

complete contrast to our previous sites. The reserve is about 50 ha of spreading bushes, a relic of early post-glacial plant succession. We added a very few associated species to the list. This visit was a real privilege. In the afternoon Joy Comrie led the way to a beautiful kettlehole turf, a dimple on the moraine south west of the lake, Here the botany was most challenging of all, the dominant species of *Carex* eluding us in the absence of fruiting heads. Suddenly Graeme Jane and Gael Donaghy appeared over the hill to offer many helpful suggestions. Much more time would be necessary to identify the many small sedges and grasses. *Lobelia perpusilla* was in flower and *Stackhousia minima* abundant in fruit, with *Ophioglossum coriaceum*. Discussion concluded over drinks, recumbent, watching little Southern Blue butterflies massing on socks and boots wet from the previous stream crossing.

Lastly we accompanied Alison and John Smithies who live at the lake, to see the Ohau Conservation Trust's restoration planting along the lake shore. The restoration is a joint project between D.O.C. and the Trust with the plants being grown at Motukarara from locally sourced seed. Mountain beech, kowhai, hoheria, hebe, cokokia, Hall's totara and snow tussock are the main species planted. John is the chairman of the Trust which also carries out weed control of conifers, broom, and sweet briar on the lake shore. Nearby is a dense natural stand of *Coprosma intertexta*.

Participants:

Margaret Austin	Paul and Ruth Maurice & Claire
Robert Birks	Ann McMillan
Eleanor and Barry Bissell	Fraser Ross
Trevor Blogg	
Jane Demeter	with help from:
Miles and Gillian Giller	Joy Comrie and Chris Woolmore
Rick and Fay Jackson	Graeme Jane and Gael Donaghy
Bryony Macmillan	Alison and John Smithies

16 JANUARY – WAIREPO TARNS RESERVE AND QUAILBURN GORGE

Paul Maurice

Early cloud was followed by a warm sunny day. Joy Comrie and Chris Woolmore, two of the local Department of Conservation officers, joined us for the day and shared their extensive knowledge of the area with us. The

DOC Wairepo Kettleholes Reserve kept us interested for the best part of the day. Two main habitat types were examined here.

In the dry short tussock grassland *Festuca novae-zelandiae*, *Leucopogon fraseri*, *Discaria toumatou* and *Raoulia subsericea* were dominant. Among the more interesting species in between were *Pimelea oreophila*, *P. pulvinaris* (Joy pointed out that this was much hairier than *P. oreophila*), *Coprosma petriei* (the scattered retrorse hairs on the leaves being helpful in identification), *Raoulia parkii* (leaves more downy and folded than *R. subsericea*), *Acrothamnus colensoi* and a single specimen of *Halocarpus bidwillii*.

The real interest of the day was in the short species-rich turf surrounding the kettleholes. Here were some real gems including *Stackhousia minima* (with its tiny brown and yellow flowers), *Herpolirion novae-zelandiae* (with more obvious white flowers), *Limosella lineata* (with tiny lavender flowers), *Galium* sp.aff. *perpusillum*, *Epilobium angustum*, *Plantago triandra*, *Lilaeopsis ruthiana*, *Utricularia monanthos* (purple flowers), *Leptinella maniototo*, *Eleocharis acuta*, *Carex gaudichaudiana* (Bryony pointed out the glaucous leaves and very dark glumes with a pale midrib), *Luzula celata* and *Ophioglossum coriaceum*. We spent some time sorting out the *Pratia* and *Hypsela* that were growing there and satisfied ourselves that there were both (to give them their new names) *Lobelia perpusilla* (was *Pratia perpusilla*) and *L. ionanthe* (was *Hypsela rivalis*). The former species is distinguished by having the corolla split to the base.

Amongst the *Chionochloa rubra* tussock was abundant *Bulbinella angustifolia* (mostly in seed).

Later in the afternoon we drove further up Quailburn Road into the Ahuriri Conservation Park, where we admired the old Quailburn Woolshed, constructed from beech poles about 1920. The wool was transported from there by bullock-drawn wagons to Oamaru, where it was shipped to Dunedin ready for export. Nearby we admired *Peraxilla tetrapetala* on a mountain beech tree. Miles pointed out *Olearia bullata* growing by the stream. Upstream in the beech forest the following ferns were of interest: *Asplenium richardii*, *Cystopteris tasmanica*, *Polystichum vestitum* and *Hypolepis millefolium*. Notable plants above the bushline included *Aristotelia fruticosa*, *Carmichaelia petriei*, *Podocarpus nivalis* and *Lobelia linnaeoides*.