

**'In the Footsteps of Cathy Jones' –  
The Auckland Botanical Society Field Trip to Molesworth,  
Balaclava Ecological District, 3 - 10 January 2002**

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For a number of years now the Auckland Botanical Society committee (ABS) has enviously read accounts from the Wellington Botanical Society on their forays over to the South Island mountainous areas to feast their eyes on New Zealand's unique alpine plants. The torch-bearer to take the challenge of organising such a field trip was one of the Society's stalwarts, namely Sandra Jones. Hurrah for e-mail when organising field trips 'overseas'. This technology eases the life and reduces the stress for the organiser and helps arrangements to run a little smoother. Well, we hope so. Sandra must have sent through 'mountains' of electronic messages to our guide and co-organiser Cathy Jones. Bulletin #1 from Sandra arrived in late October with a list of names of enthusiastic souls, a request for our arrival and departure arrangements, food and wine requirements, a note on accommodation, costs etc. We were forwarded a set of comprehensive species lists to study and enthuse over before our adventure and even asked if we would like

gathering of the entire party – a wonderful reunion of 'old' stalwarts with an infusion of new and enjoyable company. Age range between 29 and 73 years young!

Travelling on together we soon left the beech forest behind us. We splashed our way through meandering riverbeds of grey boulders whilst high above, magnificently beautiful, clean cut peaks arced against a clear blue sky. Composed of brittle sandstones, greywacke and argillite, these rocks have shattered to produce seemingly naked, dun coloured screes running from mountain top to flat river terraces and in places down to the braided river snaking along the valley floor below. Tantalising glimpses from the vehicle of wet hollows overflowing with *Bulbinella hookeri* and cliff faces of helichrysums and *Cheesemanina fastigiata* proved too much for us botanists. Cathy's difficulty was trying to get us back on the road! A wonderful, awesome grandeur lay in the simplicity of line and colouring of our surroundings as we finally brought the

convoy to a halt at Sedgemere. We crammed ourselves, our 'mountains' of provisions and equipment into a small but comfortable hut over 1000m asl in the Upper Wairau valley. This was to be our home for the next week. It promised to be, and proved to be, a stunning experience.



**Packed and ready to depart, minus the photographer, Kerry and Steve McCraith, 10 Jan 2002. Photo: Ewen Cameron.**

**Friday 4th January – Island Pass**

Serious ground zero level botanising of the local subalpine flora began in earnest on Friday. The day started with broken clouds and sunshine as we eagerly waited to hear from our wondrous leader Cathy Jones, DoC Nelson Conservancy threatened plant botanist. Our botanical appetite was whetted with the promise of botanising subalpine carpet grass herbfields, scree slopes of Island Pass and seeing *Myosotis traversii*, *Lobelia roughii*, *Leptinella dendyi* and many other gems. Island Pass was so named for an anomalous hill in a glaciated valley formed when a glacier divided to bypass it and ground away the surrounding land.

to indulge in a little luxury – pure ground coffee and if we had any wine preferences, red/white/medium/dry! Such was the attention to detail of Sandra's precision planning and her only gripe about the trip was that we had 2 Pauls, 2 Steves and 2 Pams! Bulletin #2 being the final one, warned us not to expect 5 star accommodation and long hot showers! Reading that frosts, snow and hail were possibilities in a Molesworth summer was positively chilling news.

However we all arrived at St. Arnaud around Thursday lunchtime and some of us raided the last shop that we would see for a week! Here we were introduced to our wondrous guide, the botanical guru – Cathy Jones.

**Thursday 3rd January – The journey in**

After cramming yet more food into already full to bursting vehicles we headed for St Arnaud and the

A short drive on the Wairau-Hanmer Springs Hydro Road following the Wairau River and passing vast landscapes of screes dominated by disintegrating greywacke rock and debris on our left hand side and wetlands with an abundance of red tussock

(*Chionochloa rubra*) led us to Island Pass 1347 m. As we approached Island Pass the hillside vegetation appeared as patchwork quilts of large irregular olive green patches of snow totara (*Podocarpus nivalis*) and hummocks of carpet grass (*Chionochloa australis*) which helps in scree stabilisation. *Rytidosperma setifolium* was conspicuously in flower along the roadside.

Leaving our vehicles behind, much to the disappointment of a certain Range Rover owner, we began by scrutinizing the subalpine carpet grass herbfields en route to the scree slopes. Cathy advised us to take care as we trod on the yellow/green hummocks of carpet grass as their rolled leaves made for slippery walking. Midribbed snow tussock (*Chionochloa pallens*) with characteristic un-rolled leaves was abundant as were the prostrate *Dracophyllum pronum* and upright *D. uniflorum*. Hybrids between these two taxa were in evidence. A diminutive epacrid *Pentachondra pumila* was smothered in prominent bright red, oval fruits from the previous autumn. Thymelaeaceae was represented by *Kelleria dieffenbachii* (= *Drapetes dieffenbachii*) with moss-like mats of whip-cord foliage and terminal heads of minute white flowers. Celmisias were stunning, particularly *C. spectabilis* with thick leathery leaves and felt-like indumentum, *C. incana* both leaf surfaces covered in white tomentum and the sessile flowered *C. sessiliflora* with their flowerheads opening among the dense, hard, greenish – grey cushions. The mainly Australian genus *Brachyscome* was represented by *B. sinclairii*. One of the forty species of *Aciphylla* and probably one of the smallest growing that we observed was *A. monroi* a real gem occupying the edges of eroding grass tussocks. Another prolific member of Apiaceae was *Anisotome filifolia*. Bright orange and primitive alpine clubmoss (*Lycopodium fastigiatum*) with prostrate stems, incurved leaves and stalked cones mingled with the more recently evolved alpine flora. The bright red, male strobili on the dioecious snow totara (*Podocarpus nivalis*) were a delight. A small plant of vegetable sheep (*Raoulia bryoides*) was identified on the edge between the herbfield and screes.

As we approached the summit of this subalpine carpet grass herbfield one could see the distant mountain peaks disappear in rain choked clouds and within minutes we too were being drenched with bitterly cold rain making botanising somewhat frustrating.

With a slight improvement in conditions we approached what appeared to be a completely bare and lifeless scree slope but proved on closer inspection to harbour a specialized flora of cryptic little rock-coloured plants, so difficult to see that one had to take great care not to tread on them. Scree flora is extremely vulnerable to human disturbance and one felt guilty of intruding into such a sensitive habitat. The biennial rosette of the brassicaceous penwiper (*Notothlaspi rosulatum*) was soon seen and flowering

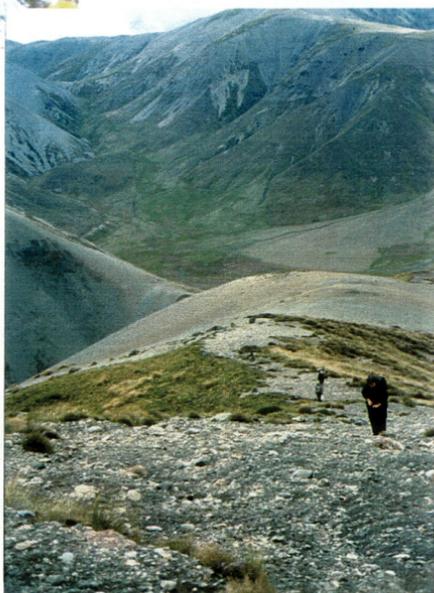
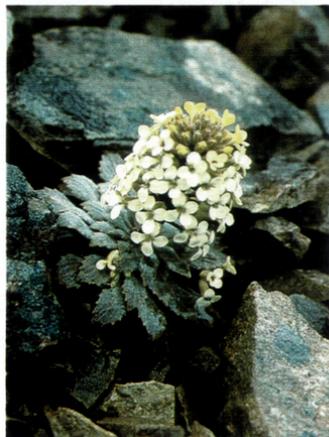
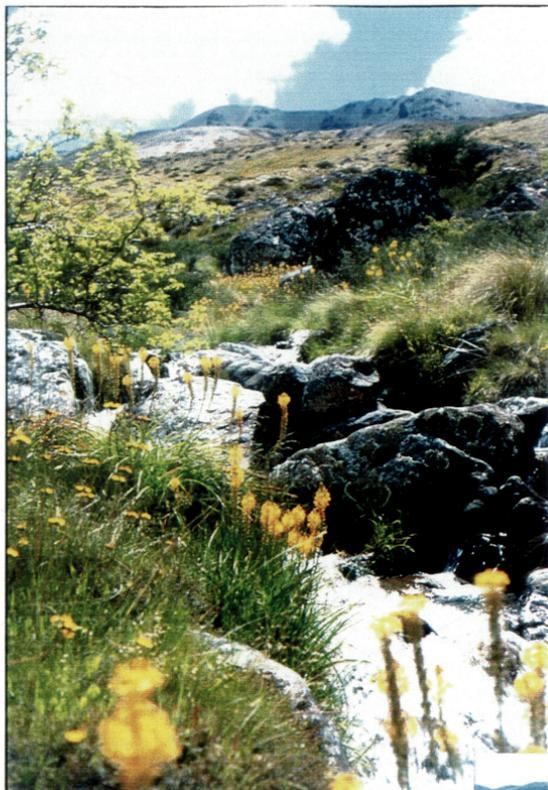
beautifully. Remarkably the inflorescence was sweetly scented. Other characteristic taxa of the screes were two button daises (*Leptinella dendyi*) with their bright yellow florets and dark red tips and a slate-grey leaved relative *L. pyrethrifolia* ssp. *pyrethrifolia*, *Lignocarpa carnosula*, *Lobelia roughii*, *Myosotis traversii*, *Poa buchananii*, *Stellaria roughii* and the fleshy-leaved *Wahlenbergia cartilaginea*.

So intriguing was this unfamiliar flora that it was a late lunch which was taken in the huddled warmth and shelter of the vehicles. After lunch it was decided that the cold wind and intermittent showers did not bode well for the afternoon's botanising, so we headed for home. However interesting gullies, tors, and streams proved too much for our joint resolve and stops were made in various places by various vehicles. One group found *Ophioglossum coriaceum*, *Vittadenia australis* and a *Gunnera* sp. The *Gunnera* was tentatively identified in the field as *G. densiflora* a thrilling find, but may well be a broad-leaved variant of *G. dentata* (Shannel Courtney pers comm. April 2002). Living material was collected for the Auckland Regional Botanic Gardens (AUCK 20020002) and leaf samples for Livia Wanntorp at Stockholm who is studying the phylogeny of *Gunnera*. The rest found lots of the huge and showy *Celmisia monroi*, *Brachyglottis cassinioides*, *Olearia cymbifolia*, *Dolichoglottis lyallii* and many more treasures than there is available space in these notes to mention. A mid-afternoon return to the cosy hut and warmth of the pot-belly stove was appreciated by the chilled bodies.

### Saturday 5th January – "Anthony's" valley

An expedition to "Anthony's Valley", a side-stream of the Wairau which drains the face of Mt. Weld in the Turk Range proved to be a challenge from the start with the crossing of the Wairau. Naturally Anthony was the first to cross this boulder strewn river in his Land Rover and watched on with excitement as fellow botanists piled into the back of Cathy's wagon to prepare for their crossing whilst others not so eager to risk their lives with such a crossing decided to wade across!

Serious botanising soon commenced as our eyes feasted on vast areas of golden *Bulbinella hookeri* indicating wet seepages. The group soon split into several smaller ones and started to botanise both sides of the stream. There was a small stand of mountain beech (*Nothofagus solandri* var. *cliffortioides*) beside the stream and the South Island *Leptinella squalida* subsp. *mediana*. An early find of noteworthiness was *Hebe salicornioides*. Anthony crawled under a large boulder beside the stream to find *Asplenium richardii*, *Cystopteris tasmanica* and a large-leaved *Ranunculus insignis* with flower remnants. At this point Sandra decided to upstage Anthony's youthful spirited adventures by falling in the fast-flowing stream up to her armpits and luckily the camera was rescued! Large spreading female snow totaras (*Podocarpus nivalis*) and the occasional male plants contrasted strongly with the herbfield flora.



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Another conifer but not so showy was the monoecious *Phyllocladus alpinus*. A highlight for Juliet was the *Olearia cymbifolia* with leaves so recurved that they looked succulent-like. Steve B. went well up the valley and found a large plant of *Haastia pulvinaris* var. *minor* relatively low down, measuring 189cm x 94cm and sprinkled with asteraceous disc florets. Graeme's find on a bare slope above the stream was the adder's tongue fern (*Ophioglossum coriaceum*) with its characteristic fronds unrolling sideways from the centre rather than uncoiling lengthwise. The alpine clubmoss (*Lycopodium fastigiatum*) distinguished by its stalked cones and incurved leaves was abundant. Graeme also identified the fir clubmoss (*Huperzia australiana*). Late in the day a small group ventured onto the scree, c.1500 m. a.s.l. and found *Wahlenbergia cartilaginea* in flower as well as penwiper plant (*Notothlaspi rosulatum*) with its large brassicaceous flattened fruits. A further search for *Lobelia roughii* proved negative. Much searching by Pam D. for psyllid galls on *Aristotelia fruticosa* resulted in success. This gall stage completes the lifecycle of this small insect.

### Sunday 6th January – Lake Tennyson

Our location today was Lake Tennyson formed behind the debris left behind from a glacier. The lake lies in the complex mountain system in the vicinity of the headwaters of the Clarence, Wairau, and Waiau Rivers. Most of us were suitably clothed for the fine but chilly day. The reason for the chill soon became evident when at lunchtime the cloud lifted from Mt. Una (2,301 m a.s.l.) revealing a fresh frosting of snow. Arriving at the lakeside we scattered into small botanising groups : scree slopes, lake margins and cushion bogs.

Botanical highlights of the scree slopes were *Cheesemanina fastigiata*, flowering and fruiting, young rosettes of the caryophyllaceous herb *Colobanthus affinis*, several *Haastia pulvinaris* var. *minor*, *Leucogenes grandiceps* a South Island edelweiss and the intriguingly cryptic *Myosotis traversii*.

The lake margins yielded washed up quillwort plants, an aquatic fern ally. Graeme being Graeme and Maureen being Maureen, specimens were taken back to study under the binocular microscope. The quillwort had been originally identified and listed by previous botanists as *Isoetes alpina* but under Graeme's careful

scrutiny and examination the spores were found to have a tubercled surface, typical for *I. Kirkii*, whereas in *Isoetes alpina* they have a smooth surface. The canary yellow-coloured flowers of *Myosotis australis* were unfurling, contrasting with the nearby shiny reddish brown sedge *Carex berggrenii*.

The quaking cushion bog proved to be the biggest challenge in trying to keep one's feet dry! This area was extremely species rich with flowering *Celmisia* aff. *gracilentata*, *Epilobium macropus*, *Hebe salicornioides*, *Potamogeton cheesemanii* and *Ranunculus glabrifolius*. *Leptinella dioica* is always a joy to see. The beetroot-coloured leaves of *Rumex flexuosus* were abundant. A dandelion look-alike was identified as *Microseris scapigera*.

Ornithological highlights were recorded by Paul Asquith, as well as his remarkable find of a stunning red mistletoe *Peraxilla tetrapetala* found on a mountain beech remnant over on the far side of the lake. Paul observed a total of 13 species of birds, including nesting banded dotterels in his 3.5 hour circumnavigation of the lake. Betty studied the south eastern shoreline, sighting 14 species, including a black-fronted tern flying with a meal of fish in its bill.

Ewen found a small Australian whistling frog (*Litoria ewingii*), a brown tree frog without webbed feet.

Returning from Lake Tennyson our vehicle stopped in the Lower Island Pass stream area where 2 further patches of the undetermined *Gunnera* were found. At the Rag and Famish Creek we found a little plant of *Meliclytus* "kaikoura" with pale grey interlacing branchlets, minute bright green leaves and un-ripened fruits hanging close to the scree. The fruits turn white when ripe and attract lizards, which evidently help to disperse the seeds.

### Monday 7th January – Wet Hollow & Bert's Creek

Day 5 at Sedgemere Hut began with an early breakfast interspersed with tales of sleepwalking and bed hopping. False accusations and speculation escalated at a Dr. Seuss-like rate until the culprit giggled guiltily. The tone for the day was set and it would later end in a similar vein.

First stop for the day was Sedgemere Ephemeral Tarn

1. Looking up "Anthony's valley" towards Mt Weld. *Bulbinella hookeri* in full flower (yellow) by stream, tributary of Wairau River, 5 Jan.
2. *Leptinella pyrethrifolia* formed attractive patches on upper scree margins; Crimea Range, 8 Jan.
3. Penwiper, (*Notothlaspi rosulatum*) with sweet-scented flowers – the classic obligate scree example; near Island Saddle, 4 Jan.
4. *Pratia macrodon* with sweet-scented flowers, were greatly admired during our ascent of Crimea Range, 8 Jan.
5. *Haastia pulvinaris* var. *minor*, close-up of a vegetable sheep on the Crimea Range, (leafy branchlets 10-12 mm across), 8 Jan.
6. The ascent of the Crimea Range, Balaclava Ridge in the background.

All photos taken by Ewen Cameron during the trip.

(Wet Hollow), a fenced off wetland barely five minutes drive from our humble abode (well 10 minutes via the "Barry Crump" route - thank you Anthony). Upon arrival we were cautioned not to trample the *Pterostylis tanypoda* common in the "carpark". This tarn is home to several rare species including, *Pseudognaphalium luteo-album* var. *compactum*, *Craspedia* "tarn", *Oreomyrrhis delicatula*, *Cardamine* "tarn", *Gnaphalium traversii* and another unnamed species of *Craspedia* are of interest as is the possible presence of *Myosotis pygmaea* var. *minutiflora*. The diversity of tiny herbs in the area immediately surrounding the lake was quite extraordinary. At one spot *Stackhousia minima*, *Coprosma atropurpurea*, *Ophioglossum coriaceum*, *Nertera setulosa*, *Galium perpusillum*, *Hydrocotyle montana*, *Craspedia* "white edge", *Leptinella pusilla*, *Viola cunninghamii* and a tiny unnamed *Luzula* were all identified within a 100x100 mm square.

an otherwise drab landscape. *Parahebe lyallii* was seen in flower again and the habitat was home to a number of interesting finds previously unseen on the trip including the shrub *Traversia baccharoides*. Allan describes the leaves and young branchlets descriptively (and fittingly) as 'glutinous'.

The group gradually made their way toward the waterfall as other plants were highlighted along the way. A quick scramble to the side found *Grammitis poeppigiana* and some very dry *Hymenophyllum multifidum* and *H. villosum* hidden in a rocky hollow. Above this, on the unstable cliffs were perched several small examples of vegetable sheep (*Raoulia bryoides*). A number of beautiful celmisia plants (*C. monroi*) added splashes of colour to the rocky outcrops. An intrepid botanist started a lone chamois up above the waterfall resulting in a cloud of dust and no chamois. One (slightly bewildered?) botanist then turned his hand to ento-mology and with a youthful shriek of



**Wet Hollow - I know I parked it around here somewhere**

A local skink was apprehended whilst attempting to mind his own business. After being poked, prodded and no doubt misidentified he made his escape back in to the wild none the worse for wear. A quick search of a probable location for the *Myosotis pygmaea* var. *minutiflora* amongst the lakeside gravel beds resulted in nothing more than sore knees and an appetite for morning tea. Ensnared in the tussock, a certain member of the party attempted the groundbreaking technique of searching for *Myosotis* through deep meditation.

After a quick drink and a bite to eat the next destination was Bert's Creek, a few minutes drive down the road. The creek emerges as a waterfall from the steep sided scree slopes providing an oasis of green in

exuberance appeared, prey in hand, and a look of triumph impressed upon his face. A giant, native mountain dragonfly (*Uropetala montana*) was produced and all within earshot dutifully snapped away in that classic tourist fashion. Closer still to the waterfall several specimens of Marlborough helichrysum (*Helichrysum coralloides*) were located appearing quite at home in the shadows of the gorge. The

alternative form of porcupine plant (*Meliccytus* aff. *alpinus*) was located in the cliffs near to the waterfall.

The day finished as it started with more intriguing stories. This time speculation surrounded the (legitimate I might add) entertainment of two, young frau posing as lost German cyclists.

### **Tuesday 8th January - Crimea Range**

The day started at 5.30am with the departure of Kerry and Steve M to catch the 9am DoC boat to Maud Island, reducing our party to 17. The others also rose early with the expectation this was our "mountain tops" day, breakfasted, packed lunches, and prepared themselves for a long day in the field. The weather looked ideal, high cloud with no rain or wind.

After a short drive (c. 11 km) we parked at Island

Saddle (the high point of the Wairau-Hanmer Springs Hydro Road, 1350 m a.s.l.) and set off due north at 9.15am with 16 people (Pam D decided a quiet day at camp was in order to sort her insects). A good pace was set over the carpet grass herfield that we had already botanised 4 days before. To insure we reached the Crimea Range ridge crest it was agreed not to botanise for the first part of the day. The initial enthusiasm was knocked a little when reaching a local high point the drop to the nearest leading ridge to the Crimea Range was further than the cursory look at the topo map had indicated. Dropping down a scree slope was compensated with the only flowering *Lobelia roughii* seen on the trip; presumably the northeast-facing slope was warmer than the other localities where we had previously seen sterile specimens.

After the decent of 70 m we began our direct ascent to the main ridge of the Crimea Range. At 1540 m *Pratia macrodon* with its highly scented flowers was sniffed and photographed. By now the party was spread over 0.5km; the weather remained ideal, overcast, cool, dry and no wind. The slope was dominated by snow tussocks (*Chionochoa flavescens*, *C. pallens*, *C. rubra*), occasional mats of carpet grass (*C. australis*) and bristle tussock (*Rytidosperma setifolium*). Occasional, silvery (from the pale underside of the leaf), low clumps (1m tall x 2m across) of *Hebe* aff. *rigidula* (H. sp. "q" of Eagle 1986: 349), just beginning to flower were the only shrubs. In the same area were small loose mats of *Raoulia grandiflora* with its large flower heads (large for that genus!); loose mats of *Celmisia laricifolia* with mainly finished flowers heads; tight, firm, bright green mats of *Phyllachne colensoi* with a scattering of small, white starry flowers; a few clumps of *Celmisia viscosa* with stiff leaves and sticky scapes; *Kelleria dieffenbachii* was common; a magnificent clump of *Celmisia lateralis* was in full flower c. 1 m across at 1600m; and all admired the low mat-forming *Anisotome imbricata* var. *prostrata*. This was one of the few additions to the Druce Upper Wairau Valley list (Druce 1987). It was quite common along the Crimea Range ridge crest.

Just before the ridge crest was a small scree slope with many of the typical scree species that we had seen over the last 4 days: penwipers (sweet-scented flowers), *Leptinella dendyi* (yellow flower heads), *Myosotis traversii* (white flowers), and *Poa buchananii* (firm & glaucous). Where there were exposed basement rock cushions of *Colobanthus acicularis*, *Raoulia bryoides* and mats of *Leptinella pyrethrifolia* were present. A little further to the east at this altitude were firm pale cushions of *Haastia pulvinaris* over 1m across that we had spied from the car park. Seven species of *Celmisia* were seen in flower during the ascent.

From the ridge crest (1660 m) magnificent views into the upper Wairau catchment and the rugged opposing range, Turk Ridge with a touch of snow, were enjoyed over lunch. Most of the white patches seen from below

(vegetable sheep?) were actually *Thamnolia vermicularis*, a lichen that looks like tangles of white worms. Skylarks had sung to us all morning, and were still singing here. Pipits were also present, and one black-backed gull flew by. Most of us then followed the easygoing ridge crest to the west for 1.5 km (a few descended before this). Once again the party spread out, with the slowest pace being set by Anthony and myself who were collecting specimens, accompanied by Cathy and Paul S. Cathy's local knowledge of the flora was invaluable.

Highlights along the broad ridge included fertile *Euchiton nitidulus*, *Gentiana ?montana* starting to flower, *Haastia sinclairii* (very local), small cushions of *Chionohebe pulvinaris* in a rocky area and an alpine scree weta (*Deinacrida connectens*) under a rock. A tor was carefully picked over for lichens, and the west side contained a fine clump of *Grammitis poeppigiana*. A rusty can opener at this locality bemused some of the party. Sadly, in the tussock areas hawkweed (*Hieracium* spp.) was abundant (five insect control agents have recently been approved by ERMA for release against hawkweeds!), hare droppings were frequent and a novelty to me was the abundance of chuckor droppings (similar to pukeko but brown, not green). Chuckors are a type of partridge, introduced to NZ from India and Iran in 1920s - 30s, and mainly feed on grasses. Paul A at the front of the group saw a pair running off amongst the tussock. Disappointingly falcon were not seen this day, but were heard by a few.

A short drop led us to the top of a large scree slope that we had admired earlier from Island Saddle. The upper part of the scree was firm, rather difficult to walk on (too difficult for some!), and supported large cushions of both *Haastia pulvinaris* and *Raoulia bryoides*. A few descended straight down the scree and saw most of the usual scree species from this area including *Stellaria roughii*, *Lignocarpa carnosula* \* (both flowering) and *Wahlenbergia cartilaginea* (sterile). Most skirted around the scree and came across a small tarn with sphagnum and flowering *Drosera arcturi*, *Viola lyallii* and *Neopaxia*.

We followed a creek (headwaters of the Serpentine Creek) down through the tussock. Local on its margins in full flower were: *Pratia angulata*, *Neopaxia* sp., *Ourisia ?macrocarpa*, *Geum cockaynei*, *Leptinella* spp., *Gingidia montana*, *Plantago lanigera* (fruiting) and *Dolichoglottis lyallii* with its yellow daisy heads and monocot-looking leaves. Anthony was delighted to find a fine specimen of *Polystichum cystostegia* amongst the tussock.

After crossing the creek at the bottom through a large sward of Chewings fescue, there were some wilding *Pinus contorta* at the bottom of a scree slope that looked like they had escaped from an earlier planting now cut down. A short ascent and we were all back at the vehicles at 6 pm for a short G & T from Anthony before returning to base.

Two vehicles deviated down to Island Gully proper on the way back to check out the shallow wetland and creek margin. The tiny *Juncus ?pusilla* and *Leptinella dioica* were in flower and another patch of *Gunnera ?dentata*, growing through *Schoenus pauciflorus* was located.

Back at camp dinner was nearly ready, balloons signalled that it was Juliet's birthday. Anthony poured Juliet an extra large G & T to finish the bottle and put Juliet in the right mood for the evening. The usual copious dinner consisted of sausages, pumpkin, courgettes, and mushrooms, followed by Bermuda peaches, birthday cake, candles, chocolate, ginger, wine and coffee. Forty-eight plant specimens to press that evening to finish off another magical Molesworth day.

\* Many *Lignocarpa carnosula* plants were heavily infected with a rust and leaf samples were sent to Eric McKenzie at PDD. He replied that the rust fungus was *Puccinia whakatipu*, with three different spore stages present and that they have only 8 other collections of it, of which 3 are on *L. carnosula*.

### **Wednesday 9th January – Lake Tennyson & Hanmer Hot Springs !**

This was our first morning that we awoke to rain and a general reluctance not to go rushing off to botanise. I wonder why? However by mid morning the rain began to lift and there was a consensus that we should return to Lake Tennyson and take a look at those remnant beech forests for the red mistletoe and perhaps onto the hot springs to ease our weary limbs.

To reach those remnants we had to cross the Lake Tennyson outlet and you can no doubt guess whose was the first vehicle across. Anthony and his wild crew were halfway around the lake by the time the other vehicle was edging its way across the rather deep boulder strewn river! We drove as far as we could and then abandoned the wheels and took to our feet, munching sour gooseberries and yummy blackcurrants from naturalised bushes along the way. We soon found the stunning red mistletoe *Peraxilla tetrapetala* high up in the mountain beech trees from the tell tale brilliant orange red petals on the ground. Returning to where we crossed the river the group were soon engrossed in serious botanising of the idyllic and almost pristine tarns above the River Clarence terraces. *Microtis oligantha* was found to be obviously benefiting from the cow pats through which it was growing. For most of us seeing the exquisite lentibulariaceous *Utricularia novae-zelandiae* with pale purple flowers and the characteristic yellow eye was such a thrill. Ewen pointed out the slender stolons terminating with the small but characteristic bladders. Two monocots of interest were *Carpha alpina* and the moss-like *Centrolepis ciliata*. The latter forming cushions of growth with minutely acicular tipped leaves and

sheaths with ciliate margins.

Dropping down onto a low river flat we came across what was first thought to be another population of the undetermined *Gunnera*, together with *Acaena caesiiglauca*, *Helichrysum bellidioides* and *Rumex flexuosus* spreading 11 m along the river bank. The *Gunnera* was later determined as *G. dentata*, but all the same, still a thrilling find.

Dragging ourselves back into our vehicles we headed to the "civilisation" of Hanmer Springs with the anticipation of a nice long therapeutic soak and perhaps even an ice cream! Having been isolated in the mountains for only a few days one couldn't help feeling rather alien amongst the trappings of modern day life as we wandered into Hanmer Springs township. All our aches simply seemed to melt away as we bathed in pools of hot steamy waters. Motoring back to basecamp we just couldn't resist a further delight of botanising, so Cathy and her passengers stopped and tried to find the diminutive *Carmichaelia corrugata* on the gravelly river flats but to no avail. However we did find *Gunnera dentata* in abundance together with *Leptinella dioica*. Dinner was served very late this evening but what a day to remember!

### **Thursday 10th January – Return to St. Arnaud**

A beautiful dawn for the last day prompted a brief trip for some to the nearby Sedgemere Lake. Soft white mist seeped dramatically along the valley floors and around the glassy water as we watched a pair of shovellers glide silently through the reflections of the mountain peaks beyond. We marvelled at the profusion of the huge heads of gentians (*Gentiana corymbifera*) and the tiny lavender-flowered *Hebe pimeleoides* for the last time before returning to the hut.

The lining up of the vehicles and gathering for the group photograph was almost as rigorous as the cleaning and closing up of the hut but finally we managed to tear ourselves away. With Juliet's birthday balloons flying from Anthony's car we headed out of Molesworth on the Rainbow road to Nelson with a few stops on the way for more photos of Cathy's rare *Cheesemanina fastigiata* and a number of other gems. It was a wrench to leave such austere beauty behind knowing the abundance of plant species nurtured there but as the sun seeped back into our bones we found numerous treasures such as *Gastrodia* sp., *Adenochilus gracilis* and the diminutive *Carmichaelia corrugata*, fully grown at 2 cm, bearing yellow-brown flowers and green seed pods easily 1 cm each in size.

The task of organising this field trip was Herculean. My pleasure and my thanks are of the same scale and I am sure I speak for all those who had the fortune to be there. To all those who made it possible - including the 'gin-slinger' – it was 'wondrous' thank you!



**Acknowledgements:** I would like to recognise with gratitude both Ewen Cameron and Cathy Jones for their proof-reading and comments.