

- Mason B 1949. The geology of Mandamus-Pahau District, North Canterbury. Transactions of the Royal Society of New Zealand 77, Part 3: 403–408.
- Metcalf LJ 1972. The cultivation of New Zealand trees and shrubs. AH & AW Reed, Wellington.
- Simpson G, Thomson JS 1942. Notes on some New Zealand plants and descriptions of new species (No. 2). Transactions of the Royal Society of New Zealand 72: 21–40.

A WEE STORY TO WHET YOUR APPETITE FOR AN ADVENTURE IN THE DEEP SOUTH

Brian Patrick

Wildland Consultants
brian.patrick@wildlands.co.nz

On the afternoon of the 6 March 1987 when flying into Invercargill airport from Stewart Island following three wonderful days camped upon Mount Anglem with my lepidopterist colleague Neville Hudson – at that time doing field work for his PhD in geology – I saw from the aircraft what looked like large purplish patches of *Gunnera hamiltonii* standing out on a rocky sand dune system below the Three Sisters, facing Stewart Island. The species, although described from southern Southland, was at that time thought to be locally extinct, although a few plants were known from sand dunes on Stewart Island.

Needless to say we wasted no time and hopped in our car that was waiting at the airport and drove around towards Bluff. Venturing off a side-road we then used the Three Sisters high point (173 m) as a beacon as we bashed our way through thick manuka to find this wonderful site. And there it was at last, a sprawling rocky slope stretching down to the rocky shore, interspersed with tongues of sand that have been blown a hundred metres up-slope. Along with the sand, the wind has transported salt high up the slope so that the rocky areas contain saline communities in which *Gunnera hamiltonii* lives along with a myriad of other herbs, grasses and mosses (Fig. 1, p. 11).

This is a unique ecosystem with many local endemics, such as *Gentianella saxosa*, *Euphrasia repens* and *Pimelea lyallii*, along with nationally threatened species including *Gunnera arenaria*, *Geranium arenarium*, *Myositis pygmaea* and *Ficinia spiralis*. The site also supports several local endemic moths, some of which are threatened, including a new *Meterana* (gorgeous green and pink with larvae on *Pimelea*), *Notoreas casanova* (newly named with larvae on *Pimelea*), *Asaphodes stephenitis*, *A. frivola*, *Merophyas paraloxa*, and *Scoparia tetracycla*.

On researching *Gunnera hamiltonii* at the time, it was apparent that this is the original place for the species and its Type locality. It was described from “Hills near the mouth of the Oreti River, Southland; 300ft”. No other part of the river mouth has that altitude, so we had found the original population.



Figure 1 A close-up of *Gunnera hamiltonii* (with intruding rosettes of the local endemic *Gentianella saxosa*).

I found myself there last week (15 December 2014) with local DOC botanist Brian Rance. We found two of the 1987 mats of *G. hamiltonii*, with the largest measuring at least 10 m x10 m square. Apparently three plants of the species remain on the site along with a suite of rare and threatened plants and insects.