

# Nearly gone forever: A trip to the Threatened Native Plant Garden, Auckland Botanic Gardens

Bec Stanley, Emma Simpkins & Jeff Jones

Participants: *Jessica Beever, Maureen Burke, Jan Butcher, Ewen Cameron, Steve Cook, Graeme Falla, Alex Fox, Lesley Haines, Wendy John, Jeff Jones, Cristine Major, Mere Roberts, Emma Simpkins, Ian & Lydia Smith, Bec Stanley (trip leader), Adriene Stanton, Claire Stevens, Pancha Suman, Cheryl Taylor, Alison Wesley, Mike Wilcox, Paula Wilkie, Maureen Young.*

Conservation is one of the three main roles a Botanic Garden plays and the Auckland Botanic Gardens realises this in several ways (Hobbs & Bodley 2017). We focussed on two during our short mid-winter trip: Advocating for threatened plants, the role of the Threatened Native Plant Garden (TNPG); and contributing to the recovery of threatened plants, through ex situ collections, which will be returned to the wild.

Our trip on 16 July 2022 (Figs. 1–4) coincided with the 40<sup>th</sup> birthday of the Auckland Botanic Gardens which is being celebrated throughout this year and at the time of our visit included a display of the conservation and research role of the Gardens and an exhibition of photos from 1982, the year the garden opened.

Now twenty years old, the TNPG highlights some threatened plants from Auckland and Northland in replicas of habitats in which they typically occur. Habitats are created by growing common plants found with these threatened plants in the wild and using rocks and other hard landscaping to give visitors an impression of the wild. Usually just one threatened species is highlighted per habitat. The replica habitats include inland scrub forest, streamside, swamp, gumland, coastal scrub forest, offshore island, boulder beach, lava field, coastal rocky bluff, coastal wetland/saltmarsh, shell bank, forest dune and sand-dune.

While the aim of this collection is advocacy, to raise awareness of the plight of NZ native plants in the wild and showcase some threatened plants, the plants are expected to be of known recorded provenance, ideally collected from the wild, or acquired with complete field notes (and appropriate legal permissions).

The early development of the TNPG was well-profiled (Benham & Torrens 2000 & 2002; Benham 2006) and has fulfilled its primary goal to highlight the plight of native plants to visitors, who are often



**Fig. 1.** Bec gave us an introduction at the entrance to the TNPG. All photos by Cheryl Taylor, 16 Jul 2022.



**Fig. 2.** Bot Soccers spread out along the pond margin.



**Fig. 3.** Bec answers questions from a rocky vantage point.



**Fig. 4.** Bot Soccers paid little attention to a sculpture in the pond.

unfamiliar with plant conservation, through its creative plant displays supported by interpretation. Gardens staff use the garden on tours, for example in conservation week, and as a place to teach university labs. As an example of its use, we were able to discuss the threat of myrtle rust to native myrtles at the swamp habitat, on *Syzygium maire*, which has been infected by myrtle rust (but was not evident on our visit). The inclusion of threatened plants that look like weeds, such as *Sonchus kirkii* and *Picris burbridgeae*, demonstrate the value of the TNPG in helping people identify some of our most threatened herbs. Even bot soccers might walk past them and think they are weeds. Plants highlighted on our walk included the green mistletoe (*Ileostylus micranthus*) growing on its main host from Miranda (*Plagianthus divaricatus*) in the saltmarsh habitat. The TNPG has been the venue for the teaching of various conservation groups about seed dispersal in this mistletoe.

Challenges of managing the habitats that are shaped by ecological factors in the wild were shared, like salt-laden winds or tides, that are absent in a garden. Conditions in natural environments are usually far harsher than the benevolent growing conditions in a garden where native plant growth is

often extremely vigorous. In addition, the many exotic annual herbaceous weeds relentlessly find every gap, making the display of 'bare ground' often found in natural habitats impossible to replicate. The saltmarsh/coastal wetland habitat was extensively remodelled in 2020 to try to mitigate the weed issues in this habitat. Managing an invasion of *Cymbalaria muralis* (ivy-leaved toad flax) in the lava field habitat is particularly exhausting as it grows deep into the lava rocks and under the prostrate threatened plants, making hand-weeding difficult. One good 'problem' to have is the 'weedy' threatened native plants that always seem to move away from their plant labels and off to another habitat that they are not usually naturally found in.

Participants were pleased to see a kaka fly overhead twice – Jeff informed us that they were usually present, and that they particularly liked feeding on the ice-cream bean tree (*Inga edulis*). After spending an hour and a half in the TNPG we went 'behind the scenes' at the nursery to see some of the threatened plants being grown for returning to the wild in conservation projects, such as *Metrosideros bartlettii*, *Pimelea eremitica*, *Anogramma leptophylla* (currently dormant) and *Veronica jovellanoides*.

## References

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## Rabbit Island / Takangariki, Kawau Bay Auckland Bot. Soc. Field Trip, 17 September 2022

Maureen Young

Participants: Jenny Andrew, Maureen Burke, Ewen Cameron, Amanda Charleton, Anne & Brian Dudley, Frances Duff, Kate Feickert, Alan Foubister, Shelley Heiss-Dunlop, Jetta Laurenson, John Millett, Philip Moll, Peter Moosberger, Brittany Pearce, Helen Preston Jones, Juliet Richmond, Mere Roberts, Joshua Salter, Cheryl Taylor, Dave Wilson, Maureen Young and the island caretaker Leslie Holmes.

Two small islands to the west of Kawau Island are collectively known as the Mayne Islands. The southerly of the two was called Goat Island until the establishment of the Goat Island Marine Reserve [officially Cape Rodney-Okakari Point Marine Reserve] near Leigh. To prevent confusion, the Kawau Bay Goat Island became known by its Māori name, Takangaroa (the long casting of the