

Waimangu Volcanic Valley Field Trip 1 July 2018

Martin Pearce

On a crisp and cool morning 14 of us walked down through the Waimangu valley. The valley is a favourite of the Botanical Society with its wide range of plants all naturally regenerating after the 1886 eruption of Mt Tarawera and the 1917 eruption of Frying Pan Lake. As usual it took a while to get everyone moving. We saw a few mistletoe plants of *Ileostylus micrantha* hosted on wineberry (*Aristotelia serrata*), kanuka (*Kunzea robusta*) and mahoe, (*Melicytus ramiflorus*) at the top of the valley before following the track down to the Southern Crater, usually covered with the water fern *Azolla rubra*. We had a short discussion on the different species of *Kunzea* in the vicinity. The tree fuchsia *Fuchsia excorticata*, kotukutuku, seems to thrive at this end of the valley and we passed by a couple of fine specimens, just beginning to flower. We explored a small area above the path where mangeo and tawa seedlings were popping up. Most of these were under a large kamahi, a favourite haunt of the local kereru. A titoki and reasonably big totara were present just off the path and it is believed these were planted by previous guides in the valley.

This brought us into the thermal area of the reserve. The track lies above Frying Pan Lake, one of the world's largest geothermal springs. Lots of Spanish heath (*Erica lusitanica*) above and below the track as well as plenty of broom and blackberry weeds keep staff fairly busy throughout the valley. Prostrate or geothermal kanuka, *Kunzea tenuicaulis*, is present near the warmer sites. As we got closer to the water *Nephrolepis flexuosa* appeared on the lake side along with *Hymenophyllum* on the shady banks of the track.

The walk to Bus Stop 1, part way down the valley, normally takes one hour but at 'Botsoc' pace we took nearly four hours. We stopped for lunch by the hot springs, where the ground was nice and warm to sit on. Close by the lunch spot we enjoyed a display of *Psilotum nudum* and the carnivorous *Drosera auriculata* on a track edge cutting.

After lunch we had a short discussion about the difference between two thermal ferns, *Cyclosorus interruptus* and *Christella dentata*. Deer browsing was evident on the smaller mahoe and karamu in this area. We headed to Bus Stop 1, still only part way down the valley, and caught the bus to Warbrick Terrace. Storm damage had wiped

out one of the bridges so walking down was a bit tricky. In the Warbrick Terrace wetland area a small leech was spotted on a submerged root, leading to discussion on freshwater leeches.

We then walked to the lake, following the path by the stream. This area has since flooded due to the higher lake levels. We seem to have had our share of natural disasters in the Waimangu Valley. We took a short look at the Lake Rotomahana shore, then enjoyed the bus trip back through the valley to the Visitor Centre.

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## Waimangu Valley – additions to vascular plant species list

Gael Donaghy

A comprehensive vascular plant species list for the Waimangu Valley was included in Newsletter 52, June 2009, as part of the 25<sup>th</sup> Anniversary celebration report. That list was compiled by John F.F. Hobbs from a list by C. E. Ecroyd, March 1999, with additions from Rotorua Botanical Society visits 2001, 2004 and 2009. Additions to this list recorded on the July 2018 visit are listed below. (Editor)

### Ferns

|                                                                                     |                             |
|-------------------------------------------------------------------------------------|-----------------------------|
| <i>Leptopteris hymenophylloides</i> (Todea)                                         | single crepe fern; heruheru |
| <i>Polystichum neozelandicum</i> ssp. <i>zerophyllum</i> (pp. <i>P. richardii</i> ) | <i>Pteris macilenta</i>     |
| sweet fern                                                                          |                             |

### Gymnosperms

|                                                                        |                                 |
|------------------------------------------------------------------------|---------------------------------|
| <i>Podocarpus laetus</i> ( <i>P. hallii</i> , <i>P. cunninghamii</i> ) | Hall's totara; thin bark totara |
|------------------------------------------------------------------------|---------------------------------|

### Dicotyledons

|                                                                               |                        |
|-------------------------------------------------------------------------------|------------------------|
| <i>Beilschmiedia tawa</i>                                                     | tawa                   |
| <i>Kunzea serotina</i>                                                        |                        |
| <i>Litsea calicaris</i>                                                       | mangeo                 |
| * <i>Soliva sessilis</i> ( <i>S. pterosperma</i> ; <i>S. valvidiana</i> )     | Onehunga weed          |
| * <i>Aphanes arvensis</i> ( <i>Alchemilla</i> )                               | parsley piert          |
| * <i>Cardamine flexuosa</i>                                                   | wavy bitter cress      |
| * <i>Geranium robertianum</i>                                                 | herb Robert            |
| <i>Hydrocotyle moschata</i> var. <i>moschata</i> ( <i>H. sibthorpioides</i> ) |                        |
| * <i>Hydrocotyle tripartita</i>                                               | Australian hydrocotyle |
| * <i>Myosotis sylvatica</i> ssp. <i>sylvatica</i>                             | garden forget-me-not   |

### Monocotyledons

|                                                                              |                                 |
|------------------------------------------------------------------------------|---------------------------------|
| * <i>Bromus catharticus</i> var. <i>catharticus</i> ( <i>B. unioloides</i> ) | prairie grass                   |
| <i>Cordyline banksii</i>                                                     | forest cabbage tree; ti ngahere |
| * <i>Lolium arundinaceum</i> ( <i>Festuca</i> , <i>Schedenorus</i> )         | tall fescue                     |
| * <i>Poa annua</i>                                                           | annual poa                      |
| <i>Rytidosperma unarede</i>                                                  | cliff fairy grass               |
| * <i>Setaria pumila</i> ( <i>S. glauca</i> )                                 | yellow bristle grass            |