

Auckland Anniversary Weekend Camp at Turangi 29 January to 2 February 2010

Lisa Clapperton, Maureen Young, Leslie Haines, Margaret Peart, Warren Brewer, Colleen Brewer, Jan Butcher, Mike Wilcox

This mid-summer camp was based at the Turangi Cabins, Ohuanga Road, Turangi, where we were accommodated in comfortable 1-4 person huts, originally the workers' quarters for the Turangi power scheme in the 1970s. Sharon Grimmett and daughter Alison of Sharon's Homestyle Catering, Motuoapa, expertly provided all our meals, and we were well looked after by Shelagh, manageress of the Cabins.

Our group was: Ezra Barwell, Colleen Brewer, Warren Brewer, Brian Cumber, Jan Butcher, Lisa Clapperton, Bev Davidson, Geoff Davidson, Leslie Haines, Marcel Horvath, Peter Hutton, Helen Preston Jones, Eila Lawton, Helen Lyons, Barrie McLeay, Peter Maddison, Gretta McLeay, John Millett, Margaret Peart, Carol Ralph, C.J. Ralph, Juliet Richmond, Mere Roberts, John Rowe, Stella Rowe, Val Tomlinson, Diana Whimp, Mike Wilcox, Maureen Young.

Tongariro River Raft Trip, Friday 29 January 2010

Lisa Clapperton

The nine of us (Helen PJ, Val, Eila, Mike, Margaret, Lisa, John M, Diana, Ezra) game to try botanising by raft were picked up early afternoon and taken to the Tongariro River Rafting Company's base where we were fitted out (roughly speaking) with wetsuit, boots, vests, lifejacket, and helmet, before heading to the launching point in the river off the Kaimanawa Road. Here we were separated into crews and briefed on the fundamentals of rafting and river safety. Then it was into the rafts, a quick practice in paddle usage and down the river we went (Figs. 1 and 2).

The Tongariro River is relatively shallow but moves along at a good clip, the section we travelled having about 60 rapids comprising large, round boulders but no serious drops. It made for interesting botanising by aiming straight for a rock face at speed, bouncing off, proceeding backwards for a short space of time, before maintaining an even keel for a period in the current, then repeating the exercise.

Predominant memories of the riverbank forest were tree fuchsia (*Fuchsia excorticata*), tutu (*Coriaria arborea*), tree daisy (*Olearia arborescens*), mountain flax (*Phormium cookianum*), and Bank's cabbage tree (*Cordyline banksii*) hanging over the river, with red beech (*Nothofagus fusca*), silver beech (*N. menziesii*), kamahi (*Weinmannia racemosa*) and black maire (*Nestegis cunninghamii*) in the canopy, and with saplings of rimu (*Dacrydium cupressinum*), Hall's

totara (*Podocarpus hallii*), miro (*Prumnopitys ferruginea*) and matai (*P. taxifolia*) being moderately common in the understorey but not common in the canopy. Swathes of *Lobelia angulata* were in flower on the rocky faces and as well there was river daisy (*Anaphalioides trinervia*), the handsome flat-leaved sedge *Machaerina sinclairii*, and lovely mosses and ferns (for instance, maidenhair *Adiantum cunninghamii*) were glimpsed as we battered the bank taking care of arms, elbows and paddles.



Fig. 1. Raft trip on the Tongariro River, Helen, Margaret, Ezra, Val, Eila. Photo: Tongariro Rafting Company, 29 Jan 2010.



Fig. 2. Raft trip on the Tongariro River, John, Diana, Lisa, Mike. Photo: Tongariro Rafting Company. 29 Jan 2010.

A brief stop was made where part of the group were taken up stream to jump off large rocks at the side of the river into a deep pool, and the more dedicated went foraging under the bush canopy to botanise. Here, in mainly red beech forest, we found a good number of shrubs, notably native broom (*Carmichaelia australis*), putaputaweta (*Carpodetus serrata*),

Coprosma lucida, *Coprosma microcarpa*, *Coprosma rhamnoides*, *Coprosma tayloriae*, *Coprosma tenuifolia*, pokaka (*Elaeocarpus hookerianus*), snowberry (*Gaultheria antipoda*), mapou (*Myrsine australis*), *Neomyrtus pedunculata*, lemonwood (*Pittosporum eugenioides*), kohuhu (*Pittosporum tenuifolium*), and horopito (*Pseudowintera colorata*). There was a fine display of ferns in the riverbank forest, the prominent ones on the ground being crown fern (*Blechnum discolor*), creek hard fern (*B. fluviatile*), kiokio (*B. novae-zelandiae*), the very common *B. vulcanicum*, prickly shield fern (*Polystichum vestitum*), and three kinds of tree fern (*Cyathea smithii*, *Dicksonia fibrosa*, *D. squarrosa*). Filmy ferns were well represented by kidney fern (*Cardiomanes reniforme*), *Hymenophyllum demissum* and *H. multifidum*, a common club moss was *Lycopodium volubile*, and bush rice grass (*Microlaena avenacea*) was abundant.

On the bare, bouldery, mineral soil of the river edge were patches of buddleia (*Buddleja davidii*), toatoa (*Haloragis erecta*), tutu, dwarf tutu (*Coriaria pteridoides*), *Helichrysum lanceolatum*, kanuka (*Kunzea ericoides*), tree lupin (*Lupinus arboreus*), toetoe (*Cortaderia fulvida*), native poa (*Poa anceps*), and some composite mat plants – *Raoulia sericea* and *Anaphalioides bellidioides*.



Fig. 3. Top of Mt Tihia, Stella Rowe, Juliet Richmond, C.J. Ralph, with Mt Kakaramea in the background. Photo: Mike Wilcox, 30 Jan 2010.

The deep layers of ash overlaying the bouldery volcanic agglomerate were pointed out as we sailed past, and to everyone's delight a family of blue duck were carrying out their business in the river, two adults and three ducklings, paying us little heed as they made their way up stream. The rafting company headed by its owners Garth and Leigh Oakden are involved in predator control aimed at protecting the blue duck, and it was great to hear the excitement in the guides' voices when the birds were spotted.

We paused as long as one can in a raft at Fault Line Gorge, which is a crack in the rocks matching up on either side of the river and is indeed a fault line. As the river opened out kowhai (*Sophora microphylla*)

became common, along with weedy broom (*Cytisus scoparius*), grey willow (*Salix cinerea*) and buddleia. Our exhilarating voyage ended at the Blue Pool, where the rafts and gear were carried up to the bus, and photos taken before going back to base to change and partake of hot drinks and sandwiches. The raft trip covered some 12 km of the river and took about 2¼ hours. The guides were very skilled and made the trip really enjoyable, especially as they did all the hard work, and weren't at all fussed when the river Taniwha wrenched my paddle out of my hands and kept it.

Tongariro River Walk, Friday 29 January 2010 Maureen Young

On the drive to the Red Hut Pool where the non-rafters commenced the afternoon's downstream walk, the most noticeable features of the second-growth vegetation were the abundance of five finger (*Pseudopanax arboreus*), *Pittosporum colensoi* and a small-leaved kanuka that grows on the volcanic plateau, and seeing the large-leaved kowhai (*Sophora tetraptera*) growing in the wild. These plants were in evidence along the walkway, together with kamahi, *Coprosma lucida*, lancewood (*Pseudopanax crassifolius*), wineberry (*Aristotelia serrata*), hinau (*Elaeocarpus dentatus*) and horopito. Young podocarps are starting to make an appearance as the bush gains in maturity: rimu, miro (*Prumnopitys ferruginea*), matai (*P. taxifolia*), Hall's totara and kahikatea (*Dacrycarpus dacrydioides*). Later in the walk a very large matai and a kahikatea were seen on the edge of the track. When crossing the river on a long bridge it could be seen that the introduced broom and buddleia have a good hold on the riverside vegetation, with plentiful toetoe there also. On the far bank were large trees of kowhai, and both red beech and black beech (*N. solandri* var. *solandri*). A moist gully was clad in giant fronds of kiokio, with *Dicksonia squarrosa* and handsome specimens of *D. fibrosa*. Other ferns of note were *Asplenium hookerianum* and *Pellaea rotundifolia*. The orchids, *Earina mucronata* and *E. autumnalis* grew thickly along the edge of the track where it bounded a steep drop down to the river. We were finally able to name the species of *Parsonsia* when a couple of flowers showed the exerted anthers of *P. capsularis*. Weeds were few on the first part of the walk, with a little Himalayan honeysuckle (*Leycesteria formosa*) and blackberry (*Rubus fruticosus* agg.), but became more plentiful near the end where the track passed under pines. Here there was abundant blackberry and also two species of *Cotoneaster*.

Mt Tihia, Tongariro National Park, Saturday 30 January 2010

Leslie Haines

Mt Tihia is an extinct andesitic volcano at the northern edge of the Tongariro National Park that is a designated World Heritage site. From Turangi the track entrance is on SH47 (Te Ponanga saddle road) 4

km after the turnoff and c.1 km before Hinemihī's Track, on the right hand side of the road beside culvert 416. After a little difficulty in finding the unmarked track entrance we climbed c.700 m to the open tops of Mt Tihia and to the summit at 1165 m (Fig. 3). This day trip was particularly interesting as we passed through several altitudinal vegetation zones to reach the sub-alpine summit. From the road the tall rimu trees give an indication of a significant forest. The track was well defined on the lower slopes but as it became a little steeper there were opportunities to take a false turn, which some of us did for a short way. Lunch was on a rocky outcrop above the tree line with magnificent views over the surrounding landscape.

The podocarp forest was dominated by rimu and miro on the lower slopes for a the first part of the walk. These trees were tall and almost formed a canopy instead of the usually less abundant emergent qualities of podocarps. Kamahi was the dominant canopy species in the podocarp-broadleaf forest with numerous saplings in the shrub layer. Its abundance and the lack of significant other broadleaved canopy species such as tawa suggests some previous understorey browsing disturbance. There was good species richness in the shrub layer on the lower slopes including *Carpodetus serrata*, *Neomyrtus pedunculata*, *Hedycarya arborea*, *Pseudopanax crassifolius*, *Coprosma rhamnoides*, *Aristolelia serrata*, *Meliclytus ramiflorus*, *Coriaria arborea*, *Griselinia littoralis* and *Astelia nervosa* (no secondary veins protruding on the undersides). The ground cover included *Leptopteris hymenophylloides*, *Uncinia banksii*, *U. uncinata*, *U. zotovii*, *Blechnum colensoi*, *Leptolepia novae-zelandiae*, *Microsorium pustulatum* and the giant moss *Dawsonia superba*. Ferns were not as common here as at other lower altitude sites we visited, and yet there were over 30 species of ferns and fern allies. Tree ferns were significant and included the usual *Cyathea dealbata*, *C. medullaris* and *Dicksonia squarrosa*, but also *C. smithii* was relatively common in the mid zone.

The podocarp-broadleaf forest gradually thinned and we reached a zone dominated by red beech. This zone progressively became reduced in height as we ascended. The understorey changed and several shrub species first appeared or became more common: horopito, mountain karamu (*Coprosma tenuifolia*), stinkwood (*C. foetidissima*), black maire, toro (*Myrsine salicina*), *Raukaua anomalus*, *Raukaua simplex*, and pokaka.

At the tree line we encountered *Leptospermum scoparium* and *Olearia nummulariifolia* amongst a range of subalpine shrubs, with alpine herbs at the track edges and on the rocky outcrops. At least one plant of *O. nummulariifolia* was massed with white flowers- one of the highlights of the day. Jane (2004)

records mountain beech at the bush line but we seemed to have missed it.

Immediately above the tree line the sub-alpine herbs became obvious, especially *Wahlenbergia pygmaea*, *Euphrasia cuneata*, *Anaphalioides bellidioides*, *Celmisia spectabilis* and *C. gracilentia*. However this subalpine zone was predominantly shrubby with *Leptospermum scoparium*, *Hebe stricta*, *Pimelea prostrata* subsp. *vulcanica*, *Coriaria pteridoides*, *Olearia nummulariifolia*, *Epacris alpina*, *Dracophyllum longifolium* and *Pentachondra pumila*. Of particular interest were the more or less woody prostrate *Coprosma cheesemanii* with minute leaves, and the occasional *Brachyglottis bidwillii* with whitish leaf margins. We searched hard for *Coprosma decurva* – recorded from here and neighbouring Mt Pihanga (Heads 1998) but without success. Nearer the summit *Hebe odora* and *H. venustula* were present (both in flower), the grasses *Chionochloa rubra* and *Hierochloa redolens* were common, and we encountered a range of shrubby podocarps: *Podocarpus nivalis*, *Phyllocladus alpinus*, *Halocarpus bidwillii*, *Lepidothamnus laxifolius*, and emergent above the scrub was the occasional *Libocedrus bidwillii*.

Bidwill was a common species name in the subalpine zone: *Libocedrus bidwillii*, *Halocarpus bidwillii*, and *Brachyglottis bidwillii*. There was some discussion around the identifying features of the similarities between *Libocedrus bidwillii* (opposite decussate leaves) and the mature leaves of *Halocarpus bidwillii* (alternate, therefore less regular arrangement).

Although the zones were quite distinct, some plants were seen throughout the area, with varying abundance. *Weinmannia racemosa* was seen from the entrance to the forest as the dominant canopy species in the podocarp-broadleaf forest. At higher altitudes within the beech zone, it was less common and it was occasional in stunted form as part of the subalpine scrub zone. *Neomyrtus pedunculata* was common in the shrub layer of the two forest zones. Heather (*Calluna vulgaris*) was present along the tracks in the forest zones and more common in open situations in the subalpine scrub zone. It is a concern especially as this species was not recorded on Mt Tihia in 2002 (Lund 2002). There was no obvious sign of biological control for heather in this area.

The species we recorded that are missing from Lund's Mt Tihia list were (Lund 2002): *Cordyline banksii*, *Podocarpus nivalis*, *Hedycarya arborea*, *Pseudopanax colensoi*, *Coprosma rhamnoides*, *C. tenuifolium* and *Microsorium pustulatum*. *Hebe odora* we found quite common but is recorded by Lund as uncommon here.

There are managed populations of *Dactylanthus taylorii* nearby on the northern slopes of Mt Pihanga (Lund 2002, Jenkins 2008) but we didn't spy any on Tihia. Highlights of the day were the flowering of the

Olearia nummulariifolia, the sorting of *Libocedrus* and *Halocarpus*, the impressively tall rimu and miro forming a near canopy, and the juvenile forms of *Elaeocarpus hookerianus* and *Raukaua simplex*.

Some of the birds seen were: whitehead, kakariki, wood pigeon, and fernbird on the way up, tui on the forest edge seen from the lunch stop, and robin in the forest on the way down. Long-tailed cuckoos were heard all day but frustratingly unseen here – but we were rewarded later, at Lake Rotopounamu. C.J. Ralph spotted a falcon.



Fig. 4. *Coriaria pteridoides*, Waihohonu Track. Photo: Mike Wilcox, 31 Jan 2010.

Desert Road to Waihohonu Hut, Sunday 31 January 2010

Margaret Peart

We parked our vehicles beyond the car park, part way up the four-wheel-drive track, to save some walking. Before we reached the National Park, we crossed part of the Rangipo North 6C Block, administered by the Lake Rotoaira Trust. The track began through red tussock (*Chionochloa rubra*) country, invaded by heather. We passed patches of shrubland, with much *Leptospermum scoparium*, and several areas forested with mountain beech. Conifers included bog pine (*Halocarpus bidwillii*), snow totara (*Podocarpus nivalis*), pygmy pine (*Lepidothamnus laxifolius*) and mountain toatoa (*Phyllocladus alpinus*). Patches of *Coriaria pteridoides* carpeted the ground on recently exposed gravel (Fig. 4). *Carmichaelia australis* and the dwarf *C. nana* (Fig. 5) were of interest, *Muehlenbeckia axillaris* and the much less common *Myrsine nummularia* (Fig. 6) formed prostrate carpets and *Coprosma cheesemanii* was sporting its orange berries. The understorey in the beech forest featured abundant broadleaf (*Griselinia littoralis*), prickly mingimingi (*Leptecophylla juniperina*), and stinkwood (*Coprosma foetidissima*), and the little daisy *Lagenifera strangulata* was fairly common beside the track through the forest. Other coprosmas seen during the day included *Coprosma acerosa*, *C. microcarpa* and *C. pseudocuneata*.



Fig. 5. *Carmichaelia nana*, Waihohonu Track, Margaret Peart, 31 Jan 2010.

Amongst the red tussock were many flowering *Ozothamnus leptophyllus*, *Hebe tetragona*, *H. odora* and *H. venustula*. Noteworthy monocots included bristle tussock (*Rytidosperma setifolia*), holy grass (*Hierochloa redolens*), *Elymus solandri*, *Poa colensoi*, *Deyeuxia avenoides*, *Empodisma minor*, *Lepidosperma australe*, *Carpha alpina* and *Astelia nervosa*. Dicot herbs noted were *Anisotome aromatica*, *Celmisia gracilentata*, *Celmisia spectabilis*, *Chaerophyllum colensoi* and *Drosera pygmaea*.



Fig. 6. *Myrsine nummularia*, Waihohonu Track. Photo: Mike Wilcox, 31 Jan 2010.

The Ericaceae family was well represented with bog mingimingi (*Androstoma empetrifolia*), *Dracophyllum longifolium*, *D. recurvum*, *D. subulatum*, *Epacris alpina*, *Gaultheria antipoda*, *G. depressa*, *G. macrostigma*, prickly mingimingi, *Leucopogon fasciculatus*, *L. fraseri*, and *Pentachondra pumila*. Of interest was the shrub formerly known as *Leucopogon suaveolens* or *Cyathodes colensoi*, which has recently been renamed *Acrothamnus colensoi*. The white stripes on the underside of the leaves consist of thousands of tiny hairs. The stomata (minute pores allowing the movement of gases in and out of the intercellular spaces) are snuggled down among the hairs, well out of the wind.

Orchids seen included *Pterostylis* sp., *Thelymitra longifolium*, *T. cyanea* (in a damp area), *Prasophyllum colensoi* and *Microtis oligantha*. Some of the ferns and fern allies noted were *Lycopodium scariosum*, tangle fern (*Gleichenia dicarpa*), *Sticherus cunninghamii*, *Polystichum vestitum* and *Grammitis magellanica* subsp. *nothofageti*.



Fig. 7. Old Waihohonu Hut. Photo: Mike Wilcox, 31 Jan 2010.

We lunched at the Waihohonu Hut, which was crowded with many other trampers. It was interesting to go on to the original Waihohonu Hut (1904), which is now an historic museum (Fig. 7). By the afternoon, steady rain had set in but, on the return journey, some of our party detoured to the Ohinepango Springs. A few lucky ones saw a blue duck swimming beneath the bridge. *Montia fontana*, with its tiny flowers, was found growing under the water, and there were good examples of *Uncinia rubra*, and the spinose divaricating shrub *Pittosporum anomalum*. We also saw here a serious weed, mouse-ear hawkweed *Hieracium pilosella* (syn. *Pilosella officinarum*).

Our bedraggled party returned to the vehicles to find that two of them refused to be driven off for more than a short distance and were well and truly stuck in the mud. Much pushing, and pulling with a rope, was of no avail, so we decided to ring for a tow truck. While we waited, renewed efforts with more ropes and some skilful and scary driving from Mike and Geoff finally gave the desired results. We were lucky to be able to cancel the truck. After our late arrival back at camp, a trip for some to the Tokaanu hot pools soothed tired muscles and jangled nerves!

Lake Rotopounamu, Monday 1 February 2010 Warren & Colleen Brewer

With the weather clearing, following steady rain during the night, we set off for Lake Rotopounamu (greenstone lake). It is sited in the Pihanga Reserve within Tongariro National Park and lies at the northwest foot of Mt. Pihanga. It is believed to have been formed by a landslide around 10,000 years ago. It has a maximum depth of 9 m and is fed by four

streams. There is no visible outflow and it possibly drains by way of an underground stream or seepage.

The walk began with a steady climb. The track was initially flanked by two impressive miro trees. Massive podocarps and broadleaf became a feature of the climb, along with groves of katote (*Cyathea smithii*). The first of several carpets of black maire seedlings were noticed highlighting the benefit of recent good predator control (Jenkins 2008).

At the top of our climb the fine-leaved parsley fern (*Botrychium bifforme*) was found and we were also greeted by two robins. The track then descended down to lakeside, passing a giant black maire draped in plant life - mosses, ferns, perching lilies (*Collospermum microspermum*) and a couple of mapou saplings.



Fig. 8. Lake Rotopounamu, checking out *Baumea arthropphylla*. Photo: Mike Wilcox, 1 Feb 2010.

We soon reached "10 Minute Beach" and became engrossed by the aquatic species on the margin of the lake, dominated by stands of the sedge *Baumea arthropphylla* (Fig. 8). Very noticeable by its reddish hue and extending out into standing water was the introduced rush *Juncus bulbosus*. Spearwort (*Ranunculus flammula*) and *Juncus articulatus* were other well-established introduced species, but we were very pleased to find the native bedstraw *Galium trilobum* in flower and fairly common. Other plants of note here were *Centella uniflora*, *Lobelia angulata*, *Myriophyllum pedunculatum*, *Lepidosperma australe*, *Eleocharis acuta*, *E. gracilis*, *E. sphacelata* and *Phormium tenax*. Clarkson & Clarkson (1987) also recorded *Glossostigma elatinoides* here but we did not see it.

On rejoining the track a tentacled stinkhorn fungus (*Aseroe rubra*) drew our interest as also did rohotu (*Neomyrtus pedunculata*) which was bearing small delicate white flowers. Ferns began to really dominate the trackside, most notably *Blechnum vulcanicum* and some fine patches of *Lindsaea trichomanoides*. Next came red beech forest. Our lunch was eaten at Long

Beach which stretches along the eastern side of the lake. We were visited by several very friendly grey ducks and most of us were able to see a long-tailed cuckoo fly past. Behind the beach was an extensive drying wetland dominated by *Lepidosperma australe*.



Fig. 9. Kamahi forest at Lake Rotopounamu. Photo: Mike Wilcox, 1 Feb 2010.

Continuing on around the lake we passed remarkable rewarewa (*Knightsia excelsa*) and black maire of impressive girth and height. Groves of kamahi (Fig. 9) and kahikatea followed, the latter producing spectacular carpets of seedlings. Some of our group carefully checked boggy ground near the southern edge of the lake and found good numbers of the sundew *Drosera binata*, turfs of *Lilaeopsis ruthiana*, and surprisingly on the beach, the sedge *Morelotia affinis*, better known to us from impoverished soils around Auckland. At this point a search began for the orchid ally *Thismia rodwayi* which had previously been observed here. This proved unsuccessful but did alert us enough so that on the final stretch several orchid species were found, including some fine examples of *Orthoceras novae-zelandiae*, together with the herbs *Wahlenbergia violacea*, *Gentianella grisebachii* and some patches of the fern *Asplenium hookerianum*.

Kaimanawa Range, Pillars of Hercules, Monday 1 February 2010

Jan Butcher

From Lake Rotopounamu on SH 47 we headed down to the junction with SH 46 (Rotoaira Road) and along to Rangipo, passing Lake Rotoaira, a most outstanding feature being the impressive kanuka

forests on the lower northern slopes of Mt Tongariro. We turned off SH1 (Desert Road) into Kaimanawa Road and on to the spectacular gorge known as the Pillars of Hercules in Kaimanawa Forest Park (Department of Conservation 2001). The walk across the swing bridge high over the Tongariro River enabled us to eyeball the red beech, but even then the tops were above us. On our short walk along the river the three beeches were seen: mountain, red and silver, with *Coprosma microcarpa* common in the understorey, and a fair bit of *Helichrysum lanceolatum* and abundant *Blechnum vulcanicum* (Fig. 10) near the bridge. There were nice patches of flowering *Lobelia angulata*, and much *Cortaderia fulvida* alongside the river.



Fig. 10. *Blechnum vulcanicum*, Kaimanawa Forest Park, Pillars of Hercules. Photo: Mike Wilcox, 1 Feb 2010.

On returning to the carpark, we turned the other direction and started along the track to the Urchin Camping Area. We had no time to head along the track to Urchin (a high point of 1392 m) but a brief account of the flora there has been given by Milligan (1999). Our walk featured carpets of *Hymenophyllum demissum*, and an understorey of *Neomyrtus pedunculata* and *Coprosma microcarpa* predominated beneath the red beech canopy, with a sprinkling of kamahi, miro and Hall's totara. A stump covered in *Nertera villosa* and a seed head of *Adenochilus gracilis* were spotted. The area leaves one with the impression of a rather depauperate bush, quite different to that around Lake Rotopounamu, showing why pest control is so important in maintaining biodiversity in our bush. In saying that, it is always nice to walk in the beech forest, with the distinctive flora that they have. We wondered where the name of the gorge came from. With reference to the Wikipedia website "The Rock of Gibraltar was one of the Pillars of Hercules and the other being on the African side of the Strait. In ancient times the two points marked the limit to the known waters, a myth originally fostered by the Phoenicians".



Fig. 11. *Pittosporum turneri*, Kuratau River. Photo: Margaret Peart, 2 Feb 2010.

**Kuratau River and Waituhi Lookout, SH 47 towards Taumarunui, Tuesday 2 February 2010
Mike Wilcox**

At this stage we were homeward bound and our group had shrunk to a dozen, but there was still more to see. We stopped at a frosty-looking clearing near the Upper Kuratau River bridge and inspected some fine specimens of *Pittosporum turneri* bearing good crops of fruit (Fig. 11). Also here were *Olearia virgata*, plentiful mountain toatoa, miro, Hall's totara, *Corokia*

cotoneaster, *Aristotelia serrata*, *Coprosma tayloriae*, *Hebe parviflora*, *Dracophyllum subulatum*, *Pittosporum colensoi* and *Griselinia littoralis*.



Fig 12. *Olearia ilicifolia*, Waituhi Lookout. Photo: Mike Wilcox, 2 Feb 2010.

Our last botanical stop was at the spectacular lookout at the top of the Waituhi Saddle on the southern end of the Hauhungaroa Range, where we saw extensive thickets of mountain holly (*Olearia ilicifolia*) (Fig. 12), and had wonderful views out over the high country we had been visiting during the long weekend.

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A visit to the Whangamarino Wetland

Mike Wilcox

On 20 February 2010 we headed south over the Bombay Hills down into the northern Waikato near Meremere to explore the famous Whangamarino Wetland – New Zealand's equivalent to Florida's Everglades (without the alligators) and Brazil's Matto Grosso (without the anacondas).

Those in attendance were: *Waikato group*: Monica Peters & Keith Thompson (leaders), Yanbin Deng, Janet Planet, John & Stella Rowe *Auckland group*: Jan Butcher, Ewen Cameron, Xin Cheng, Hamish Dublon, Michelle Dublon, Eunice Hall, Kristy Hall, Stewart Hall, Marcel Horvath, Peter Hutton, Helen Lyons, Barrie McLeay, Christine Major, Mike Wilcox Maureen Young.

We were very fortunate to have wetland experts Keith Thompson and Monica Peters (Fig. 1) from Hamilton on hand to lead the way and explain the history and

ecology of the wetland – one of New Zealand's biggest (Clarkson 2002, Reeves & Askew 2003). Janet Hunt (2007) describes it as a superlative wetland of c. 6000 ha, representing 20% of Waikato's remaining wetlands, "its unassuming, somewhat willow-infested appearance belies its significance: its interconnected system of peat bogs, peat swamps, ponds, lakes, streams and rivers, and their associated specialised plant and animal life, represents huge value to the nation and the world".

We visited three sites.

Island Block Road, south of old school overlook

Here we entered a restiad bog covering c. 2000 ha, the dominant peat-forming plant being wire rush (*Empodisma minus*) (Clarkson & Clarkson 2006; Clarkson et al 2004). Unlike the Kopouatai peat dome