



From the President

Summer is here, and with it our summer trip 16–26 January, based in Westport and Karamea. The organisers have matters well in hand. At a recent committee meeting we evaluated the content and format of the Society's web site, *Newsletter* and *Bulletin*. We'll be making a few changes in the coming year. The web site will be the main place for rapid communication, and storing and making our publications more widely available. To that end, all back issues of the *Bulletin* are being scanned as part of a project the NZ Plant Conservation Network had funded to get all botanical societies' publications digitised. The *Newsletter* will be slimmed down by publishing major trip reports and obituaries in the bulletin, and the *Bulletin* will be published more frequently.

Members were treated to a rare event at the October evening meeting when Anthony Wright, President, NZ Botanical Society, presented the Allan Mere to Dr Patrick Brownsey. The Allan Mere is administered by NZBS and is awarded for "outstanding contribution to New Zealand botany". After the presentation of the Allan Mere, we were treated to Dr Peter Johnson's talk "A very merry mere". Peter was last year's recipient of the Allan Mere and he took us on a journey with the mere he has made from many different kinds of wood, containing many little treasures—the whole being Peter's taonga. Both Patrick and Peter have made outstanding contributions to NZ botany and we have all benefitted from their work.

Carol West

Articles for web site

We welcome articles for consideration for inclusion on our web site: www.wellingtonbotsoc.wellington.net.nz

Please send your article to:

Richard Herbert,
8 Duval Grove,
Redwood,
Wellington

ph 232 6828

fax 381 4518

e-mail herbert.r@xtra.co.nz

Manawa Karioi Society Revegetation Programme Workbees

Second Sunday each month,
10 a.m. – 2 p.m.

Bring your lunch.

Contact:

Peter Russell ph 383 6898
mob. 021 207 6011

Wellington Botanical Society

Address:	PO Box 10 412, Wellington 6143		
Web site:	www.wellingtonbotsoc.wellington.net.nz		
President:	Carol West	387 3396	
Vice-Presidents:	Sunita Singh	387 9955	
	Bev Abbott	475 8468	
Secretary:	Barbara Clark	233 8202	233 2222 (fax)
		e-mail: bj_clark@xtra.co.nz	
Treasurer:	Rodney Lewington	970 3142	
Auditor:	Peter Beveridge	237 8777	
Submissions			
co-ordinator:	Bev Abbott	475 8468	
Bulletin editor:	John Sawyer	470 8427 (w)	499 0077 (fax)
		DOC, PO Box 5086, WN 6145	
Newsletter editor:	Chris Horne	475 7025	475 7253 (fax)
		e-mail: jchorne@paradise.net.nz	
		28 Kaihuia St, Northland, WN 6012	
Annual subscription:	ordinary \$25; country \$20; student \$10;		
	group / family \$30.		

Send your subscription to Treasurer, WBS, Box 10 412, Wellington 6143.

New subscribers: Please complete form at the back of this Newsletter.

Meetings

BotSoc meetings are usually held at 7.30 pm on the third Monday of each month at Victoria University, W'gton – Lecture Theatre 101, ground floor, Murphy Building, west side of Kelburn Parade. Enter building about 20 m down Kelburn Pde from pedestrian overbridge.

Field trips

Day trips to locations in the Wellington region are usually held on the first Saturday of each month.

Extended excursions are usually held at New Year, the first weekend in February, and at Easter.

DEADLINE FOR COPY FOR NEXT ISSUE – 25 March 2009

Articles may be edited for clarity and length

ATTENDING FIELD TRIPS AND MEETINGS

Ideas please

We welcome your ideas about:

- places to visit on field trips
- topics and speakers for evening meetings
- information or photographs for BocSoc web site

Please send ideas to our secretary, Barbara Clark, PO Box 10 412, Wellington 6036, ph 233 8202.

Field trips

If you intend to join a trip, PLEASE phone the leader at least TWO DAYS beforehand, so that he/she can tell you of any changes and/or particular requirements. If you cannot ring in advance, you are welcome to join on the day.

Clothing for field trips

Sun hat, balaclava¹ or hat¹, waterproof/windproof parka, long-sleeved cotton shirt, singlet¹, bushshirt¹, 1 or 2 jerseys¹, waterproof/windproof overtrousers, nylon shorts, longjohns¹, longs¹, underclothes, swimming togs, 4pr socks¹, hut shoes, boots, gaiters, mittens¹, handkerchief.

Day trip gear

First aid kit, compass², map², insect repellent, whistle, matches in waterproof container, water purification tablets, water bottle, thermos, pocket knife, camera², binoculars², hand lens², note book², pen and pencil², sunblock, sunglasses, large plastic survival bag to line pack.

Overnight trip gear and food

As well as the day trip gear listed above, bring torch, spare bulb and batteries, candle, mug, plate, knife, fork, spoon, small towel, soap, tooth brush, tent, fly, poles and pegs, groundsheet, sleeping mat, sleeping bag, liner and stuff bag. Bring bread, butter/margarine, biscuits, fresh fruit and scroggin. SCROGGIN = Sultanas, Chocolate or Carob, Raisins, Orange peel, Glucose³, Ginger, Including Nuts.

1 = wool, polypropylene or polarfleece as applicable.

2 Optional

3 Dried apricots are recommended instead of glucose but would spoil the acronym!!

BotSoc equipment

In addition to the gas stoves, billies, kitchen utensils, flies etc., used on long field trips, the following are also available:

- first aid kit. NOTE: anti-histamines NOT included, because of short shelf-life
- ten NZMS 260 Sheet R27, Pt.Q27 maps
- ten Silva Type 3 compasses

If you are leading a BotSoc trip, and would like to take these items, please ring Chris Horne ph 04 475 7025, or Barbara Mitcalfe ph 04 475 7149.

Health and safety

- You are responsible for your own first aid kit. If you have an allergy or medical condition, please carry your own anti-histamines and medications, tell the trip leader of any problems you may have and how to deal with them.
- You are responsible for keeping with the party. If you have any doubts about your ability to do this, you must check the trip conditions with the trip leader, who reserves the right to restrict attendance.

Fitness and experience

Our field trips vary considerably in the level of fitness and tramping experience required. Although our main focus is botanical, our programme sometimes offers trips which, in the pursuit of our botanical aims, are more strenuous than others. Although leaders take care to minimise risks, everyone participates at their own risk. If you have any questions about whether you are fit enough for a particular trip, please contact the leader well beforehand.

Transport reimbursement of drivers

- We encourage the pooling of cars for trips.
- **Passengers:** Please pay your share of the running costs to your driver. We suggest 10c/km/passenger.
 - If a trip on the inter-island ferry is involved, please pay your share of the ferry fare.
 - If you change cars mid-trip, leave a *written* note for your driver.
- **Drivers:** Please ensure that you know where you are going, and who is in your car;
 - Zero the odometer at the start, and agree on a return time;
 - Account for all your passengers before you come back;
 - Collect contributions towards transport costs.

Meetings

Public transport to meetings

You may find the following bus services useful. They stop on Kelburn Parade, about 50 m from Lecture Theatre M101 in the Murphy Building, Victoria University:

TO MEETINGS

No. 23 Mairangi: 6.30 pm from Houghton Bay, 6.40 Zoo, 6.50 Courtenay Place, 6.57 Pastoral House, 7.02 University.

No. 23 Mairangi: 6.55 pm from Southgate, 7.05 Hospital, 7.15 Courtenay Place, 7.22 Pastoral House, 7.27 University.

No. 22 Southgate: 6.55 pm from Mairangi, 7.10 University.

No. 23 Houghton Bay: 7.25 pm from Mairangi, 7.40 University.

No. 17 Railway Station: 6.35 pm from Karori Park, 6.52 University.

Cable Car at 00, 10, 20, 30, 40, 50 min past each hour from Lambton Quay terminus. Alight at Salamanca Station.

FROM MEETINGS

No. 23 Southgate: 9.10 from University.

No. 23 Southgate: 10.10 from University.

Cable Car at approx. 01, 11, 21, 31, 41, 51 minutes past each hour from Salamanca Station.

Last service 10.01 p.m.

For further information ring Ridewell Enquiry Service 801-7000.

FIELD TRIPS AND EVENING MEETINGS: DECEMBER 2008 – MAY 2009

The following programme IS SUBJECT TO CHANGE. If you wish to go on a field trip, PLEASE help with planning by giving the leader 2 days' notice before a day trip, MORE notice before weekend trips, and SEVERAL WEEKS' notice before the New Year's trip.

16–26 January 2009: Field trip

Westport – Karamea

Please contact Mick Parsons 972 1142, mtparsons@paradise.net.nz, to ask if there are any vacancies.

Saturday 7 February: Field trip

Waikanae wetlands

Botanise wetlands and possibly a QEII National Trust property—bring gumboots. Meet 9 a.m., Harcourt's Real Estate carpark, cnr Te Moana Rd and SH1, Waikanae. Leader: Lisa Clapcott 06 364 2207 (w), Wellington contact: Sunita Singh 387 9955.

Monday 16 February: Evening meeting *Delimiting species within the native sedge genus *Uncinia* (hook grasses)*

Speaker: Carlos Lehnebach, Botany Researcher, Te Papa, will explore species boundaries within three native hook grasses, *Uncinia angustifolia*, *U. rupestris* and *U. zotovii*, using a number of morphological characters and statistical analyses. The diagnostic value of characters traditionally used to identify these species was also assessed and results have provided support to synonymise *U. angustifolia* with *U. rupestris* and maintain the latter name.

Saturday 21 February: Field trip

Druce garden work bee

Leader: Helen Druce, 123 Pinehaven Rd, Pinehaven. Ph: 970 7853. Help with maintenance of this nationally important garden containing many threatened indigenous plant species established by Tony and Helen Druce over forty years ago. It is a QEII National Trust Open Space Covenant. Meet from 9.30 a.m. Bring food; hot drinks provided. Bring gloves, kneeler, weeder and secateurs.

Saturday 7–Sunday 8 March: Field trip

Turakirae Head Scientific Reserve – Barney's Whare, Palliser Bay coast

Botanise this landscape over a series of ancient earthquake-raised beaches and large rocks/monoliths. See *Korthalsella clavata*, *K. lindsayi*, *Coprosma virescens*, possibly *Sonchus kirkii*, and the *Muehlenbeckia astonii* enclosure. Map, R27 Wellington. Accommodation: Barney's Whare (sleeps 6–8 people) and camping; costs unknown as yet but to be shared. Car pooling for drive to Orongorongo Station essential to minimise storage of vehicles on Station. Two packs per person needed: your daypack and an overnight pack to be delivered by vehicle to Barney's Whare. Meet 9.00 a.m., Orongorongo Station, end of Wainuiomata Coast Rd. Leader: Chris Hopkins 564 3980. Deputy leader: Mick Parsons 972 1148.

Monday 16 March: Evening meeting

Changes on Raoul Island: rats, eruptions and cyclones

Dr Carol West will describe the state of Raoul Island, now that rats have been eradicated, and following natural disturbances in the last 3 years by eruptions and cyclones. Her talk will be based on her visit in March/April 2008.

Friday 10 – Sunday 12 April: Easter field trip

Pongaroa Reserve, northern Wairarapa

Details t.b.a. – please check web site.

Saturday 25 April: Field trip

Te Marua Bush workbee

NOTE EXTRA FIELD TRIP

In partnership with Greater Wellington, BotSoc has been committed since 1989 to do weed control and revegetation in this important matai/totara/maire remnant in Kaitoke Regional Park. Our biennial workbees must continue so that we keep ahead of re-invasion by weeds, particularly around the plantings, so please come to help with this important planting and weeding work. Bring: gloves, kneeler, weed bag, and your favourite weeding tools e.g. trowel, hand fork, loppers, pruning saw, pinch bar. Meet at Te Marua Bush at 9.30 a.m. (250 m north of Te Marua Store and then left, off SH2 for 50 m, along the road to Te Marua Lakes, Kaitoke Regional Park. Or, if you plan to use the train, *ring the leader* to arrange to be met at Upper Hutt Station; catch 8.05 a.m. train on Hutt line from Wellington Station. Co-leaders: Glennis Sheppard 526 7450, Sue Millar 526 7440.

**Help raise funds for BotSoc's Jubilee Award Fund –
bring named seedlings/cuttings for sale at each evening meeting**

Monday 20 April: Evening meeting **The evolution of NZ's everlasting daisies: the more we know, the more we don't know**

Speaker: Ilse Breitwieser, Research Leader Plant Systematics, Landcare Research. A number of angiosperm groups appear to have undergone rapid endemic radiations in NZ after dispersal from other landmasses. Of these, the *Gnaphalieae* (*Asteraceae*) present perhaps the most bewildering array of forms. DNA data, considered in the context of the highly complex pattern of morphological character state distribution in the group, suggest a complex set of inter-relationships among extant species. Ilse will give an overview of the current state of knowledge of *Gnaphalieae* evolution in NZ, followed by specific examples: *Leucogenes*, the famous *Raoulia* vegetable sheep, and *Craspedia*.

Saturday 2 May: Field trip

Korokoro–Maungaraki Bush

Explore some of the tracks in this regenerating forest on the Western Hutt hills above Percy Scenic Reserve. The bush would be a worthy addition to Hutt City's reserves. Botanise up to Sugarloaf, down through tall kohekohe forest to George Gee Dr, then in Galbraiths Gully. Meet: 9 a.m. at pipeline in Akatea Rd, at start of track to Sugarloaf. Catch 8.05 a.m. train on Hutt line from Wellington to Petone Station. Walk up Korokoro Rd to hairpin bend, up Galbraiths Gully path to Singers Rd, go up it to Maungaraki Rd, then turn right into Akatea Rd – 25 minutes' pleasant walk. Map R27 Wellington, and street map. Korokoro Walks brochure available. Leader: Bev Abbott 475 8468, deputy-leader: Jill Goodwin 475 7248.

Monday 18 May: Evening meeting

Members' evening

Please share your botanical slides and photographs taken on BotSoc trips, your paintings, drawings and your favourite botanical readings. Slides to be limited to 20 per showing. Plant specimens would add to a memorable evening.

EVENTS

- **Summer: Regional Outdoors Programme.** bookings@gw.govt.nz, 801 1041
- **6–20 February. Flora of Aotearoa/New Zealand.** Department of Biological Sciences summer course: "Biol226C Grow your knowledge!"
Weekend field trip in native forest, followed by two weeks' intensive lectures, labs and two day-trips to forests in Waikato, then complete an individual assignment after the two-week teaching portion.
Open to:
 - Students wishing to major in Plant Biology or Restoration Ecology
 - People with a keen interest in botany (admittance at discretion of Course Co-ordinator)Topics covered:
 - Origin of NZ's unique flora
 - Basics of plant taxonomy
 - Modern methods of plant classification and identification
 - Identifying plants in the fieldCourse co-ordinator: Dr Chrissen Gemmill, c.gemmill@waikato.ac.nz; 07 838 4053; room R.2.12. Prof Bruce Clarkson, clarkson@waikato.ac.nz, 07 838 4237, or Dept of Biological Sciences, University of Waikato, PBag 3105, Hamilton 0800, www.waikato.ac.nz, 07 838 4022.
- **12 February. Symposium to celebrate 150th anniversary of the publication of *The Origin of the Species*, and 200th anniversary of Darwin's birthday.** School of Biological Sciences, University of Auckland. Free event of seminars by NZ and overseas speakers.
Dr Greg Holwell, School of Biological Sciences, University of Auckland, PBag 92 019, Auckland 1142. 09 373 7599 extn 83652, www.sbs.auckland.ac.nz/uoa/science/about/departments/sbs/research/ecolevol/dr-greg-holwell/dr-greg-holwell_home.cfm

GRANTS AVAILABLE

- 22 January. **Sustainable Management Fund.**
 - Ministry for the Environment, Box 10 362, WN 6143. Ph 439 7400. www.smf.govt.nz, funds@mfe.govt.nz
 - 25 February. **Lottery Environment and Heritage Grants.**
Support projects that promote, protect and conserve NZ's natural, physical and cultural heritage.
 - 0800 824 824, or www.cdgo.govt.nz
 - 1 March. **Project Crimson funding for northern rata planting, pest and weed control, fencing etc.**
 - www.projectcrimson.org.nz, 0800 764 888.
 - 31 March. **Wellington City Council Environmental Grants.**
Criteria, application forms and other information available from:
 - Grants Advisor, WCC, Box 2199, WN 6140, 499 4444, www.wellington.govt.nz/services/grants
 - Late March – t.b.a. **Community Conservation Fund.**
 - CCF, DOC, Box 10 420, WN. ccf@doc.govt.nz, 0800 86 2020, www.doc.govt.nz/communityfund.
 - Late April – t.b.a. **Biodiversity Funds.**
 - BE, DOC, Box 10 420, WN. biofunds@doc.govt.nz, 0800 86 2020, www.biodiversity.govt.nz/biofunds.
- t.b.a. Lucy Cranwell student grant for botanical research. \$2500, towards research on some aspect of NZ's flora and vegetation, at any tertiary institution in NZ. Priority given to projects in northern half of North Island.
- Secretary, Auckland BotSoc, Box 26 391, Epsom, AK 1344, s.jones@auckland.ac.nz.

PUBLICATIONS

- 1a. **Flora of the Western Reef, Chatham Islands.** P.J.de Lange; J.W.D.Sawyer 2008. *DOC R & D Series* 302. 18 p.
- 1b. **Deer impacts on tawa (*Beilschmiedia tawa*) regeneration.** M.C.Smale 2008. *DOC R & D Series* 300. 8 p.
- 1c. **Recruitment of *Coprosma wallii* at Paengaroa Mainland Island.** H.M.Parkinson 2008. *DOC R & D Series* 299. 18 p.
 - Publishing Team, DOC, Box 10 420, WN 6143.

- 2a. **Wellington Conservation Board – Annual report to NZ Conservation Authority – 1/7/07 – 30/6/08.**
- 2b. **Wellington Conservancy Conservation Management Strategy review, excluding Chatham Islands.** A4 brochure.
- *Wellington Conservancy, DOC, Box 5086, WN 6145. 472 5821, www.doc.govt.nz*
3. **EnviroNZ 11/08.** Sustainable Management Fund; etc.
- *Ministry for the Environment, Box 10 362, WN 6143. 917 7400.*
4. **Open Space 74, 11/08.** Turf communities; annual report; etc. Three issues p.a., subscription \$30, family \$45.
- *QEII National Trust, Box 3341, WN 6140.*
- 5a. **The state of our environment 07-08 – eight report cards.** (None on indigenous ecosystems. Ed.).
- 5b. **Regional Parks Report 07-08.** 28 p.
- 5c. **Regional Pest Management Strategy – Operational Plan Report 2007-2008.** www.gw.govt.nz, or view at GWRC offices.
- 5d. **Green Shoots Community Newsletter.** 4 p.
- *Greater Wellington Regional Council, Box 11 646, WN 6142. 384 5708. www.gw.govt.nz*
6. **Coastcare – Tiaki takutai 16, 9/08.** Dune plants – planting tips; storm damage to dunes and dune plants; etc.
- *Environment Bay of Plenty, Box 364, Whakatane. 0800 368 267 Pim.demonchy@envbop.govt.nz, www.envbop.govt.nz*
7. **Branch Out 30 spring 08.** Park rangers; Porirua Harbour; Central Park upgrade; ecological survey of coast; etc.
- *Wellington City Council, Box 2199, WN 6140. 499 4444, lyn.murphy@wcc.govt.nz.*
- 8a. **NZ Botanical Society 93 9/08.** Koiata Botanical Trust; National Pollination Survey; hand lenses; *Hibiscus richardsonii* rediscovered; etc. No. 94 12/08: list of images wanted for new Threatened Plants book by 31/01/09; *Crassula alata* naturalised in NZ; etc. Quarterly – subscription \$25, students \$12.
- 8b. **NZ BotSoc Newsletter.** Back issues: Nos. 1 (8/85) – 46 (12/96) \$2.50 ea; 47 (3/97) – 50 (12/97) \$3.00 ea; 51 (3/98) – 72 (6/03) \$5ea; 73 (9/03) onwards \$7 ea.
- *NZBotSoc, c/- Canterbury Museum, Rolleston Ave, CH 8001.*
9. **Trilepidea 58 9/08.** *Hibiscus richardsonii*; Shannel Courtney wins Loder Cup; *Libertia cranwellii* rediscovered; where is NZ's highest diversity of threatened plants – Macraes, Otago; Fungal Guide web site; Te Papa MSc scholarship in molecular systematics at VUW; etc. No. 59: *Myosotis laeta*; *Hibiscus richardsonii* rediscovered; Percy Scenic Reserve news; Treescape sponsors NZPCN web site; rare plants on Port Hills' outcrops; Dr Patrick Brownsey awarded 2008 Allan Mere; Dr David Galloway awarded Acharius Medal by International Association for Lichenology; etc. No. 60 11/08: *Raukawa edgerleyi*; Chatham Islands have highest diversity of threatened plants?; white maire restoration project; *Olearia gardneri* planting in Wairarapa; rediscovery of maidenhair spleenwort in Hawke's Bay; *Marattia salicina* now *Ptisana salicina*; etc.
- *NZ Plant Conservation Network, Box 16 102, WN 6242, events@nzpcn.org.nz*
10. **Auckland Botanical Society 10/08: report on NZPCN Conference; etc.** 11/08: controlling weeds on Rangitoto and Motutapu Islands; etc.
- *Secretary, ABS, Box 26 391, Epsom, AK 1344*
- 11a. **Botanical Society of Otago 58 11/08: Dr David Galloway's award, and Macraes – see Trilepidea above; etc.**
- 11b. **Botanical Society of Otago 2009 Calendar.** This beautiful calendar has photographs from the 2008 BSO Photography Competition; compiled by Abe Gray. Essential presents for discerning botanists! \$15.00 + \$1.50/Standard post, or + \$2.00/FastPost per calendar, or multiples of two.
- *Lyn Bentley: e-mail stevef@ihug.co.nz; 03 453 6542; mail: c/- Bot Soc of Otago, Box 6214, North DN 9059. Make cheques payable to BotSoc of Otago.*
12. **Manawatu Botanical Society 39 9/08.** *Senecio glastifolius*/pink ragwort/holly-leaved senecio weed; etc.
- *Jill Rapson, Ecology Group, Institute of Natural Resources, Massey University, PNth. 06 350 5799 ext 7963.*
13. **Wellington Botanical Society Bulletin 51 11/08.** Otari BioBlitz; weed swaps; naturalised plants - southern North Island; liverworts - Hinewai; Carolus Linnaeus; *Wolffia australiana*; fungi - Matiu/Somes Island; swamp nettle - Wellington. \$21 incl p&p to non-members.
- *WBS, Box 10 412, WN 6143.*
14. **Chatham Islands – Heritage and Conservation.** Edited by Colin Miskelly 2008. 19 contributors. \$44.95 incl p&p – NZ orders.
- *Canterbury University Press, PBag 4800, CH. 03 364 2914; mail@cup.canterbury.ac.nz*
15. **A sustainable vision –Forest & Bird post-election briefing.**
- *Royal Forest & Bird Protection Society, Box 631, WN. office@forestandbird.org.nz*
16. **New observations on chromosome number variation in *Hibiscus trionum* s.l. (Malvaceae) and their implications for genetics and conservation.** B.G.Murray, L.A.Craven.
- *NZ Journal of Botany 46: 315 – 319.*
17. **Canopy 50 spring 08.** Trust seeks donations towards purchase of 3400ha, including restiad swamp, 25km of coastline, a volcanic cone, and 25ha lake, on Chatham Island; etc. Donations most welcome!
- *NZ Native Forests Restoration Trust, Box 80 007, Green Bay, Waitakere 0643.*
18. **Otari-Wilton's Bush Trust 12/08.** Dr John Dawson appointed a Fellow of the Linnean Society in London, following nomination by the trust; Otari curators and supervisors since 1947; etc.
- *OWB Trust, 160 Wilton Rd, WN 6012.*
19. **Koiata Botanical Trust.** A4 leaflet re Trust's role in seeking donations to support the work of botanist, Hugh Wilson, on his publication of the flora of Banks Peninsula. Donations most welcome!
- *KBT, c/- M.J.Hooker, Chartered Accountant, Box 4415, CH 8140. 03 374 5448, info@hookerca.co.nz*
20. **True colours spring 08.** Funding round – see Grants section above; planting northern rata on Makara Peak; etc.
- *www.projectcrimson.org.nz, 0800764 888.*
21. **East Harbour Environmental Association 126 10/08.** Fitzroy Bay planting; annual report; etc.
- *EHEA, Box 41 029, Eastbourne 5047.*
22. **Ecolink 9-10/08.** "Vote for the environment" policies recommended to political parties; etc.
- *ECO, Box 11 057, WN 6142. 385 7545, eco@eco.org.nz, www.eco.org.nz*
23. **Heritage summer 08.** "Scarlet Christmas" – re pohutukawa; etc.
- *NZ Historic Places Trust, Box 2629, WN 6140. 472 4341, information@historic.org.nz*
24. **Plant Heritage NZ: Te Whakapapa o nga Rakau – Interpreting the Special Features of Native Plants.** Tony Foster. Raupo/Penguin Group. 11/08. ISBN 9780143009795, rrp \$50.00, pb.
- *Kathryn Carmody, e-mail: kathryn.carmody@gmail.com tel. 04 385 7070, 027 287 7963.*
- 25a. **Telopea – Journal of Plant Systematics 12(2) 08.** *Drosera whittakeri* s.lat.; *Doodia hindii*; etc.
- 25b. **Index to Vol 11 2005-07.**
- Both documents available on loan from BotSoc.
- *National Herbarium of New South Wales, Royal Botanic Gardens, Sydney.*

SUBMISSIONS CALLED FOR

- **9 January. Waikato Conservation Management Strategy review.**
Waikato CMS review, DOC, PBag 3072, Hamilton 3240.
waikatocms@doc.govt.nz
- **11 March. 1a Draft Rakiura National Park Management Plan;**
1b Revised draft Stewart Island/Rakiura Conservation Management Strategy.
View at any DOC Conservancy office, or online, or download from www.doc.govt.nz/rakiura. Available on CD. Submissions to DOC, Rakiura Planning Team, Box 743, Invercargill.

Letters to the editor

We would welcome your comments on any aspect of BotSoc's activities:

- places you would like to visit on field trips
- topics for evening meetings
- topics for BotSoc's Bulletin and Newsletter
- other matters of concern or interest to you.

The committee

Nominations sought

Who should BotSoc nominate for:

- Loder Cup?
- H. H. Allan Mere Award?
- Conservation Award?

Your suggestions would be welcome! Please send them to:

Barbara Clark, Secretary, WBS, PO Box 10 412, WN 6143. Ph 233 8202, fax 233 2222, bj_clark@extra.co.nz

BotSoc Bulletins

Expand your collection of our "flagship" publication and boost BotSoc's bank balance! The following back issues are available at a cost \$3 per issue, incl. p&p; \$12 for any five issues incl. p&p.:

1950s: 23 (9/50); 30 (12/58).

1960s: 32 (12/61); 33 (2/66); 34 (11/67); 36 (12/69).

Index to Bulletins Nos. 1-35.

1970s: 37 (11/71); 38 (9/74); 39 (10/76); 40 (8/78).

1980s: 41 (9/81); 42 (9/85); 43 (4/87); 44 (11/88).

1990s: 46 (12/94); 47 (9/96).

2000s: 48 (9/02), 49 (12/05).

Copies of our latest *Bulletin*, 51 (11/08), are \$11 each incl. p&p, to members and other individuals, and \$21 each incl. p&p to organisations.

Please make your cheque payable to Wellington Botanical Society, PO Box 10 412, Wellington 6143. Thank you!

Rodney Lewington, Treasurer

Newsletter by e-mail?

If you would like to receive your Newsletter by e-mail, and thus help us to reduce our postage costs, please advise our Treasurer:

Rodney Lewington, WBS, PO Box 10 412, WN.

For any Conservation-related illegal activity,
call the 24-hour conservation emergency helpline

DOC HOTline
0800 362 468
For Search & Rescue—call 111

All other enquiries to your local DOC office or visit our
website www.govt.nz

Department of Conservation
Te Papa Atawhai

New Zealand Government

Kelburn School's inspirational ecological restoration project

In 1858 Charles Barraud painted a view of the gully below the school, with native bush in the foreground, and in 1875 Dr John Buchanan listed all the native and adventive plants in the adjacent area, now the Wellington Botanic Garden. A copy of his archival, handwritten list is being used to guide the gully planting programme, because these two sites were once ecologically continuous, though now separated by Ngaio Road.

The steep, north-facing gully has been under dense weed growth for decades, until recent years when a generous grant funded the development of its upper part as a terraced adventure play area, and locals began to restore the lower part to indigenous vegetation. WCC's Berhampore Nursery has supplied eco-sourced plants and these have been supplemented in some cases. For instance, WBS Newsletter readers may remember that last year three *Nestegis cunninghamii* saplings, progeny of the ancient, solitary, black maire in the Botanic Garden, were donated by David Sole, Manager, Botanic Garden. Unfortunately, from time to time, some inappropriate species have also been planted in the gully, but these will be removed.

Friday 24 October was a day of great excitement for all the school pupils and the many parents who had volunteered time and energy over several years of weeding and planting. Scores of guests were welcomed with a traditional powhiri, followed by waiata from a spirited kapa haka team trained by staff member Annie Gear, to witness the unveiling of a waharoa (ceremonial gateway) which the Gully Project planners had commissioned Jono Randell to carve.

Passing through the waharoa symbolises one's transition from the everyday, recreational part of the gully, down to the restoration area, Te Waonui a Tāne, the realm of Tāne, where special conditions, requirements, and sound ecological practice apply. It seems to me that other schools could well choose to follow this inspirational idea.

Barbara Mitcalfe

Hutt River riparian planting trial

Greater Wellington Regional Council (GWRC) is preparing a brief for Landcare Research Ltd to analyse the results of the native plant trials opposite Maoribank, and at Taita Gorge, and Avalon. We hope to have a summary of findings available for the next BotSoc newsletter.

Jacky Cox, GWRC

Massey Regional Park – a regional park for Wellington City

With the inevitable increase in petrol prices and the need to minimise travel, both personally and in the national and global interest, there is an equally strong need for a significant open-space recreational area as close as possible to the Wellington City community.

Wellington City has no regional park: Wellingtonians need a regional park, particularly given that they pay Greater Wellington Regional Council for regional parks, but have none.

The proposed Massey Regional Park is the best opportunity for a regional park in Wellington City, given its spectacular coast and harbour views, and walking tracks through native bush, farmland and pine forests, and learning about the unique military history of Miramar Peninsula. It is also a place of refuge for our native flora and fauna, and a CO₂ sink to offset the demands our community places on our air.

It would be named after William Ferguson Massey, the Prime Minister of NZ through WWI 1912–1925, whose soul rests at the Massey Memorial at the northern tip of the proposed park.

Support the creation of Massey Regional Park on this unique and nationally important coastal and harbour landscape within Wellington City. Ensure that Councillors and MPs protect this 150-ha, outstanding coastal landscape, easily accessible by public transport, for our community to enjoy now, and into the future for the generations to come.

The land does not need to be purchased, as the proposed Massey Regional Park land is government-owned, and WCC reserve.

Source: <http://masseyregionalpark.org.nz/>

Rare native fern rediscovered in Hawke's Bay

Dr Leon Perrie, Te Papa's Botany curator, and Manawatu BotSoc recently rediscovered a maidenhair spleenwort fern population (*Asplenium trichomanes* s.l.) previously thought extinct.

The last identified specimens were recorded in the 1950s, but the exact locality was not recorded. The population of ferns comprises only nine plants in an area c. 5 m x 3 m. The Department of Conservation (DOC) has been notified, but the exact locality is not being released more widely because of the plant's scarcity. Dr Perrie said he was elated when the population was discovered during a field trip specifically to hunt for the fern.

'I didn't think our chances of finding it were very high, if at all, so I was rapt when a team member called me over to positively identify it – I couldn't stop smiling!' said Dr Perrie.

There are two species of maidenhair spleenwort ferns (*Asplenium trichomanes* s.l.) in NZ: "quadrivalens" and "hexavalens". They look very similar, but have different numbers of chromosomes. The hexavalens species is common, but the quadrivalens species is very rare in NZ, although it is common overseas; the only living plants known are the nine just discovered.

The maidenhair spleenworts differ from other similar ferns in having an unbranching, black, almost smooth stem, and in having the reproductive structures away from the margins on the underside of its leaves.

The taxonomy of the maidenhair spleenwort ferns requires further investigation which is why the two species do not yet have formal scientific names.

Any additional finds of either of the species of the maidenhair spleenwort in Hawke's Bay would be very significant. David Carlton of DOC 06 869 0494, dcarlton@doc.govt.nz, or Dr. Perrie 04 381 7261, leonp@tepapa.govt.nz would be grateful for notification. The species are most likely to found on limestone.

For further information or an image, contact Jane Keig, Manager Communications, 029 601 0180, 04 381 7083, janeke@tepapa.govt.nz

Source: Te Papa news release, 20 October 2008

DOC Wellington Visitor Centre



*Te Pae Manuhiri, Te Rohe
ō Te Whanganui ā Tara*

**Conservation House,
18–32 Manners St**

- Track, hut, conservation information
- Kapiti Island visitor permits
- Hut tickets, backcountry hut passes
- Hunting permits

**Open: Mon – Fri 9 a.m. – 5.00 p.m. •
Sat 10 a.m. – 3.30 p.m.**

Tel: 04 384 7770 Fax: 04 384 7773

E-mail: wellingtonvc@doc.govt.nz

Web: www.doc.govt.nz



Department of Conservation
Te Papa Atawhai

Request for donations to protect native forest

If you would like to make a donation towards Wellington's newest native bush reserve, located in Derwent St, Island Bay, please send it to Island Bay Natural Heritage Charitable Trust Inc, 36 Ribble St, Island Bay, Wellington, or to Westpac, Kilbirnie Branch account no. 030521-0311090-00.

Privacy Act authority: Yes/No (please indicate): I/we am/are happy to authorise the publication of my/our name(s), and the amount of my/our donation, to other supporters of the reserve and the public.

Note: All donors will be entered in the Register of Donors for the new reserve, and will receive an official receipt and certificate. Donations of \$5 or more are tax deductible. Donations may be from individuals, families, organisations, or businesses.

Obituary – Peter Wardle

It is with sadness that we note the sudden death of Peter Wardle on Saturday 6 December. Peter was crossing the Waimakariri River at Klondyke Corner in tandem with his wife, Margaret, when they slipped and were swept downstream. It seems likely that Peter suffered a heart attack. Margaret was able to make it back to the riverbank safely. Peter was leading a trip of the Over Forties Tramping Club at the time.

Peter died at the age of 77 and for about 70 years he had been collecting plants and determining their ecology. His grandfather knew Leonard Cockayne. Once Peter became aware of Cockayne's "Vegetation of New Zealand", while at primary school, he determined to revise that work as, even then, he thought there were many improvements that could and should be made to the text! Aside from Peter's seminal work, the "Vegetation of New Zealand", he published many papers that are widely referenced today in the fields of ecology, palaeoecology, physiology, systematics and more.

Carol West

New conservation site established

Southern Environmental Association (SEA) have settled an Environment Court appeal regarding the ex-Owhiro Bay Quarry land, which SEA campaigned to make into a reserve in the 1990s. Wellington City Council has agreed to rezone most of the ex-quarry land as a Conservation Site, the highest level of protection available in the District Plan, leaving only the most recent of the former quarry faces to be zoned as "Open Space B".

Source: Southern Environmental Association

Erratum

In the 6 September 2008 trip report in the September newsletter, the first bullet point should have stated that black beech in DOC's Dry Creek is at its southern limit west of the Wellington Fault.

EVENING MEETING REPORT

18 August 2008: Druce Memorial Lecture

Looking from the outside, inside – toward a Chatham Islands' flora

Peter de Lange, Ecosystems and Species Unit, Research and Development, DOC, first met Tony Druce in 1982 through the influence of two Wellington BotSoccers, Audrey Eagle and Ken Haydock. Ken gave Peter his first ever "Druce List", that for Mt Pirongia, a mountain near Peter's home town, Hamilton, and Audrey provided Peter with Tony's address, and encouraged him to write to Tony about plants. Tony provided Peter with numerous lessons in botany, plant checklists, and gentle chidings when he became too carried away with particular notions and ideas. In 1996 Peter visited the Chatham Islands for the first time, armed with, of course, 'Druce & Kelly', a checklist prepared by Tony for an island group that he never visited, and based on observations, specimens and notes made by Geoff Kelly. That checklist became the basis for a later list, prepared by Peter, John Sawyer and Rebecca Ansell, and published in 1999 by DOC's Wellington Conservancy. Since then Peter has made nine more trips, where he has worked on the vascular flora, threatened plant management, and lichens, liverworts and mosses.

The last comprehensive account of the Chatham's flora was published by Melbourne-based botanist, Ferdinand von Mueller, in 1864. There has

never been any other treatment, and Mueller's classic work is the only source of information in a flora format of the islands' plants. Mueller wrote this flora, paid for by the Victorian State Government, mainly because he had overheard that Joseph Hooker had laid claim to the islands' flora! As Mueller felt slighted by Hooker's and George Bentham's comments over some of his taxonomic views, he saw the Chathams as a legitimate target, so encouraged William Travers to send his son, Henry, there to make the first comprehensive plant and animal gatherings. The plants that Henry obtained in 1861 were the basis of Mueller's 1864 flora.

Since Mueller, the only other notable contributor to our published knowledge of the islands' flora was Leonard Cockayne, who visited the islands in 1901, and published a major treatment of the vegetation and ecology, and also described most of the endemic plants recognised from there today. Cockayne's legacy is truly astounding, as are his rather acidic comments about Mueller's species concepts, and views on Darwinism!

Peter divided his talk into: 1. Features of the Chathams' flora. 2. Naturalised plants. 3. "Lower plants"—lichens, liverworts, mosses and seaweeds. 4. Origins of the flora.

5. Progress on a new flora of the "higher plants".

The vascular flora comprises about 392 indigenous species, subspecies, and varieties of native vascular plants; a further 393 are naturalised. There are two endemic genera (*Embergeria* and *Myosotidium*), and 34 endemic flowering plants and ferns. One moss, *Macromitrium ramsayae*, is endemic, one lichen, *Caloplaca maculata*, appears to be so, and as yet there are no endemic liverworts. Seven of the c. 250 seaweeds recorded from the islands are endemic. The endemic vascular flora appears to have a mostly southern NZ origin, though *Cortaderia turbaria*, *Sporadanthus traversii*—and possibly *Coprosma chathamica*, have northern NZ origins. Aside from the 34 formally recognised endemics, a further 15–16 informally recognised entities appear to be endemic to the islands. Peter briefly outlined a few examples of these, including a new *Olearia* allied to the akeake (*O. traversiorum*) that was discovered in September 2007 by Peter Heenan on Pitt Island, two lepidia allied to nau/Cook's scurvy grass (*L. oleraceum*)—one-third is nearly endemic, being known otherwise only from the Antipodes Islands, and a new hook grass (*Uncinia* aff. *uncinata*), discovered by Peter and Peter Heenan in May 2008. All of these plants, and

most of the others are being worked up for formal publication by Peter and Peter Heenan. The indigenous flora is unusual, comprising a majority of plants known from only one or two sites. Peter offered reasons for this distinctive pattern. A feature of many of these plants is that they are disjunct from northern NZ to the Chathams; examples include Poor Knights' spleenwort (*Asplenium pauperequitum*) and *Senecio marotiri*. There are a few other unusual disjunctions, most notably *Leucopogon parviflorus*, which is not otherwise known from NZ, but is abundant in eastern Australia and Tasmania.

Peter also discussed the naturalised flora, including mainland NZ native plants that are either invasive or hybridising with related species that occur naturally on the Chathams. He said that the lichen (c. 200 taxa),

liverwort and hornwort (270+ taxa) and moss (180+ taxa and subspecies) floras of the islands have not been well studied.

Peter said that Chathams' seaweeds are probably better studied. Again, Dr Wendy Nelson's work has shown that here, just as with the "lower plants", there is a distinctive mix of northern and southern NZ species, often including apparent sister species which are otherwise allopatric in their distribution. Indeed, a stroll along a Chatham Island reef will soon reveal a bizarre assemblage quite unlike anything you will ever see in NZ. The seaweed flora is sadly under much threat from naturalised seaweeds, and here especially there is a strong need for better biosecurity measures.

Peter said that the origins of the islands' flora is still a hot topic, with two polarised camps favouring

"ancient" (Cretaceous), or recent (late Pliocene), origins. Critical study of the vascular endemics *may* help to resolve this matter.

The final phase of Peter's talk summarised the findings, and related these to the need for a new Chatham Islands' Flora which is being prepared. He showed an example of a finished treatment, the Crassulaceae, to demonstrate the planned format. He said that myriad reasons for a Chatham Islands' Flora have been offered, one of which is that outsiders, i.e. mainland NZers, have been looking inside the Chatham Islands since the 1840s, and as far as the islanders are concerned, there is little tangible evidence of what has been achieved over that time!

A complete summary of Peter's talk will appear on the BotSoc web site

Chris Horne



Edited by Colin Miskelly

\$39.95, Paperback, 248 x 185 mm, 224 p
ISBN 978-1-877257- 78-0

Order from CANTERBURY UNIVERSITY PRESS
 Private Bag 4800, Christchurch

Phone: +64-3-364 2914 Fax: +64-3-364 2044
 mail@cup.canterbury.ac.nz
 www.cup.canterbury.ac.nz

This much-anticipated revised and expanded edition describes the Chatham Islands with emphasis on their geology, flora, fauna, habitats, and extinct and endangered species—on land, in freshwater and in the sea.

It also provides an introduction to the human history of the islands, and is a guide to the many reserves and covenants that have been established to protect and conserve the islands' heritage.

Contributors:

Te Miria Kate Wills-Johnson (heritage)
 Michael King (history)
 Hamish Campbell (geology)
 David Schiel (marine life, seaweeds)
 Wendy Nelson (seaweeds)
 Rhys Richards (marine mammals)
 Ian Atkinson (land habitats)
 Peter Johnson (freshwater wetlands, lichens)
 Nadine Bott (freshwater fish)
 Peter de Lange (botany, mosses, liverworts)
 Peter Heenan and John Sawyer (botany)
 Allan Fife (mosses)
 David Glenny (liverworts)
 Peter Johnston and Ross Beever (fungi)
 John Dugdale and Rowan Emberson (insects)
 Phil Sirvid (spiders)
 Karin Mahlfeld (land snails)
 Allan Munn and Ken Hunt (managing the resource)
 Colin Miskelly (birds, lizard, managing the resource, people who made a difference)

TRIP REPORTS

20 September 2008: Te Marua Bush workbee

We concentrated on releasing plants in the southern extension of the bush, which was planted in the winters of 2006, 2007 and 2008.

Some plants died during the 2008 drought, but this winter's plantings are

thriving. If we get frequent rain this summer, this area should need only a little infill planting. We found several patches of tradescantia, and removed two bags of it. Larger areas will need spraying.

Participants: Barbara Clark, Ian & Jill Goodwin, Bryan Halliday, Chris Horne, Rodney Lewington, Barbara Mitcalfe, Richard Northmore, Allan & Glennis Sheppard, Darea Sherratt, Julia Stace.

4 October 2008: Rocky Bay–Whitireia Park

The weather forecast indicated gales and rain would hit the coast during our trip, so I discussed this with Chris Horne and Barbara Mitcalfe. They said that BotSoc trips were never cancelled in the old days, so we decided to alter the trip slightly to take into account everyone's health and safety.

Twenty-five people arrived at the car park at Rocky Bay to brave the conditions. We descended a steep and eroded track into a bay immediately west of Rocky Bay, to see mainly small coastal natives such as *Apium prostratum*, *Raoulia hookeri* var *hookeri*, *Linum monogynum*, *Peperomia urvilleana*, *Einadia triandra* and the region's only mainland population of *Hebe elliptica* (syn *H. elliptica* var. *crassifolia*). Many plants are being out-competed by karo and taupata, but there are still plenty clinging to the cliffs. On our way back up the path, Chris Hopkins spotted a *Sonchus kirkii* (Gradual Decline) and, although I have botanised the area for years, I had never seen it here.



Linum monogynum.
Illustration by Eleanor Burton.

area of *Apodasmia similis*. Here we found several more plants of *Sonchus kirkii* and again, the drier areas are dominated by karo, which is also germinating on the cliffs where there is more *Hebe elliptica*. Given the atrocious wind, we did not linger, and instead of walking around the coast of Whitireia Park, we drove to Onehunga Bay, and botanised the only remaining fragment of bush just up the valley.

Using a species list compiled by Pat Enright and Olaf John in 2001, we botanised the bush block. We worked our way uphill, noting the damage caused by cattle, which last summer forced their way through the perimeter fence. Sadly, smaller open areas are now larger open areas filled with boneseed,

Chrysanthemoides monilifera and *Senecio glastifolius*, pink ragwort. The only known population of *Doodia australis*, a scarce species south of Waikato, had been trampled, but some of it was still alive. The fence has been strengthened, and at a recent meeting of the Whitireia Park Board, I asked the Board to put \$2,000 toward weed eradication in the bush block, which was unanimously approved. We found the only recorded plant of *Streblus banksii*, or is it *Streblus heterophyllus*? Jonathan Anderson, a local expert on *Streblus*, is unsure if *S. banksii* and *S. heterophyllus* are two species, or just merge into one species with a wide leaf variation. Growing far too closely for the health of the *Streblus* sp. is a karaka, not native to Wellington, which could be removed to allow the *Streblus* sp. more room and light. Close by was the one *Lophomyrtus obcordata* which again is uncommon or possibly an unknown species in Wellington, *L. bullata* being much more common in the Wellington area, and *L. obcordata* more common in the Wairarapa. The only addition we made to the species list was the grass *Oplismenus hirtellus* subsp. *imbecillus*. After spending two hours in the bush block, we decided to end the trip, just as the rain started. We shall allow BotSoccers to finish the coastal exploration of Whitireia Park, as was originally planned, at a later date.

Participants: Ros & Derek Batchelor, Jill Broome, Rae Collins, Barrie Cook, Rob Craven, Rewi Elliot, Glenys Evans, Frances Forsyth, Bryan Halliday, Dave Holey, Nicky Holt, Chris Horne, Chris Hopkins, Sheelagh Leary, Rodney Lewington, Pippa Lloyd, Barbara Mitcalfe, Mick Parsons, Darea Sherratt, Robyn Smith (leader/scribe), Julia Stace, Carol West, Julia White, John Whitty.



Einadia triandra. Photo: Jeremy Rolfe.

The coastal turf fields of Rocky Bay, with large open holes, perhaps a relic of a seal colony, were mainly dominated by *Lobelia anceps*, *Samolus repens*, and *Isolepis cernua*, with an

1 November 2008: Eastern Hutt River, Tararua Range

Owen Spearpoint, BotSoccer, and Environmental Technician, Greater Wellington Regional Council, organised 4WD transport from the Kaitoke Regional Park ranger station to the road end at Phillips Stream, a true left tributary of the Eastern Hutt River. From there we twelve walked quickly to the swingbridge, and began botanising on the true right, along the track that leads up the valley. We used the plant list prepared by various BotSoccers over the last decade, and added to on a trip, also led by Owen, mostly on the true left bank, on 5 April 2008.

The forecast was lousy, but “Hughie” held off until after lunch, when the rain and gale began. Until then we added *Coprosma rigida*, *Neomyrtus pedunculata*, kohuhu/*Pittosporum tenuifolium*, common maidenhair/*Adiantum cunninghamii*, Prince of Wales feathers/*Leptopteris superba*, a shield fern/*Polystichum silvaticum*, the orchid *Simpliglottis cornuta*, and the dicot herb, *Nertera villosa*. Near the saddle where the route to Quoin Ridge branches off, we saw red mistletoe, *Peraxilla tetrapetala*, high in a beech tree. On the saddle, three, single, separate, orchid leaves in the leaf litter



Neomyrtus pedunculata. Photo: Jeremy Rolfe.

had us puzzled. Images of these were later flashed around several botanists, and the consensus is that they were *Simpliglottis cornuta*, which usually has two or three leaves but does occasionally have a single leaf.

A thoroughly enjoyable trip in forest well-protected from pest

animals by air-dropped 1080, and by cullers. Our thanks to GWRC staff for providing the transport to this water catchment area, which until the late-1990s was closed to the public.

Chris Horne and Barbara Mitcalfe

9 November 2008: Makara Foreshore Reserve workbee

In the 1940s the Home Guard bulldozed the 2m-high dunes at Makara Beach, in case an invading, enemy force landed and hid there. Luckily, remnants of the native coastal plant communities such as pingao, have been slowly re-colonising this WCC reserve ever since. In the 1970s Wellington Botanical Society was one of several science-based groups that convinced WCC to designate the flat, 40 × 70 m² area as a reserve, because of its locally very uncommon community of indigenous, mat and sand-binding plants. But last winter and this spring have been so wet that foreign invaders of a very different sort have infested the reserve. Its survival is now critically threatened by unprecedented hordes of weeds such as allseed, *Crassula decumbens*, mouse-eared chickweed, veld grass and bur medick. WCC contractors BM and JCH who have been working long-term to restore the reserve have been unable to control this season's infestation.

Because of the urgency of the situation, President Carol West suggested a WBS weeding workbee, and on 9 November, 22 volunteers (in post-election blues or bliss), worked shoulder to shoulder, on hands and knees, for several hours. We were joined by three local residents and the duty ranger, and WCC provided light refreshments. The result of our work was an area of c. 50 m² cleared of weeds. While this splendid effort was sincerely appreciated, it also demonstrated that to eliminate weeds from the remaining, worst-infested areas, of the reserve would require c. 300 hours, quite beyond the WCC budget allocated for the reserve. WCC has now called in a contractor to advise urgently on the situation.

Barbara Mitcalfe and Chris Horne
(co-leaders/scribes)

On behalf of BotSoc I sincerely thank the following participants: Bronwyn Bell, Sam Buckley, Barry Dent, Sue Freitag, Paolo

Fuiono (WCC Ranger), Bryan Halliday, Dave Hansford, Stephen Hartley, Marieke Hilhorst, Dave Holey, Brenda Johnston, Rodney Lewington, Hugh, Jessica, Lee & Matthew Robertson, Margaret Scott, Darea Sherratt, Sunita Singh, Carol West, Julia White.

Post Script

Contractor John Sala, of Te Ngahere, and his associate, visited the reserve in November. We await his advice on potential control methods, one or some of which will be trialled in autumn. Meanwhile WCC has reduced the reserve's maintenance budget, as part of its general cost cutting because of the financial downturn. As a result, our weeding will be even more strictly prioritised to concentrate on the threatened species *Austrofestuca littoralis* and *Crassula mataikona*, and on keeping the raoulia mats clear of weeds. Regrettably it will not be possible to do much more.

22 November 2008:

Dench Garden weeding

Thirteen good and true BotSoccers worked to remove the rampant growth of weeds threatening to overwhelm many of the special plants in the garden's collection.

Members will recall that in 2007, Ruth Dench's many years of daily weeding and maintenance ended. Despite invaluable help with weekly weeding funded by Wellington Branch, Royal Forest and Bird Protection Society, I have, because of advancing years, found it almost impossible to manage this physically demanding property.

Happily for us all, the weather, for once, was relatively benign, and everyone tackled the tasks with remarkable energy. Casualties at least among the native plants were few, and our work was greatly helped by a substantial morning tea.

My grateful thanks to everyone for the good work they did, and for giving up part of their well-earned weekend.

Participants: Bev Abbott, Peter Beveridge, Eleanor Burton (co-leader), Arnold Dench (co-leader/scribe), Gavin Dench, Bryan Halliday, Chris Horne, Brenda Johnston, Rodney Lewington, Phillip Parnell, Mick Parsons, Sunita Singh, Julia Stace.

6–7 December 2008: Eastern Tararua Range

The Atiwhakatu Valley has been botanised in the past, starting with the doyen of field botanists, Tony Druce. Oddly enough, a search of the Transactions of the Royal Society does not register any hits when Atiwhakatu is entered. Sixteen pairs of BotSoccers' eyes on this trip resulted in several additions to the list, e.g., a mature, narrow-leaved maire/*Nestegis montana*, a seedling titoki/*Alectryon excelsus*, shining spleenwort/*Asplenium oblongifolium*, and the small, ephemeral, orchid *Petalochilus chlorostylus*.

Perhaps the most spectacular plant we saw was red mistletoe/*Peraxilla tetrapetala*, almost in full flower on a closed part of the track past Donnelly Flat. We also saw other noteworthy species, although not as showy, including the semiparasitic member of the sandalwood family, *Mida salicifolia*, which grows near the track and the bridge. As is often the case, after we saw the first one, others were easier to find. Fortunately at least one showed the alternate leaf arrangement which is one way of distinguishing it from white maire/*Nestegis lanceolata*.

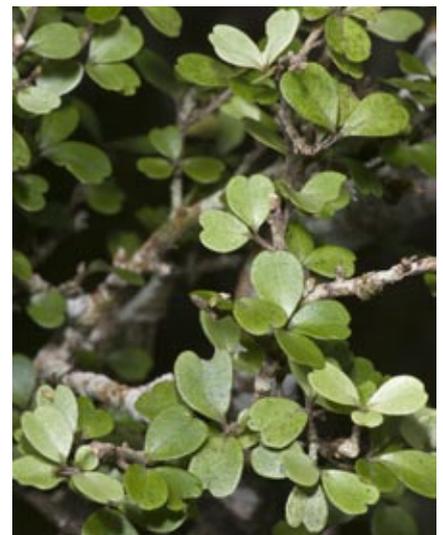
Unfortunately it was too early to botanise the streambed to see the interesting species that grow there in the short season allowed when

Atiwhakatu Stream is a sufficiently low level. Grasses such as *Deschampsia tennella* and *Poa breviglumis* and the small herbs *Colobanthus apetalus*, *Geum cockayneanum*, and *Coriaria plumosa* grow in the stream gravels and along the banks.

Despite our late start, we covered quite a large area and still had energy reserves to tackle a fuller and more arduous day the next day.

Pat Enright

On Sunday, we botanised up Gentle Annie Track, and from the bush edge near Rocky Lookout, across Pig Flat, to Mountain House Shelter. Above here along the Powell Hut track, was the highlight of the day, seedlings, and shrubs to c. 4m, of the recently described, Nationally Threatened, *Myrsine umbricola*. Found only in the Tararua Range, it occurs in silver beech forest and has a more spreading habit and larger leaves than its close relative, weeping matipo/*Myrsine divaricata*.



Myrsine umbricola. Photo: Jeremy Rolfe.

Other species we saw included the fern, *Microsorium novae-zelandiae*, the yellow mistletoe, *Alepis flavida*, and the orchids, *Pterostylis montana*, and *Singulariylbas oblongus*.

We thank Pat Enright for providing copies of plant lists for both days.

Chris Horne

Participants: Bev Abbott, Gavin Dench, Pat Enright (leader, day 1), Bryan Halliday, Tony Harcourt, Chris Hopkins, Chris Horne, Brenda Johnston, Sheelagh Leary, Rodney Lewington, Barbara Mitcalfe, Mick Parsons, Darea Sherratt, Tony Silbery (leader, day 2), Sunita Singh, Carol West, Julia White.



Petalochilus chlorostylus. Photo: Jeremy Rolfe.

Wellington Botanical Society Inc. – Membership Application

(For new members, **NOT** for renewal of existing membership)

I wish to join the Society

My name Mr/Mrs/Ms/Dr Phone (.....) (h)

My address Phone (.....) (w)

..... Fax (.....)

I would like to receive my newsletters by e-mail as a PDF Please tick if appropriate.

My e-mail address@

Signature Date:..... / / 200...

The membership year is from 1 July to 30 June. Dues received after 1 May will be credited to the following year.

Type of membership: Ordinary \$25; Country \$20; Student \$10. Group / family \$30.

We welcome donations to support research into NZ native plants and to the Jubilee Award Fund.

Please make your cheque payable to Wellington Botanical Society Inc, and send it with this form to:

Wellington Botanical Society Inc., PO Box 10 412, Wellington 6143

My cheque is enclosed for	Ordinary membership	\$.....
	Country membership	\$.....
	Student membership	\$.....
	Group / family membership	\$.....
	Donation	\$.....
	TOTAL	\$.....

Authority to release your name, address and phone number to other members of the Society.

The Society holds the names and addresses of all members to use for post-outs of news letters etc.

The committee sees benefit in circulating the membership list to all members. This is done by many societies to enhance social interaction as well as being of practical value.

Under the Privacy Act the circulation of names on such lists requires the approval of the individual members.

If you are agreeable to your name and address being on the circulated list please sign the authorisation below

I agree to my name, address and telephone number being on the membership list to be circulated to members of the Wellington Botanical Society. I understand that this list is to be used only by members, and that the circulated list will include the caveat that the list is for social and society use and is not to be used for any other purpose. Specifically the list is not to be used for marketing, soliciting or political purposes.

(Please make any changes you require)

Name..... Signed..... Date / /

Name..... Signed..... Date / /

If you do not agree it would assist processing if you could please put a line through paragraphs above and return the sheet unsigned.