paradise duck and kereru were observed or heard in the study area. Evidence of possums and was also noted.

This site was the only one to record (Rhopalostylus sapida) nikau.

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