

ARAPAWA ISLAND SUMMER CAMP 13 – 18 FEBRUARY 2016

SUMMARY AND RECORDS Colin Meurk and Miles Giller

The botany of Arapawa Island has been studied and documented by many botanists, over several years, and for a variety of purposes. Lists of plants and birds observed on Arapawa Island were published in Issue 33 of the *Canterbury Botanical Society Journal* (Meurk et al. 1999). These lists include records from 1984 (Walls) mainly covering the northern end of Arapawa Island, 1993 (Meurk and Ward) covering the central and western parts of Arapawa Island, and 1994 (Nelson Botanical Society) covering the northern part of Arapawa Island (see Meurk et al. 1999 for references to survey details). Our 2016 visit covered Puriri Bay, Oioi Bay and Blumine Island.

No formal written list including all our observations was compiled, although several participants informally recorded their findings during the various excursions during our stay. Some recorded these on the citizen science natural history website NatureWatch NZ [<http://naturewatch.org.nz/>]. There are about 750 observations of nearly 450 named species (plant, animal and fungi; terrestrial, freshwater and marine) largely from our 2016 trip, but with some also from other independent observers. These can be viewed in the “Arapawa & Associated Islands” Place in NatureWatch NZ by following the link <http://naturewatch.org.nz/places/arapawa-associated-islands>.

This includes observations on all of the islands of Queen Charlotte Sound, although the vast majority at this point are from Arapawa and Blumine Islands with a 100 or so complementary NatureWatch NZ records from these islands not associated with this expedition. Future and past observations can be added online, building a cumulative, more comprehensive ‘living’ record. We encourage readers, with even old natural history digital images of uncertain identity, to load them onto the site to contribute to this increasing archived account of the biota of Arapawa and adjacent islands.

Separate written species lists were eventually prepared for Blumine Island (Table 1, p. 78) and another for the Puriri Preservation QEII Covenant (Table 2, p. 80). It is difficult to know whether our trip found any completely new records, though several observations had not been published in the previous *Canterbury Botanical Society Journal* article or on NatureWatch NZ. These included *Deparia petersenii* subsp. *congrua*, *Hypolepis dicksonioides* and *Schoenus maschalinus*.

The islands of Queen Charlotte Sound have been heavily modified over the centuries by prehistoric fires, whalers, farmers, foresters, and by the

deliberate or accidental introduction of animals and plants, the latter more recently associated with the numerous baches and privately-owned properties that now dot the shoreline. Several species on these islands and on the Puriri Preservation property are designated Threatened or At Risk, whilst a few, such as *Plagianthus divaricatus* observed at Oioi Bay, are locally rare. Thankfully some of the island's refuge characteristics are retained because of its at least partial isolation from mainland influences, and by pest and weed control by DoC and by private land owners. Even some well entrenched weeds are now being managed in a concerted manner, the recent control of wilding conifers being the most visually obvious. The Puriri Preservation property is a prime example of positive change. Much of the property was formerly farmed grassland. Virtually all is now clad again in a mosaic of modified-primary mixed hardwood forest and secondary kanuka forest, bounded by open farmland, regenerating native forest and by commercial forestry plantations.

Future recommendations for the management of risks are little different from those usually suggested elsewhere. These are primarily relating to the control of ecologically threatening weeds, such as old man's beard (*Clematis vitalba*) and wilding conifers (generally *Pinus radiata*), and the management of browsing ungulates (including deer, feral livestock, wild pigs, and goats). Provided these pests are adequately managed, nature's processes are likely to gradually bring about a recovery of forested areas to a more primary character. Given recent events in Hawkes Bay, Marlborough and Canterbury, it goes without saying that fire is an ever present threat and high priority must be given to prevention and control. Phasing out pine plantations and accelerating succession to evergreen broadleaved forest will be a key preventative measure.

Some modern influences can be regarded as having a nett beneficial influence in certain places or circumstances. Several small areas of well-grazed grassland beside the vehicle tracks supported small herbs that were otherwise crowded out in ungrazed grassland or forested areas. The multiple land uses currently in place on differing properties provide opportunities for different flora and fauna - a mosaic of ecological associations under a mosaic of land uses.

Reference

Meurk CD, Ward JC, Jane G, Walls GY 1999. Arapawa Island – flora and ecological notes. Canterbury Botanical Society Journal 33, 77–98. http://bts.nzpcn.org.nz/bts_pdf/Cant_1999_33_77-98.pdf [accessed 7 March 2017]