

*Hypolepis millefolium*, *Polystichum vestitum* and *Cystopteris tasmanica*) and occasional orchids (*Chiloglottis cornuta*, *Pterostylis* sp. and *Gastrodia cunninghamii*) the understory was visually dominated by mosses. Species included *Lembophyllum divulsum*, *Dicranoloma dicarpum*, *Breutelia* sp. *Sematophyllum* spp., *Thuidium* sp. and *Rhizogonium* sp, plus several moss-like leafy liverworts (including *Frullania* spp.).

On emerging above the bush-line the weather deteriorated, but not before the array of sub-alpine shrubs was first scrutinised. A large bright-green *Hebe rakaiensis* stood out among *Brachyglottis cassinioides* (several in yellow flower), *Pittosporum anomalum*, *Coprosma dumosa*, *Melicytus* aff. *alpinus*, *Hoheria glabrata*, *Discaria toumatou*, *Myrsine nummularia* and *Bulbinella angustifolia*. The cryptic creeper *Clematis marata* was seen scrambling through a range of hosts, the females carrying balls of seeds, and *Celmisia petiolata* was flowering alongside the stream.

On our return to camp the hot news was the discovery of a mustelid which had casually sauntered into our kitchen area and taken up residence behind the fridges, occasionally playing peek-a-boo around the corner. Local conservationists John and Alison Smithies provided a box-trap, and the offender was eventually caught and despatched. It turned out to be a weasel, but only after much-contested deliberation (after all, mustelids are weaselily distinguished, each being stoatally different).

## 19 JANUARY – AHURIRI RIVER VALLEY

Ann McMillan

On the fourth day the Ahuriri River valley was our destination for the day.

### Ben Avon Wetland Reserve

In the morning the group looked at the Ben Avon Wetland Reserve, altitude 820 meters. It was a hot/warm sunny summer's day. Our group identified about 30 species of swamp loving/liking plants in the wetter places of this protected bog, with a range of both indigenous and adventive ones recorded from a smaller area nearest the road.

Most common in the water were two sedges, *Carex diandra* being the shorter, brownish one in the shallower water and closer to the road, then *C. virgata* was taller and golden in colour growing in deeper water, further away from the road. Two more sedges were *Schoenus pauciflorus* (red form) and *Eleocharis acuta* in the more open spaces in water. They appeared to be

quite abundant. *Schedonorus arundinaceus*, tall fescue, was present as a weedy grass. *Ranunculus glabrifolius* (yellow flowers) was a common native in the water. As well, two mosses identified as *Acrocladium cuspidatum* and *Drepanocladus aduncus* seemed to be scattered all through the water, and a thallose liverwort *Marchantia foliacea* was noted at the water's edge.

Robert discovered a tall pink-flowered clover more like *Trifolium pratense* than anything else; it occurred along with *T. pratense* with red flowers and *T. repens* with white flowers in the surrounding paddock. Around the edge nearer the roadside fence, where the soil was drier but still remained much damper than the paddocks, was a collection of native and introduced species. Most of the group wore boots or gumboots but I decided to paddle barefoot, it was more fun and cooler. However I had to dry myself off at lunchtime to put on socks and boots for the afternoon.

### The Ahuriri Exclusion

Further up the wide U-shaped valley in the afternoon the group visited the Ahuriri Exclusion, an area fenced off on the former Birchwood Station so that it could not be grazed. Because of that isolation and the length of time involved, we found a range of plants –flowering and non-flowering.

It is now a semi-fenced/broken fence area of *Nothofagus solandri* var. *Cliffortioides* (mountain beech) forest with *Phyllocladus alpinus* (celery pine) with the interesting shaped leaves of the genus, and *Halocarpus bidwillii* (bog pine) –these being the dominant species.

We collectively identified about 20 species present in the small patch along the forest margin, beside the grasslands still covering the Ahuriri River valley floor. I make special mention of a wee gem *Herpolirion novae-zelandiae* that had white star flowers and green ribbon leaves in a large patch (Fig 4, page 9).

Two ferns were present, *Hypolepis millefolium* and *Histiopteris incisa*, and a moss *Racomitrium pruinosum*, which, with *Lycopodium fastigiatum* (clubmoss), make up the quartet of lower plants identified.

There were several species of flowering plants listed, *Gaultheria parvula*, *G. Depressa* and *G. antipoda*, *Muehlenbeckia axillaris*, *Leucopogon* / *Cyathodes fraseri*, *Anisotome aromatica* and *Coprosma petriei* (male plant). Daisy family/Asteraceae members were *Raoulia subsericea*, *Celmisia gracilentia* and *Lagenifera cuneata*. These all are ground covers and small woody shrubs.

*A special thank you to Bryony Macmillan who gave me help with proof-reading, and support and encouragement.*