

<i>Laccaria</i> sp.	driveway, soil/moss	iNaturalistNZ 171665149, 6 July 2023
<i>Nidula</i> sp.	on fallen kauri twig	iNaturalistNZ 171868691, 6 July 2023
<i>Protheleum albodecendens</i>	on fallen twig	iNaturalistNZ 168751859, 17 June 2023
<i>Roridomyces</i> sp.	on dead wood	iNaturalistNZ 168579941, 17 June 2023

Lichens

<i>Dibaeis absoluta</i>	driveway, soil bank	iNaturalistNZ 17243215, 6 July 2023
<i>Parmotrema reticulatum</i>	on kauri tree trunks at edge of driveway	

ABS field trip, 15 July 2023 to Sylvan Park and Kitchener Park, Milford, Auckland City

Rhys Gardner

A hundred and fifty years ago the volcanic crater of Lake Pupuke was ringed by native forest (its extent clearly shown in two Auckland Libraries maps, from 1863 and 1886, referenced below). Sylvan Park and Kitchener Park, on the northern side of the lake, contain almost all of what remains of it. Like the better-known Smith's Bush a short way to the south, these two contiguous reserves represent an old-growth community of great rarity in the Auckland City region.

Large karaka (*Corynocarpus laevigatus*) (Fig. 1), kohekohe (*Didymocheton spectabilis*) and taraire (*Beilschmiedia tarairi*), and a lesser number of puriri (*Vitex lucens*), make up most of the forest canopy. Big old kowhai (*Sophora chathamica*) were much more conspicuous forty years ago (Gardner 1986) than they are now, many having died or declined to a stump and a few branches (but as we saw, the latter are still producing copious amounts of seed) (Fig. 2).



Fig. 1. Old karaka tree still managing to produce a canopy. Photo: EK Cameron, 15 Jul 2023.



Fig. 2. ABS group inspecting the two old kowhai by the carpark. Photo: EK Cameron, 15 Jul 2023.

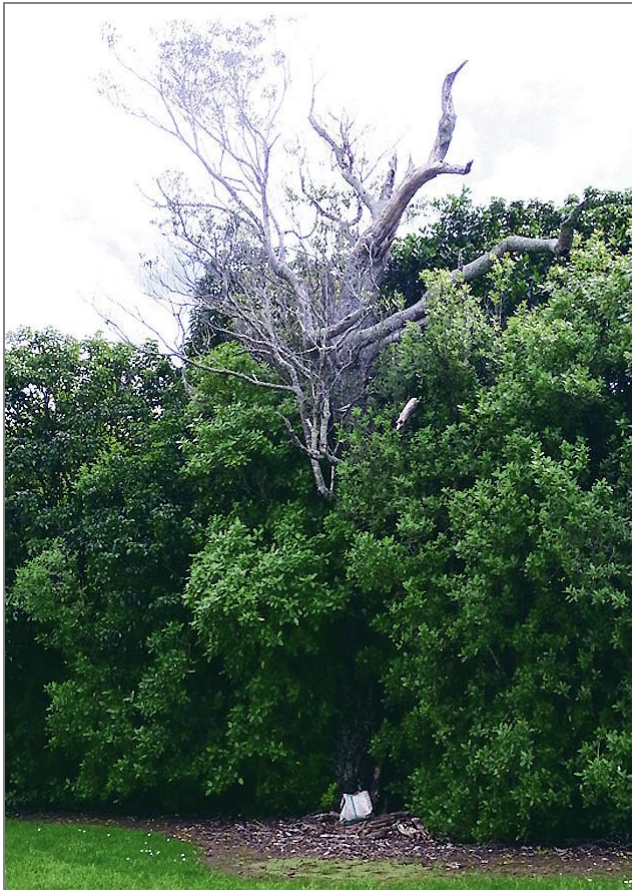


Fig. 3. Sylvan Park's single surviving hinau (*Elaeocarpus dentatus*), c. 10 m tall, among kohekohe and karaka. Photo: RO Gardner, 30 Aug 2023.



Fig. 4. Bark of *Elaeocarpus dentatus*. Photo: RO Gardner, 30 Aug 2023.

Our ABS (Auckland Botanical Society) visit was made a day after this year's Matariki, when kohekohe's nearly month-long flowering was ending and that of *Coprosma macrocarpa* var. *minor* was about to start. This latter plant, "just a karamu" to many gardeners and park managers, deserves a positive mention: it is invaluable here on the forest edges, keeping out the wind and superfluous probing by humans, and providing a reliable (wind-pollinated) abundance of berries for the birds.

As we walked through these reserves, west to the Kitchener Park lakeside scrub and back through the best stands along their northern edge, much of our discussion was about how the health of this forest could be maintained. Our suggestions (and some less democratic ones, being just the writer's) are given briefly in the Notes below.

We observed that the canopy and understorey of the forest are without nikau (*Rhopalostylis sapida*), although a few young ones have been planted recently. Mamaku (*Cyathea medullaris*) and ponga (*C. dealbata*) tree ferns are likewise lacking. Perhaps a combination of continual low light and summer drought is responsible for these absences. Most of the large trees are in good health, but there is one recent canopy gap (through death of a huge

kowhai). This now carries a waist-high growth of *Coprosma macrocarpa* saplings but is without any significant amount of regeneration by kohekohe, taraire, etc. Are the seeds of these trees not getting here, or are they being removed by rats and mice or other predators? A study of the fate of any such seeds and the seedlings that do manage to germinate in this clearing could be a very useful one.

In the Kitchener Park stand east of the tennis courts Ben Goodwin found the log that in 1986 I knew as the reserves' only tawa tree. Not far away, Ewen Cameron spotted a few leaves on a huge, nearly dead hawthorn (*Crataegus monogyna*). This would have seeded-in long ago from the hedges that once divided up the farmland around the lake but it is not clear why hawthorn does not continue to be invasive here (and elsewhere in Auckland's older suburbs, e.g. at Arch Hill and the Orakei Basin).

In 1986 I recorded two large ("60 cm dbh") hinau (*Elaeocarpus dentatus*) trees in the northern part of Sylvan Park proper. The one on the bush edge is still alive but is very stag-headed (Fig. 3). Eventually we came up against what is left of the other one, its location and size as described in 1986, dead but still standing and still carrying its distinctive hard, deeply fissured bark (Fig. 4). In the Auckland Museum



Fig. 5. The mushroom *Callistosporium* sp. One up-ended to show stalk and gills. Photo: A Charlton, 15 Jul 2023.



Fig. 6. Toilet block, literally blocking the view to the lake beyond, and on right, two old kowhai (See also Fig. 2). RO Gardner 30 Aug 2023.

Herbarium (AK) this species is represented in the Tamaki Ecological District only by old specimens from "Northcote", although it is known to have grown (and could still) in the Chelsea-Chatswood valley.

Fungi were not a conspicuous feature of taller stands (the good health of the canopy trees means that there was not much rotting wood on the ground) but Beth Gibbs saw and Amanda Charlton photographed, and Jerry Cooper later identified, the agaric decomposer *Callistosporium* sp., growing on the cut end of a log (Fig. 5).

We spotted a fern that is uncommon in these reserves, the hound's-tongue. A variety of correct botanical names were mentioned. Leon Perrie (2021) suggests that *Lecanopteris pustulatus* is the

preferable one, and his discussion can be recommended to anyone wanting to understand the logic (evolutionary rather than nomenclatural) behind most of the recent name changes in our flora.

Our group of 20 ABS members was co-led by Tabitha Becroft of the Pupuke Birdsong Project, a community group which carries out maintenance and restoration activities here and elsewhere around the lake. We enjoyed learning from her (*Dracaena draco* naturalising, hedgehogs abundant) and greatly appreciate the work she and her volunteer-helpers are doing, and the hot drink and a piece of cake that she kindly provided near the end of the trip

Attendees: Jenny Andrew, Treffery Barnett, Tabitha Becroft (co-leader), Ewen Cameron, Amanda Charlton, Aidan Edwards, Rhys Gardner (co-leader), Beth Gibbs, Ben Goodwin, Leslie Haines, Christine Major, John Millett, Philip Moll, Peter Moosberger, Brittany Pearce, Karen & John Staniland, Claire Stevens, Paul Travers, Alison Wesley, Maureen Young.

Notes

Sylvan Park is more or less equally divided between native vegetation and mown grassland. Here, and in many other of our large parks, the hotter summers that climate-change is bringing to Auckland might be mitigated by tree-planting. This could be in the form of forest or something more park-like: woodland, groves and avenues. (Because the preservation of Sylvan Park as native forest is paramount the vexed question of whether to plant with natives or exotics or both can be avoided). Suggestions to improve the botanical and amenity values of the two reserves are as follows:

1. Relocate Sylvan Park's view-blighting toilet block (Fig. 6) to the northern or western side of the parking area and replace it with a woodland of kowhai (from locally sourced seed).
2. Substantially reduce the area of mown grass north and west of the parking area by planting broad swathes of natives on the edges of the forest stands. In particular, completely fill in the c. 100 m long grass triangle (Fig. 7) that separates the main forest stand from the scrub and forest on the slope above the lake.
3. The mown grass area's isolated old kohekohe (Fig. 8) and karaka are a sad sight. Their deterioration might be reversed for a while by mulching (what have they done to deserve being confined by spray rings?) but in the longer term, planting around them will be needed if this picturesque treescape is to be preserved. Kanuka, taraire, rewarewa and kowhai are all quite fast-growing, especially if planted in a sheltering nurse scrub; such "replacement groves" will give shade to visitors in the hot summers not very far away.
4. Despite the decline of the two hinau trees their size suggests that the site might still be a favourable one for



Fig. 7. Superfluous mown grass between forest on slope above the lake (out of sight, left) and main stand towards houses. RO Gardner 30 Aug 2023.



Fig. 8. Three isolated old kohekohe; the RH one almost dead. RO Gardner 30 Aug 2023.

the species (for its growth, if not its reproduction). I have never seen flowers on the single remaining tree, nor could I find any fruit endocarps in the litter around it, so its continuance here will probably have to be through clonal propagation.

5. Proper tracking, preferably by boardwalks, would reduce the damage to the ground cover and understorey presently occurring (cf. the situation in Smith's Bush.).

6. The lake edge might also carry a boardwalk that would join with the end of the existing one at the western end of the Kitchener Park section.

7. The lake-edge vegetation west to Kitchener Park seems to need help in gaining height and diversity. Enrichment with suitable species (kahikatea, cabbage tree, pukatea, putaputaweta) is suggested.

8. Towards the western end of Kitchener Park the land becomes steep, scrubby and weed infested, and restoration of forest here would conflict with adjacent property owners' desires of lake views. Restoration of a lower-stature cover (mainly of *Coprosma macrocarpa*?) could be a workable compromise.

References

- Auckland Libraries. Heritage Collections, Map 4131: "Takapuna villa sites for positive sale...", 1863.
 Auckland Libraries. Heritage Collections, Map 4142: "Hurstmere estate, Lake Takapuna", 1886.
 Gardner, R.O. 1986: Native bush at Sylvan Park, North Shore, Auckland. *Auckland Botanical Society Newsletter* 41: 36–42.
 Perrie, L. 2021: [new names for *Phymatosorus pustulatus*] <https://blog.tepapa.govt.nz/2021/12/20/a-new-scientific-name-for-one-of-aotearoas-most-common-ferns-kowaowao-again/>

Exploring the botanical wonders of Rangitoto Island – ABS field trip 19th August 2023

Brittany Pearce

Participants: Jenny Andrew, Sarah Carr, Deborah Colson, Frances Duff, Ben Goodwin, Beth Gibbs, Kathryn Garthwaite, Leslie Haines (co-leader), Helen Nagels, Pete Nagels, Dani Lucas, Juliet Richmond, Ella Rawcliffe, Dhahara Ranatunga, Brittany Pearce, Helen Preston Jones, Garry McSweeney, Carol McSweeney, John Millet, Jetta Laurenson, Maureen Young (co-leader), Joshua Salter, Jennifer Shanks, and Anthony Wright. All photos were taken on the day by the author (BP), or by Joshua Salter (JS) and Anthony Wright (AW).

It was an overcast winter's morning as we waited for the ferry to take us to Rangitoto Island, an iconic

volcanic landmass situated in the Hauraki Gulf, just a 25-minute ferry trip from downtown Auckland. With our notebooks, cameras, and a sense of excitement, we set out to uncover the botanical treasures that this 600-year old island had to offer. The day was destined to be a great one when we were greeted by 'Nationally Endangered' bottlenose dolphins (*Tursiops truncatus*) as we docked at the Rangitoto Wharf.

Upon arrival we couldn't help but admire the fragrant white flowers of exotic *Freesia leichtlinii* near the wharf, as well as colonies of whisk fern (*Psilotum nudum*) on basalt outcrops. Non-vascular species here included an *Asterella* liverwort and feather moss