Trip report: Journeys End and Oruawharo, 18 October 2014

David Wilson

Participants: Bruce Calvert, Brian Cumber, Joe Greig, Richard Hursthouse, Wendy John, John Millet, Phillip Moll, Dion Poe, Dhahara Ranatunga, Vijay Soma, Adrian Stanton, Helen Turnwald, David Wilson (leader), Angelina Young.

On this trip we explored part of the north-western corner of the Tapora Peninsula, on the shore of the Kaipara Harbour (Fig. 1). We assembled at the settlement known as Journeys End, on the esplanade between the harbour and the residences and holiday homes. Here, showy non-native flowers were the first plants to attract our attention. African daisy (Arctotis stoechadifolia) and dimorphotheca (Osteospermum fruticosum) featured, and were likely to have spread either from nearby gardens, or from having been planted to beautify the shore. Ice plant (Carpobrotus chilensis) was in the same area, and had spread from the roadside amenity area down on to the foreshore sand flats. It had many pink flowers, all of them closed on this cloudy day.

Nearby, a dense sward of buffalo grass (*Stenotaphrum secundatum*) admitted few other plants, but amongst it we noted other exotics such as wild gladiolus (*Gladiolus undulatus*, Fig. 2), tall fescue (*Schenodorus arundinaceus*) and gorse (*Ulex europaeus*), as well as the natives *Muehlenbeckia complexa*, umbrella sedge (*Cyperus ustulatus*) and bracken (*Pteridium esculentum*). Elsewhere, sheep's



Fig. 1. Map showing location of Journey's End, Kaipara Harbour. Prepared by David Wilson.



Fig. 2. Wild gladiolus (*Gladiolus undulatus*). The base of an uprooted plant, showing the corm and cormils. Photo: Phillip Moll, 18 Oct 2014.



Fig. 3. Sheep's sorrel (*Rumex acetosella*) inflorescence. Photo: Phillip Moll, 18 Oct 2014.



Fig. 4. Two plants of sharp rush (*Juncus acutus*), showing root masses presumably exposed over time by wave erosion. Photo: David Wilson, 18 Oct 2014.



Fig. 5. Weeping matipo (*Myrsine divaricata*), close up of foliage. Photo: David Wilson, 18 Oct 2014.



Fig. 6. Foliose lichens on branchlet of the shrub *Myrsine divaricata*. The species with yellowish thalli and bright yellow apothecia is *Teloschistes chrysophthalmus*, and the one with strap-shaped grey-green thalli is *Ramalina celastri*. Photo: David Wilson, 18 Oct 2014.

sorrel (*Rumex acetosella*) with its many tiny red flowers (Fig. 3) and yellow serradella (*Ornithopus pinnatus*), with only occasional flowers, dominated small areas of sandy ground above high tide level.

We walked north along a sandy, but thicklyvegetated stretch of shore where the low vegetation included the small native sedge Carex pumila, shore bindweed (Calystegia soldanella), with one or two flowers, and many small exotic species. Taller plants here were gorse, pampas grass (Cortaderia selloana), tree lupin (Lupinus arboreus) and a clump of bulbil watsonia (Watsonia meriana var. bulbillifera). There was one small shrub of akeake (Dodonaea viscosa) - larger specimens are to be found further along the coast than we ventured on this trip (D. Wilson, pers. obs.) Saltwater paspallum (Paspallum vaginatum) was often the nearest plant to high tide level, below which was a band of mature mangroves, with a dense bed of seedlings underneath. The ground between the beach and the paddocks further inland was evidently very wet, having a large stand of raupo (Typha orientalis), with the sedge Machaerina articulata amongst it and M. juncea toward the seaward edge. The bindweed Calvstegia sepium was entwined amongst some of these plants. Australian bell frogs (Litorea sp.) could be heard calling from within this area.

A few small pingao (*Ficinia spiralis*) were on a flat, sandy area near the mangroves. They looked out of place there amongst a crowd of mainly exotic species, as if being gradually overwhelmed by them. Perhaps these few were relics from a time when this shore might have had the sparsely vegetated, rolling dunes in which pingao is more typical. The orchid *Microtis unifolia* seemed more at home here, with many plants in the early stages of flowering.

Further along the shore, high tides and waves had evidently been rolling over the sand and eroding a firmer, more elevated substrate. Some resistance had been provided by root masses of sharp rush (Juncus acutus, Fig.4), which was evident from the remnants of dead plants at the forefront of wave attack, or the exposed bases of the still-living In places these exotic specimens further back. rushes were surrounded by a dense turf of saltwater paspallum, but we also came across a good population of the native bachelor's button (Cotula coronopifolia), and other indigenous saltmarsh species such as Samolus repens, Sarcocornia quinqueflora, Selliera radicans and Austrostipa stipoides, amongst the taller Apodasmia similis and sea rush (Juncus kraussii).

We found one or two small plants of alligator weed (*Alternanthera philoxeroides*), a common weed of wet ditches around Tapora. In one spot we were able to compare individual plants of three exotic

members of the mallow family: paddy lucerne (*Sida rhombifolia*), creeping mallow (*Modiola caroliniana*) and another species which was possibly *Malva neglecta*.

It was also on these saltmarsh flats that we found weeping matipo (Myrsine divaricata, Fig. 5). The first bushes we found were heavily windshorn, and becoming overgrown by buffalo grass as well as a native competitor, Muehlenbeckia complexa. The Myrsine foliage was, at first glance, difficult to pick out when tangled with the similarly rounded leaves of the Muehlenbeckia. But we also found a small grove of much taller, healthier looking *Myrsine*. Nevertheless, a combination of competition from other species, particularly buffalo grass, and erosion of the ground where it grows made it difficult to envisage further seedling establishment and recruitment into this small population. It is to be hoped that there are more plants of this species in more favourable situations elsewhere along this coast.

Low bushes such as weeping matipo and saltmarsh ribbonwood (*Plagianthus divaricatus*) supported some luxuriant lichen growth. The most conspicuous of these were fruticose, grey-green *Ramalina* and *Usnea* species, a yellow *Xanthoria* and an orange-coloured species of *Teloschistes* (Fig. 6).

Continuing around the coast, we ventured onto the mudflats and across the estuary channel of Otekawa Creek. On the mudflats and amongst the mangrove pneumatophores, the most conspicuous plant was a green alga, this being a sea lettuce (*Ulva* sp.). Individual plants showed two forms of leaf; one wide and flat, the other narrower and ribbon-like. We also saw patches of sea grass (*Zostera muelleri*), and small pools amongst intertidal rocks on the other side of the channel had the red coralline alga *Corallina officinalis*.

Having crossed the channel, we found ourselves no longer amongst saltmarsh, but instead walked along a stony beach at the foot of an elevated headland. Kanuka (Kunzea sp.) was prominent in the vegetation above us, but the steepness of the slope prevented us from getting up into this forest and attempting a more accurate identification; it seemed likely to have been K. robusta. One slope appeared to show a definite zonation of vegetation, with a low cliff face, above which was a dense cover of Muehlenbeckia complexa. followed, with increasing elevation, by bands of woolly nightshade (Solanum mauritianum), red matipo (Myrsine australis) and then cabbage trees (Cordyline and buffalo grass were australis). Pampas prominent along the forest edge in many places, where they admitted few other species. In other places, the slopes above us had a sward of the exotic grass *Avena barbata*, with an eye-catching mass display of spikelets.

Crevices in the cliff face had a few coastal harebells (Wahlenbergia vernicosa, Fig. 7), low enough on the cliff for us to inspect their pale flowers and hairy stems and leaves. Some brownedoff specimens of the native coastal herb Crassula The native aroundsel *seiberiana* were nearby. Senecio quadridentatus was more common than either of the former two species, but, like them, seemed to be restricted to the few areas free of exotic grasses. Other native species of the coastal fringe included kowhai (Sophora chathamica), still with a few flowers, Gahnia lacera and clumps of Astelia banksii. The scrubby forest included mahoe (Melicytus ramiflorus), hangehange (Geniostoma liqustrifolium), Hebe stricta, mingimingi (Leucopogon fasciculatus), kawakawa (Piper excelsa) and karamu (Coprosma robusta).

A small stream ran on to the beach from a gully; the stream bank had dense vegetation including rosy maidenhair fern (*Adiantum hispidulum*), *Haloragis erecta* and a small herb, possibly *Callitriche petrei*. A shrub of mingimingi showed an ability to adapt to an exposed coastal location, having taken a very compact, divaricating growth form. A dense clump of large flax (*Phormium tenax*) made access up this stream difficult, discouraging further exploration of this coastal forest, while steady rain had by now prompted most participants on the trip to turn back, making this the end point of our walk.



Fig. 7. Flowers of the coastal harebell *Wahlenbergia vernicosa*. Photo: Phillip Moll, 18 Oct 2014.

Appendix: List of vascular plant species seen at Journey's End on 18 October 2014 by Auckland Botanical Society.

Ferns

Adiantum hispidulum Blechnum parrisiae Pteridium esculentum Pyrrosia eleagnifolia

Dicots

Alternanthera philoxeroides * Arctotis stoechadifolia * (planted?) Atriplex prostrata * Avicennia marina Callitriche sp. Calystegia sepium Calystegia soldanella Calystegia turguriorum Carpobrotus chilensis * Cirsium vulgare * Cerastium sp. * Conyza sumatrensis * Coprosma rhamnoides Coprosma robusta Cotula coronopifolia Crassula sieberiana Crepis capillaris * Dodonaea viscosa Foeniculum vulgare * Galium aparine * Geniostoma ligustrifolium Haloragis erecta Hebe stricta Hypochaeris radicata * Kunzea sp.

Leontodon saxatilis * Leptospermum scoparium Leucopogon fasciculatus Lotus pedunculatus * Lupinus arboreus * Malva ? neglecta * Melicytus ramiflorus Modiola caroliniana * Muehlenbeckia complexa Myrsine australis Myrsine divaricata Olearia solandri Ornithopus pinnatus * Osteospermum fruticosum * (planted?) Phytolacca octandra * Piper excelsum Plagianthus divaricatus Rumex acetosella * Samolus repens Sarcocornia quinqueflora Senecio esleri Selliera radicans Senecio hispidulum * Senecio quadridentatus Sida rhombifolia * Solanum mauritianum * Sonchus oleraceus * Sophora chathamica Ulex europaeus * Veronica arvensis * Wahlenbergia vernicosa

Monocots

Anthoxanthum odoratum * Apodasmia similis Astelia banksii Austrostipa stipoides Avena harhata * Bromus diandrus * Carex pumila Cordyline australis Cortaderia selloana * Cyperus ustulatus Ficinia nodosa Ficinia spiralis Gahnia lacera Gladiolus undulatus * Juncus acutus * Juncus kraussii Machaerina articulata Machaerina juncea Microtis unifolia Oplismenus hirtellus Paspalum dilatatum * Paspalum vaginatum * Phormium tenax Schenodorus arundinaceus * Sporobolus africanus * Stenotaphrum secundatum * Typha orientalis Watsonia meriana var. bulbilifera * Zostera muelleri

Lord Howe Island – a record of the Auckland Botanical Society visit, 18-24 October 2014

General Introduction – by Ewen Cameron

There was a previous unofficial Auckland Botanical Society (ABS) trip to Lord Howe Island (via Norfolk Island) by 20 people, which included 15 ABS members (see Appendix) in Nov-Dec 1993, organised by Helen Cogle because "Graeme Hambly wanted to go there". Graeme gave a wonderful talk about this trip to ABS in April the following year. There have

Ewen K. Cameron (editor)

also been three ABS "overseas trips" to remote parts of New Zealand: Raoul Island in Nov 1994 and two to the Chatham Islands in Jan 2007 and Jan 2009 (Young 2007, 2009) and four foreign overseas trips: New Caledonia (Wilcox 2004), Sydney area (Wilcox et al. 2010), Norfolk Island (Wilcox et al. 2010), Tasmania (Wilcox 2012), and now this 2014 Lord Howe Island (LHI) trip.