

reach out into the sea, their submerged parts clad with golden-brown bull kelp. Some of the lava flows contain sparkling glassy hornblende crystals. An exposed bed of 5 million year old fossil scallop shells and dramatic black volcanic dykes that rise vertically, often with radiating flower-like patterns, reminds one of unfamiliar times and forces.

Along the summit on the east side of the cape is a large area of salt turf (Fig 8, p. 13). This includes typical salt turf species such as *Samolus repens*, *Selliera radicans*, *Sarcocornia* and *Apium prostratum*. Also present were *Disphyma papillatum*, *Cotula coronopifolia* and a small *Leptinella* sp. The strong winds would undoubtedly keep this area well drenched with salt spray.

1 DECEMBER – OCEAN MAIL RESERVE, HAPUPU RESERVE AND KAINGAROA

Peter Wardle

Yet another fine, warm day, to explore the northeast of the island. Our first stop was to examine the colony of 'Chilean guava' (*Ugni molinae*) that extends for some 100m along the road. Its density was illustrated by the head-first dives that our 12-year old passengers Finn and Tui made into



Figure 10. Colony of Chilean guava (*Ugni molinae*) on North Road, its density and resilience providing our young passengers with a soft landing. Photo: E. Bissell

the canopy from the top of the bus (Fig. 10, p 14). It is spreading steadily along the road sides and into the adjacent paddocks, but as far as we could determine this is by long rhizomes rather than seedlings.

Next, we walked through the Ocean Mail reserve, from the road to the shore of Te Whanga Lagoon. In view of the unfolding disaster at the Green Swamp Reserve (Fig. 9, p 13), it was encouraging to see the extent of recovery from a fire that occurred some 25 years ago. Harakeke, bracken, *Dracophyllum scoparium* and *Sporodanthus traversii* dominate, but there were plenty of other botanical treasures such as male, female and hermaphrodite plants of *Aciphylla traversii* in full flower, white- and pink-flowered forms of *Gentiana chathamica*, *Libertia peregrinans*, *Drosera binata*, and enough orchids for the enthusiasts (Fig. 11, p.16). The gradation to salt marsh at the lagoon edge allowed us to compare *Sporodanthus* with another 'jointed rush', *Apodasmia similis*.

We lunched at the J. M. Barker Historical Reserve at Hapupu and then looked at the Moriori bark carvings on kopi (a.k.a. karaka) trees; these dendroglyphs are sadly diminishing in clarity and numbers. The regeneration of kopi, mahoe (*Melicytus chathamicus*) and matipo (*Myrsine chathamica*) in the reserve contrasts with the tree graveyard outside the fence.

A punctured tyre led to our bus limping to Kaingaroa, and during the time taken for repairs, a communication breakdown led to your reporter and Bill Sykes becoming isolated from the rest of the party and from each other. However, one way or another we all enjoyed Kaingaroa beach where, despite the dominant marram, pingao (*Desmoschoenus spiralis*), the giant sow thistle *Embergeria grandifolia* and *Euphorbia glauca* are all thriving. Among the schist rocks on the headland, we were privileged to see the shrubby *Leptinella featherstonii* in full flower (a plant otherwise almost confined to offshore islets; Fig. 12, p.16), as well as other coastal endemics of the Chathams: *Myosotidium hortensia*, *Disphyma papillatum*, *Lepidium* aff. *oleraceum*, *Senecio radiolatus* subsp. *radiolatus*, *Hebe dieffenbachii*, and *H. chathamica*, the last, with its globose, blue racemes being particularly attractive. They were accompanied by taupata (*Coprosma repens*), in the role of an unwanted introduction.

Most of the party visited the remains of the Lutheran mission station at Mission Bay, while thanks to a friendly local, your reporter made a personal visit to the thriving seal colony at Munning Point. Finally, we were all reunited to enjoy a sumptuous smorgasbord at the Kaingaroa Club, provided by the residents.



Figure 11. *Drosera binata* in the Ocean Mail Reserve. Photo: M. & B. Geerkens



Figure 12. *Leptinella featherstonii* among the schist rocks of Kaiangaroa headland. Photo: P. Wardle