

# Trip Report to Manukau Heads: "Robinson's Gully", Lighthouse and Mahanihani, 19 March 2016

Tricia (PA) Aspin



**Fig. 1.** View of Manukau heads from above "Robinson's Gully". Photo: Philip Moll. All photos taken 19 March 2016.



**Fig. 2.** We descend down into the gully. Note the old pohutukawa on the steep hillside. Photo: Ewen Cameron.



**Fig. 3.** Tricia checks to see both *Metrosideros perforata* and *M. carminea* growing together. Photo: Philip Moll.

**Participants (19):** Jenny Andrews, Tricia Aspin (leader), Bruce Calvert, Ewen Cameron, Janeen Collings, Frances Duff, Lesley Haines, Dongmei Li, John Millet, Philip Moll, Juliet Richmond, Joshua Salter, Lydia Smith, Vijay Soma, Claire Stevens, Val Tomlinson, Janie Vaughan, Alison Wesley, David Wilson.

Our plan was to visit two areas of botanical interest, and record species observed (see Appendix), and also visit the Manukau Heads Lighthouse. We met at Matakawau Hall and car-pooled from there. The first point of interest was at the Dickey Road turn-out where we viewed the Manukau Bar and the diorama depicting the *HMS Orpheus* disaster. We also had an overview of "Robinson's Gully" the first venue for today (Fig. 1).

A few metres further down the road we parked in the disused turn-around at the old cowshed. This property was farmed by the Robinson family from the 1930s until June 2012, when it was sold and amalgamated with the neighbouring dairy farm. Brian Clarke is the present landowner and the property is managed by Chris and Sara Maffey.

The gully leads right out to the coast where there used to be private access to Short's Gap. Our aim was to go partway down into the remnant bush area to view the uncommon liverwort *Dumortiera hirsuta*. I first discovered this liverwort in April 2007 on my initial visit to the valley. On sending a specimen to AK I was surprised to learn that at the time it was the first record for Auckland Region and had only been previously recorded in New Zealand in Northland. It since has been found on the Chatham, Kermadec and Little Barrier Islands.

The initial descent was steep, but cattle tracks and an old fenceline gave good footing and we noted occasional old pohutukawa (*Metrosideros excelsa*) clinging to the steep hillsides (Fig. 2). Apple of Sodom (*Solanum linnaeanum*) is becoming established among the rough pasture and its thorns provided a nasty surprise to the unsuspecting (some strange "French" loudly uttered!). The flat valley bottom was a mass of rank Kikuyu grass (*Cenchrus clandestinus*) which rippled wildly in the strong NE wind funnelling down the gully.

Once we reached the watercourse, several native species became obvious on the small steep sidings untrampled by cattle. Species included *Adiantum cunninghamii*, *Blechnum parrisiae*, *Lobelia anceps*, *Mentha cunninghamii* and *Wahlenbergia violacea*. A partially dead rohtu (*Lophomyrtus obcordata*) was



**Fig. 4.** *Metrosideros perforata* was often noted with late flowers. Photo: Philip Moll.



**Fig. 5.** The large *M. perforata* tree, with a thick trunk, stood c.3 m tall and c.6 m across. Photo: Tricia Aspin.

noted on the north side of the confluence of the two main gullies. It may have been subject to past aerial spraying of gorse (*Ulex europaeus*) but has survived and is now sprouting healthy regrowth.

We followed the south side of the watercourse and noted interesting species on the way. On checking I found that both *Metrosideros perforata* and *M. carmina* were on the same host tree (Fig. 3). Another tree-like *M. carminea* was on a nikau. *Metrosideros perforata* still had some late flowers (Fig. 4) as did several lacebarks (*Houheria populnea*) and *Parsonsia heterophylla*. One *M. perforata* growing on

the water's edge was very large and a tree in its own right (Fig. 5).

We made our way down past the small gorge and crossed to the north side and went to the foot of a small constantly dripping sandstone cliff. Here we observed our target, the thalloid liverwort *Dumortiera hirsuta*. A few other liverworts, noticeably *Monoclea forsteri*, are in the vicinity but the thallus of the former is large, forked and markedly straplike (Fig. 6). Lunch was enjoyed on a nearby grassy patch among wild strawberries (*Potentilla indica*) before retracing our steps back up



**Fig. 6.** The thalloid liverwort *Dumortiera hirsuta* is large and markedly straplike (c. 1 cm wide). Photo; Philip Moll.



**Fig. 7.** The Manukau Heads Lighthouse was reconstructed using the original dome. Photo: Ewen Cameron.



Fig. 8. View over to the sands of Whatipu from the Manukau Heads Lighthouse. Note the ship exiting the harbour on the high tide. Photo: Ewen Cameron.



Fig. 9. Bruce descending the steep slope among the groves of *Lophomyrtus obcordata* at Mahanihani. Photo: Janeen Collings.

to the cars. On return, in a waste area at the head of the gully we noted a dense covering of great bindweed (*Calystegia silvatica*) over the rank kikuyu and climbing up a puriri (*Vitex lucens*). The pure white bindweed flowers stood out, but the papery capsules were seedless.

Birds noted were fantail, goldfinch, grey warbler, magpie, pheasant, paradise shelduck, tui, turkey with young ones, welcome swallow and yellowhammer.

Next we drove to the lighthouse carpark and explored the area now administered by the Lighthouse Trust. The lighthouse has been

reconstructed utilising the original dome (Fig. 7). Grand views were to be had across to the Waitakere Ranges and Whatipu sands, both sites of many Bot Soc field trips (Fig. 8).

Our second botanical visit was to the recently fenced area (May 2015) on land leased from the Ports of Auckland. The signalman, Evan McGregor, and his wife, Carol, lease 90 ha and have worked closely with local iwi, Ngati Te Ata, Steve Benham, DoC and the Environmental Section of Auckland Council, to secure funding for fencing of the gully, which is now stock proof. Awhitu Landcare had grown species occurring naturally



Fig. 10. Windshorn *Lophomyrtus obcordata* c.2 m tall at Mahanihani. Photo: Joshua Salter.



Fig. 11. The distinctive bark on mature *L. obcordata*. Photo: Ewen Cameron.

in the vicinity including karamu (*Coprosma robusta*), houpara (*Pseudopanax lessonii*), manuka (*Leptospermum scoparium*) and broom (*Carmichaelia australis*) and last winter planted the northern perimeter. Mahanihani is the ancient Maori name for the Heads area and so this now reserved gully is known locally by that name.

From the carpark we went through the rough pasture and crossed the fence. The planted area is infested with weeds but most of the planted species seem to be surviving, with tall Scotch thistle (*Cirsium vulgare*), Californian thistle (*Cirsium arvense*) and inkweed (*Phytolacca octandra*) providing shelter from prevailing winds. We noted that plantings in grassy areas not blanket sprayed pre-planting, and without the presence of kikuyu, are weed-free and seem to be thriving also.

This south-facing slope is old pastureland with a sprinkling of broadleaf forest species (Fig. 9). Natural regeneration is occurring. There is a good cover of wind-battered and wind-trimmed rohutu (*Lophomyrtus obcordata*) (Fig. 10). Armed with a species list supplied by Steve Benham we went down as far as to be able to have good observations of this regionally endangered species. Specimens ranging from seedling stage to old gnarled trees just above head height are abundant (Fig. 11). Many had fruit present (Fig. 12). If the myrtle rust (*Puccinia psidii*), which has established in Australia, arrives in New Zealand it will be a threat to the species, and Janeen has noted that this site can provide a good source for seed banking (approx. 10,000 seeds were collected on 8 April, Janeen Collings pers. comm.).

The slope made for interesting botanising for, as Ewen commented, the very steepness of the terrain put everything at eye height as one clambered back up. We noted a patch of *Centella uniflora* with exceptionally large leaves, and again we noted lacebarks and parsonsia in flower (Fig. 13). A highlight was the finding of *Mentha cunninghamii* in flower (Fig. 14) accompanied by blue flowers of *Wahlenbergia violacea*.

Time prevented a full study of the whole area but all were well satisfied with what we had covered.

### Acknowledgements

We thank landowner Brian Clarke and his farm managers, Chris and Sara Maffey, for access to "Robinson's Gully"; and Evan and Carol McGregor of the Manukau Heads signal station for access to Mahanihani. I would like to thank Ewen Cameron for assistance with this report and species lists, also photographs; Philip Moll, Janeen Collings and Joshua Salter for photographs; and Steve Benham for his earlier species list of Mahanihani.



**Fig. 12.** A particularly heavy-fruiting *L. obcordata*. Photo: Janeen Collings.



**Fig. 13.** *Parsonsia heterophylla* in flower at Mahanihani, one of the species noted still flowering at both sites visited. Photo: Philip Moll.



**Fig. 14.** A single flower head of *Mentha cunninghamii* creeping through the rank grass and ferns among the groves of *Lophomyrtus obcordata* at Mahanihani. Photo: Joshua Salter.

## Appendix. Species lists for "Robinson's Gully" and Mahanihani Reserve, South Manukau Heads

The Robinson's Gully list is based on native records from a survey of the valley as far as the boundary fence, undertaken by Tricia (P A) Aspin on 5 May 2007, with additions from the Bot Soc visit on 19 March 2016 to the upper half of the valley. The Bryophytes are under-recorded; those listed were growing in association with a *Dumortiera hirsuta* population.

For Mahanihani Reserve, the base list and information were supplied by Steve Benham from a survey of the forest gully remnant (8.498ha) on 15 February 2015. Additions for the western end of the south-facing slope were recorded by Auckland Botanical Society, 19 March 2016.

Steve's botanical inventory was compiled starting on the south facing slopes which has significantly higher biodiversity values than the northern facing slope. The north-facing slope is mainly kanuka and manuka. The area was occasionally lightly grazed. A new fence was constructed in May 2015 to secure the site with funding made available through Auckland Council. Natural regeneration is occurring.

Notable weeds recorded by Steve include: blackberry (*Rubus fruticosus* agg.), apple of Sodom (*Solanum linnaeanum*), woolly nightshade (*Solanum mauritianum*), mist flower (*Ageratina riparia*) and occasional cape gooseberry (*Physalis peruviana*), and boxthorn (*Lycium ferocissimum*). Both apple of Sodom and woolly nightshade were controlled by cutting and pasting and removing fruits from site. A threat to this site were the 14+ clumps of *Elaeagnus x reflexa* that were recorded in neighbouring Lot 220 and controlled May 2015.

### Key

+ = present

# = Additions by Auckland Botanical Society (ABS)

\* = exotic species (added by ABS, except those recorded by S. Benham as threats to Mahanihani Reserve)

NS = Not seen by ABS

PA = Tricia Aspin's survey of "Robinson's Gully", 5 May 2007  
SB = Steve Benham's survey of Mahanihani Reserve, 15 Feb 2015

Planted species not included.

	Robinson's Gully		Mahanihani Reserve						
	PA	ABS	SB	ABS					
<b>Bryophytes</b>									
<i>Achrophyllum dentatum</i>	+								
<i>Dumortiera hirsuta</i>	+								
<i>Heteroscyphus normalis</i>	+								
<i>Megaceras</i> sp.	+								
<i>Monoclea forsteri</i>	+								
<b>Ferns</b>									
<i>Adiantum cunninghamii</i>	+		+						
<i>Adiantum fulvum</i>								#	
<i>Asplenium bulbiferum</i>	+	NS							
<i>Asplenium lamprophyllum</i>	+								
<i>Asplenium oblongifolium</i>	+	NS	+					NS	
<i>Asplenium polyodon</i>	+	NS							
<i>Blechnum chambersii</i>	+								
<i>Blechnum filiforme</i>	+		+						
<i>Blechnum membranaceum</i>	+							#	
<i>Blechnum novae-zelandiae</i>	+								#
<i>Cyathea medullaris</i>	+		+						
<i>Deparia petersenii</i>	+								
<i>Dicksonia fibrosa</i> (juvenile)			+					NS	
<i>Dicksonia squarrosa</i>		#							
<i>Doodia australis</i>	+		+						
<i>Lastreopsis glabella</i>		#							
<i>Microsorium pustulatum</i>	+		+						
<i>Microsorium scandens</i>	+		+						
<i>Paesia scaberula</i>	+	NS	+						
<i>Pneumatopteris pennigera</i>	+		+						
<i>Polystichum neozelandicum</i>	+		+						
<i>Polystichum wawranum</i>			+					NS	
<b>Gymnosperms</b>									
<i>Podocarpus totara</i>						+	NS		
<b>Dicotyledons</b>									
<i>Acaena novae-zelandiae</i>									+
<i>Ageratina riparia</i> *							#		+
<i>Anagallis arvensis</i> var. <i>arvensis</i> *							#		#
<i>Beilschmiedia tawa</i>						+	NS		
<i>Brachyglottis repanda</i>						+			
<i>Callitriche stagnalis</i> *							#		
<i>Calystegia sylvatica</i> *							#		
<i>Calystegia tuguriorum</i>						+			
<i>Carduus tenuiflorus</i> *									#
<i>Carmichaelia australis</i>						+	NS	+	NS
<i>Centaureum erythraea</i> *							#		
<i>Centella uniflora</i>								+	
<i>Cirsium arvense</i> *									#
<i>Cirsium vulgare</i> *							#		#
<i>Clematis paniculata</i>								+	
<i>Conyza sumatrensis</i> *							#		#
<i>Coprosma grandifolia</i>						+	NS		
<i>Coprosma macrocarpa</i>						+			#
<i>Coprosma repens</i>								+	NS
<i>Coprosma rhamnoides</i>								+	
<i>Coprosma robusta</i>						+	NS	+	
<i>Corynocarpus laevigatus</i>						+			

<i>Crepis capillaris</i> *				#	<i>Ranunculus reflexus</i>	+			
<i>Daucus carota</i> *		#		#	<i>Ranunculus repens</i> *				#
<i>Dysoxylum spectabile</i>	+				<i>Rhabdothamnus solandri</i>	+		+	
<i>Entelea arborescens</i>	+				<i>Rubus fruticosus</i> agg.*		#	+	
<i>Epilobium rotundifolium</i>	+				<i>Rumex obtusifolius</i> *		#		
<i>Fuchsia excorticata</i>	+	NS			<i>Senecio bipinnatisectus</i> *				#
<i>Galium divaricatum</i> *		#			<i>Senecio skirrhodon</i> *				#
<i>Geniostoma ligustrifolium</i>	+		+		<i>Sherardia arvensis</i> *		#		
<i>Geranium robertianum</i> *		#			<i>Solanum linnaeanum</i> *		#	+	
<i>Haloragis erecta</i>	+	NS	+		<i>Solanum mauritianum</i> *		#	+	
<i>Hebe macrocarpa</i>			+	NS	<i>Solanum nigrum</i> *		#		#
<i>Hedycarya arborea</i>	+	NS	+		<i>Solanum nodiflorum</i> *		#		
<i>Hoheria populnea</i>	+		+		<i>Stellaria parviflora</i>	+	NS		
<i>Hydrocotyle elongata</i>				#	<i>Streblus heterophyllus</i>			+	
<i>Hydrocotyle moschata</i>			+	NS	<i>Tetragonia implexicoma</i>			+	NS
<i>Hypochoeris radicata</i> *		#		#	<i>Trifolium pretense</i> *		#		
<i>Jacobaea vulgaris</i> *		#			<i>Ulex europaeus</i> *				#
<i>Knightia excelsa</i>				#	<i>Vitex lucens</i>	+			
<i>Kunzea robusta</i>	+		+		<i>Wahlenbergia violacea</i>	+		+	
<i>Leontodon saxatilis</i> *				#					
<i>Leptospermum scoparium</i>	+		+		<b>Monocotyledons</b>				
<i>Leucantheum vulgare</i> *		#		#	<i>Agrostis capillaris</i> *		#		#
<i>Leucopogon fasciculatus</i>	+		+		<i>Apodasmia similis</i>	+			
<i>Linum bienne</i> *				#	<i>Astelia banksii</i>		#		
<i>Lobelia anceps</i>	+		+		<i>Astelia hastata</i>	+		+	NS
<i>Lophomyrtus obcordata</i>	+		+		<i>Carex breviculmis</i>	+			#
<i>Lotus angustissimus</i> *		#			<i>Carex dissita</i>	+	NS		
<i>Lotus pedunculatus</i> *		#		#	<i>Carex lessoniana</i>	+			
<i>Ludwigia palustris</i> *		#			<i>Carex solandri</i>	+	NS		
<i>Lupinus arboreus</i> *		#			<i>Carex uncinata</i>	+			
<i>Lycium ferocissimum</i> *		#	+		<i>Carex virgata</i>	+			
<i>Lythrum hyssopifolia</i> *		#			<i>Cenchrus clandestinus</i> *		#		#
<i>Melicope ternata</i>	+	NS	+		<i>Cordyline australis</i>	+		+	
<i>Melicytus ramiflorus</i>	+		+		<i>Cordyline banksii</i>	+			
<i>Mentha cunninghamii</i>	+			#	<i>Cyperus congestus</i> *		#		#
<i>Metrosideros carminea</i>	+				<i>Cyperus ustulatus</i>	+			
<i>Metrosideros excelsa</i>	+		+		<i>Dactylis glomerata</i> *		#		#
<i>Metrosideros perforata</i>	+		+		<i>Ehrharta erecta</i> *		#		#
<i>Muehlenbeckia australis</i>	+		+		<i>Eleocharis gracilis</i>			+	NS
<i>Muehlenbeckia complexa</i>	+		+		<i>Eleusine indica</i> *		#		
<i>Myrsine australis</i>			+		<i>Freycinetia banksii</i>	+			
<i>Nasturtium officinale</i> *		#			<i>Gahnia lacera</i>	+			
<i>Olearia furfuracea</i>				#	<i>Isolepis cernua</i>	+	NS		
<i>Oxalis exilis</i>	+			#	<i>Isolepis sepulcralis</i> *		#		
<i>Parsonsia heterophylla</i>	+		+		<i>Juncus effusus</i> *		#		#
<i>Persicaria decipiens</i>		#			<i>Lolium perenne</i> *		#		#
<i>Physalis peruviana</i> *		#			<i>Machaerina sinclairii</i>	+			
<i>Piper excelsum</i>	+		+		<i>Microlaena stipoides</i>	+		+	
<i>Pittosporum cornifolium</i>	+	NS			<i>Microtis unifolia</i>				#
<i>Plantago lanceolata</i> *				#	<i>Oplismenus hirtellus</i>	+		+	
<i>Plantago major</i> *		#			<i>Paspalum dilatatum</i> *				#
<i>Potentilla indica</i> *		#			<i>Phormium tenax</i>	+	NS		
<i>Prunella vulgaris</i> *		#		#	<i>Poa pusilla</i>	+	NS		
<i>Pseudognaphalium luteoalbum</i>	+	NS			<i>Rhopalostylis sapida</i>	+			
<i>Pseudopanax crassifolius</i>	+				<i>Ripogonum scandens</i>	+	NS		