Kepa Bush Reserve, Orakei, 15 August 2009

Rhys Gardner

Situated on the south-facing slope between Kepa Road and Purewa Creek (Fig. 1) this 13.6 ha. reserve is, except for the Hillsborough-Blockhouse Bay coastal strip, the largest piece of native bush on the Auckland isthmus. John Kinder, churchman, artist and photographer, pictured its western edge in 1878. His scene, the paddocks of the Orakei Basin tuff-ring in the foreground (Fig. 2), has changed far less than most places so very near the central city.



Fig. 1. Enlargement from topographical sheet NZMS 2A 1: 25 000 "Waitemata", published in 1942.

The bush was part of the Church of England-owned land (Footnote 1) within the Kohimarama Block, this being the second of the Crown's large Auckland acquisitions (Jackson 1976). The bush became a Council-owned reserve in 1962.



Fig. 2. "Purewa Creek, High Water". John Kinder, 1878. Original watercolour in Auckland City Art Gallery.

We gathered in dampness in the clearing at the top of the main central ridge. Its old kanuka (*Kunzea ericoides*) are too large (Footnote 2) and high-crowned to make good umbrellas — we could all have fitted though under the single old dome-headed manuka (*Leptospermum scoparium*) here. The ridge's

clay soils are infertile and poorly drained (*Baumea juncea* and *Lepidosperma australe* are abundant furthur down towards the creek) and one would think that long ago, once successive Maori-lit fires had bared the ground, that this part of Auckland would have supported only a low scrubby cover, perhaps mainly of manuka, cabbage tree (*Cordyline australis*), sedges and umbrella fern (*Gleichenia* spp.).

We headed down the eastern gully. First to get our admiration were the numerous large putaputaweta (*Carpodetus serratus*), several of which reach c. 13 m tall and 30 cm dbh. These and the accompanying old hawthorns (*Crataegus monogyna*) are to an extraordinary degree pocked with holes made by the larvae of the puriri moth (Cameron et al 2008). Now that there is predator-control for this bush a visit on a summer night would seem likely to produce a sighting of the moth itself, New Zealand's largest (Footnote 3).

A stormwater drain discharges into the top of the gully but the latter's clay banks are too coherent to erode much and are generally well-clothed in ferns and bryophytes, with a *Fissidens* moss doing especially well. The fern *Deparia petersenii* (which I regard as adventive) is quite common. Wandering Jew, *Selaginella kraussiana* and *Zantedeschia aethiopica* 'Green Goddess' were seen only in the lower two-thirds of the gully.

We noted the general lack of canopy-species regeneration: kahikatea (Dacrycarpus dacrydioides), rimu (Dacrydium cupressinum) and puriri (Vitex *lucens*) are all absent, presumably because seed-trees all lie some distance away. Kohekohe (Dysoxylum spectabile), the dominant of the older parts of this reserve, is present in this gully more or less just as seedlings and saplings. It may have been prevented from developing here in past decades because of a severe possum infestation. (The bush's hawthorn, survivors of an ecopurge — in the mid-90s, to my recollection — once had the useful role of sheltering the bush's young kohekohe from animals, including cattle and horses). The current predator-control work by the Kepa Bush Volunteers is quite likely the reason for the revival of kohekohe here.

There are several large kanuka high on the Thatcher St side of this gully but two trees on the other side were of particular note. First, a medium-sized acmena (*Syzygium smithii*), redeveloping its dense crown after having been topped (storm and/or humans ?); the gap so created has become a thicket of acmena saplings. Second, a pigeonwood (*Hedycarya arborea*), which at c. 15 m tall and 40 cm dbh must be one of the largest in the region. Other only slightly smaller pigeonwoods nearby are generally ringed by sucker

shoots, sometimes to the degree that they are multi-trunked.

Going up west onto the main ridge we saw numerous examples of young pohutukawa (*Metrosideros excelsa*) that had started life on silver tree-ferns (*Cyathea dealbata*). Presumably they can do this where enough light comes in from the side and allows them to grow quickly and get their roots into the ground.

The end of the main ridge has scattered large pohutukawa and kanuka over a low scrub of native spp. with a fair amount of hawthorn, privet spp. and even *Rhamnus alaternus*. But it may be the nature of its ground cover (*Carex longebrachiata, Baumea juncea* and *Allium triquetrum*) that is mainly responsible for delaying further regeneration. There was discussion about whether puriri (*Vitex lucens*) and totara (*Podocarpus totara*) had ever been dominant here, and whether these species could become so again if replanted into openings made into the scrub.

Further west we descended into the middle section of the main gully, remarkable for its numerous large kohekohe (cf. the kohekohe forest of Dingle Dell, St Heliers). There is also a single magnificent taraire (*Beilschmiedia tarairi*). Mike Wilcox checked what was coming up under it — reassuringly, it was kohekohe, so we surmised that no pigeons visit here to bring in acmena, phoenix palm or loquat. Nikau (*Rhopalostylis sapida*) is present, but no especially tall individuals were seen.

Higher on the gully sides there are numerous large old kowhai (*Sophora chathamica*) but nearly all are dead or dying. The landscape of this part of Auckland was, not so long ago, greatly beautified by kowhai, and it would seem very desirable to revive it here, for its spring-flowering and also to draw in the native

pigeon, which feeds on its new shoots in mid-late winter.

After lunch we went round the base of the Thatcher St ridge on a narrow track above the creek. The scrub on the steepest ground seemed like the place where the old gathering of *Pimelea tomentosa* and the slightly younger one of toetoe *Cortaderia fulvida*) could have been made (Footnote 4) but we had to be satisfied with seeing three tree fuchsias (*Fuchsia excorticata*), more or less just hanging on, and several colonies of *Adiantum aethiopicum*.

At this point the quality of the bush deteriorates and, as we turned north to follow up the major sidestream below Kempthorne Crescent, the canopy of this "Selwyn Bush" (named for the school) becomes one of youngish mahoe (*Melicytus ramiflorus*) and hawthorn, over a great amount of privet spp., *Asparagus scandens, Hedychium* spp. and Wandering Jew. The Purewa Restoration Group members were cheered by our telling them that a biocontrol for the latter was nearly ready.

On our way back to the main bush entrance some of us wondered at the abundance of bryophytes on the creek's old crack willows (*Salix fragilis*). More effectively, Mike Wilcox reestablished connection with the red alga *Bostrychium harveyi*, its growths in debris among saltmarsh at rear of the creek's big old mangroves being the best he knows of in the region.

More notes on the area and its history, especially for the southern (cemetery) side of Purewa Creek, are given in Gardner (1987).

Attendance

Enid & Paul Asquith (and grand-daughter Robyn), Colleen and Warren Brewer, Michelle Findlay, Rhys Gardner (leader), Lesley Haines, Martin Heffer, Trina Jashari, John La Roche, Barrie and Gretta McLeay, Juliet Richmond, Mike Wilcox, Tony Williams, Maureen

Footnotes

- 1 If Bishop Selwyn had been a plant-collecting man, and not so preoccupied with setting up St John's College etc., the bush might well have been named after him. To have called it "Purewa Bush" would have preserved the continuity of the locality's name in botanical-historical writings.
- 2 The taller kanuka of this ridge reach almost 20 m in height, and some have trunks of c. 50 cm dbh. Most seem healthy though they must be near the end of their lives; one has been torn apart by wind quite recently.
- 3 The puriri moth's scientific name is *Aenetus virescens*; Gr. *aenetos* praiseworthy, *virescens* green.
- 4 *Pimelea tomentosa*, coll. H. E. Powell, 28 Jan 1947 "Purewa Bush", AK 44764. There is also a *Cheeseman* collection from "Orakei". *Cortaderia fulvida*, coll. R. 0. Gardner 5068, 25 Dec 1986, AK 178707.

References

Cameron, E.; Hayward, B.; Murdoch, G. 2008: *A field guide to Auckland*. Revised edn. Godwit Press. Gardner, R. O. 1987. Purewa and its cemetery. *Auckland Botanical Society Newsletter* 42: 15-18.

Jackson, E. T. 1976: Delving into the past of Auckland's eastern suburbs. Section 3 Meadowbank-St Johns. Published by the author. [Copies in Auckland City Libraries].