

## EASTCAPE TRIP, 2012 – DAY 2 – TWO RAWEA STREAM WETLANDS, TORERE

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On Sunday 30<sup>th</sup> September 2012 a small number of Rotorua Botanical Society members returning from the annual East Cape weekend spent a day botanising two of the many wetlands within the large multiple-owned Torere 64 Block which is directly inland from Torere, accessed from the end of Wainui Road. For our field visit we were met at the main gate and guided through the forest by Amiria Parker (chairperson of Torere 64 Trust which administers the block) who was more than willing to show us the wetlands and explain some of the history of the block.

This large block consists predominantly of *Pinus radiata* plantation managed by Hancock Forest Management. Within the block there are several identified regionally significant wetlands along the Rawea Stream and a visit to two of these was the aim of our visit, which had been organised by Tim Senior who unfortunately couldn't join us for the day.

A long drive inland through the forestry block brought us to the Rawea Stream – an extensive meandering stream gully through the pine forest. Our first view was of areas of kahikatea forest along the stream margins bordering the pine forest before we turned off the main forestry road onto Puketoetoe Road to park near a ford over the Rawea Stream.

The botanists headed off back down the road and into the main wetland area to the south which consisted of a manuka/sphagnum bog perched above the stream with scattered kahikatea (*Dacrycarpus dacrydioides*) present. Progress was slow as initially the margins of wetland were very wet and it was necessary to jump from one thick sphagnum hummock to the other to stay dry. Kiokio (*Blechnum novae-zelandiae*) dominated the understorey in many places. The wetland was in very good condition with no significant weed species noted and minimal animal sign seen.

Traversing in a south-easterly direction we eventually left manuka/sphagnum bog and entered rank exotic grassland with occasional manuka (*Leptospermum scoparium*) trees present on a river terrace of Rawea Stream itself (Photo 1). We followed the grassland flats back up stream in and out of manuka clumps. The stream did not appear to be associated with the adjacent wetland which appeared to flow around it.



Photo 1: Rawea Stream

After lunch back at the vehicle we drove back up to the main Wainui Road junction and headed through the pine forest west of main road to botanise another arm of the Rawea Stream. We intrepidly entered a large area of raupo (*Typha orientalis*) wetland (Photo 2) with a few scattered kahikatea on its margins. Expecting the raupo area to be very wet and difficult to cross we were pleasantly surprised to find the ground firm and relatively dry. The stream was nearby but was a narrow ‘ditch’ as it had cut down through pumice appearing to have largely bypassed flowing through the area of raupo. Here we noted a few small grey willow (*Salix cinerea*) saplings and trees – the only significant weeds noted within the wetland areas visited.



Photo 2: Raupo wetland on west side of Wainui Road with manuka scrub in the background.

Above the raupo wetland on the flats were further areas of manuka scrub with a generally dense understorey of kiokio. Scattered kahikatea trees were occasionally emergent in and around the manuka scrub. We followed upstream through flats dominated largely by exotic grassland with creeping buttercup (*Ranunculus repens*) common and *Carex geminata* scattered in places. Weaving in and out of the manuka scrub and exotic grassland we reached an area where pine forest closed in around the stream. Here you could see where the stream had obviously flooded and changed course heaping debris up and inundating several pine trees in the process. We returned and headed back to the vehicle. With much habitat still left to botanise we had to leave it for another day, as there was a long drive back out of the block to the coast road and home.

We had been privileged to get access to the Rawea wetlands, that are well and truly hidden away in a vast area of pine plantation, but that are recognised as being significant wetlands in the eastern Bay of Plenty. Unfortunately our trip did not yield any significant

new botanical discoveries, but we confirmed that they are in relative good condition with virtually no serious weed species present, which is rare for Bay of Plenty wetlands.

Special thanks go to the Trustees of Torere 64 Block for allowing us access and in particular to the chairperson Amiria Parker for guiding us to the wetlands and also Tim Senior for negotiating and coordinating the trip.

## VASCULAR PLANT SPECIES LISTS FOR TWO RAWEA STREAM WETLANDS

John F.F. Hobbs

\* = naturalised species

Ferns and Fern Allies		Puketoetoe Road	Wainui Road
<i>Asplenium flaccidum</i>	makawe	x	
<i>Blechnum chambersii</i>	rereti		x
<i>Blechnum discolor</i>	petipeti, crown fern	x	
<i>Blechnum fluviatile</i>	kiwikiwi		x
<i>Blechnum membranaceum</i>		x	
<i>Blechnum minus</i>	swamp kiokio	x	x
<i>Blechnum novae-zelandiae</i>	kiokio	x	x
<i>Blechnum penna-marina</i> subsp. <i>alpina</i>		x	x
<i>Cardiomanes reniforme</i>	kidney fern, konehu	x	
<i>Ctenopteris heterophylla</i>		x	
<i>Cyathea smithii</i>	katote, soft tree fern	x	
<i>Dicksonia fibrosa</i>	wheki-ponga	x	
<i>Dicksonia squarrosa</i>	wheki	x	
<i>Histiopteris incisa</i>	matata, water fern	x	x
<i>Huperzia varia</i>	Whiri-o-Raukatauri	x	
<i>Hymenophyllum demissum</i>	irirangi, filmy fern	x	
<i>Hymenophyllum flabellatum</i>	mauku, filmy fern	x	
<i>Hymenophyllum frankliniae</i>	mauku, filmy fern	x	
<i>Hymenophyllum multifidum</i>	mauku, filmy fern	x	
<i>Hymenophyllum rarum</i>	mauku, filmy fern	x	
<i>Hymenophyllum revolutum</i>	mauku, filmy fern	x	
<i>Hymenophyllum scabrum</i>	mauku, filmy fern	x	
<i>Hypolepis ambigua</i>		x	x
<i>Leptopteris hymenophylloides</i>	heruheru	x	
<i>Microsorium pustulatum</i> subsp. <i>pustulatum</i>	hounds tongue fern	x	

<i>Microsorium scandens</i>	mokimoki	x	
<i>Paesia scaberula</i>	matata	x	x
<i>Pneumatopteris pennigera</i>	pakau		x
<i>Pyrrosia eleagnifolia</i>	leather-leaf fern	x	x
<i>Rumohra adiantiformis</i>		x	
<i>Tmesipteris elongata</i>		x	
<i>Tmesipteris tannensis</i>		x	
<i>Trichomanes venosum</i>		x	

### Gymnosperms

<i>Dacrycarpus dacrydioides</i>	kahikatea	x	x
<i>Dacrydium cupressinum</i>	rimu	x	x
<i>Phyllocladus trichomanoides</i>	tanekaha	x	
<i>Podocarpus hallii</i>	Hall's totara	x	
<i>Podocarpus totara</i> var. <i>totara</i>	totara		x
<i>Prumnopitys ferruginea</i>	miro	x	

### Dicotyledons

<i>Acaena anserinifolia</i>	piripiri		x
* <i>Achillea millefolium</i>	yarrow		x
<i>Alseuosmia pusilla</i>		x	
<i>Aristotelia serrata</i>	makomako, wineberry	x	x
<i>Beilschmiedia tawa</i>	tawa	x	
* <i>Berberis glaucocarpa</i>	barberry	x	
<i>Brachyglottis repanda</i>	rangiora	x	x
<i>Calystegia sepium</i> subsp. <i>roseata</i>	pohue		x
<i>Carpodetus serratus</i>	putaputaweta	x	x
<i>Centella uniflora</i>		x	x
* <i>Cirsium arvense</i>	California thistle		x
* <i>Cirsium vulgare</i>	Scotch thistle		x
<i>Clematis cunninghamii</i>	ngakau-kiore		x
<i>Clematis paniculata</i>	puawananga		x
<i>Coprosma grandifolia</i>	kanono	x	
<i>Coprosma robusta</i>	karamu	x	x
<i>Coprosma tenuicaulis</i>	swamp coprosma	x	
<i>Coriaria arborea</i> var. <i>arborea</i>	tutu	x	x
* <i>Digitalis purpurea</i>	foxglove	x	x
<i>Elaeocarpus dentatus</i>	hinau	x	
* <i>Epilobium obscurum</i>	willow herb		?
<i>Euchiton limosus</i>			x
<i>Fuchsia excorticata</i>	kotukutuku	x	x
<i>Galium propinquum</i>	mawe	x	x
<i>Gaultheria antipoda</i>	tawiniwini	x	
<i>Geniostoma ligustrifolium</i> var. <i>ligustrifolium</i>	hangehange	x	x

<i>Griselinia littoralis</i>	kapuka	x	x
<i>Hebe stricta</i> var. <i>stricta</i>	koromiko		x
<i>Hedycarya arborea</i>	porokaiwhiri	x	
<i>Hoheria sexstylosa</i>	houhere, lacebark	x	x
<i>Hydrocotyle heteromeria</i>		x	
* <i>Hypochaeris radicata</i>	catsear	x	x
<i>Ixerba brexioides</i>	tawari	x	
<i>Kunzea</i> aff. <i>ericoides</i>	kanuka	x	
* <i>Leontodon taraxacoides</i>	hawkbit		x
<i>Leptecophylla juniperina</i> var. <i>juniperina</i>	prickly mingimingi	x	
<i>Leptospermum scoparium</i> agg.	manuka	x	x
<i>Leucopogon fasciculatus</i>	mingimingi	x	x
* <i>Lotus pedunculatus</i>	lotus	x	x
<i>Melicytus ramiflorus</i> subsp. <i>ramiflorus</i>	mahoe	x	x
* <i>Mentha pulegium</i>	penny royal	x	
<i>Metrosideros diffusa</i>	white rata vine	x	x
<i>Metrosideros perforata</i>	aka	x	
<i>Myrsine salicina</i>	toro	x	
* <i>Nasturtium officinale</i>	watercress		x
<i>Neomyrtus pedunculata</i>	rohutu	x	
<i>Nertera depressa</i>			x
<i>Nestegis lanceolata</i>	white maire	x	x
<i>Pittosporum tenuifolium</i>	kohuhu	x	
* <i>Plantago australis</i>	swamp plantain	x	x
* <i>Plantago lanceolata</i>	narrow-leaved plantain	x	
* <i>Prunella vulgaris</i>	selfheal	x	x
<i>Pseudopanax arboreus</i>	five finger	x	x
<i>Pseudopanax crassifolius</i>	horoeka, lancewood	x	
<i>Quintinia serrata</i>	tawheowheo	x	
<i>Ranunculus reflexus</i>	maruru		x
* <i>Ranunculus repens</i>	creeping buttercup	x	x
<i>Raukawa anomalus</i>		x	x
<i>Rubus australis</i>	tataramoa	x	
* <i>Rubus fruticosus</i> agg.	blackberry	x	x
* <i>Rumex obtusifolius</i>	broad-leaved dock		x
* <i>Salix cinerea</i>	grey willow	x	x
<i>Schefflera digitata</i>	pate		x
* <i>Scrophularia auriculata</i>	water figwort	x	x
* <i>Sonchus oleraceus</i>	puha, sow thistle		x
* <i>Stellaria alsine</i>	bog stitchwort		x
* <i>Taraxacum officinale</i>	dandelion	x	
* <i>Trifolium repens</i>	white clover	x	
* <i>Ulex europaeus</i>	gorse	x	
<i>Urtica incisa</i>	ongaonga, tree nettle		x

* <i>Veronica anagallis-aquatica</i>	water speedwell		x
<i>Weinmannia racemosa</i>	kamahi	x	x

### Monocotyledons

* <i>Anthoxanthum odoratum</i>	sweet vernal		x
<i>Astelia solandri</i>	kowharawhara	x	
<i>Carex geminata</i> agg.	rautahi		x
<i>Cortaderia fulvida</i>	toetoe	x	
<i>Cyperus ustulatus</i>	toetoe, upokotangata	x	
* <i>Dactylis glomerata</i>	cocksfoot	x	x
<i>Dianella nigra</i>	turutu		x
<i>Earina autumnalis</i>	raupeka	x	
<i>Earina mucronata</i>	peka-a-waka	x	
<i>Eleocharis acuta</i>		x	x
<i>Eleocharis gracilis</i>		x	x
* <i>Glyceria declinata</i>	blue sweetgrass		x
* <i>Holcus lanatus</i>	Yorkshire fog	x	x
<i>Isachne globosa</i>	swamp millet	x	x
<i>Isolepis reticularis</i>			x
* <i>Juncus articulatus</i>	jointed rush	x	x
<i>Juncus edgariae</i>	wi	x	
* <i>Juncus effusus</i> var. <i>effusus</i>	soft rush, leafless rush	x	x
<i>Juncus pallidus</i>	wi	x	
<i>Juncus planifolius</i>		x	x
<i>Lemna minor</i>	karearea		x
<i>Microlaena avenacea</i>	bush rice grass	x	
<i>Potamogeton suboblongus</i>	rerewai	x	
<i>Ripogonum scandens</i>	supplejack, kareao	x	
* <i>Schedonorus arundinaceus</i>	tall fescue	x	
<i>Schoenus maschalinus</i>		x	x
<i>Typha orientalis</i>	raupo	x	x
<i>Uncinia uncinata</i>	kamu matau a Maui		x