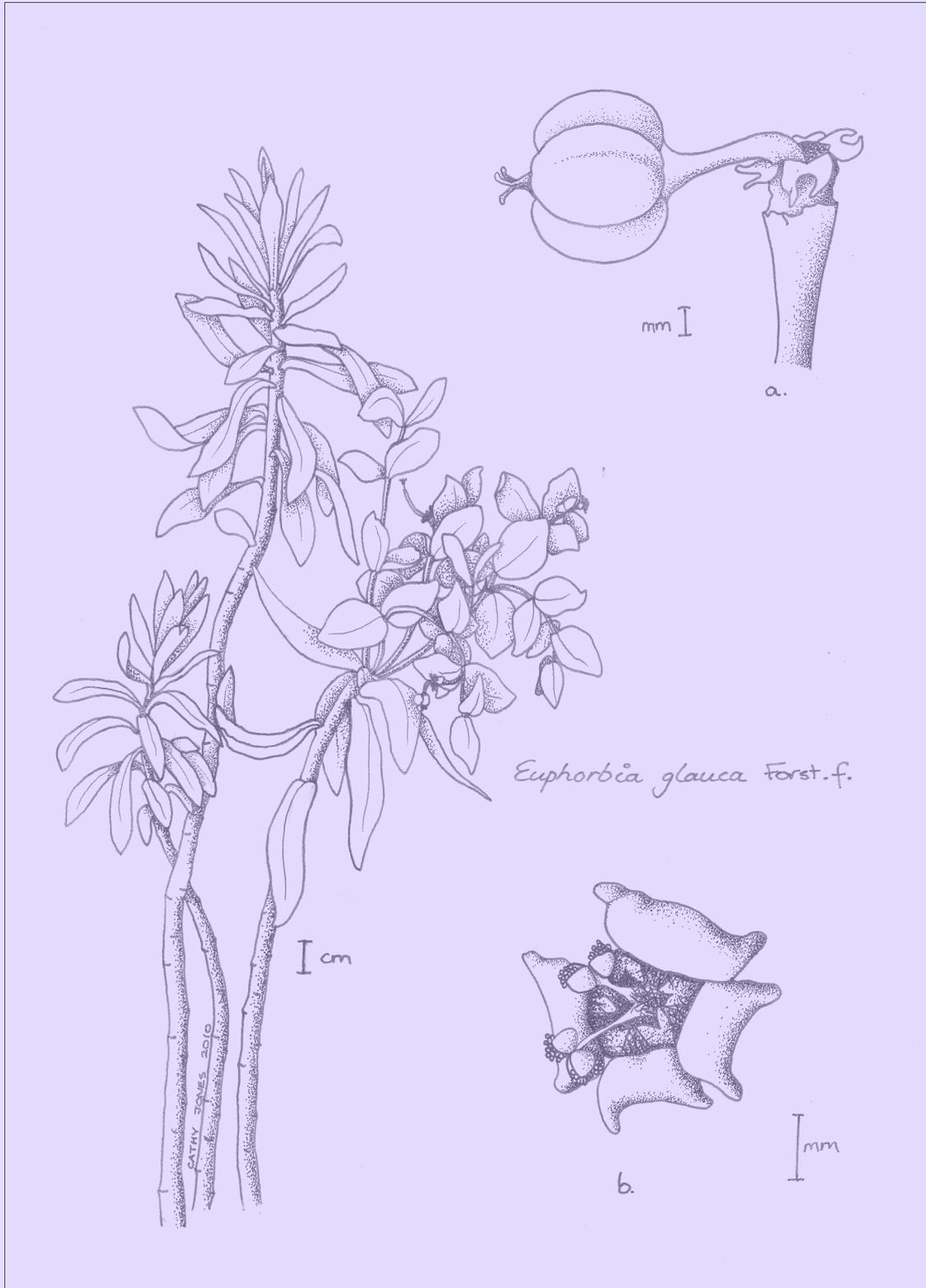


NEW ZEALAND BOTANICAL SOCIETY

NEWSLETTER

NUMBER 99

March 2010



New Zealand Botanical Society

President: Anthony Wright
Secretary/Treasurer: Ewen Cameron
Committee: Bruce Clarkson, Colin Webb, Carol West

Address: c/- Canterbury Museum
Rolleston Avenue
CHRISTCHURCH 8013

Subscriptions

The 2010 ordinary and institutional subscriptions are \$25 (reduced to \$18 if paid by the due date on the subscription invoice). The 2010 student subscription, available to full-time students, is \$12 (reduced to \$9 if paid by the due date on the subscription invoice).

Back issues of the *Newsletter* are available at \$7.00 each. Since 1986 the Newsletter has appeared quarterly in March, June, September and December.

New subscriptions are always welcome and these, together with back issue orders, should be sent to the Secretary/Treasurer (address above).

Subscriptions are due by 28 February each year for that calendar year. Existing subscribers are sent an invoice with the December Newsletter for the next years subscription which offers a reduction if this is paid by the due date. If you are in arrears with your subscription a reminder notice comes attached to each issue of the Newsletter.

Deadline for next issue

The deadline for the June 2010 issue is 25 May 2010.

Please post contributions to:

Melanie Newfield
17 Homebush Rd
Khandallah
Wellington 6043

Send email contributions to atropa@actrix.co.nz. Files are preferably in MS Word (with the suffix ".doc" but not ".docx"), as an open text document (Open Office document with suffix ".odt") or saved as RTF or ASCII. Graphics can be sent as TIF JPG, or BMP files. Alternatively photos or line drawings can be posted and will be returned if required. Drawings and photos make an article more readable so please include them if possible. Macintosh files cannot be accepted so text should simply be embedded in the email message.

Cover Illustration

Euphorbia glauca drawn by Cathy Jones from a cultivated plant, originally collected from the Clifford Bay coast, the only known South Marlborough population. a.seedhead with remains of flowers.
b.flower

NEW ZEALAND BOTANICAL SOCIETY
N E W S L E T T E R
NUMBER 99 March 2010

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NEWS

New Zealand Botanical Society News

■ **Call for nominations for Allan Mere Award 2010**

Nominations meeting the following conditions are invited for the award of the Allan Mere for the year 2010.

Conditions of the Allan Mere Award

- The Award shall be made annually to a person or persons who have made outstanding contributions to botany in New Zealand, either in a professional or amateur capacity.
- The Award shall be administered by the New Zealand Botanical Society.
- Nominations for the Award may be made by regional Botanical Societies, or by individuals, to the Secretary of the New Zealand Botanical Society. Nominations shall close on 30th June each year. Nominations shall be signed by nominator and seconder, and accompanied by two copies of supporting information that must not exceed one A4 page.
- Selection of the successful nominee/nominees shall be made by the Committee of the New Zealand Botanical Society, normally within three months of the closing date for nominations.
- If, in the opinion of the Committee, no suitable nomination is received in any particular year, the Committee may refrain from making an award.
- The Mere shall be formally presented to the recipient on an appropriate occasion by the President of the New Zealand Botanical Society or his/her nominee, but otherwise shall remain in the custody of, and be displayed by, the Herbarium Keeper of the Allan Herbarium (CHR) at Landcare Research, Lincoln, together with the book recording awards.
- The recipient shall receive an appropriately inscribed certificate.

Nominations should be forwarded by 30 June 2010 to:

Ewen Cameron, Secretary, New Zealand Botanical Society, c/- Canterbury Museum, Rolleston Avenue, Christchurch 8013.

■ **Call for suggestions for Loder Cup nomination 2010**

The NZBS is one of the ten named groups able to nominate people for the Loder Cup – New Zealand's premier conservation award.

On Gerald Loder's first visit to New Zealand in 1886 he was introduced to this country's unique and distinctive flora. He was captivated and became an enthusiastic collector. Over a period of time he developed an outstanding selection of New Zealand and Southern Hemisphere plants on his estate in Surrey, England.

In 1926, he donated a cup to encourage and honour New Zealanders who work to investigate, promote, retain and cherish New Zealand's indigenous flora. Gerald Loder became Lord Wakehurst in 1934. He remained passionately involved with what he called our "incomparable flora" until his death in 1936.

The Loder Cup is entrusted to the Minister of Conservation who appoints the Loder Cup Committee and awards the Cup. The Department of Conservation handles the administration of the award and any other matters.

The Cup is awarded annually to the person, group of people, or organisation which has exceeded all other nominees in furthering the aims and objects of the donor of the Cup.

Suggestions for consideration by the Committee for the Society's nomination should be forwarded to the undersigned by Wednesday 5th May 2010.

Ewen Cameron, Secretary, New Zealand Botanical Society, c/o Canterbury Museum, Rolleston Avenue, Christchurch 8013

■ **Financial Statement for year ended 31 December 2009**

	2009
INCOME	
Donations	\$287.22
Interest	\$15.85
Sale of Back issues	\$217.00
Grant from DOC TFBIS 216 for digitisation	\$3,900.00
Grant from DOC TFBIS 227 for Lichen Information (part 1)	\$20,000.00
2009 Subscriptions	\$3,670.00
2010 Subscriptions received in advance	\$224.00
Total Income	\$28,314.07
EXPENSES	
Printing costs	\$3,675.38
Postage costs	\$1,779.96
Bank fees	\$29.50
Calligraphy costs (Allan Mere)	\$50.63
TFBIS 216 – digitisation	\$3,900.00
TFBIS 227 – Lichen Information	\$20,000.00
Total Expenses	\$29,435.47
Total income	\$28,314.07
Less total expenses	\$29,435.47
Net surplus	-\$1,121.40
ASSETS	
Cash in bank - current account	\$2,931.99
Cash in bank - Ready Money	\$1,975.83
Total Assets	\$4,907.82
LIABILITIES	
Printing costs	\$1,018.13
Postage costs	\$433.08
Total Liabilities	\$1,451.21
Total Assets	\$4,907.82
Less Total Liabilities	\$1,451.21
Net assets	\$3,456.61
Represented by	
Retained earnings c/fwd from previous year	\$4,578.01
Profit for year	-\$1,121.40
TOTAL FUNDS AS AT 31 DECEMBER	\$3,456.61
Note: Liabilities were printing for <i>Newsletter</i> 98 (December 2009) of \$1,018.13 and postage of \$433.08 which were paid in January 2010.	

Regional Botanical Society News

■ Auckland Botanical Society

End-of-year pot luck picnic

For a change from a pot luck dinner, this year a picnic was held in the volunteers' house at Tawharanui Regional Park. A pre-luncheon hunt for *Danhatchia australis* was successful, with c. 25 spikes of the cryptic little orchid being found in taraire forest. After lunching, members strolled through the bush along the Ecology Trail, and were rewarded by seeing and hearing the increase in bird life and the regrowth of plants since the building of the predator-proof fence. The one *Streblus banksii* was admired, and several sprays of green fruit confirmed the sexual orientation of the tree. An afternoon low tide enabled Mike to bring to our attention the wonders of the seaweed world, including an unnamed green algae in the genus *Cladophora*.

January Camp at Central Otago

Abbotsford School Outdoor Education Centre at Bannockburn was the venue for our biennial South Island camp. With leaders Neill and Barbara Simpson from Queenstown, and David Lyttle and Alison and John Knight from the Botanical Society of Otago, we were fortunate to have local knowledge to help us identify the bewildering range of cushion plants that grow on the salt pans and range tops there.

Anniversary Weekend Camp, Turangi

At this camp we explored the Tongariro River by foot or raft, Mt Tihia, Waihohonu Track, Lake Rotopounamu and the Pillars of Hercules. An enduring memory of Lake Rotopounamu will be the thousands of seedlings of black maire and kahikatea that carpeted the ground, thanks to the predator control being carried out by volunteers.

February Field Trip

The Whangamarino wetlands were explored under the leadership of friends from the Waikato. The morning was spent in an area of good quality swamp. Notable plants seen were *Sparganium subglobosum*, *Dianella haemata*, *Utricularia delicatula*, *Drosera binata*, *Epacris pauciflora*, *Astelia grandis* and *Hydrocotyle pterocarpa*. The afternoon was spent on private land checking out areas destined for restoration and weed control.

Forthcoming Activities

3 March	AGM, "Flora of Central Otago"
20 March	Kawau Island
7 April	Neill Simpson, a botanical tribute to Tony Druce
17 April	Fern family workshop, John Braggins

Auckland Botanical Society, PO Box 26391, Epsom, Auckland 1344

President: Mike Wilcox **Secretary:** Bec Stanley rebecca.stanley@arc.govt.nz

■ Rotorua Botanical Society

November trip report: Omaio Bay

After an early start we arrived at Omaio Bay (near Te Kaha) and were briefed by the local iwi on their expectations of us - a starting point for rehabilitation of the shore by iwi. This area was largely in rough grazing that stretched for 1 km in front of us between the road and a fine gravel shore. Recently, patches of wild rose had been ripped up and heaped. Beyond that a fringe of pohutukawa on low cliffs separated the shore from the road. We soon devolved into two teams - the grazers who dashed hither and thither covering the ground and the conscientious who left no turn unstoned. The first 20m from the high tide was a carpet of *Calystegia soldanella* but further inland there was a huge variety of adventives including such unusual plants as *Trifolium angustatum* and *Lotus angustissimus*, pests such as smilax, German ivy, pampas, canna lily, montbretia, wandering Jew and arum lily, and one solitary patch of *Tetragonia tetragona*.

After lunch we started along the pohutukawa-covered cliffs with one notable adventive - *Setaria palmifolia*, but a good range of mainly woody native species and ferns including hangehange, ngaio, houpara, patches of maidenhair fern and *Poa anceps* with a few patches of ice plant on the exposed cliffs. At the end of the cliffs the highlight was tall puriri with nikau, karaka and whau.

At low tide we headed to Motunui, where, after a warm welcome and blessing from the locals, we head out across the rock platform to the former pa site and tapu area. The island was dominated by pohutukawa with steep flanks. We circled the island first. The highlight were *Lagenifera lanata*, two species of *Pimelea* and lots of wharanui. A steep climb brought us, under dense pohutukawa, to the flat top which had been formerly heavily modified and fortified. Here a few seedlings of mapou, hangehange, and houpara, of the forest to come were noted.

December Trip report: Pahiko - Waiorongomai Valley

As it was a joint trip with Waikato Bot Soc, we met at the road end. Among the possible highlights discussed was *Pittosorm kirkii* for which a trophy of a chocolate fish was offered. As it was to be a long day, we decided to make a fast trip to the Pylon Track junction. The level Piako tramway through relatively recent forest regeneration was followed by a steep climb on the Kauri Grove Track through older forest with patches of kohekohe, kauri, toatoa and *Mida salicifolia*.

At the kauri grove the track became a "route" along an old pack track. Initially it passed through a fern-rich pukatea gully where the locally common, shiny-leaved *Aspenium lamprophyllum* was common. Further along it sidled steeply through a wet gully of parataniwha with *Trichomanes elongatum* on the steeper shaded banks. By lunchtime we were in more open low scrubland and selected a rocky lookout surrounded by kanuka, snowberry, *Gonocarpus incanus* and *Schoenus tendo* and the odd emergent hard beech. From there, the rather open ridge track continued through low scrub including gorse and Spanish heath to the main ridge where we turned southwards toward Pahiko trig through silver beech, tawari, *Dracophyllum latifolium* and *Alseuosmia macrophylla*. The scrubby climb to the lookout near the trig, through *Gahnia pauciflora*, *Dracophyllum sinclairii* and *Pseudopanax laetum*, provided grand views of the upper Waitawheta valley tors. On the descent we spotted the expected *H. armstrongii* as a mat on a treefern.

A shortcut return, via a more northern ridge, took us through cedar then tawari and kamahi where the chocolate fish was won simultaneously by two people spotting *P. kirikii* at different places. One had gorgeous, large fruit. Nearby was *Microsorium novae-zelandiae*, starting as usual well up the tree. The route soon descended steeply back on to the Kauri loop track near its upper end where we arrived at the old hut site amongst a mass of *Gladiolus undulatus*. After crossing the creek and climbing through kanuka scrub we regained the Piako tramway for a hasty and easy return.

FUTURE EVENTS

14 March	Endean Bush Reserve, Paradise Valley
10 April	Marawaiwai SR
17 April	Okareka Mistletoe Restoration Work day
1 May	Athenree Bowentown Dunes
29 May	Thornton Dunes
13 June	Carmichael Reserve

President: Paul Cashmore (07) 348 4421 pcashmore@doc.govt.nz

Secretary: Sara Crump

■ Wanganui Museum Botanical Group

2 May 2009 Field Trip: Whanganui Riverbank (true left bank)

On a cold but not unpleasant morning, six members walked along the Southern Whanganui riverbank at low tide, between the Cobham Bridge (SH3) and Corliss Island. We found the taller vegetation to be dominated by ngaio, gorse, *Cortaderia* and alder. A number of small, self-sown kowhai were found growing not far from the high tide mark. A tall wattle [probably silver wattle, *Acacia dealbata*] was apparently thriving in this zone also, as was a specimen of *Coprosma robusta*. Of considerable interest were a balm of Gilead, *Cedronella canariensis*, and a flowering *Parahebe* [probably *P. diffusa*]. As to be expected, sedges and rushes were plentiful, with good specimens of native sea rush, *Juncus kraussii*. In the more open downstream section of the riverbank, *Samolus repens*, *Selliera radicans* and exotic buck's horn plantain, *Plantago coronopus*, dotted the mudflats. There were healthy patches of *Leptinella dioica* here in places. Sea aster, *Aster subulatus*, was still in flower. Other species found included: *Apium prostratum* subsp. *prostratum* var. *filiforme*, a *Spergularia* [either the exotic *S. rubra* or the native *S. media*], and *Atriplex prostrata*. Ormond Torr

30 May 2009 Field Trip : A Bastia Hill Garden

A small but enthusiastic group went on a ramble to discover some of the unusual treasures hidden away in Jocelyn & Ian's garden. The property, formerly a commercial cut flower nursery, has an extensive range of plants from many places. An extensive planting of a Patagonian bromeliad (*Fascicularia bicolor*), with its scarlet-flushed leaves and tiny blue flowers, was an early talking point. Nearby, a large Natal bottlebrush (*Greyia radlkoferi*) was frosted but with buds & the first of its brilliant scarlet flowers; dainty yellow flowers on the variable emu bush (*Eremophila maculata*); stunning flower spikes of Queensland's ivory curl tree (*Buckinghamia celsissima*); masses of white flower on two large wild rosemary (*Eriocephalus africanum*); and a large flowering clump of the not often seen *Clivia nobilis* (in 1828, the first *Clivia* to be described). NZ natives included two 5-6 m rimu (*Dacrydium cupressinum*) and a wide range of kowhai (*Sophora* spp.) growing with a large winter flowering gum (*Eucalyptus leucoxylo* var. 'Rosea'), meaning the delightful song of tui & bellbird accompanied us. Bulbous plants included a large group of the lovely green lachenalia (*Lachenalia viridiflora*), and several of the small cyclamen species. Fruiting plants included a hedge of feijoa (*Feijoa [Acca] sellowiana*) and the beautiful and much-admired orange Japanese persimmon (*Diospyros kaki*) in full fruit. Ian & Jocelyn Bell

November Field Trip: Campbell Road, Brunswick

In just an afternoon we walked about half the 30 ha of secondary forest in private ownership, occupying valleys cut into an elevated marine terrace. Apart from a couple of forest remnants off Mission Road, this is almost as close as native forest now gets to the coast in this district. However, at 7.5 km distant from the coast, this patch showed no coastal influences. In fact, it was this winter's (July?) frost influence that provoked much discussion. The mahoe in the lower parts of the valley looked dead, but when we looked closely, most were beginning to sprout. There was a clear frost-line around the valley. Above the frost-line, other frost sensitive trees like the naturally occurring mamaku and planted puriri and pohutukawa seemed untouched. Most of the bush had been cleared several decades ago and it is also in early stages of recovery from years of stock grazing. Small numbers of fallow deer are still here. The canopy was > 90% mahoe with a very few older pukatea and hinau that clearly survived the earlier clearing. Now, after 4 years without stock, the understorey has some regeneration of shrubs, predominantly pigeonwood, but we were pleased to see a lot of young nikau too. The species seen here that are least common in the district were two flowering shrubs of *Olearia virgata* in the swamp valley floor and the fern *Deparia petersenii*. From a ridge, we could see that the adjoining valley, which we did not have time to explore, had some titoki and kahikatea and a more varied canopy generally, so another trip has been scheduled there for October 2010. Our day ended with a tour of the owners' organically grown orchard. Colin Ogle

FUTURE EVENTS

Saturday 27 February	Westmere Lake
Tuesday 2 March	NZ's native 'Mallows' (<i>Hoheria, Plagianthus</i>) - Jennifer Tate
Saturday 10 April	Tangimoana estuary & dunes
Tuesday 6 April	<i>Clivia</i> – Tony Barnes
1 or 2 May	Higgies' Bush 'Woodburn', Fordell
Tuesday 4 May	Kalimantan, Borneo - Les Rowlands

Sunday 30 May	Ashhurst Domain's dry and wet forest
Tuesday 1 June	Alexander Library, Wanganui – Gillian Tasker
Sunday 4 July	St John's Hill School & Bens Place
Tuesday 6 July	Touring in Sikkim, India, Europe - Tom Welch
Sunday 1 Aug	Castlecliff dunes revegetation
Tuesday 3 August	AGM – members' evening
Sunday 5 Sept	Bason Botanic Reserve, Rapanui Road, Westmere
Tuesday 7 Sept	Chatham Islands evening – members' memories
Sunday 2 Oct	Campbell Road bush, Brunswick
Tuesday 5 Oct	Central Australia - Laurel Stowell & Richard Thompson
Oct. 30/31	trip to be announced
Tuesday 2 Nov	Queensland plants & places - Clive & Nicki Higgin
Dec. 4/5	trip to be announced
Tuesday 7 Dec	End-of-year social

President: Clive Higgin (06) 342 7857 clive.nicki@xtra.co.nz

Secretary: Robyn Ogle (06) 3478547 22 Forres St, Wanganui. robcol.ogle@xtra.co.nz

■ Nelson Botanical Society

November Field Trip: Te Kaainga o Tawhai, QE2 covenant

This 36-ha property borders Kahurangi National Park. Beech had been removed from the land in the past and so the covenant had 15 years' regrowth. In a patch of regenerating beech forest (all five taxa are present) was a mistletoe (*Alepis flavida*) enclosed in chicken wire (trunk bands had not provided enough protection) with new leaves. Of the many small-leaved shrubs in the bush, *Raukaua anomalus* was very abundant. Alongside the excellent boardwalks on the river terrace were flowering *Oxalis magellanica* and patches of *Viola lyallii*. Kahikatea will eventually predominate in the area. Several species were seen on both the hill and the flat, including *Pseudowintera colorata*, *Cyathea colensoi* and *Pittosporum rigidum* (one plant with seed capsules, one with dark flowers). An exciting find was *Alseuosmia pusilla* with its highly scented flowers. A check of the rat and possum traps en route to the ridge revealed the odd rat, much mouse sign and two very dead possums. There were also pig rootings – these having worsened since the owners lost their dog. Trapping is making a huge difference to the regrowth.

December Field Trip: Wairoa Gorge Rare Plant Protection

It has been about a year since Nelson BotSoc last weeded the Inches' riverside forest. The area is species rich and well worth protecting. Our previous efforts were plainly visible: *Teucrium parvifolium* bushes were larger and flowering prolifically. *Brachyglottis sciadophila* had increased in area too. *Scutellaria novae-zelandiae* is growing under a grove of *Melicytus ramiflorus* and *Pseudopanax ferox* is growing well. *Clematis vitalba*, still a problem, was the focus of weeding effort. When a large multi-trunked barberry was cut down a nice-sized *Coprosma obconica* shrub appeared.

December Camp: Canaan Downs

Saturday 19 December: To Moa Park – A variety of habitats was visited throughout the day. Several coprosmas were seen, including *Coprosma decurva*, *C. tayloriae* and *C. microcarpa*. Other shrubs and trees included *Olearia ilicifolia*, *Dracophyllum elegantissimum*, *Cordyline indivisa* and *Archeria traversii*. On the ground several plants were in flower: *Epilobium brunnescens* ssp. *minutiflorum*, *Oreostylidium subulatum*, *Libertia micrantha*, *Viola filicaulis* and *Myosotis venosa*. We saw a range of filmy ferns: *Hymenophyllum villosum*, *H. multifidum*, *H. rufescens* and *H. malingii*, the last blanketing trunks of dead *Libocedrus bidwillii*. Two greenhood orchids were seen – *Pterostylis venosa* and *P. irsoniana*, both just past flowering. At Moa Park, there was a hybrid *Olearia ilicifolia* x *O. lacunosa* (the parent species were seen earlier). The boggy soils of this area supported a whipcord hebe (*Hebe hectorii* ssp. *coarctata*); *H. odora*; bog pine (*Halocarpus bidwillii*); *Gentianella bellidifolia* (in flower); and a few celmisias (including a large *C. traversii*). There were some *Aciphylla colensoi* and, in wetter areas, *Drosera arcturi* (in flower) and *D. spatulata*. Also flowering was a patch of *Herpolirion novae-zelandiae* and two hybrids of yellow silver pine (*Lepidothamnus intermedius*) and pigmy pine (*L. laxifolius*). Of concern were small patches of three exotics: *Juncus squarrosus*, *Hieracium lepidulum* and *Erica lusitanica*.

Sunday 20 December: Limestone country

The day was spent on a private, 300ha, Canaan property, which contained the quarry that provided marble for Wellington's Parliament Building. A damp area in beech forest revealed two new *Myosotis* species for the weekend: *M. forsteri* and *M. tenericaulis*. *Oxalis magellanica*, *O. exilis* and *Ranunculus membranifolius* were there too. Other bush plants seen early in the day included *Pittosporum rigidum* and *P. divaricatum*, *Coprosma obconica* and *C. propinqua*, a 2m-tall *Hebe leiophylla* and, the rarest plant of the trip, *Ourisia modesta* in a damp area near a sink hole. Nearby were mats of *Mazus radicans*. At the quarry were *Nematoceras macranthum* and *Pterostylis oliveri*, just two of the eight orchid species seen during the day. In the large area of limestone pavement, deep cracks were refuges for plants like *Pseudopanax macintyreii* and *Melicactus obovatus*, while *Clematis forsteri* flowered on the bush edge. *Pimelea longifolia* and *Gingidia montana* were also in flower. After we descended through the bush, botanising continued with *Huperzia australiana* and *Aristotelia fruticosa*.

Nelson Anniversary Weekend Camp: Reefton

Saturday 30 January: Mt Haast – En route to the carpark we passed crimson patches of southern rata among the beech – a great start. The first part of the day was spent in the bush, where we saw the difference between *Grammitis billardiarei* and *G. magellanica* ssp. *nothofageti*, and between various bush-habitat coprosmas such as *C. colensoi*, *C. crenulata*, *C. pseudociliata* and *C. pseudocuneata*. Other interesting trees and shrubs included the dominant *Nothofagus solandri* var. *cliffortioides*, *N. menziesii* and *N. fusca*, along with *Dracophyllum traversii*, *Halocarpus biformis*, *Archeria traversii*, pokaka (juvenile and adult forms), *Myrsine divaricata*, *Neomyrtus pedunculata*, *Olearia lacunosa* and the superficially similar *Pseudopanax linearis*, *Pittosporum crassicaule*, *Raukaua anomalus* and *R. simplex* (juvenile and adult forms). Near our feet were *Viola filicaulis* and *Lagenifera strangulata*. Then came a lesson on *Astelia* aff. *nervosa* and *A. fragrans*. Later in the day, above the bushline, *A. nervosa*, *A. petriei* and *A. skottsbergii* were seen. There were also carpets of *A. linearis* var. *linearis* on boggy ground. Also above the bushline were *C. fowerakeri* and *C. serrulata*. In the alpine zone, the celmisias were putting on a beautiful display, including *Celmisia armstrongii*, *C. semicordata* ssp. *semicordata*, *C. sessiliflora*, *C. laricifolia*, *C. lateralis*, *C. verbascifolia* ssp. *membranacea* and, in the boggy areas, *C. alpina*. The honey-scented flowers of *Brachyglottis bidwillii* were admired, along with *Hebe macrantha*, *Hebe lycopodioides*, *Leonohebe ciliolata*, *Phyllacne colensoi*, *Ourisia macrocarpa* ssp. *calycina*, *O. simpsonii*, *Aciphylla colensoi*, *A. similis*, *Anisotome pilifera*, *A. aromatica*, *A. haastii*, *A. imbricata* var. *prostrata*, *Epilobium pernitens*, *Euphrasia monroi*, *Leucogenes grandiceps*, *Dolichoglottis scorzoneroideis* and *Raoulia grandiflora*.

Sunday 31 January: Klondyke Tarns Track – This track meandered up the Klondyke Valley through mixed beech forest to a subalpine waterfall. Many of the species seen yesterday were seen again. Alongside the initially boggy track was *Luzuriaga parviflora* in flower, and there were several large *Libocedrus bidwillii*. At least three cedar stumps were covered in *Hymenophyllum malingii* and there was a clump of *Peraxilla tetrapetala* (with one flower). Later, the fine *Uncinia filiformis* was compared to *U. clavata* seen nearby. Several orchids were found during the day, many of them in flower: *Pterostylis graminea*, a small *Caladenia* species, several beautiful *Gastrodia cunninghamii*, *Aporostylis bifolia*, *Simpliglottis cornuta* and later *Pterostylis irsoniana*. Occasional flowers of *Myosotis forsteri* were seen, as were large areas of *Hypolepis millefolium* and one patch of *H. rufobarbata*. A boggy clearing was carpeted with flowering *Forstera tenella*, *Lobelia angulata* and the less showy *Gonocarpus aggregatus* and *Hydrocotyle sulcata*, amongst others. Another period in the bush brought us to a wide, boggy, flat area before the waterfall. Here we encountered many celmisias, hebes and parahebes, large flowering stems of *Aciphylla colensoi*, *Craspedia incana* and *C. uniflora*, and *Geranium sessiliflorum* ssp. *novae-zelandiae*. At the base of the waterfall were clumps of yellow-flowering *Dolichoglottis lyallii* and views down the valley to Mount Haast.

Monday 1 February: Alborns Coal Mine Walk – Most of the species seen on this 3-km loop track had been seen on the other two days, but there were some new species too, and old mine shafts and bits of ancient machinery added interest. *Thelymitra cyanea* was found growing on a damp bank with sundews. Other orchids not seen the other days were *Adenochilus gracilis* and a *Caladenia* species, possibly *Petalochilus nothofageti*. *Luzuriaga parviflora* was again present, but with berries as well as flowers. *Quintinia serrata* was present in large numbers, as was *Weinmannia racemosa*. A small miro was seen and there was an interesting patch of gymnosperms – cedar, pink pine, yellow-silver pine and rimu – growing together with very little else on moist mineralised soil.

FUTURE EVENTS

Mar 21: Maitai Caves. Leader Lawrie Metcalf (03) 540 2295
April 1–5: Kaikoura camp. Leader Cathy Jones (03) 546 9499
April 18: Sherry River. Leader Bee Grant (03) 539 6364
April 19: Annual General Meeting and a talk on Iceland by Andy Dennis
May 16: Fungal foray, Pelorus. Leader Rebecca Bowater (03) 545 1260
May 17: Talk, *Pittham's Plant pictures*, by Don Pittham.

President: Cathy Jones (03) 546 9499. Flat 1 47A Washington Rd. Email: cjones@doc.govt.nz

Treasurer: Trevor Lewis (03) 547 2812. 22 Coster St. Email: tandjlewis@actrix.co.nz

■ Other Botanical Society Contacts

Waikato Botanical Society

President: Liz Overdyck (nee Grove)

General contact: bot_soc@waikato.ac.nz

Secretary: Monica Peters

Our newsletters are available on <http://cber.bio.waikato.ac.nz/Waibotsoc/WaikatoBotSoc.html>

Manawatu Botanical Society

Jill Rapson: Ecology Group, Institute of Natural Resources, Massey University, Palmerston North.
Ph (06) 350 5799 Ext 7963; Email: G.Rapson@massey.ac.nz

Wellington Botanical Society

President: Carol West (04) 387 3396 cwest@doc.govt.nz

Secretary: Barbara Clark (04) 233 8202 bj_clark@xtra.co.nz PO Box 10412 Wellington 6143.

<http://wellingtonbotsoc.wellington.net.nz>

Canterbury Botanical Society

President: Bryony Macmillan, 351 2886, or 351 9241 (for messages)

Secretary: Jodi Rees, mallotus@yahoo.com.au PO Box 8212, Riccarton, Christchurch 8440

Botanical Society of Otago

Chairman: David Lyttle djlyttle@ihug.co.nz

Secretary: Allison Knight, P O Box 6214, Dunedin North.

More information available on website: <http://www.botany.otago.ac.nz/bsol/>

Wakatipu Botanical Group

Chairman: Neill Simpson (03) 442 2035

Secretary: Lyn Clendon (03) 442 3153

ANNOUNCEMENTS

■ A Colenso Society

Ian St George (ian.stgeorge@mzcgcp.org.nz)

7 November 2011 marks the bicentennial of the birth of the Rev. William Colenso, a polymath whose genius has been appreciated in limited fashion by church historians and with greater enthusiasm by botanists, Māori scholars, students of the history of science, print lovers and others.

Much of his writing is relatively inaccessible.

I propose the formation of an incorporated Colenso Society. Its aims: to ensure his bicentennial is properly marked, and to encourage Colenso scholars by establishing a "Colenso Project". The Colenso Project might trace and catalogue all of his surviving writing, transcribe and annotate his letters, republish Bagnall and Petersen's biography and make it all available in searchable form on

line. The concept is modelled on the Darwin Correspondence Project (<http://www.darwinproject.ac.uk/>).

If you are interesting in contributing a little time, a little wisdom and ten dollars to permit as a first step the formation of a properly incorporated society please contact me. I will send you draft Rules for comment, add your email to my mailing list, and contact all responders early in 2010. If you know of others who might be interested, please pass this to them. Don't send money yet.

▪ **2010 Australian Systematic Botany Society Conference, 1st circular**

Lincoln, Canterbury, New Zealand, 29 Nov – 3 Dec 2010

“Systematic botany across the ditch: links between Australia and New Zealand”, including palaeobotany, biogeography, phylogeny, algae, hybridisation, and biosecurity/weeds.

You are warmly invited to attend the 2010 ASBS conference in Lincoln, New Zealand, hosted by the Allan Herbarium, Landcare Research.

Registration

For information and registration go to:

www.landcareresearch.co.nz/news/conferences/asbs2010/

When?

- Monday 29 November – Friday 3 December 2010

Where?

- Lincoln University, Lincoln, New Zealand

Timetable

- Mixer and registration: afternoon/evening 29 November
- Further registration: early morning 30 November
- Conference presentations and workshops: 30 November–2 December
- ASBS AGM (followed by Conference Dinner): starting late afternoon, 2 December
- Field trip, Friday 3 December: Arthur's Pass



Email: ASBS2010@landcareresearch.co.nz



Landcare Research
Manaaki Whenua

NOTES AND REPORTS

■ Range extension of the subantarctic species *Uncinia hookeri* Boott (Cyperaceae) to Stewart Island

Carlos A. Lehnebach, Museum of New Zealand Te Papa Tongarewa. Cable St. PO BOX 467, Wellington. CarlosL@tepapa.govt.nz

The genus *Uncinia* (hooked sedges or hook grasses) is primarily found throughout the Southern Hemisphere except for Africa. It comprises about 90 species and it is in New Zealand where the greatest number of species occurs (Starr 2001).

Currently there are about 34 species listed for New Zealand (Edgar 1976, Heenan 1996, Heenan & de Lange 2001). Most of the species are widespread and only one species, *Uncinia hookeri* Boott, has been considered endemic to the subantarctic islands of New Zealand. This species has been collected in the Antipodes Islands, Auckland Islands and Campbell Islands, and the Australian administered Macquarie Island. It usually grows in bogs and open grasslands from sea level to up to 200 metres above sea level (masl) (Hamlin 1959, Edgar 1976).

Uncinia hookeri was described by Francis Boott using material collected by J.D. Hooker in 1840 at the Auckland Islands. The type material is stored at Kew and an image of the type material is available from the Kew Herbarium Catalogue (<http://www.kew.org>). The specimen number is K000357213. Note that the type material of *Uncinia hookeri* is labelled *U. compacta* var. *compacta*, which is the name Nootboom (1978) used to refer to most of the Malesian and Australasian *Uncinia* species.



Fig. 1: Pistillate bracts of *Uncinia viridis* (left) and *U. hookeri* (middle) from Stewart Island and *U. hookeri* from Auckland Island (right). The margins of the pistillate scale on the right are slightly rolled inwards and damaged in the lower right side. Material from CHR 309855, CHR 359434A and WELTSP 002453D. Photo by C.A. Lehnebach (c) Allan Herbarium (CHR), Landcare.

While studying the species complex formed by *U. angustifolia*, *U. rupestris* and *U. zotovii*, over 50 specimens of the species *U. viridis* were also examined. Three of these specimens, stored at the Allan Herbarium (CHR), were particularly different and a detailed examination of the material, especially of the fruiting spikes and female glumes, indicated these specimens belong to *U. hookeri*. Unlike many other *Uncinia* species, the spikes of *U. hookeri* are quite distinctive and this makes its identification easier. The main distinguishing characters of *U. hookeri* are in the female glumes. These are acute, membranaceous, light or dark brown and usually have a prominent green midrib and two very dark brown lateral veins. The margin of the glumes is pale brown (Figure 1).

All three specimens were collected in Stewart Island in 1979 by H.D. Wilson, who originally identified them as *U. viridis*. The identity of two of these specimens was later confirmed by E. Edgar. The first specimen (CHR 404931) was collected in the southern slopes of Mount Anglem, c. 500 masl, "among grasses, mosses and young shrubs on revegetated surface of slip" and the other two (CHR 359434 A, CHR 359434 B) east of the summit of Mount Anglem, c. 940masl, "under thick leatherwood (*Olearia conlensoi*) shrubland".



Fig. 2: Close up to one of the specimens of *Uncinia hookeri* collected at Mount Anglem, Stewart Island. Material from CHR 359434A. Photo by C.A. Lehnebach (c) Allan Herbarium (CHR), Landcare.

These specimens support the occurrence of *U. hookeri* outside New Zealand's subantarctic islands and extend the northern limit of distribution of *U. hookeri* by c. 430km.

Material examined

Uncinia viridis

Southland Land District: Stewart Island: North of Mount Allen. 14-II-1980, H.D. Wilson & C.D. Meurk (CHR 309855).

Uncinia hookeri

Southland Land District. Stewart Island: East of summit, Mount Anglem, c. 940m. 12-I-1979. H.D. Wilson. (CHR 359434 A/B)

Auckland Islands: Carnley Harbour. II-1909. B.C. Aston. (WELT SP002453D).

Acknowledgements

This study was supported by the New Zealand Foundation for Research Science and Technology through the Defining New Zealand's Land Biota OBI. Leon Perrie and Patrick Brownsey for comments on earlier version of this note and CHR staff for their assistance.

■ **Chromosome count for *Hebe aff. traversii* from Hae Hae Te Moana River, Canterbury**

Murray I. Dawson, Landcare Research, P.O. Box 40, Lincoln 7640

In 2007, Derrick Rooney wrote two articles discussing a possible new *Hebe* from the Hae Hae Te Moana River South Branch gorge area in Canterbury (Rooney 2007a, b). Derrick mentioned that this plant was "more-or-less intermediate between *H. traversii* and *H. rakaiensis*, possibly arose [arising] in the distant past as a result of spontaneous hybridisation between these two, and has become 'fixed'."

To this comment, I added an editors' note in Rooney (2007b) that if the *Hebe* from Te Moana was indeed "the result of hybridisation between *Hebe traversii* ($2n = 40$) and *H. rakaiensis* ($2n = 80$), then this entity may have an intermediate chromosome number (of $2n = 60$)."

In November 2009, I counted the chromosomes of this *Hebe* from Te Moana and found it to have $2n = 40$ (Allan Herbarium voucher specimen CHR 566556).

Whilst I cannot comment on the taxonomic status of this entity, the new chromosome count does fit with a statement made by Mike Bayly (pers. comm. and in Rooney 2007b) that "The plants in question are probably covered within the circumscription of *H. traversii* in *An Illustrated Guide to New Zealand Hebes*, wherein the two southernmost distribution records for *H. traversii* are based on herbarium specimens from the headwaters of the Hae Hae Te Moana River (CHR 51466, CHR 51467)."

My thanks to Peter Heenan for collecting the plant material counted which was grown on at Landcare Research.

References

- Bayly, M.; Kellow, A. 2006: An illustrated guide to New Zealand hebes. Te Papa Press, Wellington.
- Rooney, D. 2007a: A new *Hebe* species? *New Zealand Botanical Society Newsletter* 87: 12–13.
- Rooney, D. 2007b: A new *Hebe*? *New Zealand Garden Journal* 10(2): 20–22. Available at www.rnzih.org.nz/RNZIH_Journal/Pages_20-22_from_2007_Vol10_No2.pdf

Derrick Rooney responds:

I'm not qualified to discuss the taxonomy or cytogenetics of the Te Moana hebe. What I can say is that when it is taken into cultivation and grown side by side with mid-Canterbury and north Canterbury forms of *Hebe traversii* it remains clearly distinguishable from them. So perhaps it is worthy of at least varietal status.

It's worth noting that the Te Moana hebe hybridises promiscuously with the larger *H. salicifolia* wherever the two grow in proximity. At some sites within the gorge and its feeder streams it is difficult to find any plants that can be placed with certainty into one species or the other. Hybrids between these two species are known elsewhere, but are presumably not common, as they are not widely reported in botanical literature. These two hebes are very different in general appearance and wherever they occur together in the Te Moana area a range of intermediate forms can be found. I collected and grew on cuttings from a few plants that appeared to have promise of horticultural merit. One of them is very interesting because in foliage and growth form it is indistinguishable from the rare *Hebe urvilleana* that is growing alongside it in my garden. As a wild plant the latter is confined to D'Urville Island and a few nearby mainland sites in the Marlborough Sounds. Of course when the two flower it becomes apparent that they are very different. Curious, though, I thought. But then, as every horticulturist knows, plants are full of surprises.

BIOGRAPHY / BIBLIOGRAPHY

■ Biographical Notes (75) Sir George Edward Grey (1812–1898)

E.J. Godley, Research Associate, Landcare Research, P.O. Box 40, Lincoln

The late Sir Keith Sinclair (1) considered that Sir George Grey “was one of the most remarkable nineteenth century British colonial governors, and one of the most remarkable people who have lived in New Zealand”; and Professor James Rutherford (2) wrote: “He had a shrewd insight into the Maori mind and his published collection of Maori legends is a classic. He bequeathed his large collection of writings on the African language together with his library of incunabula and manuscripts to Cape Town in 1861, and later donated a second valuable collection to the city of Auckland. An amateur natural scientist of repute he sent thousands of specimens of the flora and fauna to the British Museum and to Kew Gardens. His island domain of Kawau became a botanical and zoological experiment in the acclimatisation of plants and animals.” (1,2)

The present note aims to give some examples of Sir George's relation to plants and botanists, information not usually found in biographies or dictionaries. In so doing I make use of letters held at the Auckland Public Library that were written to Grey by Sir William Jackson Hooker, first Director of the Royal Gardens, Kew, and his son Joseph Dalton Hooker, the second director.

George Grey was born on 14 April, 1812, in Lisbon, a few days after his father Lt. Col. George Grey had been killed at Badajoz during the Peninsular War against Napoleon. After boarding school and some tutoring Grey entered the Royal Military College, Sandhurst in 1826; and in 1830, promoted ensign, joined the 83rd Foot Regiment for 6 years in Ireland. During this time he was promoted lieutenant and studied further at Sandhurst with distinction (1,2,3).

1. Western and South Australia: 1837–1845

Bored with military life, Grey proposed that he and a colleague explore to the north of present-day Perth in western Australia; and in 1837–39 he led expeditions to Hanover Bay and to Shark Bay. His 2-volume *Journals of two expeditions of discovery in Northwest and Western Australia* published in 1841 became a best seller (3). Promoted captain and appointed resident magistrate at Albany, King George's Sound, he married Eliza Lucy Spencer, in Nov. 1839, the daughter of his predecessor, Sir Richard Spencer. At this time Grey wrote a report on the way indigenous peoples could be assimilated which was well received, and, back in England, *aet.* 28 he was appointed governor of South Australia and resigned from the army. In Adelaide, between 1840 and 1845 Grey's main task was to balance the books of the struggling infant colony and by the time he left he had succeeded.

2. New Zealand: 18 Nov. 1845–31 Dec. 1853

On 18 Nov. 1845 Captain George Grey became our 4th Governor after Hobson, Shortland and Fitzroy. In 1848 he was knighted (KCB) and from 1 Jan. 1848 to 7 Mar. 1853 became Governor-in-Chief over the islands of NZ, Governor of the Province of New Ulster and Governor of the Province of New Munster. And he was Governor of New Zealand from 7 Mar.–31 Dec. 1853. During this time he was responsible to the Colonial Office (4).

During this first New Zealand period there were three early residents who shared their botanical interests with Grey. They were:

(a) Dr Andrew Sinclair (1794–1861), the retired naval surgeon who, during a visit to the Bay of Islands in 1841, had collected plants with Joseph Dalton Hooker, assistant surgeon and botanist to Ross's Antarctic expedition, and with William Colenso of the Church Missionary Society; and who had arrived permanently in 1843 with Governor Fitzroy and became Colonial Secretary (5);

(b) Dr Charles Knight (1808?–1891) who so impressed Grey when he was surgeon on the ship taking Grey from England to Adelaide that Grey appointed him as a copying clerk. From this he worked his way up, and after accompanying Grey to New Zealand became Auditor General here. On the side he became interested in mosses, and even more so in lichens (6,7);

(c) Lieut. Colonel Daniel Bolton (c. 1793–1860) who arrived in Auckland in August 1847, in charge of a contingent of Royal Engineers and became Grey's friend, the equivalent of his "Commissioner of Works" (8,9).

In November, 1850, Sir George and Lady Grey, accompanied by Lt. Col. Bolton and others, went south on *HMS Fly* to inspect the Enderby whaling settlement in Ross Harbour at the Auckland Islands. They were there from 29 Nov. to 5 Dec. and during this time Bolton collected plants (his second visit). On their return north, Lyttelton was visited on 13 December (8,9). At Dr Sinclair's suggestion Bolton sent a collection of his dried specimens to Sir William Hooker on 15 June, 1852 (9); and Sinclair suggested to Joseph Hooker that a shrub-daisy discovered by Colenso should be named after Grey (see below).

In 1851 Grey was elected Foundation President of the New Zealand Society (10).

On 24 April, 1853, Sir William Hooker wrote to Grey saying that he had addressed a parcel to Grey's care, and hoped it would reach Auckland before Grey left. He also cannot tell Grey how much he is obliged "to you and Dr Knight for the beautiful packet of mosses, accompanied by the truly excellent drawings of that gentleman. They came, too, in just the nick of time, when Dr Hooker is preparing the Cryptogamic portion of his *Flora Novae Zelandiae* for the press. I do not think we have in England a person who could observe so well with the microscope and draw so what he sees as Dr Knight. They are the perfection of Cryptogamic Botany and the young colony may well be proud of such a man of science and such an artist." Hooker sends a packet of garden seeds, a book for Knight containing illustrations of New Zealand mosses collected on Vancouver's voyage by Menzies, and a "thin book for an excellent botanical correspondent at Nelson" [probably Dr David Monro]. And he concludes by inviting the Greys to visit Kew when next they are in England, and by announcing that "[Robert] Brown was on a visit with me at the very moment your packet arrived and very much pleased at being remembered by her Ladyship and you. He is wonderfully well for his years – but is about to retire (in May) from the Presidency of the Linnaean Society."

3. England: 1854

In late 1853 Grey left New Zealand for leave in England. (In my note on Bolton (9) I incorrectly stated that Grey left to become Governor of Cape Colony). And on 28 Nov. 1853 Bolton also left for the same reason. In London Grey continued to look after Knights' interests. On 4 June, Sir William Hooker wrote to him about the expense of publishing Knight's moss illustrations and suggested that Knight "prepare a supplement [to J.D. Hooker's *Flora Novaezelandiae*] of his new species? and why should not the Col. Office give £100 towards the publication. It might be done." And he repeats his invitation to visit Kew.

On 15 July, 1854, Sir William wrote again, to thank Grey for "a case of living plants and the magnificent specimens of tree ferns." He is also sending someone to Eccleston Square (presumably Grey's London base) to collect dried plants. (Presumably all these items were despatched after Grey left New Zealand. Sir William concludes with a further invitation to visit Kew even although "the prospect of again going out [to Cape Colony] and soon too, must throw an immense deal upon your hands."

Grey's visit to England was turbulent at times on the official level, but this was compensated for by family reunions and two other important events. Oxford University conferred upon him an honorary doctorate (Hon. DCL) and the Maori version of his mythology book appeared: *Ko nga Mahinga a nga Tupuna (Mythology and Traditions of the New Zealanders)*; and next year, in South Africa, Grey finished the English version: *Polynesian Mythology & Ancient Traditional History of the New Zealanders, as furnished by their Priests and Chiefs.*(3)

4. Cape Colony: 1854–1861

Grey sailed for Capetown about August 1854, to become Governor of Cape Colony and Bolton joined him in May, 1855 (9).

On 2 December, 1855 Sir William informed Grey that he had sent a Wardian case of plants on 21 November and enclosed a list. He asks that the case be returned filled with South African plants, and adds: "Against the spring I shall rear some offsets of the *Phormium tenax* and I shall have Mimosa (Australian Acacias) and possibly one or two Dammonars [sic]." In an undated note, or what might be a postscript to the above, Hooker wrote: Harvey is preparing a little work on new Cape plants. His first plate is a beautiful plant which we have thought worthy of bearing your name. But I expect soon to have the opportunity of publishing a coloured plate. Until then you cannot have an idea of its beauty." And on 5 December 1860 he wrote: "The first volume of *Flora Capensis* is complete and does Harvey great credit. His *Greyia suthulendi* [sic] is a most beautiful plant and is now flourishing in our greenhouses at Kew and at Dublin. Sutherland indeed, from the fact of his surveying duties sending him up the mountains, and in and out of the way places, has perhaps found most novelties." In 1860 war broke out in Taranaki and it was decided to send Grey back to New Zealand to deal with the problem.

5. New Zealand: 1861–1868

On 15 August, 1861, Grey sailed for his beloved New Zealand (3), becoming Administrator on 3 October and Governor from 4 December, 1861 to 5 February 1868 (4).

In November 1862 Grey bought Kawau Island, lying close to the east coast, some 30 miles off Auckland. He also bought Motuhora and Rakura islets nearby. Kawau, with an area of c. 10 square miles, had once been mined for copper, and Grey set about transforming the old manager's house into a mansion (the present Mansion House) and began introducing exotic animals and plants.

In August, 1864, appeared Joseph Dalton Hooker's *Handbook of the New Zealand Flora* (Vol. 1), which was dedicated as follows:

TO HIS EXCELLENCY
SIR GEORGE GREY, K.C.B., D.C.L. OXON.,
ETC. ETC. ETC.,
GOVERNOR AND COMMANDER-IN-CHIEF OF THE
COLONY OF NEW ZEALAND,
WHO, THROUGHOUT A LONG AND DISTINGUISHED CAREER,
IN THE COLONIES OF
SOUTH AUSTRALIA, NEW ZEALAND, AND THE CAPE OF GOOD HOPE,
HAS BEEN THE LIBERAL ENCOURAGER OF EVERY SCIENTIFIC UNDERTAKING,
THIS WORK
IS GRATEFULLY DEDICATED,
BY HIS EXCELLENCY'S VERY FAITHFUL SERVANT,
J. D. HOOKER.

ROYAL GARDENS, KEW,
July, 1864.

Dr Charles Knight, the auditor-general, who had acted as liaison officer between J.D. Hooker in London and the politicians in Wellington who voted on money and other matters for the Handbook considered that Hooker should have dedicated the work to Dr David Monro, Speaker of the House of Representatives, botanist, & supporter of the scheme (7).

On 3 May, 1865, Joseph Hooker told Grey that Sir William had been seriously unwell but was better; then on 14 November, 1865 he announced his father's death. "Though aged in years he was so well and active and full of his duties to within 4 days of his decease that the blow was as sudden and heavy to us all." I have been appointed to my father's place and have his ambition to carry out its duties and sphere of usefulness to the uttermost." In his May letter Joseph wrote: "I wish I could persuade the New Zealand people to send a vessel to explore the Bounty, Antipodes, Campbell, Auckland, and McQuarie islands and put Colenso on board her, he is the best collector in the islands and I do wish he had gone on with his botanical explorations." and he returned to this on 18 December: "Colenso tells me that you spoke to him, but he fears seasickness — I am sorry for this for he is the only *sharp* collector I know of in NZ. Hector and Buchanan do exceedingly well, however, and Mr Travers, the father, seems an acute collector. Hector is a most indefatigable fellow." In the several letters from Joseph Hooker to Sir George in the 1860s, there are mentions of irises and rhododendrons for Kawau, as well as seeds of the best Turkish tobacco for distribution. And a continuing theme is the unreliability of Wardian cases for sending plants long distances.

On 23 January, 1867, John Enys of the Castle Hill station in inland Canterbury, wrote in his diary: "Sir G. Grey arrived by coach." (11) We do not know how long Grey stayed although Enys would have had much to show him in the way of fossils, plants and animals. Grey's reasons for visiting Canterbury

were to open the Museum and to unveil the Godley statue on 16 December, Canterbury's Anniversary Day, but because of a faulty pedestal, the latter event was postponed (12).

In 1915, Joseph Armstrong, one of the earliest gardeners at the Christchurch Botanical Gardens, recalled that "Sir George Grey was always anxious to plant a tree in the Gardens but he never managed to do it. He sent one from Kawau and it was planted for him. It was an English elm, variegated, but it has disappeared. Sir George was a very good botanist and a great patron of the plantation. He sent many plants from Kawau." (13).

In 1867–68 Grey was a member (ex officio) of the Board of Governors of the New Zealand Institute; and in 1867–69 he was first President of the Wellington Philosophical Institute (10). Grey's appointment as Governor was terminated in 1868 by the British Government because of his refusal to obey orders, and for a few years, until 1874, he took a change either visiting England or relaxing at Kawau. During this time he arranged for John Buchanan, Hector's assistant at the Colonial Museum in Wellington, to make a botanical survey of Kawau. Buchanan's report, which appeared in 1876, begins with a brief account of geographical features and vegetation ("grass", "scrub", "bush"). These are followed by species lists under the following headings and with the following numbers:

Indigenous flowering plants: 189 genera, 348 species.

Cryptogamia (Ferns): 25 genera, 90 species.

Introduced flowering plants: 96 genera, 125 species

Unfortunately Buchanan did not list the cultivated plants that Grey had introduced. As for the animals, Buchanan wrote: "On shore, as the island is traversed, the ever-changing scenery is beautiful, and the Fauna might puzzle the visitor as to his whereabouts on the face of the earth. The Deer of Britain may be seen hurrying past to the covert; the Kangaroo of Australia, spanning across the path, pulls up erect to view the stranger; Tree Kangaroos from New Guinea are seen hopping up and down Puriri trees; the visitor is ever kept on the alert by the whirr of Californian Quail, or Chinese Pheasants, and the Wallabi Kangaroo, in numbers, keep zig-zagging across his path; the Cape Barren Goose might also exhibit to him the unusual sight of a bird carrying her young under her wings. The introduction of so many animals and plants must produce some influence on the indigenous Flora of the island either for good or evil in future years." (14)

In 1874 Grey returned to politics as Superintendent of Auckland and M.P. remaining in the House for 20 years. In 1877–79 he was Prime Minister. In 1888 Grey sold Kawau and on 8 March, 1894, he left Wellington for England, where he lived in London in increasingly less expensive hotels and in increasingly deteriorating health, until he died on 19 September, 1898. He was buried in St Paul's Cathedral.

Eponymy

- 1853 *Senecio* : "Northern Island. Cape Palliser, *Colenso*". "I have named this beautiful plant, at Dr Sinclair's suggestion, in honour of His Excellency Sir G. Grey, Lieut.-Governor of New Zealand, who is no less distinguished in his official and political capacity than as the zealous promoter of the extension of knowledge & scientific enquiry (J.D. Hooker).
- 1859 *Greyia* : Melianthaceae, South Africa (Hook & Harvey in Proc. Dubl. Univ. Zool. & Bot. Assoc. 1: 138. t. 13, 14.
River (Westland), town (Wairarapa), mount (Canterbury), avenue (Auckland), scholarship (Auckland Univ. Coll.)

Memorials

Statue (Albert Park, Auckland)

Dedication

J.D. Hooker's "Handbook of the New Zealand Flora" (1864, 1867)

Acknowledgments

I am particularly grateful to Kate de Courcy, Manuscript Collections Librarian, Auckland City, for sending copies of the letters of W.J. and J.D. Hooker to Sir George Grey; and I also thank Michelle Losse, Assistant Archivist, Royal Botanic Gardens, Kew for referring me to Auckland, and for help

with references. I thank Ted Doonerwind, Librarian, Landcare Research, Lincoln, Sue Molloy (Christchurch Botanical Gardens) and Pam Knox (Christchurch). Wendy Weller kindly typed the note.

References

(1) Keith Sinclair 1990: Grey, George 1812–1898. Dict. NZ Biogr. 1: 160–164; (2) James Rutherford 1966: Grey, Sir George 1812–1898. Encycl. NZ 1: 877–880; (3) Bohan, Edmund 1998: To be a hero. A biography of Sir George Grey. Harper Collins NZ Ltd; (4) G.C. Petersen (ed.) 1968: Who's who in NZ (9th edn) Wgtn. AH & AW Reed; (5) B.P.J. Molloy 1990: Sinclair, Andrew 1794–1861. Dict. NZ Biogr. 1: 397; (6) D.J. Galloway 1990: Knight Charles 1808?–1891. Dict. NZ Biogr. 1: 229; (7) D.J. Galloway 1998: Joseph Hooker, Charles Knight, and the commissioning of New Zealand's first popular Flora. Tuhiinga 10: 31–62; (8) E.J. Godley 1970: Botany of the southern zone 1847–91. Tuatara 18: 49–93; (9) E.J. Godley 2003: Biographical Note 52: Daniel Bolton (c. 1793–1860) NZ Bot. Soc. Newsletter 74: 14–16; (10) C.A. Fleming: Founders and supporters of the New Zealand Institute and the Royal Society of NZ. Unpubl. typescript; (11) E.C. Richards 1951: Castle. Simpson & Williams, Chch; (12) Mark Stocker (ed.) 2001: Remembering Godley. Hazard Publishing Ltd. Chch; (13) Anon. 1915: Historical trees. The Sun, Nov. 30; (14) John Buchanan 1876: On the botany of Kawau Island: Physical features and causes influencing distribution of species. Trans. & Proc. NZ Inst. 9: 503–527.

Note on *Greyia sutherlandii* Melianthaceae

South Africa

by W.R. Sykes (Christchurch)

This species is uncommon in cultivation in NZ, especially in the South Island, because it is not very hardy. Cultivated at Orton Bradley Park, Charteris Bay, Lyttelton Harbour, it forms a large dense shrub with shining large green leaves. The flowers are in large clusters and are bright scarlet, being produced in late spring and early summer. Bellbirds visit the plants for the nectar of the flowers, just as they and tui visit the related *Melianthus majus*.

Corrections

In Biographical Note (74) "H.H. Loughman" on page 23 should be "H.H. Loughnan"; and "Britten and Bolger" in the references should be "Britten and Boulger".

■ Biographical Sketches: Eileen Alice Willa (1905-1999)

Val Smith, 80 Mill Road, New Plymouth 4310.

Eileen Willa, née Harrison, was born, educated and spent most of her long life on Rakiura/Stewart Island. Her maternal grandfather Tom Leask of Orkney, Scotland, arrived in 1862 as a ship's carpenter, did building work on the island and married Dinah Walschläger whose family had settled at Loneckers Bay. Together they raised ten children. Their daughter Rosa married John Harrison, the eldest son of Joss and Jane Harrison from Lancashire, who had built a fish-shed and smokehouse on the island; John worked there for 53 years, becoming manager at an early age. Eileen was the oldest of Rosa and John Harrison's family of five.

A love of nature had always been in the family. Rosa Harrison collected seashells and made frequent trips to Ringaringa Beach with her young children; Eileen later collected for her, but after botanising with Dolly Leask at Mason Bay, plants became her main interest. In 1924 she accompanied the Dawson family to Herekopare Island to look after the children while their parents caught, cleaned and packed muttonbirds. This was her introduction to both the muttonbird islands and her future husband, Percy (Buddie) Willa, who also went with them. After their marriage in 1928 they went to Kaikoura, Buddie's birthplace, where his father had left him a house, but the following year they, with their baby daughter, were back in Rakiura. Buddie returned to fishing from Halfmoon Bay and Port Pegasus, and while he fished, Eileen took every opportunity she could to explore new areas, collect plants, and assist visiting naturalists.

She began collecting seaweeds early in 1943 after a request from Victor Lindauer, a teacher and well-known algologist, and sent him 60 different species from Ringaringa. After receiving back a named and mounted specimen of each kind, she collected, dried and mounted everything she sent – 6,000 during the next few years, many of which were forwarded to American and European universities. Lindauer's three-week visit in 1946 to work the tides heralded shorter visits by several overseas

specialists, and later she also collected with Nancy Adams. Her work for Lindauer, Pocock, Papenfuss, Conway, Norris and others, led to her publication in *The World Who's Who of Women* (1982) and the presentation to her of a plaque. Three species of seaweed are named after Eileen Willa: *Ptilonia willana*, which she found at Port Pegasus in 1945; the large brown kelp, *Durvillaea willana* (Broad Bay, 1946) and *Crouania willae* (Ringaringa, 1960). The Dominion Museum's publication in 1974 of the booklet "The Marine Algae of Stewart Island", which she co-authored with three others, is another indication of the extent of her knowledge and the esteem in which she was held.

She helped in the Rakiura Museum from its establishment, recording collections of native flora. In 1963 she became Curator and with Buddie's assistance, worked there for 22 years. Their daughter Ellen died in 1975, and after Buddie's death at their Leask Bay home in 1985, "Gran", as she was affectionately known, presented her herbarium of Stewart Island algae to the National Museum, Wellington, and reluctantly left the island to live in Invercargill, where she died in 1999.

Durvillaea willana

Durvillaeaceae

Durvillaea: a southern hemisphere seaweed genus of five species, four of which occur in New Zealand; a fifth is endemic to the coasts of southern Australia.

Durvillaea willana is massive plant, up to 5 metres high with a solid cylindrical stipe bearing short stalked blades along its length. The blades are flattened and split into strap-like segments; they lack internal honeycomb tissue and are very heavy and not buoyant. The holdfast is a domed, circular disc. The plant's colour is dark brown, with the stipes often paler, shaded to greenish yellow; texture is leathery and pliable. *D. willana* grows on rock at and just below the extreme low tide mark in exposed situations and, where the two species grow together, below the *D. antarctica* zone. Its distribution in New Zealand is the southern North Island (but not the Cook Strait shore), South and Stewart Islands.

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THESES

■ Recent theses from the University of Otago, Department of Botany (2008-2009)

Bywater, Cressida Felicity (2008): How selective are arbuscular mycorrhizal fungi in montane tussock grasslands? MSc Thesis, University of Otago, Dunedin. 77p.

Joyce, Leigh (2008): Movement patterns, home range and habitat selection by kakapo (*Strigops habroptilus*, Gray 1845) following translocation to Pearl Island, Southern New Zealand. Ph.D Dissertation, University of Otago, Dunedin. 333 p.

Netzer, Michael Shantih (2008): Red deer (*Cervus elaphus*) behaviour and habitat selection on an extensively managed high-country station in New Zealand. MSc Thesis, University of Otago, Dunedin. 101 p.

Bischoff, Mascha (2009): Pollination ecology of the New Zealand alpine flora. Doctor of Natural Sciences, University of Heidelberg, Germany Thesis, Heidelberg, Germany. 153 p.

O'Connell, Dean Michael (2009): Plant-arthropod interactions: Domatia and mites in the genus *Coprosma* (Rubiaceae). PhD Dissertation, University of Otago, Dunedin. 190 p.

PUBLICATIONS

■ **Correction: Eagle's Complete Trees and Shrubs of New Zealand**

CORRECTION: In the first printing of the above book, in 2006, a mistake was made in the distribution of *Pachystegia* sp. 'A' and *P.* sp. 'B'. I am grateful to Dr. Brian Molloy who has alerted me to this mistake.

P. Sp. 'A' should read: Distribution: S. Irongate Stream, Southern Marlborough, to Wairau River, North Canterbury. Rocky Cliffs and steep slopes below 700m a.s.l.

P. sp. 'B' Distribution: S. Inland southern Marlborough from Mount Lookout (mid Awatere River), across mid Clarence River, to Leamington Stream in North Canterbury. Rocky cliffs and steep slopes below 700 m a.s.l.

This mistake was corrected in 2007 in the first reprint. Unfortunately this reprint was not recorded as such. You may wish to check the entries for *Pachystegia* sp. 'A' and *P.* sp. 'B' and, if you have a copy of the original 2006 print run, correct this mistake in your copy.

Audrey Eagle, January 2010

■ **Book review: Natural History of Banks Peninsula By Hugh Wilson**

Published by Canterbury University Press,
Christchurch, 2009

Paperback, 144 pages, 210 × 148mm

ISBN 978-1-877257-82-7

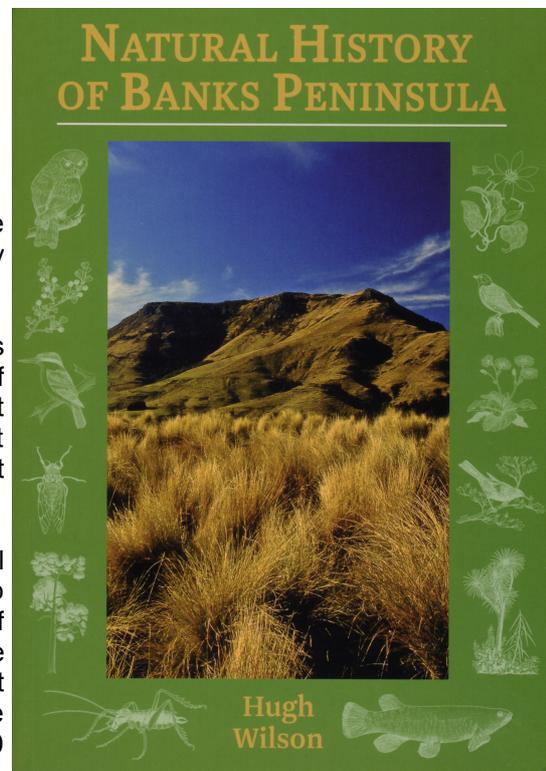
\$NZ30.00

Reviewed by Murray Dawson

Natural History of Banks Peninsula provides a concise but thorough overview of the flora and fauna, geology and ecology of Banks Peninsula, Canterbury.

Banks Peninsula is a unique volcanic landform that was an island for nearly all of its 20 million years of existence. Indeed, Captain Cook famously mistook it for an island on 16 February 1770 when he sailed past on the first voyage of the *Endeavour*; Cook named it after the botanist Joseph Banks.

As the title suggests, this book traces the natural history of Banks Peninsula including the impact of two human colonisations; Māori and Pākehā. As a result of these colonisations the Peninsula has undergone extensive changes. Most of its forest cover was lost through logging and burning and about 1% of the original forests have survived. However, in the last 100 years areas have begun to regenerate with some 15% now under some form of native woody vegetation cover.



The author, Hugh Wilson, is a renowned conservationist and botanist. He received the Loder Cup for plant conservation and the Allan Mere Award to honour outstanding botanists. These accolades only hint at the depths of his conservational passion. He has never owned a car which he regards as “fossil fuel burning monstrosities” and his sole means of transport are provided by his two legs and a bicycle. Hugh was an early advocate of the use of gorse as a nurse plant to support native plant regeneration. At the time this notion was heavily challenged by the traditional farming community but is now widely accepted.

For the past 30 years Hugh’s life has become an inextricable part of Banks Peninsula and he is uniquely qualified to write this book. Hugh lives and works as reserve manager at Hinewai, east of Akaroa, a privately-owned and funded nature reserve freely open to the public. Managing this reserve is very demanding and I am amazed that he still finds time and energy in the evenings to produce his scholarly works.

Natural History of Banks Peninsula is clearly presented and written in the same easy style as Hugh’s earlier titles (e.g., Wilson and Galloway, 1993; Wilson, 1994; Wilson, 1996). He excels in achieving an ideal balance between comprehensible writing and presenting detailed technical information.

The text is accompanied by a good range of well-captioned photographs that convey a real sense of the landscape and biota of Banks Peninsula. These photos are provided by contributors and interspersed by Hugh’s own delightful pen and ink drawings. There are also nine figures and seven tables throughout the main body of the book.

Chapters of the book follow a logical progression that includes Introduction, Geological history, Human history, History of the vegetation and fauna, Landscape and vegetation today, Distributional limits, Plant distribution by altitude, Ecological classes, Fauna, and Opportunities for protection.

Under ‘Landscape and vegetation today’, Hugh lists eight plants found only on Banks Peninsula: *Celmisia mackaui* (Akaroa daisy), *Festuca actae* (Banks Peninsula fescue), *Hebe strictissima* (Banks Peninsula hebe), *Heliohebe lavaudiana* (Banks Peninsula sun hebe), *Leptinella minor* (Banks Peninsula button daisy), *Myosotis australis* var. *lytteltonensis* (Lyttelton forget-me-not), an unnamed *Tmesipteris* (fern), and *Wahlenbergia akaroa* (Akaroa harebell, which is dubiously distinct).

The botanical names in the main body of this book follow Hugh’s preferences, and those used are probably the most well-known. For example, not all botanists have adopted the change from *Hebe* back to *Veronica*, and a similar situation exists for three native *Corybas* orchids also known under names in *Nematoceras*. I am not qualified to comment on the scientific names of the fauna covered.

Six appendices provide checklists of species recorded on Banks Peninsula – native vascular plants (Appendix 1), fish (Appendix 2), amphibians and reptiles (Appendix 3), birds (Appendix 4), mammals (Appendix 5), and in the final appendix, common and scientific names for all of these groups, with the addition of key insects and weeds, are listed.

This book concludes with References, Acknowledgements, information about the Banks Peninsula Conservation Trust and Hugh Wilson, and an Index.

There are relatively few errors in this book; the most noticeable is on page 50, where some of the text for the caption to Table 1 appears to be missing, presumably as a glitch in the formatting.

The only other natural history books that I know of for defined areas within New Zealand are for southern New Zealand (Darby et al., 2003), Rangitoto Island (Wilcox, 2007), and Canterbury (Winterbourne et al., 2008). Hugh also wrote the text for the Banks Peninsula section of the lengthier (and considerably more expensive) *Natural History of Canterbury* (Winterbourne et al., 2008) and draws upon this and his earlier vegetation survey report (Wilson, 1992) for *Natural History of Banks Peninsula*.

Publication of this book was sponsored by the Josef Langer and Banks Peninsula Conservation Trusts. The Banks Peninsula Conservation Trust aims to promote conservation, biodiversity

enhancement, and sustainable land management on the Peninsula, and their sponsorship of this book helps to meet these goals.

This book is an indispensable guide for Banks Peninsula and Christchurch residents, as well as those visiting this special region from further afield. It succeeds in providing a deeper appreciation of and interest in the area; it should also help landowners on Banks Peninsula manage the unique biodiversity and ecology on their properties.

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Available from Touchwood Books and Manaaki Whenua Press

■ Publications Received

Rotorua Botanical Society, Newsletter No. 53, Dec 2009, 76 pp. Vegetation and flora of Broadlands Block Reserve. Notes on fungi from Matakana Island.

Botanical Society of Otago, Newsletter No. 58, December 2009, 31 pp. Otago Central Rail Trail – a sanctuary for native plants? Lichens of Maungatua Scenic Reserve, eastern Otago, New Zealand.

Wellington Botanical Society, Newsletter December 2009, ISSN 1171-9982. Restoration of sand dunes: are our native fauna being cared for? Progress report: indigenous planting, Karori Tunnel's eastern portal. Completion of trials of selected native plant species as riparian protection.

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