

Trip Report: Karekare to Pararaha Dune Country, 21 May 2016

Bruce Calvert

Participants: *Bruce Calvert, Bev and Geoff Davidson* (leader), *Leslie Haines, Jeff McCauley, Philip Moll, Juliet Richmond, Ian and Lydia Smith.*

In the days before the Bot Soc trip I took a look at the vegetation near the Pararaha valley, but this in no way prepared me for the botany we were to discover on this Bot Soc trip to Whatipu Sands Scientific Reserve, where the Society had been several times, most recently in Nov. 2012 (Cameron 2013).

The wind came up and the rain came down after the group set off from Karekare at 10:30 am (Fig. 1). We trudged along the vast flat, black and faintly green beach, past the mobile dunes featuring much *Spinifex sericeus* and a little *Ficinia spiralis*. Jeff gave a brief but impassioned talk on dune dynamics and vegetation. This topic lends itself to lab and high tech study (Yukhnevich 2015, Lawrence 2015), but there is always a valuable place for field work to make species lists, photos, sketches or descriptions.

We pressed on and did not stop until the lower Pararaha Stream, which runs westward to the sea.

There Geoff, our leader, showed us some *Limosella lineata* (Fig. 2), *Triglochin striata*, *Eleocharis neozelandica*, *Lilaeopsis novae-zelandiae* (Fig. 3) and *Myriophyllum votschii*, all growing in the damp sand beside the stream (Fig. 4).

We wandered through some dune slacks (Fig. 5), surrounded by dominant *Apodasmia similis*, associated with low fertility and repeated cover with fresh water, and noted how some were more recently vegetated, only ankle high, while older stands were over 1 m high. Leslie pointed out features of a solitary blue-green *Machaerina juncea*. Many sand dunes a few metres high, in ridges, mounds or other shapes criss-crossed the slacks. They and the slacks showed some open sand, and supported a suite of herbs, such as *Erigeron sumatrensis* and *Lobelia anceps* (Fig. 6). It really was not a day for holding pieces of paper, or exposing expensive cameras to the rain, and by 1:30 pm we set off back along the beach with little to show for our effort. Jeff stayed on; he disturbed a bittern, and kept looking for hard-to-find plants. A large lone weedy *Lilium formosanum* (Fig. 7) was very visible among the *Apodasmia*.



Fig. 1. The rain came down. Photo: P. Moll. All photos taken on 21 May 2016.

References

- Cameron, E.K. 2013: A visit to the Whatipu Sands. *Auckland Botanical Society Journal* 68: 43-47.
- Yukhnevich, M. 2015: Ephemeral wetlands of dune slacks: how do their environmental relations structure their patterning? MSc thesis, Massey University, Palmerston North, New Zealand. <http://mro.massey.ac.nz/handle/10179/7326#sthash.hin9EJOZ.dpuf>
- Lawrence, G. 2015: Using satellite imagery and novel low altitude aerial imagery to classify coastal wetland vegetation for change detection at Whatipu Scientific Reserve, Auckland, NZ. MSc thesis, Auckland University of Technology. <http://hdl.handle.net/10292/9774>



Figs. 2-7: **2.** *Limosella lineata*. Photo: P. Moll. **3.** *Lilaeopsis novae-zelandiae*. Photographed and then replanted. Photo: B. Calvert. **4.** Beside the stream. Photo: P. Moll. **5.** Through the dune slacks. Photo: P. Moll. **6.** *Lobelia anceps*. Photo: P. Moll. **7.** The erect old capsules of *Lilium formosanum*. Photo: B. Calvert.