

SOME INDIGENOUS VASCULAR PLANTS OF GOLLANS VALLEY TRUE RIGHT TRIBUTARY CATCHMENT, S.N.A. SITE 36, CENTRED ON NZMS 260 R27 MAP WELLINGTON, G.R. 685859; LIST COMPILED ON 24 JUNE 1997 BY B.J. MITCALFE AND J.C. HORNE.

BOTANICAL NAMES	MAORI NAMES	COMMON NAMES
GYMNOSPERM TREES		
<i>Dacrydium cupressinum</i>	rimu	rimu
<i>Dacrycarpus dacrydioides</i>	kahikatea	kahikatea
<i>Prumnopitys ferruginea</i>	miro	miro
<i>Prumnopitys taxifolia</i>	mataii	matai
MONOCOT TREES		
<i>Cordyline australis</i>	tii koouka	cabbage tree
<i>Cordyline banksii</i>	tii ngahere	bush cabbage tree
DICOT TREES AND SHRUBS		
<i>Aristotelia serrata</i>	makomako	wineberry
<i>Brachyglottis repanda</i>	rangiora	rangiora
<i>Carpodetus serratus</i>	putaputaweetaa	marble leaf
<i>Coprosma areolata</i>		
<i>Coprosma grandifolia</i>	kaanono	kanono
<i>Coprosma lucida</i>	karamu	karamu
<i>Coprosma propinqua</i>		
<i>Coprosma rhamnoides</i>		
<i>Cyathodes juniperina</i>	mingimingi	mingimingi
<i>Elaeocarpus dentatus</i>	hiinau	hiinau
<i>Gaultheria antipoda</i>	taawiniwini	
<i>Geniostoma rupestre</i>		
<i>ssp. ligustrifolium</i>	hangehange	hangehange
<i>Griselinia lucida</i>	naapuka	broadleaf
<i>Hedycarya arborea</i>	porokaiwhiri	pigeonwood
<i>Knightea excelsa</i>	rewarewa	rewarewa
<i>Kunzea ericoides</i>	kaanuka	kanuka
<i>Leptospermum scoparium</i>	maanuka	manuka
<i>Laurelia novae-zealandiae</i>	pukatea	pukatea
<i>Leucopogon fasciculatus</i>	mingimingi	mingimingi
<i>Lophomyrtus bullata</i>	ramarama	ramarama
<i>Macropiper excelsum</i>	kawakawa	kawakawa
<i>Melicytus ramiflorus</i>	maahoe	mahoe
<i>Myoporum laetum</i>	ngaio	ngaio
<i>Myrsine australis</i>	mapou	mapou
<i>Nothofagus solandri</i>		
<i>var. solandri</i>	tawhairauriki	black beech
<i>Nothofagus truncata</i>	tawhairaunui	hard beech
<i>Olearia paniculata</i>	akiraho	akiraho
<i>Olearia rani</i>	heketara	heketara
<i>Olearia solandri</i>		

Ozothamnus leptophyllus	tauhinu	tauhinu
Pennantia corymbosa	kaikomako	kaikomako
Pseudopanax crassifolius	horoeka	lancewood
Schefflera digitata	patee	seven finger
Weinmannia racemosa	kaamahi	kamahi

MONOCOT LIANES

Freycinetia baueriana		
ssp. banksii	kiekie	kiekie
Ripogonum scandens	kareao	supplejack

DICOT LIANES

Clematis foetida		
Clematis paniculata	puawaananga	
Metrosideros diffusa	aka	white climbing rata
Metrosideros perforata	aka tea	clinging rata
Muehlenbeckia australis	poohuehue	poohuehue
Parsonsia heterophylla	kaihua	parsonsia
Rubus cissoides	taataraamo	bush lawyer
Tetragonia trigyna	kookihi	NZ spinach

FERNS

Adiantum cunninghamii	huruhuru tapairu	maidenhair
Asplenium bulbiferum	manamana	hen & chickens
Asplenium flabellifolium		necklace fern
Asplenium flaccidum	makawe o Raukatauri	hanging spleenwort
Asplenium hookerianum		
Asplenium oblongifolium	huruhuruwhenua	shining spleenwort
Blechnum chambersii	nini	
Blechnum discolor	piupiu	crown fern
Blechnum filiforme	paanako	climbing thread fern
Blechnum fluviatile	kiwakiwa	
Blechnum membranaceum		
Blechnum minus	kiokio	swamp kiokio
Blechnum procerum		
Blechnum "lowland"	kiokio	kiokio
Cyathea dealbata	ponga	ponga
Cyathea medullaris	mamaku	mamaku
Dicksonia squarrosa	whেকii	whেকii
Grammitis ciliata		
Hymenophyllum demissum	mouku	filmy fern
Hymenophyllum flabellatum	"	"
Hymenophyllum revolutum	"	"
Hypolepis ambigua		
Lastreopsis glabella		
Lastreopsis hispida		
Leptopteris hymenophylloides	heruheru	single crepe fern
Paesia scaberula	maataa	ring fern
Pellaea rotundifolia	tarawera	

Phymatosorus pustulatus	koowaowao	hound's tongue
Pneumatopteris pennigera	paakau	gully fern
Polystichum richardii	pikopiko	shield fern
Pteridium esculentum	raarahu	bracken
Pteris macilenta	titipo	brake
Pteris tremula	turawera	shaking brake
Rumohra adiantiformis	karawhiu	
Tmesipteris elongata		fork fern
Trichomanes venosum		veined bristle fern

ORCHIDS

Pterostylis alobula	tutukiwi	greenhood
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GRASSES

Cortaderia toetoe	toetoe	toetoe
Microlaena avenacea		bush rice grass
Microlaena stipoides		

SEDGES

Carex flagellifera		
Carex secta	puurei	
Carex virgata		
Cyperus ustulatus	upoko tangata	
Gahnia setifolia		
Gahnia setifolia		
Uncinia uncinata	matau a Maui	hook grass
Uncinia banksii		

RUSHES

Isolepis nodosa		
Juncus pallidus	wii	
Juncus sp.	"	

MONOCOT HERBS

Astelia fragrans	kakaha	
Phormium tenax	harakeke	swamp flax

DICOT HERBS

Parietaria debilis		
Stellaria decipiens	kohukohu	chickweed

ADVENTIVE PLANTS

Digitalis purpurea		foxglove
Cedronella canariensis		Balm of Gilead
Ulex europaeus		

BIRDS

piwaiwaka	fantail	
riroriro	greywarbler	

NOTES ON A RAPID RECONNAISSANCE OF WRY HILL/GOLLANS TRUE RIGHT TRIBUTARY CATCHMENT, (PART) S.N.A. SITE 36.

(Site 28b in the Biological Resources Survey, 1984)

Adverse weather resulted in only part of the Site 36 being surveyed. We were able to spend only a few hours on the site and permission to return was not given. The area shown on the accompanying map is the area covered on the day.

The wetland area on the east (True Left) side of Gollans Stream, included in the current SNA boundary and marked 14 on the map was not surveyed.

BOUNDARY

PART OF SITE 36 IS CONSIDERED SIGNIFICANT UNDER THE TERMS OF THE RESOURCE MANAGEMENT ACT 1991.

The boundary needs to be adjusted to include only those parts indicated on the map as significant.

HISTORY

Farming, burning and landfilling have taken place in parts of Site 36. In 1908 fire swept up Gollans Valley and over into Days Bay.

FLORA AND FAUNA

The most significant vegetation surveyed is in a catchment centred on NZMS 260 Map R27 PtQ27 Wellington, GR 685859, a True Right tributary of Gollans Stream. It comprises a Carex/Cyperus wetland, the podocarp/broadleaf forest which almost surrounds it, and the black beech/kanuka forest on the spurs above. It is continuous with the Butterfly Creek catchment vegetation, and that of the East Harbour Regional Park. It contains pukatea (to est. 14 metres), some very large (probably original) black beech and hinau, hung with luxuriant lianes such as kiekie, an understorey of e.g. ramarama, kawakawa, patee and hangehange, and groundcover of at least 36 fern species.

Almost all the Wry Hill section of Site 36 is gorse-covered however mamaku, rangiora, mahoe and other early successional species are colonising the gullies. Indigenous trees and shrubs such as karaka, pidgeonwood, mahoe, manuka and kanuka, fringe a small tributary immediately above and northeast of the capped tip. This vegetation is continuous with that of the upper reaches of the significant catchment mentioned above, centred on GR 685859, and is the subject of a recommendation below..

Gollans valley floor and most of the lower slopes are under pasture, with tauhinu invading the slopes and rushes occupying the wetter sites.

Regarding Gollans Stream fauna, to quote from the East Harbour Management Plan, 1995: "Gollans Stream has national importance in terms of the Wild and Scenic Rivers Policy, 1979 as a "Special Natural Feature Area"...It presents unique opportunities for scientific study

which depends on the maintenance of the existing water regime, river bed or riparian strip. The stream contains 8 species of native fish: giant kokopu, banded kokopu, inanga, long-finned eel, short-finned eel, common bully, giant bully and red-finned bully (NIWA records)...Giant kokopu is regionally rare (Stephenson 1977). *This and other species, while spending most of their life cycle in the upper reaches of Gollans Stream*, almost certainly use the lake in part of their life cycle and thus require the wetland reaches to facilitate movement between the two areas. Koura, the freshwater crayfish is also present in the Gollans Valley catchment." (Italics B. Mitcalfe's).

Some indigenous landsnails, (terrestrial invertebrates) have been found in Lowry Bay in generally similar terrain and vegetation to that of the site under consideration. It is possible that they are present in the deep, moist leaf litter of that site, but in the time available it was not possible to conduct a search.

RARITY/REPRESENTATIVENESS/DIVERSITY

The representative association centred on GR 685859, a wetland with podocarp/beechn/broadleaved forest vegetation, is a very uncommon type outside of Reserves in the Region and semi-swamp forest itself is regionally rare. Lowland beech forest, in this instance black, with some hard, beech, is probably the most uncommon forest type in the Tararua Ecological Region.

The presence of matai, miro, kahikatea and rimu, i.e. four out of the five Wellington podocarps, makes this small site unusual, especially since among podocarps, matai is not common in Wellington ecosystems. Totara would have been logged from there in early times.

A full survey would doubtless add considerably to the list of plant species. The understorey and ground cover is reasonably diverse, and there is significant diversity of habitat ranging from swamp to dry, beech-covered spur crests.

The significant diversity of native fish species has been referred to above, and was also mentioned in the Biological Resources Survey of 1984.

DISTINCTIVENESS/LANDSCAPE VALUES

This ecosystem stands out as being very different from its pastoral surroundings to the south and east, with its tall, indigenous trees and largely-unmodified swamp vegetation. On the steep slopes above, the dense beech forest forms an appropriate backdrop, completing a natural, uninterrupted, ecological sequence.

The ecotone of indigenous swamp vegetation grading into tall podocarps and pukatea, rising to dense beech on steep spurs, offers pleasing textural contrast and is ecologically appropriate, representing on a small scale what Gollans Valley must have looked like in earlier times.

CONTINUITY/LINKAGE

As the Wellington topographical map (NZMS 260 R27 R28 PtQ27) shows, the vegetation in this catchment is continuous with that to the north, extending into East Harbour Regional Park, thus, while it has obvious intrinsic value, it also has an important linking and buffering role.

Some old discs were seen, marking a route around the wetland and continuing up into the catchment, evidence of earlier recreational use to/from Gollans Valley.

CULTURAL

The presence of kiekie is of significance to iwi.

ECOLOGICAL RESTORATION/SUSTAINABILITY

This ecosystem has high restoration potential. It would restore itself to its former diversity, given time, buffering, freedom from fires, pest animals and stock, and retention of the current water-table.

OTHER CONSERVATION BENEFITS

Aside from its intrinsic value, the site's vegetation contributes to water and soil protection, mitigating the effects of erosion, pugging and siltation, and maintaining freshwater habitat values in the immediate vicinity and downstream.

It is also a significant seed source and bird corridor.

THREATS

In determining threats to this and other ecosystems, the cumulative effects of land-use practices need to be considered as well as one-off influences.

To quote again from the East Harbour Management Plan,

"Modification of the valley has affected the invertebrate fauna of the streams. Increased sedimentation and enrichment has rendered much of the substrate unsuitable for many species such as mayfly and caddis... The most significant animal threats at this time are from cattle and sheep. Damage being done to wetlands, lake margins and coastal dune vegetation needs to be monitored and controlled."

"Fires which burn on the slopes occasionally damage vegetation at the swamp margins." (D. Clelland, "Unprotected Natural Areas of the Wellington Region", June 1984.

Alteration of the watertable would mean the inevitable decline of the wetland.

Pest animals such as pig and possum pose a constant threat.

RECOMMENDATION

That the catchment above the capped tip be allowed to continue to revegetate with native species.