

Kepler and Borland Mires (31 Dec) – Gael Donaghy

The botanic day started at the Manapouri airstrip where Prof Alan Mark described the structure and features of the Kepler Mire, part of the South West World heritage area. This mire is raised (6m above surrounding area) is surrounded by a natural drainage channel (or lagg), and is gently sloping. The whole ecosystem is protected.

The lagg, which has relatively fertile soils, had a cover of pasture grasses and sedges, several "hedges" of introduced broom, and a scattering of Coprosmas (*C. propinqua*, *C. "tayloriae"*, *C. intertexta*). One plant of the unusual native grass, *Deschampsia caespitosa*, sparked the interest of the group.

On the mire, wire rush (*Empodisma minus*), manuka (*Leptospermum scoparium*), and *Dracophyllum oliveri* dominated. Other plants here were *Androstoma empetrifolia*, with its pretty red fruit, *Pentachondra pumila*, and two sundews, *Drosera binata* and *D. spatulata*. The common swamp sun orchid, *Thelymitra cyanea* was in flower everywhere, despite the heavily overcast conditions.

On the way out a few people botanised a small manuka covered moraine that stood above the level of the mire, and almost doubled their number of species. Of interest here were two ferns not seen before on the trip - Adder's Tongue (*Ophioglossum coriaceum*) and *Blechnum vulcanicum*.

After stopping off at the Mararoa control structure, where Alan Mark explained the recent history of the area in relation to the Manapouri hydro scheme, we travelled back to the Borland mire. Here Bastow Wilson explained the different structure of this mire. It had many of the same plants as the Kepler. One notable addition was the beautiful blue bladderwort, *Utricularia novae-zelandiae*.

The last area of particular interest was the edge of the mire, where bush was re-establishing among the bog pine (*Halocarpus bidwillii*). Some of the colonisers were mountain three finger (*Pseudopanax colensoi*) lancewood (*P. crassifolius*) and elder (*Sambucus nigra*). On the ground there were several flowering herbs including the little blue lily *Herpolirion novae-zelandiae*, and the white flowered *Oreostylidium subulatum*.

McKercher Stream (2 Jan) – Graeme Jane

After a brief introduction to the area from our guides for the day, Brian Rance and Geoff Rogers we headed off across pasture in drizzle towards distant shrubland in the Takitimu foothills. In the first part of the sparse shrubland area stock were still grazed. It was dominated by *Coprosma propinqua* and as a result we were treated to rich turf communities containing many introduced species but also a wide selection of native herbs including *Mazus radicans* (in flower), *Nertera setulosa*, *Hydrocotyle* species and *Centella uniflora*. The denser remnants contained orchids such as *Pterostylis areolata*, still in flower and as the rear of the grazed area was approached the first of the special