MT TARAWERA RUAWAHIA DOME
WILDING CONIFER FIELD TRIP 2015

Paul Cashmore

Due to the popularity and positive feedback from the March 2014 Mt Tarawera field trip it was decided in conjunction with the owners (Ruawahia 2B Trust) to run another combined Rotorua Botanical Society and Rotorua Forest & Bird Society trip to the mountain on 7th March 2015. Last year's trip was to Wahanga Dome but this year the trip focused on Ruawahia Dome – the centre of the three domes on the mountain and also the highpoint at 1111 m and the most visited part of the mountain.

To ensure a good turn out this year we put the invitation out to other Bay of Plenty Forest & Bird Society branches as well as the Waikato Botanical Society. As a result we got participants coming from as far away as Te Aroha and Hamilton with a good turn out from Whakatane and Eastern Bay of Plenty in particular. Also in preparation for the field trip I gave a combined presentation to Rotorua Botanical Society and Forest & Bird Society on the Wednesday before the trip. This covered aspects of the wider Ruawahia Wilding Conifer Project and talked about what the project was trying to achieve, how we were achieving it and progress to date, to give participants some wider context and background.

Once again the trip was led by Ruawahia 2B Trust chairman Ken Raureti and myself. All participants met up at the Department of Consevation Ashpit Road campground at Lake Rerewhakaaitu for a karakia and briefing before heading up the mountain in convoy.
Upon arriving on the mountain it was evident the weather wasn't nearly as good as last year. We were met with gusty winds and low cloud. After a Health and Safety briefing and gear handout the group of 30 people headed up the track towards Ruawahia Trig, an easier climb than the previous one onto Wahanga Dome, but nevertheless still a challenge for those not used to loose scoria slopes and low visibility.

The few hard core botanists in the party bought up the rear as always noting before long the patch of heather (*Calluna vulgaris*) in flower beside the track near the carpark (This

has subsequently been controlled). Some minor debate was had about *Dracophyllum* species identification and some of the *Rytidosperma* species. A good range of *Gaultheria* species are common over wide parts of the mountain including *G. paniculata*, *G. oppositifolia* and *G. antipoda* and a range of hybrids were noted. Debate continued as to the identification of a small bronze-coloured low-growing shrub common from the carpark right up onto the dome tops. Several suggestions including podocarp species such as *Lepidothamnus laxifolius* were made but John Hobbs dutifully noted the fruit indicated that it was not a podocarp species, but rather a member of the Ericaceae family. Still the identity remained unconfirmed for the remainder of the trip. (John confirmed after the trip it was in fact *Androstoma empetrifolia* – why didn't we think of that!!)

Figure 1: Heading along the crater rim in low cloud.

As the group worked their way up the track and across the crater towards the trig the cloud thickened making botanising, sightseeing and taking photographs rather limited. As we scrambled up the steep bluffy section below the trig a few patches of *Hymenophyllum multifidum* were noted – the only *Hymenophyllum* seen on this trip. We made the Ruawahia trig at 1111 m – the high point of Mt Tarawera and normally giving a

stunning panoramic 360 degree view of the Rotorua lakes and wider Bay of Plenty. Unfortunately with low cloud and wind you could barely see the trig let alone anything further.

The group continued west along the track along the northern edge of the crater. With the low cloud it was important for everyone to stay on the track as people soon disappeared from view if they deviated off to pull pines. Vegetation on the dome tops is much more limited with scattered monoao (*Dracophyllum subulatum*) and more common mat daisies *Raoulia albosericea* and *Raoulia glabra* amongst lichenfields so this allowed the botanists to keep up with the rest of the group.

By late morning we had reached a point on the northern crater edge above the valley which separates Ruawahia and Tarawera Domes. We found a sheltered spot that was out of the wind and called an early lunch, hoping for some clearance in the low cloud and strong winds. Ken Raureti spoke about some the mountain's history until just when we needed it our call was answered and cloud lifted and gradually the sun came out.

With many members of the party now itching to get pine pulling and wondering if they were ever going to see a wilding pine it was time for some action. Seizing the break in the weather we spaced out in a very long line from crater edge down to the head of the gully and started walking in a north-easterly direction around the top of the gully. Wilding conifer seedlings were fairly light through much of this country enabling good progress. Contorta pine (*Pinus contorta*) was the most common wilding conifer species pulled with occasional Douglas fir (*Pseudotsuga menziesii*) and radiata pine (*Pinus radiata*). The group worked around bluffy sections at the head of the gully which was heavily vegetated in places with broadleaf (*Griselinia littoralis*), soft mingimingi (*Leucopogon fasciculatus*) and *Olearia furfuracea* scrub. With some people below and above the bluffs visual contact was soon lost between party members. This wasn't a problem as the sun was out and it was now quite warm but would have been very problematic in the low cloud a few hours earlier!

Eventually everyone resurfaced on the northern side of the gully toward the north-west edge of the Ruawahia Dome on open tops. From here great views down to Lake Tarawera and beyond could now be had. The group then swung around in a south-easterly direction and continued pulling conifers through monoao and lichen-dominated shrubland interspersed with occasional soft mingimingi and Spanish heath (*Erica lusitanica*). Working through a small gully the group soon got bogged down in thick areas of contorta seedlings which slowed progress. We regrouped on a high point for a mid-afternoon smoko while I talked a bit about the Ruawahia Wilding Conifer Project and the wider work on the mountain to control wilding conifers. The group then continued up the gully pulling thick areas of contorta seedlings.

Eventually we reached the grassy plateaus of Ruawahia Dome below the trig where red deer are often seen grazing and keep vegetation in check. Wilding conifer seedling density was much lower here so the pace quickened as people headed for the trig. A few small thick patches of contorta seedlings slowed down some of the party. A brief stop

Figure 2: The group pulling wilding conifer seedlings in monoao shrubland

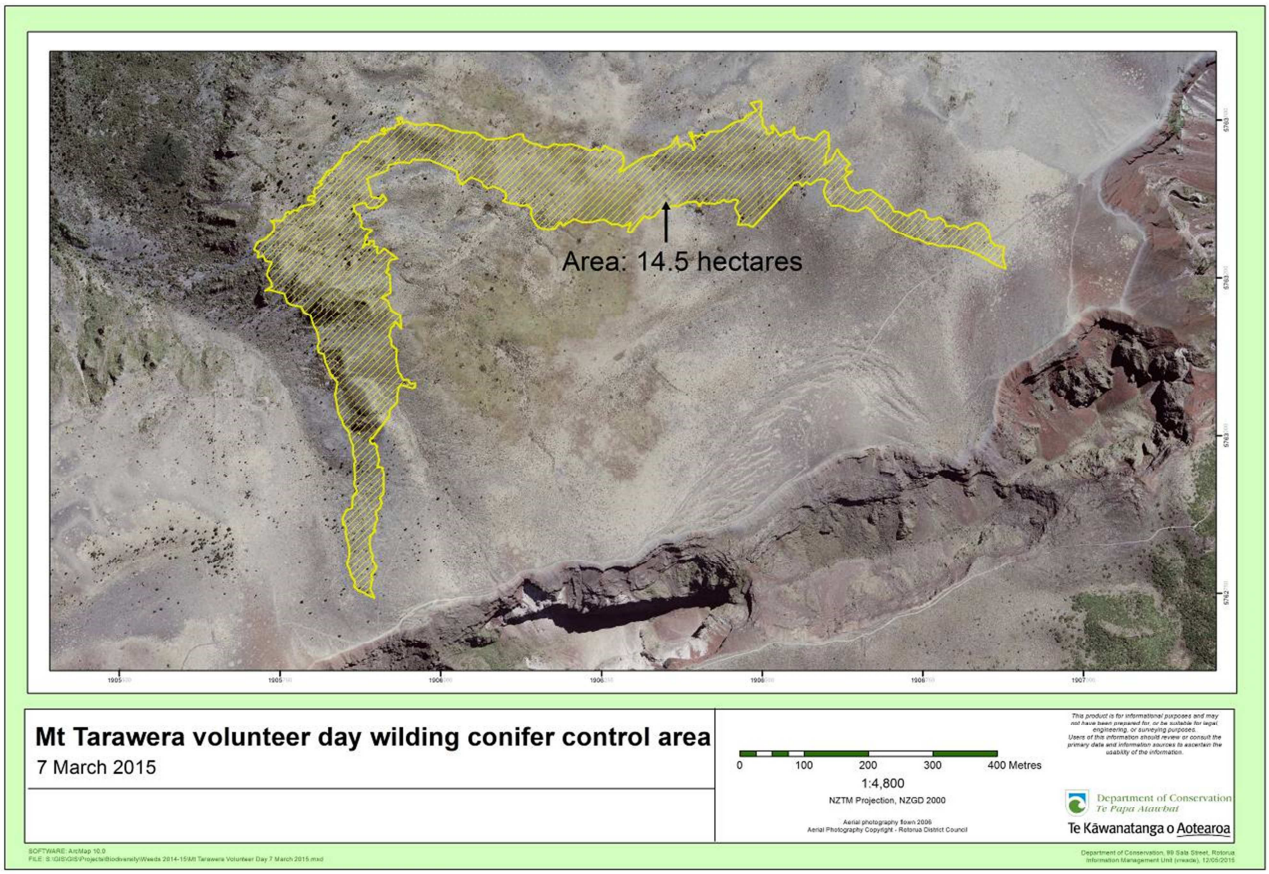
Figure 3: Gorse topiary on Ruawahia Dome.

was made to admire a patch of gorse (*Ulex europaeus*) in a form of an artistic topiary rarely seen elsewhere – a result of heavy, repeated browsing from probably a combination of deer, wallabies and hares.

Everyone regrouped at Ruawahia trig and got to take the photos of the 360 degree panorama that they missed out on in the morning. We all wandered back via the same route to the vehicles, getting back late afternoon in time for a cup of coffee and snack at the carpark.

The combined Botanical Society and Forest & Bird trip had again worked well and gave a wide variety of conservation-minded people from the wider BOP and Waikato a chance to visit the mountain and contribute to the ongoing protection of the ecosystem and landscape values present, while at same time enjoying the scenery and views from the mountain.

The work was tracked by GPS and subsequent analysis showed that the group managed to deal with approximately 14.5 ha of wilding conifers which was on par with other volunteer conifer pulling trips on the mountain and similar to last year's effort which controlled 10.7 ha on Wahanga. Once again a big thanks to everyone who showed up and put the effort in.



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VASCULAR PLANT SPECIES LIST RECORDED ON THE TARAWERA FIELD TRIP

John F.F. Hobbs and Mike Butcher

* = naturalised plants

Ferns & Fern Allies

Asplenium flaccidum subsp. *flaccidum*	hanging spleenwort, makawe
Blechnum novae-zelandiae	kiokio
Blechnum penna-marina subsp. *alpina*	little hard fern

Blechnum vulcanicum	korokio
Dicksonia squarrosa	harsh tree fern, wheki
Histiopteris incisa	water fern, matata
Huperzia australiana	mountain clubmoss
Hymenophyllum multifidum	much-devided filmy fern
Lycopodium fastigiatum	mountain clubmoss
Lycopodium scariosum	matukutuku
Microsorum pustulatum subsp. *pustulatum*	hound's tongue, kawaowao
Paesia scaberula	lace fern, matata
Pyrrosia eleagnifolia	leather-leaf fern

Gymnosperms

* *Pinus contorta*	lodgepole pine
* *Pinus nigra*	black pine
* *Pinus radiata*	radiata pine
* *Pseudotsuga menziesii*	Douglas fir

Dicot Shrubs

Androstoma empetrifolia	bog mingimingi
* *Calluna vulgaris*	heather
Coprosma dumosa	
Coprosma robusta	karamu
Coriaria arborea var. *arborea*	tutu
Corokia buddleioides	korokio
Dracophyllum strictum	grass tree, totorwhiti
Dracophyllum subulatum	monoao
* *Erica lusitanica*	Spanish heath
Gaultheria antipoda	snowberry, tawiniwini
Gaultheria antipoda × *G. oppositifolia*	koropuka
Gaultheria oppositifolia	kama
Gaultheria oppositifolia × *G. paniculata*	
Gaultheria paniculata	koropuka
Griselinia littoralis	broadleaf, kapuka
Hebe stricta var. *stricta*	koromiko
Kunzea robusta	kanuka
Leptecophylla juniperina subsp. *juniperina*	prickly mingimingi
Leptospermum scoparium var. *scoparium*	tea tree, manuka
Leucopogon fasciculatus	soft mingimingi
Leucopogon fraseri	patotara
Muehlenbeckia axillaris	creeping pohuehue
Olearia furfuracea	akepiro
Olearia ilicifolia	mountain holly
Pimelea prostrata subsp. *vulcanica*	pinatoro
* *Ulex europaeus*	gorse

	Weinmannia racemosa	kamahi

Dicot Herbs

	Acaena anserinifolia	bidibid, piripiri
	Acaena novae-zelandiae	red bidibid, piripiri
	Celmisia gracilenta	common mountain daisy,
*	*Centaurium erythraea*	centaury
*	*Cirsium vulgare*	Scotch thistle
*	*Conyza sumatrensis*	broad-leaved fleabane
	Epilobium brunnescens subsp. *brunnescens*	creeping willowherb
	Epilobium glabellum	willowherb
	Epilobium melanocaulon	willowherb
	Epilobium rotundifolium	round-leaved willowherb
	Geranium brevicaule	short-flowered cranesbill
*	*Hypochaeris radicata*	catsear
*	*Jacobaea vulgaris*	ragwort
	Lagenophora pumila	papataniwhaniwha
*	*Linum catharticum*	purging flax
*	*Lotus pedunculatus*	lotus
*	*Mycelis muralis*	wall lettuce
	Nertera depressa	stinky nertera
*	*Ornithopus perpusillus*	wild serradella
*	*Prunella vulgaris*	selfheal
	Raoulia albosericea	mat daisy
	Raoulia glabra	mat daisy
*	*Rumex acetosella*	sheep's sorrel
*	*Spergula arvensis*	spurrey
*	*Spergularia rubra*	sand spurrey
*	*Trifolium dubium*	suckling clover
*	*Viola tricolor*	heartsease

Monocots

*	*Agrostis capillaris*	browntop
*	*Anthoxanthum odoratum*	sweet vernal
	Caladenia alata ?	pink fingers
	Cortaderia fulvida	toetoe
	Dichelachne crinita	long-hair plume grass, patiti
	Hierochloe redolens	holy grass, karetu
*	*Holcus lanatus*	Yorkshire fog
	Lachnagrostis filiformis	New Zealand wind grass
	Luzula picta var. *picta*	woodrush
	Morelotia affinis	morelotia
	Rytidosperma gracile	dainty bristle grass
	Rytidosperma viride	danthonia