

Whakarewarewa 5-mile gate wetland – 13th June 2021

Jacqui Bond

Have you ever been to the 5-mile gate wetland? This secretive wetland 3km past the Waipa State Mill Road (mountain bike carpark) was hidden under willows and blackberry until “Whakarewarewa Pest Free” (WPF) turned its attention to it! Most people would have run away screaming “this is too hard” but Anthony Garea who manages WPF was not bothered by the weeds.

His interest was initially piqued from a conversation with Rotorua Department of



Conservation staff. They suggested WPF looked at restoring one of the wetlands in the Whakarewarewa Forest.

The 5-mile wetland is close to the road, had old forestry roads surrounding it, and a restoration plan (written by Wildlands), so restoring this wetland seemed like a good choice.

Drone footage of the 5-mile wetland. SH 5 at the bottom. Asterisk shows 5-mile gate.

Initially walking tracks were hacked through the weedy scrub and traps were installed in a loop around the wetland. Anthony asked “Mike the Moa” to come in and see if he could tame the old forestry tracks, and with only a few squashed traps the old roads were opened up again and access become much easier.

Our trip was planned as a “before”, with only 7 months of trapping done and very little weed control. It was a great opportunity to watch the blooming of the wetland. Starting at SH5 forestry gate we circumnavigated the wetland. Near the gate some of the willows had already been drilled and filled and slightly further into the wetland, a nesting box was installed on one of the still living exotics. Pines still have a use here!

To show appreciation for the work done to protect the wetland a fern bird started to call and could be seen flitting through the rushes of the wetland.

The wetland is surrounded by *Pinus radiata* forestry, the roads and higher areas have regenerating *Coriaria arborea* (tutu), *Coprosma robusta* (karamu), *Pittosporum tenuifolium* (kohuhu) and *Fuchsia excorticata* (kōtukutuku), with the wetland

predominantly *Machaerina rubiginosa* (baumea), *Carex secta*, *Coprosma tenuifolia* (swamp coprosma), *Phormium tenax* (harakeke), *Typha orientalis* (raupo).



Nesting boxes built by Whakarewarewa Pest Free are found throughout the wetland.

Bunding at the far end of the wetland was thought to have been used to create a pond used in case of forest fires. This back area was nearly completely covered in willows but we could see they were in the process of being cut down. It will be interesting to see how the removal of willows effects the water levels in the future. As we returned to SH5 along the front of the wetland we saw two old wetland survey markers, presumably this wetland had been monitored in the past.

Walking back to the gate along the state highway, the area had been cleared of weeds in preparation for planting in September. There were some old *Pittosporum tenuifolium* along the edge which gave way to expansive views of the wetland.



Left image, taken in the late 1970s facing SH5, showing an open wetland before willows and blackberry had moved in. Right image, roughly the same site, taken on this trip. Note the hill side on the other side of the highway is now in forestry.



Left image, Gael heading into the heart of the wetland. Right image, Highway photo shoot.

But why was there a lack of Highway noise? The road had been closed to remove an overturned truck! After our highway photo shoot, the group had to navigate their way home the long way ... except for me. As I had ridden my bike there, I could return at my leisure in any direction I pleased 😊

Since our trip, the Te Arawa Lakes team (TALT) completed 3 months' work in the wetland, drilling filling and cutting pines and willows out of the wetland, in September 2021 the front of the wetland was planted up. TALT work was funded by Gregg Brown of Rotorua and the Rotorua Lakes Council.

Vascular plants of Five Mile Gate Wetland

Graeme Jane & Gael Donaghy

Authors: JF Hobbs; Wildlands; RBS

*= naturalised species

Visit Dates: 01-12-2006; 1-1-2019;
13-6-2021

Map: BF37 **Grid Ref:** 1885622 5766932

Ferns

<i>Asplenium bulbiferum</i>	hen and chickens fern; moku
<i>Asplenium flaccidum</i>	hanging spleenwort; makawe
* <i>Azolla pinnata</i>	ferny azolla
<i>Blechnum minus</i>	swamp kiokio
<i>Blechnum montanum</i> x <i>B. novae-zelandiae</i>	
<i>Blechnum novae-zelandiae</i>	kiokio
<i>Blechnum penna-marina</i> subsp. <i>alpina</i>	alpine blechnum
<i>Cyathea dealbata</i>	ponga; silver fern
<i>Cyathea smithii</i>	soft-leaved tree fern; katote
<i>Dicksonia fibrosa</i>	wheki-ponga; kuripaka
<i>Dicksonia squarrosa</i>	wheki; harsh tree fern
<i>Histiopteris incisa</i>	water fern
<i>Hypolepis ambigua</i>	
<i>Paesia scaberula</i>	scented fern; matata; ring fern
<i>Pneumatopteris pennigera</i>	gully fern; pakau; pakauroharoha
<i>Polystichum vestitum</i>	prickly shield fern; punui
<i>Pteridium esculentum</i>	bracken; rauaruhe
<i>Pyrrhosia elaeagnifolia</i>	leather-leaf fern

Gymnosperm trees and shrubs

* <i>Pinus nigra</i> subsp. <i>nigra</i>	Austrian pine
* <i>Pinus patula</i>	weeping Mexican pine
* <i>Pinus radiata</i>	Monterey pine; radiata
* <i>Pinus strobus</i>	Weymouth pine; strobus; white pine
* <i>Pseudotsuga menziesii</i> var. <i>menzesii</i>	Douglas-fir

Dicotyledonous trees and shrubs

* <i>Alnus glutinosa</i>	alder
<i>Aristotelia serrata</i>	wineberry; makomako
* <i>Berberis darwinii</i>	Darwin's barberry
* <i>Betula pendula</i>	birch
* <i>Buddleja davidii</i>	summer lilac; buddleia
* <i>Calluna vulgaris</i>	heather; ling
<i>Coprosma autumnalis</i>	raurekau; kanono; mamono
<i>Coprosma lucida</i>	karamu; shining karamu
<i>Coprosma rhamnoides</i>	thorny coprosma
<i>Coprosma robusta</i>	karamu
<i>Coprosma tenuicaulis</i>	
<i>Coriaria arborea</i> var. <i>arborea</i>	tree tutu

* <i>Cotoneaster simonsii</i>	khasia berry
* <i>Cytisus scoparius</i>	broom
* <i>Erica lusitanica</i>	Spanish heath
<i>Fuchsia excorticata</i>	fuchsia; kotukutuku
<i>Geniostoma ligustrifolium</i> var. <i>ligustrifolium</i>	hangehange; privet
<i>Hebe stricta</i> var. <i>stricta</i>	koromiko
* <i>Hypericum calycinum</i>	rose of Sharon
<i>Leptospermum scoparium</i> var. <i>scoparium</i>	manuka; tea tree
* <i>Leycesteria formosa</i>	himalayan honeysuckle
* <i>Ligustrum sinense</i>	Chinese privet
* <i>Malus ×domestica</i>	apple
<i>Melicytus ramiflorus</i> subsp. <i>ramiflorus</i>	mahoe
<i>Pittosporum colensoi</i>	
<i>Pittosporum tenuifolium</i>	black matipo; kohuhu
* <i>Prunus ×domestica</i>	plum
* <i>Prunus serrulata</i>	Japanese hill cherry
<i>Pseudopanax arboreus</i>	five finger; puhou; whaupaku
* <i>Quercus robur</i>	red oak
* <i>Salix cinerea</i>	grey willow
* <i>Salix ×fragilis</i>	crack willow
<i>Schefflera digitata</i>	pate; patae; kotete
* <i>Ulex europaeus</i>	gorse

Dicotyledonous lianes and related trailing plants

<i>Calystegia sepium</i> subsp. <i>roseata</i>	
<i>Muehlenbeckia australis</i>	pohuehue
* <i>Rubus fruticosus</i>	blackberry

Daisy-like herbs

* <i>Achillea millefolium</i>	yarrow
* <i>Bidens frondosa</i>	beggar's ticks
* <i>Carduus nutans</i>	nodding thistle
* <i>Cirsium arvense</i>	Californian thistle
* <i>Cirsium vulgare</i>	Scotch thistle
* <i>Crepis capillaris</i>	hawksbeard
* <i>Erigeron sumatrensis</i>	broad-leaved fleabane
<i>Euchiton limosus</i>	swamp cudweed
* <i>Gamochaeta coarctata</i>	
* <i>Hypochaeris radicata</i>	catsear
* <i>Jacobaea vulgaris</i>	ragwort
* <i>Leontodon saxatilis</i>	hawkbit
* <i>Leucanthemum vulgare</i>	oxeye daisy
* <i>Mycelis muralis</i>	wall lettuce
<i>Senecio bipinnatisectus</i>	Australian fireweed
* <i>Sonchus asper</i>	prickly sow thistle; puha
* <i>Sonchus oleraceus</i>	sow thistle; puha; puka
* <i>Taraxacum officinale</i>	dandelion

Dicotyledonous herbs other than Daisies

<i>Acaena anserinifolia</i>	bidibid
* <i>Bellardia viscosa</i>	tarweed
* <i>Callitriche stagnalis</i>	starwort
* <i>Digitalis purpurea</i>	foxglove
<i>Disphyma australe</i> subsp. <i>australe</i>	iceplant; horokaka
* <i>Epilobium ciliatum</i>	tall willow-herb
<i>Epilobium pallidiflorum</i>	
* <i>Galium palustre</i>	marsh bedstraw
<i>Gentianella montana</i> subsp. <i>montana</i> var. <i>montana</i>	ridge-stemmed gentian
<i>Gonocarpus micranthus</i>	
<i>Hydrocotyle microphylla</i>	hydrocotyle
<i>Hydrocotyle novae-zeelandiae</i> var. <i>novae-zeelandiae</i>	common pennywort
* <i>Hypericum perforatum</i>	St. John's wort
<i>Hypericum pusillum</i>	matted St John's wort
* <i>Lamium galeobdolon</i> 'Variegatum'	aluminium plant
* <i>Lotus pedunculatus</i>	lotus major
* <i>Ludwigia palustris</i>	water purslane
* <i>Myosotis scorpioides</i>	water forget-me-not
<i>Nertera scapanioides</i>	
<i>Persicaria decipiens</i>	
* <i>Persicaria maculosa</i>	
* <i>Plantago lanceolata</i>	ribwort; narrow-leaved plantain
* <i>Plantago major</i>	broad-leaved plantain
* <i>Prunella vulgaris</i>	selfheal
* <i>Ranunculus flammula</i>	spearwort
* <i>Ranunculus repens</i>	creeping buttercup
* <i>Rumex obtusifolius</i>	broad-leaved dock
* <i>Trifolium pratense</i>	red clover

Monocotyledonous trees and shrubs

<i>Cordyline australis</i>	cabbage tree; ti-kouka
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Sedges

<i>Carex geminata</i>	
<i>Carex maorica</i>	
<i>Carex secta</i>	pukio
<i>Carex uncinata</i>	watu
<i>Carex virgata</i>	
* <i>Cyperus eragrostis</i>	
<i>Eleocharis acuta</i>	spike rush
<i>Eleocharis sphacelata</i>	
<i>Isolepis distigmatosa</i>	
<i>Isolepis prolifera</i>	
* <i>Isolepis sepulcralis</i>	
<i>Machaerina articulata</i>	

Machaerina rubiginosa
Machaerina tenax

Rushes and allied plants

* <i>Juncus acuminatus</i>	
* <i>Juncus articulatus</i>	jointed rush
<i>Juncus edgariae</i>	wiwi
* <i>Juncus effusus</i> var. <i>effusus</i>	soft rush
* <i>Juncus microcephalus</i>	
<i>Juncus planifolius</i>	
<i>Juncus prismatocarpus</i>	
* <i>Juncus tenuis</i> subsp. <i>tenuis</i>	track rush
<i>Luzula picta</i> var. <i>picta</i>	

Grasses

* <i>Agrostis capillaris</i>	browntop
* <i>Agrostis stolonifera</i>	creeping bent
* <i>Anthoxanthum odoratum</i>	sweet vernal
<i>Austroderia fulvida</i>	kakaho; toetoe
<i>Austroderia toetoe</i>	toetoe
* <i>Dactylis glomerata</i>	cocksfoot
<i>Deyeuxia avenoides</i>	mountain oatgrass
* <i>Eragrostis brownii</i>	bay grass
* <i>Holcus lanatus</i>	Yorkshire fog
<i>Lachnagrostis filiformis</i>	tumble grass
* <i>Paspalum dilatatum</i>	paspalum

Remaining Monocotyledonous herbs

* <i>Crocasmia ×crocosmiiflora</i>	montbretia
<i>Dianella nigra</i>	blueberry; turutu
* <i>Ixia maculata</i>	
* <i>Lagarosiphon major</i>	
<i>Lemna minor</i>	duckweed
<i>Phormium tenax</i>	flax
<i>Potamogeton cheesemanii</i>	red pondweed
<i>Sparganium subglobosum</i>	
<i>Typha orientalis</i>	raupo

Orchids

<i>Microtis unifolia</i>	onion orchid
<i>Thelymitra cyanea</i>	blue swamp orchid
<i>Thelymitra longifolia</i>	white sun orchid
<i>Thelymitra pauciflora</i>	