

# Wellington Botanical Society

Te Rōpū Manāki i Ngā Tamariki a Tāne,  
o Te Whanganui a Tara



# NEWSLETTER

## September 2007

Last issue: April 2007

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### Temporary change of meeting venue

Please note that the November BotSoc meeting at Victoria University will be in Murphy lecture theatre 220 because MULT101 is being renovated. Murphy 220 is one floor above MULT 101.

### From the President

Longer daylight hours and some warmish days mean summer is approaching and it's time to decide whether you will be joining other BotSocers when we head for Great Barrier Island at the end of January. Committee member Robyn Smith says there have never been possums or mustelids on the island and it is wonderful to see the difference this makes. You'll find more details and the registration form on page 23 of this newsletter.

Between now and then the Society is offering an exciting array of trips and speakers to help you expand your botanical knowledge.

*Bev Abbott*

### NIWA Science Fair

Tariq Kader and Josiah Nelson, year seven pupils at Karori Normal school, won this year's Botanical Society prize for their project "Sweating plants". Our judges, Gordon Leary and Rodney Lewington, said the project was neatly designed and the two boys had clearly thought a lot about the project. They had chosen five native plants of different leaf forms and presumed different leaf transpiration rates, and had devised a simple and visual way of measuring the uptake of water by the plants. The results, predictably, showed that water transpiration was the greatest in the big rangiora leaves and was the smallest in the totara leaves.

*Bev Abbott*

### Articles for web site

We welcome articles for consideration for inclusion on our web site: [www.wellingtonbotsoc.wellington.net.nz](http://www.wellingtonbotsoc.wellington.net.nz)

Please send your article to:

Richard Herbert  
8 Duval Grove  
Redwood  
Wellington 5028  
ph 232 6828  
fax 381 4518  
e-mail [herbert.r@xtra.co.nz](mailto:herbert.r@xtra.co.nz)

### Manawa Karioi Society Revegetation Programme Workbees

1st and 2nd Sunday each month,  
10 a.m. – 2 p.m.

Bring your lunch.

Contact:  
Peter Russell ph 389 5484;  
mob. 021 207 6011

### Wellington Botanical Society

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Annual	ordinary \$20; country \$15; student \$5;		
Subscription:	group / family \$25.		
Send 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 – 15 November 2007**

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, balaclava<sup>1</sup> or hat<sup>1</sup>, waterproof/windproof parka, long-sleeved cotton shirt, singlet<sup>1</sup>, bushshirt<sup>1</sup>, 1 or 2 jerseys<sup>1</sup>, waterproof/windproof overtrousers, nylon shorts, longjohns<sup>1</sup>, longs<sup>1</sup>, underclothes, swimming togs, 4pr socks<sup>1</sup>, hut shoes, boots, gaiters, mittens<sup>1</sup>, handkerchief.

### Day trip gear

First aid kit, compass<sup>2</sup>, map<sup>2</sup>, insect repellent, whistle, matches in waterproof container, water purification tablets, water bottle, thermos, pocket knife, camera<sup>2</sup>, binoculars<sup>2</sup>, hand lens<sup>2</sup>, note book<sup>2</sup>, pen and pencil<sup>2</sup>, 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, Glucose<sup>3</sup>, 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 p.m. 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 p.m. from Mairangi, 7.10 University.

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

No. 17 Railway Station: 6.35 p.m. 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 p.m. from University.

No. 23 Southgate: 10.10 p.m. 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 Metlink 0800 801-700.

# FIELD TRIPS AND EVENING MEETINGS: OCTOBER 2007–APRIL 2008

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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.

**Saturday 6 October: Field trip** **Pakuratahi Forest: Climie Ridge - Goat Rock -Tane's Track**  
Botanise mature and regenerating forest, on and off tracks. Boots essential. Full day trip. Map S27, Lake Wairarapa. Meet 9 a.m. at Tunnel Gully Recreation Area, Plateau Rd, Te Marua, Upper Hutt. NOTE: Change of meeting place and route! Co-leaders: Chris Horne 475 7025, Barbara Mitcalfe 475 7149.

**Monday 15 October: Evening meeting** **Prof. Phil Garnock-Jones: research students**  
Speakers: Senior students from the VUW School of Biological Sciences will talk about their projects. The programme is expected to include contributions from the following post-graduate students, some of whom have received financial assistance from BotSoc: • Mei Lin Tay: New Zealand *Plantago* (Plantaginaceae)—origins and evolution. • Peter Martin: Taxonomic relationship and Phylogeography of *Lessonia* species around New Zealand and Subantarctic Islands. • Gesine Pufal: Seed dispersal in cushion plants. • Joe Buchanan: Hybridisation in *Carpophyllum*. • Daniel McNaughtan: Biology of *Colpomenia*.

**Saturday 20 October: Field trip** **Dench garden weeding**  
Co-leaders: Arnold and Ruth Dench, 37 Lyndfield Lane, Newlands, ph 477 4490. Bring suitable weeding tool, kneeler, gloves and food; hot drinks provided.

**Saturday 3 November: Field trip** **Whareroa Farm, Paekakariki**  
See wetlands being restored, and Campbell Track with *Carex secta*, then botanise regenerating forest and three remnants of mature lowland forest. The farm was purchased by DOC in 2005. Boots recommended! Meet 9 a.m. at gate to Whareroa Farm, opposite entrance to Queen Elizabeth Park - leave SH1 at that exit. Map NZMS 260 R26 Paraparaumu. Catch 8.0 a.m. train from Wellington and alight at Paekakariki Station - advise Karen if you wish to be met. Co-leaders: Karen Palmer 499 1381, Ann Evans, Whareroa Guardians Community Trust Inc.

**Saturday 17 November: Field trip** **Te Marua Bush workbee**  
NOTE EXTRA FIELD TRIP  
In partnership with GWRC, BotSoc has undertaken since 1989 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 work. Bring: gloves, kneeler, weed bag, and your favourite weeding tools e.g. trowel, hand fork, loppers, pruning saw, pinch bar. Meet: Upper Hutt Station carpark at 9 a.m., or Te Marua Bush at 9.30 a.m. (250 m north of Te Marua Store and 50 m off SH2 along the road to Te Marua Lakes, Kaitoke Regional Park). Catch 8.05 a.m. train on Hutt line from Wellington Station. If you plan to use the train to Upper Hutt please ring the leader to arrange pickup. Maps: R26 Paraparaumu and Upper Hutt street map. Co-leaders: Glennis Sheppard 526 7450, Sue Millar 526 7440.

**Monday 19 November: Evening meeting** **The seven dimensions of restoration ecology**  
Dr Colin Meurk, Landcare Research, Senior Scientist; Restoration, landscape and urban ecologist, will discuss protection, habitat frameworks, the fine structure, landscape management connectivity, aesthetic considerations, and consciousness as the key elements to a NZ - Aotearoa conservation strategy.

**Saturday 1 December: Field trip** **Pukerua Bay–Plimmerton**  
Botanise PCC's Raroa Reserve, DOC's Wairaka Scientific Reserve, part of the Carrad's QEII Covenant, and the coastal escarpment. See coastal broadleaf forest, scrub, grasslands, mat plants, and the weed fern, *Polypodium vulgare*. Meet 9.15 a.m. at reserve entrance at south end of Raroa Place, Pukerua Bay. Map R26 Paraparaumu and street map. Catch 8.30 a.m. train from Wellington to Pukerua Bay. If coming by car, return to it by train from Plimmerton. Leader: Robyn Smith 236 6086.

**Saturday 8 December: Field trip** **Hutt City rata walk**  
See up to forty northern rata and some southern rata in flower as you walk through Lower Hutt city and suburbs. See them all on an 11km/4hour walk or see fewer of them on a shorter walk. Map supplied.  
Meet: 9 a.m. Hutt City i-SITE Visitor Centre, The Pavilion, 25 Laings Rd, Lower Hutt. Alight in Bunny St. L.Hutt. Take Stagecoach Flyer no. 91 bus 8.05 a.m. from Courtenay Place or 8.25 a.m. from Upper Hutt. Bring lunch and drink. Leader: Dave Holey 566 3124; deputy leader: Gordon Leary 527 7380.

**Thursday 30 January – Friday 8 February 2008: Field trip****Aotea/Great Barrier Island**

Booking form on page 25 of Newsletter. Book soon to avoid disappointment!

GB has volcanic origins. Its bluffs and ridges bear regenerating kauri forest, and its rolling hills, sweeping white sand beaches, dunes, tidal creeks, and wetlands, provide a wide range of habitats for indigenous flora and fauna. GB has no possums, deer, wallabies, mustelids, hedgehogs, Norway rats! Areas we may visit include: • Hirakimata/Mt Hobson 621 m—endemic *Kunzea sinclairii*, *Olearia allomi*, *Veronica macrocarpa* aff. *latisepala*. Fantastic landforms! • Kaitoke swamp—largest unmodified wetland in Auckland region; • Whangapoua Estuary - almost unmodified; • Harataonga coastal walkway; • Whangaparapara road - Kaiaraara - regenerating coastal forest; • Other shorter trips; • QEII National Trust Open Space Covenants. Maps: NZMS 260 SO8, SO9, TO9. (GB & Little Barrier, NZMS 259 19798 is out of print). Brochure: *Aotea Great Barrier Island, Hauraki Gulf Maritime Park*. \$2. DOC Visitor Centre, 18-32 Manners St, WN. Book: *Great Barrier Island*. Don Armitage 2004. Canterbury University Press. RRP \$40.

**Monday 18 February: Evening meeting****Trees in the urban environment**

Bruce Moorman, Arboriculture Manager/Acting Operations Manager, WCC, will discuss the challenges faced by council arborists to establish and maintain trees in and around cities, and what they are doing regarding tree preservation and heritage tree protection. Bruce will also discuss resource consents and balancing ratepayer rights and tree protection.

**Saturday 23 February: Field trip****Druce garden workbee**

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 1 March: Field trip****Gracefield Scrub, Wainuiomata**

Visit a remnant of swamp that once covered large areas of Wainuiomata. See *Ranunculus macropus*, *Baumea rubiginosa*, *Gahnia xanthocarpa* and a variety of *Carexes*. We will also botanise regenerating bush in the hills above the swamp. Meet 9.0 a.m. at the carpark on the east side of Woburn Station. Catch 8.35 a.m. train from Wellington Station, 8.30 a.m. train from Upper Hutt Station. Map R27 Wellington. Bring gumboots for the swamp. Leader: Chris Hopkins 564 3980.

**Monday 17 March: Evening meeting****Members' evening**

Please share your botanical slides—maximum 20/person—and photographs taken on BotSoc trips, your paintings, drawings and your favourite botanical readings. Plant specimens would add to a memorable evening.

**Friday 21 March – Monday 24 March: Easter field trip****Western Ruahine Range**

Botanise Ngamoko Range, Ruahine Forest Park, and reserves in the Pohangina Valley—possibilities include tussock grasslands, beech and cedar forest, lowland podocarp forest, and even plant communities on road cuttings. Maps: T22 Mangaweka, U22 Ongaonga, T23 Kimbolton, and Parkmap 274-05 Ruahine. *Western Ruahine Forest Park Walks*—\$2 at DOC Visitor Centre, 18-32 Manners St, WN. *Ruahine Forest Park – walks and tramps*, Kathy Ombler 1993. Accommodation: Sixtus Lodge, east of Apiti, via Table Flat Rd, and Limestone Rd; \$10 pp/night; bring own pillows and bedding. Pot luck dinners—confer with Chris to ensure we get plenty of variety; bring own breakfast and lunch.. Co-leaders: Chris Horne 475 7025, Barbara Mitcalfe 475 7149.

**Saturday 5 April: Field trip****Eastern Hutt catchment**

Botanise track to Phillips Stream, including wetland, then TL terraces of Eastern Hutt River—matai/northern rata-hardwood forest, then TR, and track to saddle—beech/hinau/kamahia forest, with some podocarps and northern rata. See large patches of *Dawsonia superba*. Other possibilities: botanise lower end of Quoin Ridge, or downstream to Western Hutt River. We will drive to end of 4WD road in Greater Wellington Regional Council vehicles. Meet 9 a.m. at Kaitoke Regional Park ranger station, Waterworks Rd, off SH2 at Kaitoke. Catch 7.35 a.m. train from Wellington to Upper Hutt - ask leader to meet you. Map S26 Carterton. Leader: Owen Spearpoint, GWRC 562 8780, home 562 8780. Booking essential, numbers strictly limited.

**Monday 21 April: Evening meeting****Plants of south-western Australia**

Speaker: Leon Perrie, Curator of Botany, Te Papa, will present his botanic observations as spotted on the Bibbulmun Track between Perth and Albany, Western Australia, during the spring-flower season from mid-September.

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

## EVENTS

- 22 September. **Bushy Park Trust.** 10.30 a.m. Interpretation Centre, Bushy Park Sanctuary, Kai Iwi, near Wanganui.
  - Now – 30 November. **BioBlitz Display.** Museum of Wellington City & Sea, Bond Store, Queens Wharf. Entry free.
  - 23 September–7 October. **Spring Festival.** See Wellington City Council brochure.
  - 23 September. **Native ferns – guided walk.** Meet 2 p.m., Otari-Wilton's Bush Information Centre, 160 Wilton Rd, Wilton. Leader: Leon Perrie, Te Papa.
  - 25 September. **The bush – a new theme of Te Ara – encyclopedia of NZ.** Over 100 entries on NZ's terrestrial environment, major plant groups, ecosystems and animals. After 25/9 view at [www.teara.govt.nz](http://www.teara.govt.nz)
- Series of three short courses** at Otari-Wilton's Bush, 160 Wilton Rd, each one Wednesday 7–9 p.m.; and one Saturday 10 a.m.–noon; \$60 for three, or \$30 each:
- 3 & 6 October. **The cultivation of native plants.** Tutor: Rewi Elliot, Curator/Manager, Otari-Wilton's Bush.
  - 21 & 24 November. **Introduction to our native ferns.** Tutor: Dr Leon Perrie, Te Papa.
  - 28 November & 1 December. **What bug is that?** Tutor: Dave Burton, Victoria University.
- Bookings: Onslow College, ph 477 1118, e-mail [commed@onslow.school.nz](mailto:commed@onslow.school.nz)
- 5 October. **NZ Plant Conservation Network AGM.** 5–8 p.m., Turnbull House, Bowen St, WN. **Public lecture, 6.30 p.m.:** Dr Matt McGlone, Science Leader, Biodiversity and Conservation, Landcare Research *The NZ biodiversity crisis: symbolic acts, imaginary friends and real loss.* NZPCN, PO Box 16 012, WN, [events@nzpcn.org.nz](mailto:events@nzpcn.org.nz).
  - 9 October. **Wilderness and heritage preservation in NZ.** Dr. Les Molloy. 8 p.m., Tararua Tramping Clubrooms, 4 Moncrieff St, Mt Victoria.
  - 10 October. **Hellaby Indigenous Grasslands Trust – 6th Annual Geoff Baylis Lecture.** 5.30 p.m. Speaker: Prof. Alan Mark: *The Trust's contribution to the understanding of, and changing attitudes towards, our indigenous grasslands.* Auditorium, University of Otago, College of Education, Union St E, Dunedin.
  - 14 October 07 – 20 July 08. **Wainuiomata Water Catchment guided tours.** 14/10, 4 & 25/11, 9/12, 20/1/08, 10 & 24/2, 9/3, 11 & 25/5, 15/6 – contact Joanne Clifford-Marsh, Greater Wellington Regional Council, ph 526 5332.
  - 24 October – 17 November. **What native plant is that?** Wednesday lectures: 24/10, 14/11 7–9 p.m.; Saturday field trips 27/10, 3, 10 & 17/11. Tutor: Dr John Dawson. \$60. Bookings: Onslow College, ph 477 1118, e-mail [commed@onslow.school.nz](mailto:commed@onslow.school.nz)
  - 28 October. **Huntleigh Park, Crofton Downs.** Guided botanical walk. Meet 2 p.m. at Girl Guides Centre, off Silverstream Rd. Leader: Olaf John.
  - 27 November – 4 December. **Chatham Islands – botanical camp.** Canterbury BotSoc, c/- Margaret Geerkens, 03 352 7922, [bert.marg@xtra.co.nz](mailto:bert.marg@xtra.co.nz)
  - 17 December – 17 February 2008. **Linnaeus Tricentenary exhibition.** Treehouse, Wellington Botanic Garden. NOTE: both dates to be confirmed – ring Leanne Killalea 472 0317, or Treehouse 499 1400.
  - 1–7 March. **SeaWeek, including Kupe/Kevin Smith Marine Reserve opening ceremony.** Island Bay. Date and time in next Newsletter. Contact: Peter Simpson, DOC/Poneke Area, ph 472 5821.
  - April 2008 **Identifying marine macroalgae.** Tutor: Wendy Nelson. Wellington. Registration form at [www.niwascience.co.nz/edu/training](http://www.niwascience.co.nz/edu/training)

## GRANTS AVAILABLE

- 15 November: **Wellington Botanical Society Jubilee Award.** See **article in this issue.**
- 19 November. **Lottery Environment and Heritage Grants.** These grants are for projects that promote, protect and conserve NZ's natural, physical and cultural heritage.
- Contact 0800 824 824, or [www.cdgo.govt.nz](http://www.cdgo.govt.nz)
- 30 November. **Wellington City Council Environmental Grants.** Criteria, application forms and other information available 6 weeks before closing dates.
- Grants Advisor, WCC, PO Box 2199, WN. Ph 801 3158, e-mail [grants@wcc.govt.nz](mailto:grants@wcc.govt.nz) [www.wellington.govt.nz/services/grants](http://www.wellington.govt.nz/services/grants)

## PUBLICATIONS

- 1a. **Conservation Action – Te Ngangahau ki te Kura Taiao.** 7/06–6/07.
- 1b. **Role and effectiveness of conservation boards as a community voice in conservation management.** C. Wilson 2007. *Science for Conservation* 273. 34 p.
- 1c. **Climatic prediction of seedfall in *Nothofagus*, *Chionochloa* and *Dacrydium cupressinum*.** A. Monks 2007. *DOC R&D Series* 276. 36 p.
- Science & Technical Publishing, DOC, PO Box 10 420, WN 6143. E-mail: [science.publications@doc.govt.nz](mailto:science.publications@doc.govt.nz)
- 2a. **Wild orchids of the lower North Island – a field guide to orchids of the lower North Island from Manawatu to Wellington.** P de Lange, J Rolfe, I St George, J Sawyer 2007. \$15 to BotSocers—at Conservancy Office, 181 Thorndon Quay, and DOC Visitor Centre, 18–32 Manners St, WN. See item in this Newsletter.
- 2b. **Kupe/Kevin Smith Marine Reserve.** 4 p.
- 2c. **Legal protection plan for Recommended Areas for Protection in Wellington Conservancy – A tool for prioritising effort.** C. Graeme, J. Sawyer, A. Griffiths 2006. 43 p.
- 2d. **FOOTnotes.** No.28, 7/07: restoring Waikanae Estuary Scientific Reserve; bell heather/*Erica cinerea* found in Tararua Forest Park; Kupe/Kevin Smith Marine Reserve; Restoration Day 12/5/07 attended by >210 people; Conservation Week 6–12/08/07; etc.
- 2e. **Wellington Conservation Board – minutes of meetings.**
- Department of Conservation, PO Box 5086, WN 6145. Ph 472 5821.
3. **The reassessment of 1080 – an informal guide to the 8/07 decision of the Environmental Risk Management Authority.** 28 p.
- ERMA, PO Box 131, WN 6140. Ph 916 2426, [info@ermanz.govt.nz](mailto:info@ermanz.govt.nz)
4. **EnviroNZ – Take Taiao Aotearoa.** Magazine published every 4 months.
- Ministry for the Environment, PO Box 10 362, WN. [reception@mfe.govt.nz](mailto:reception@mfe.govt.nz)
5. **Open Space.** No.70, 7/07: priorities for protecting biodiversity on private land; assessing effectiveness and benefits of wetland restoration; kamahi; controlling pigs; etc.
- Queen Elizabeth II National Trust, PO Box 3341, WN 6140. Ph 472 6626. [qe2@qe2.org.nz](mailto:qe2@qe2.org.nz)
6. **Weedbusters! Manchurian wild rice, pampas grasses, arrow bamboo, giant reed grass, wild ginger, etc.**
- Weedbusters, PO Box 4055, Hamilton. Ph 0274 434 431, [info@weedbusters.org.nz](mailto:info@weedbusters.org.nz)
- 6a. **2007/08 Annual Plan.** Parks p 39–44, land p 53–58.
- 6b. **Regional Pest Management Strategy – Operational Plan 2007/08.** View at GWRC offices, or web site.

- 6c. **Understanding the 'wet' in wetlands – a guide to the management of freshwater wetland hydrology.** 31 p.
- 6d. **Can fish fly? – native freshwater fish of our region.** 4 p + 8 sheets looseleaf.
- *Greater Wellington Regional Council, PO Box 11 646, WN. Ph 384 5708. [www.gw.govt.nz](http://www.gw.govt.nz)*
- 7a. **Annual Plan 2007/08.** Gardens and beaches p 31; green open spaces p 32-33; environmental conservation attractions p 37.
- 7b. **Branch Out.** Vol 24, Winter 2007: Tapu Te Ranga Marae/Manawa Karioi Society revegetation project; replacing pines on Town Belt; planting to control climate change; Biodiversity Action Plan; Arbor Day planting of 3 threatened coastal species; etc.
- 7c. **Bird-attracting plants for your home garden (obverse); Recommended reading (reverse).** Produced at Otari-Wilton's Bush.
- 7d. **In the neighbourhood.** Rewi Elliot, Curator/Manager, Otari-Wilton's Bush. Article re eco-sourcing – published in *The Dominion Post* – "Indulgence" section, 1/9/07.
- *Wellington City Council, PO Box 2199, WN. Ph 499 4444. [lyn.murphy@wcc.govt.nz](mailto:lyn.murphy@wcc.govt.nz)*
8. **Has the debate over genetics and extinction of island endemics truly been resolved?** I.G.Jamieson 2007.
- *Animal Conservation 10: 139-144.*
9. **Land use effects on 'spring annual' herbs in rare non-forest ecosystems of NZ.** G.Rogers, J.Overton, R.Price 2007.
- *NZ Journal of Botany 45: 317-327.*
10. **Trilepidea.** No.42, 5/07: Native plant sales up; plant of the month – *Earina autumnalis*/Easter orchid/raupeka; report on Otari BioBlitz 23-24/3/07; nominations sought for Important Plant Areas; etc. No.43, 6/07: plant of the month – *Dacrycarpus dacrydioides*/kahikatea; MWH Threatened Plant Seed Bank opened; QEII Covenant inspections; Important Plant Areas - criteria; fact sheets on indigenous orchids completed; No.44, 7/07: Network AGM 5/10/07 at Turnbull House, WN; plant of the month – *Nephrolepis flexuosa*/native ladder fern; survey of threatened ferns at Waikato geothermal sites; fact sheets for *Bolboschoenus*, *Ficinia*, *Schoenoplectus*, *Schoenus* completed; native orchid field guide published by DOC; etc. No. 45, 8/07: opening of MWH Threatened Plant Seed Bank; plant of the month – *Archidium elatum*, Nationally Endangered endemic moss; *Eagle's Complete Trees and Shrubs* of NZ wins Montana Medal for Non-Fiction; members asked to register as seed collectors; *in situ* conservation for *Atriplex hollowayi*; Network AGM 5/10/07 – see Events section.
- 11a. **NZ Botanical Society Newsletter.** No.88, 6/07: obituary – Nancy M.Adams; *Hebe pubescens* ssp. *pubescens*; biographical notes – Joseph Robert Annabell; etc.
- 11b. **NZ Botanical Society Newsletter.** Back issues: Nos.1 (8/85) – 46 (12/96) \$2.50 ea; 47 (3/97); 48 - 50 (12/97) \$3.00 ea; 51 (3/98) onwards \$3.75 ea.
- *NZBotSoc, c/- Canterbury Museum, Rolleston Ave, CH 8001.*
12. **Wellington Botanical Society Bulletin.** No.50 3/07: recovery after sustained ungulate control - the structure and condition of kamahi forests at Mt. Bruce, Wairarapa; preliminary list of liverworts from Hinewai, Banks Peninsula; *Lepidium oleraceum* – a threatened herb of coastal Wellington; survival of *Peraxilla* mistletoes in Tararua Range; northern rata – a species in decline?; *Coprosma parviflora* and *C. ciliata* – going round in circles with awkward questions!; vascular plants in Porirua Scenic Reserve and the bush on Pikarere Farm including Mill Creek catchment. NOTE: Members should have received their copies in April. \$11 incl. p&p, to individual non-members; \$21 incl. p&p, to NZ organisations.
- *Wellington Botanical Society, PO Box 10 412, WN 6143.*
- 13a. **Natural History of Rangitoto Island.** \$35 incl. p&p.
- 13b. **Auckland Botanical Society Journal.** Vol.62(1) 6/07: Chatham Islands – trip report/orchids/mosses/seaweeds/fungi/plant pests; 20th Fungal Foray, Westport 5/06; etc.
- 13c. **Dictionary of Maori plant names.** J. Beaver 1991. 75 p. Sale price \$2 incl. p&p.
- 13d. **Meanings and origins of botanical names of NZ plants.** Marie Taylor 2002. \$27 incl. p&p.
- *ABS, PO Box 26 391, Epsom, AK.*
14. **Botanical Society of Otago.** No.51 6/07: comparing *Asplenium bulbiferum* and *A.gracillimum*; changes on Whangapoua Estuary, Great Barrier Is. in 3500 years; etc.
- *BSO, PO Box 6214, North Dunedin 9059.*
- Canterbury Botanical Society. 8/07: benefits of trees in urban areas; etc.**
- *CBS, PO Box 8212, Riccarton, CH 8440.*
15. **Manawatu Botanical Society.** 8/07: Rewanui Bush, and Rocky Hills Forest Sanctuary, Wairarapa; etc.
- *MBS, Jill Rapson, Ecology Group, Institute of Natural Resources, Massey University, PNth.*
16. **Rotorua Botanical Society.** No.48, 5/07: Okareka mistletoe restoration project; etc.
- *RBS, c/- National Forestry Herbarium, Ensis, Te Papa Tipu Innovation Park, PBag 3020, Rotorua 3046.*
- 17a. **Field guide to rushes, sedges and allied plants.** Graeme Jane. c.\$15.
- 17b. **Field guide to ferns and fern allies.** Revised. Graeme Jane. \$10.
- [gtjane@clear.net.nz](mailto:gtjane@clear.net.nz)
18. **Mosses and other bryophytes, an illustrated glossary.** 2<sup>nd</sup> edition. W.M.Malcolm, N.Malcolm. 336 p, h/c. Micro-Optics Press, Nelson. \$108.
- *Manaaki Whenua Press.*
19. **Forest & Bird.** No.324, 5/07: *Ranunculus acraeus*, new alpine buttercup described in N.Otago ranges; possible World Heritage Areas:- Kermadec Islands, Kahurangi-Farewell Spit, Rakaia-Rangitata-Hakatere; 1080 reassessment and guide; etc. No.235, 8/07: Climate change threat to World Heritage areas; climate change and conservation of biodiversity; Karori Sanctuary gets \$6.5m; Audrey Eagle wins at Montana Awards; flora and fauna protection in Kahurangi NPK; Kapiti Island Nature Reserve and Marine Reserve; Waitangi Park, WN; damage by deer; etc.
- *Royal Forest and Bird Protection Soc., PO Box 631, WN. Ph 04 385 7374, e-mail [office@forestandbird.org.nz](mailto:office@forestandbird.org.nz)*
20. **Kereru.** No.34, 7/07: \$6.5m grant for visitor and information centre; etc.
- *Karori Sanctuary, PO Box 9267, WN. Ph 929 9200, [www.sanctuary.org.nz](http://www.sanctuary.org.nz)*
21. **Friends of the Wellington Botanic Garden Newsletter.** 8/07: Bush remnants workshop 23/6; environmental ecologist engaged; 5/07: *Pittosporum crassifolium* and karaka control, and buffer plantings in bush areas; proposals for bush walks; interpreted bush walks proposed; etc.
- *FoWBG, PO Box 28 065, Kelburn, WN.*
22. **Friends of the Wellington Town Belt.** Membership brochure.
- *FotWTB, PO Box 24 016, Manners Street, WN.*
23. **Matiu Really Matters Newsletter.** 6/07: Since Lower Hutt Branch F&B began planting, over 100,000 plants have been raised and planted; karo removal; etc.
- *Matiu/Somes Island Charitable Trust, c/- WN Tenth's Trust, PO Box 536, WN.*
24. **Friends of Mana Island Newsletter.** No.32, 8/07: over 6000 trees planted – gaps being filled with ngaio and taupata; etc. No.31, 5/07: *Trisetum antarcticum*/shining oatgrass translocated to Mana; etc.
- *FoMI, PO Box 54 101, Mana 5247.*
25. **ECOLink.** 5/07: Launch of SeaNet, a web-based guide for contacting groups and agencies working on the management of human impacts and activities in the sea and coast—

[www.seanet.org.nz](http://www.seanet.org.nz); etc. 8/07: Annual conference report; cutting the carbon habit; Biodiversity Strategy review; coastal and marine matters; etc.

ECO, PO Box 11 057, WN. Ph 385 7545. [eco@reddfish.co.nz](mailto:eco@reddfish.co.nz)

26. **Canopy**. No.47, Autumn 07: New reserve to protect Waitomo Caves catchment; other Trust reserves; etc.

• *NZ Native Forests Restoration Trust, PO Box 80 007, Green Bay, Auckland 0643.*

27. **Great Barrier Island**. Revised edition. D.Armitage 2004. 192 p, p/b. \$39 95.

• *Bookshops*

28. **Life in the estuary: Illustrated guide and ecology**.

M.B.Jones and I.D.Marsden. 168p s/bound. \$24.95.

• *Bookshops.*

29. **BUSHCRAFT – Outdoor skills in the NZ bush**. New edition. \$25.

• *NZ Mountain Safety Council, PO Box 6027, WN 6141. Ph 385 7162 [orders@mountainsafety.org.nz](mailto:orders@mountainsafety.org.nz)*

30. **Gourmet tramping in NZ**. J.Sawyer and L.Baker 2007. Canterbury University Press.

• *Bookshops*

31. **Telopea – Journal of plant systematics**. Vol 11(4) 07: Nematoceras; Cassinia etc.

• *National Herbarium of New South Wales, Royal Botanic Gardens Sydney, Mrs Macquaries Rd, Sydney, NSW 2000.*

32. **Atlas of bird distribution in NZ 1994-2004**.

C.J.R.Robertson, P.Hyvonen, M.J.Fraser, C.R.Pickard 2007.

Ornithological Society of NZ. >400 plates.

• [OSNZ@xtra.co.nz](mailto:OSNZ@xtra.co.nz)

33. **Trees for Survival Newsletter– Children growing trees for our future**. No.2 6/07: Four TfS units in Hawkes Bay growing natives for restoration planting on ‘at risk’ land; can 1 million trees be planted in NZ this year?; etc.

• *TfS, PO Box 51 681, Pakuranga, Manukau 2140.*

*Ph 09 520 5723, [info@tfsnz.org.nz](mailto:info@tfsnz.org.nz)*

34. **East Harbour Environmental Association**. 9/07East

Harbour Regional Park management; trial plantings, Fitzroy Bay;

Carbon Reduction Action Group/CRAG; etc.

• *EHEA, PO Box 41 029, Eastbourne. [lawrences@paradise.net.nz](mailto:lawrences@paradise.net.nz)*

## SUBMISSIONS MADE

• **Draft provisions for the Regional Policy Statement**. 13/7/07:

• **Indigenous ecosystems**. We supported the inclusion of “indigenous” in the title – it was not in the title in the 1995 document; recommended that “indigenous ecosystems” be defined as including indigenous ecosystems, and mixed indigenous/exotic ecosystems which have the potential to become purely, or predominantly, indigenous in their composition; recommended that climate change be added as the most serious threat to indigenous ecosystems; recommended that the objective of increasing the area of indigenous ecosystems receiving active management to control threats to ecological health “by at least 10%”, be increased to 25%, in line with our commitments to the NZ Biodiversity Strategy, and the Kyoto Protocol; applauded Kapiti Coast District Council’s work preparing a schedule of areas of significant indigenous ecosystems, and recommended that this be done promptly by other territorial local authorities; recommended that the RPS includes a list of all the areas the council manages on behalf of the public, c. 50,000 ha, similar in detail to the DOC/WN Conservation Management Strategy Vol 2; asked the council to continue to control pest animals and pest plants on those public lands, and when ecological monitoring results indicate the need, intensify and/or expand its pest control operations;

recommended that the council require all territorial local authorities to provide incentives, e.g. grants, subsidies, rates relief, to encourage the maintenance and enhancement of indigenous biodiversity on private land; etc.

- **Public access to and along the coast, lakes and rivers**. recommended that all unformed legal roads (“paper roads”) be identified on the ground, encroachments removed from them, and information about them made available to the public. This will improve access to some indigenous ecosystems.
- **WCC Draft Biodiversity Action Plan**. 9/8/07. We **commended** WCC for preparing draft; **recommended** the title be **Indigenous** Biodiversity Action Plan; **commended** Berhampore Nursery for supplying appropriate, eco-sourced native plants for revegetation and restoration projects; **suggested** a list of publications on indigenous ecosystems for inclusion in an appendix to the plan; **welcomed** acknowledgement that lack of information is a threat to scrub and shrublands; **commended** WCC for killing feral goats; **recommended** that pohutukawa be added to the list of weeds on the coast; **suggested** Hue te Taka be considered as an island; **recommended** that raupo wetland in Opau Stream, carex wetland in Hawkens Gully, and wetland in Takarau Gorge, be listed; **noted** that funding of pest animal, and pest plant and weed control, is not adequate; **called** for prompt gazettal as Scenic Reserve, or Recreation Reserve, of lands held by WCC in fee-simple; **recommended** that the draft, and monitoring of its progress, be simplified, by combining closely related actions; **asked** that the timing of some actions be advanced; etc. See [www.wellingtonbotsoc.wellington.net.nz](http://www.wellingtonbotsoc.wellington.net.nz) for full submission.

## SUBMISSIONS DUE

- **5 October: Draft West Coast Te Tai o Poutini Conservation Management Strategy Review**. Inspect at DOC/HO, 18-32 Manners St, WN, or any Conservancy Office, or [www.doc.govt.nz](http://www.doc.govt.nz) under Getting Involved/Consultations/Current. Submissions to Draft West Coast CMS Review, DOC, PBag 701, Hokitika 7842, or [westcoastcms@doc.govt.nz](mailto:westcoastcms@doc.govt.nz)
- **1 November: WCC Proposed District Plan Change 61**. Rezoning of land off Huntleigh Park Way, Heke St, and Thatcher Cres, (Ngaio) from Rural Area to Residential (Outer). Properties: 11a H.P.Way, 69, 79, 83 Heke St, 19, 21 Thatcher Cres. Inspect at WCC Service Centre, WN Central Library, all branch libraries, [www.wellington.govt.nz/plans/index.html](http://www.wellington.govt.nz/plans/index.html). Submissions to WCC, PO Box 2199, WN, [www.wellington.govt.nz](http://www.wellington.govt.nz)
- **6 November: How to manage deer, chamois, thar and pigs – consultation document**. Secretary, PO Box 9134, CH 8243. [www.gameanimalpanel.org.nz](http://www.gameanimalpanel.org.nz)

## 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.

## New members

We welcome the following new members to BotSoc:

Stephen Cornille, Jock Fleming, Kester Gordon, Antony Kusabs, David Lee, Nikki Lloyd, Chris Moore, Les Moran, Dorothy Sanders, Karl Yager.

# Wellington Botanical Society

## President's report to the 68th Annual General Meeting, 2007

### Some highlights

A memorable trip to Rakiura/Stewart Island and the Catlins

- Excellent speakers
- Record numbers at monthly meetings
- The Society's 50th Bulletin
- Our contribution to the success of BioBlitz at Otari-Wilton's Bush.

### Membership

The Society has 260 members, down from 267 in August 2006. 14 new members joined and the Committee cancelled 12 memberships after sending several reminders about overdue fees. We have 121 ordinary, 30 group, 59 country, 5 student and 45 life members.

We introduced two new membership services:

- a list of contact details for those members willing to have their details circulated to other members
- making newsletters available by e-mail to reduce packing time and postage and paper costs.

### Trips

Our regular trips continued to provide opportunities for members to develop their plant identification skills. We were privileged this year to see more of the richness of the plant communities protected or under restoration by private land owners.

The updated and new plant lists prepared on our trips are passed to the Department of Conservation (DOC). These records may in future become a valued resource for analysing and reporting on what's been lost and where other species may still be found.

Our summer trip to Rakiura Stewart Island and the Catlins was blessed with mostly fine weather. A visit to Ulva Island showed what can happen when pest animals are eradicated. This left me thinking about ways of recording changes in ecosystems closer to home. If only it were as easy to monitor ecosystem health as it is to record the species we see.

The superb organisation of the summer trip, including the food, has, however, had a downside as no-one has volunteered to lead next summer's trip to Great Barrier Island. There's a shortage of people with the skills and time to provide "the full package" offered in recent years.

The Committee is therefore experimenting with a new approach. We propose simplifying the leadership role by booking catered evening meals, asking participants to make their own travel arrangements and sharing out the other tasks. Committee members have signed up for some roles and remain optimistic of finding volunteers with the necessary skills for the remaining tasks.

We've come a long way from the days when we all slept on the ground, drank from streams, cooked on open fires, and the evening meals rotated through tinned fish, tinned corned beef, tinned tongue and de-hydrated mince.

### Meetings

This year's speakers have been stimulating and informative. I'd love to see their knowledge and thoughtful suggestions

disseminated more widely, perhaps in the *Bulletin* or on our web site.

We've had feedback that there were too many slides at the Members' Evening. Next year we plan to ask members to choose their 20 most memorable photographs so there is more time to see the paintings and sketches, and hear the readings that other members may bring to the meeting.

### Publications

#### *Bulletin 50*

We celebrated a major milestone in the Society's history, our 50th *Bulletin*, with a special cover. This featured an original wood-cut by John Christeller, developed from one of Tony Druce's favourite photos, and recalling artwork by John's mother on covers of some early *Bulletins*.

This year's *Bulletin* generated a series of discussions which are leading to greater clarity about the purpose of the *Bulletin*, and the respective roles and responsibilities of the Editor and the Committee.

The *Bulletin* lies in an awkward niche. Some professional botanists will always prefer to publish in refereed journals, while some unpaid botanists may think their material is not sufficiently scientific. The *Bulletin*, however, has always been a varied journal so that it caters for the range of members' interests. In 1989, Ted Williams, as guest *Bulletin* editor, made a plea for the *continuation in our pages of at least some informal and narrative writing, complete with personal and humorous touches*. In 1996, Carol West said "*remember, all botanical observations are relevant, and the style is not as formal as for refereed botanical journals*."

I therefore encourage members to talk to current editor John Sawyer about possible articles so the Society can again achieve its goal of publishing one good *Bulletin* each year.

#### *Newsletters*

The Society produced newsletters in September, December and May. These are highly valued for their detailed information about events, opportunities and publications.

### Awards

#### *Montana Book Awards*

Audrey Eagle's stunningly beautiful *Complete Trees and Shrubs of New Zealand* recently won the non-fiction category of the Montana Book Awards. Congratulations Audrey.

Instead of making a Jubilee Award this year, the Society supported Botanical Society of Otago's initiative to publish the supplement to Audrey's main volumes.

#### *National Awards*

The Society submitted or supported nominations for New Zealand's two major botanical awards, the Allan Mere Award and the Loder Cup. We hope to announce two successes in a future newsletter.

#### *Student Field Grants*

The Society made grants to support their field work of four Victoria University students: Di Batchelor, Joe Buchanan, Daniel McNaughtan and Mei Lin Tay.

#### *Wellington Secondary Schools Science Fair*

The Society's 2006 Award went to 11 year old Tony Armstrong for his study of the density and strength of New Zealand woods. Judging of the 2007 entries takes place later this month.



## Advocacy

The Society has advocated for the protection and restoration of New Zealand's indigenous plants in the Wellington region and further afield. A small group of members prepared submissions on topics ranging from draft management plans to regional pest management strategies and ERMA's 1080 Review. More members contributed to a submission on the future management of Rakiura Stewart Island through discussions on the summer trip.

The Society also wrote letters of support for applications for funding for restoration projects, for acquisition of additional land to reserves, and to raise concerns with councils. Issues such as the future of the facilities at Percy Scenic Reserve require persistence over many years.

## Community outreach

### *BioBlitz*

Many members of the Society contributed to the success of BioBlitz, an event designed to raise the profile of Otari-Wilton's Bush in its centennial year. We conducted a systematic inventory of the indigenous and adventive plants in the reserve, and were pleased about some of the new records. Members also offered displays, talks and guided walks.

### *Displays*

Displays at open days and conservation awareness events have again helped raised the profile of the Society and awareness of New Zealand's native plants.

### *Brochure for Karori Sanctuary*

Work continued on refining the text for a brochure about plants in the Sanctuary. Word limits have focused the authors' minds on identifying key points and how best to present them.

## The committee

The Committee held eight meetings, appreciating the comfort of members' homes. Our Agendas were very full, but anticipate that the development of more policies will speed up the induction of new Committee members and reduce the time needed to discuss some items. The incoming Committee will, however, need to consider how best to manage our core activities and the many other opportunities available.

I want to offer my personal thanks to members of the Committee for their support, patience and hardwork. I had no idea how much work went into running the Society.

## Acknowledgements

Many other people contribute to the Society's activities in many different ways. Thanks and acknowledgements are due to:

- all our trip leaders and speakers
- contributors to the production and mail- out of the Bulletin and Newsletter
- Peter Beveridge for auditing the accounts
- Arnold and Ruth Dench for increasing our knowledge of special plants and donating the proceeds from plant sales to the Society's Jubilee Award Fund
- Barry Dent for preparing address labels for the newsletters and *Bulletin*
- Prof. Phil Garnock-Jones for administering our field grants for students
- Richard Herbert for managing our web site
- Barbara Mitcalfe for managing our displays
- Jeremy Rolfe for designing our newsletters and *Bulletin* 50
- John Sawyer for editing *Bulletin* 50
- Joyce Stretton for managing the Society's Student Award at the Science Fair
- Julia White for managing e-mails from local and international enquirers.

## Looking to the future

We've usually streamlined the AGM to avoid cutting into the speaker's time, and that is the intention again this year. However, as our previous president, Joyce Stretton, and Bulletin Editor, John Sawyer, have both expressed challenges to the Society in the past year, I propose suggesting to the incoming Committee that we provide an opportunity some time during the next 12 months for a wider discussion with members about their hopes, expectations and priorities.

I feel privileged to have been given the opportunity to lead such an amazing organisation. Thank you all for your support.

*Bev Abbott*

## EVENING MEETINGS August 2006–July 2007

Date	Speaker	Topic	Numbers
21 August 06	Melanie Dixon	Wetland issues	33
18 September 06	Dr Peter Williams	Exotic Plant Invasions: the other half of the flora	41
16 October 06	Dr Carol West	Vegetation of Stewart Island and the Catlins	41
27 November 06	Mei Lin Tay Di Batchelor Daniel McNaughtan	Evolution of NZ Plantago Fungal survey of Mt Holdsworth	33
19 February 07	Dr Colin Meurk	Why and how cities will make or break our biodiversity	54
19 March	Dr Sean Weaver	Role of plant communities in global climate change	42
16 April 07	Jessica Costall and Jill Rapson	Native species gone weedy? A case study with karaka	42
21 May 07	Members, evening		32
18 June 07	Dr Ian Atkinson	Revegetation vs restoration	70
16 July 07	Dr Phil Garnock-Jones	<i>Hebe</i> or <i>Veronica</i> – why change back?	40
		<b>Average</b>	<b>43</b>

## FIELD TRIPS August 2006–August 2007

5 August 06	Queen Elizabeth Park	16
7 October 07	Keith George Memorial Park/Silverstream Reserve	14
4 November 06	Pakuratahi Forks, Kaitoke Regional Park	12
2-3 December 06	Clive Paton's bush, south Wairarapa	13
9 December 06	Hutt City rata walk	13
28 December–11 January	Rakiura Stewart Island and the Catlins	36
22 January 07	Waimapihi Reserve, Wellington City	11
3-4 February 07	Dunvegan Station and Bankview Station, Wairarapa	17
25 February 07	Wainuiomata Water Catchment	26
10 March 07	Crafar wetland covenant, Te Hapua Wetland, Kapiti	6
6-9 April 07	Tautane Station, Cape Turnagain	24
5 May 07	Johnny's Bush, Makara Farm and Fenaughty's bush, Makara Beach	17
2 June 07	Redwood Bush KNE	13
1 July 07	Matiu/Somes Island	6
<b>Average</b>		<b>16</b>

## WORK BEES

2 September 06	Monitoring Makara Foreshore Reserve plant communities	14
3 October 06	Monitoring Greater Wellington's plantings of indigenous riparian plants	7
28 October 06	Dench garden weeding	11
18 November 06	Te Marua Bush	6
31 March 07	Druce Garden	9
14 July 07	Te Marua Bush	7
<b>Average</b>		<b>9</b>

### 2007/08 committee

At the 68th Annual General Meeting on 20 August, the following were elected:

<b>President</b>	Bev Abbott	475 8468
<b>Vice-Presidents</b>	Gordon Leary	527 7380
	Mick Parsons	473 1142
<b>Secretary</b>	Barbara Clark	233 8202
<b>Treasurer</b>	Rodney Lewington	970 3142
<b>Auditor</b>	Peter Beveridge	237 8777
<b>Committee</b>	Frances Forsyth	384 8891
	Dave Holey	566 3124
	Chris Horne	475 7025
	Sunita Singh	387 9955
	Robyn Smith	236 6086
<b>Bulletin Editor</b> (appointed)	John Sawyer	472 5821 (w)

### Treasurer's report for the year ended 31 June 2007

The audited accounts for the past year have been circulated and I am happy to answer questions about these.

You will note that we made a small surplus on our normal operations covered by the General Account: \$150, after making a \$2,000 contribution to the preparation of the supplement to the forthcoming Audrey Eagle's *Trees and Shrubs of New Zealand*.

From the Society's investments we have provided \$3,800 to support botanical research and education.

Investment Income	(2,935+2,651+ 78+ 507 = \$ 6,189)
Last year	(2,492+2,048 +464) = \$ 5,004

Our assets remain at about the same level as last year.

Our operational costs in the coming year appears to be much the same as next year.

I am therefore proposing that subscriptions levels for the 2007–2008 year should be the same as last year:

Ordinary	\$25 reducible to \$20 if paid by 30 Nov. 2007
Country	\$20 reducible to \$15 if paid by 30 Nov. 2007
Student	\$10 reducible to \$5 if paid by 30 Nov. 2007
Group/family	\$30 reducible to \$25 if paid by 30 Nov. 2007

*Rodney Lewington, Treasurer*

**Wellington Botanical Society Inc.**  
**Income and Expenditure for the Year ended 30 June 2007**

**General Account**

2006	Expenditure	2007	2006	Income	2007
1,756	Printing and Stationery	1,633	2,281	Ordinary subscriptions	2,357
689	Post and telephone	1,230	829	Country subscriptions	875
477	Meeting expenses	527	25	Student subscriptions	10
172	Sundry expenses	272	837	Group subscriptions	555
325	Subscriptions to other organisations	50	84	Subscriptions in arrears	25
			4,056	Total Subscriptions	3,822
312	Depreciation on equipment	250			
920	Transfer to Student Award Fund	920	2,935	Interest on investment	3,290
				Contribution by DOC for plant lists	250
384	Purchase of publications	1,104	394	Sale of publications	1,258
	Transfer to Jubilee Award Fund of surplus on sale of publications	154			
	Transfer to Jubilee Award Fund	2,000			
200	Donation to the Lucy Moore Memorial Fund				
2,000	Contribution to the Supplement to <i>Eagle's Trees and Shrubs of New Zealand</i>				
150	Surplus on General Account for the year	481			
<b>\$7,385</b>		<b>\$8,620</b>	<b>\$7,385</b>		<b>\$8,620</b>

**Jubilee Award Fund**

2006	Expenditure	2007	2006	Income	2007
			35,001	Opening Balance	38,150
	Science Fair Award*	100	2,302	Transfer from General Account	2,000
				Donations	1,558
2,000	Jubilee Award		196	Surplus on sale of publications	154
				Plant sales	262
				Card sales (net of cost)	31
38,150	Closing Balance	45,012	2,651	Interest on investment	2,958
<b>\$40,150</b>		<b>\$45,112</b>	<b>\$40,150</b>		<b>\$45,112</b>

\*Note that because of the timing of the Science Fair, the 2005-6 award was paid in the 2004-5 financial year.

**Tom Moss Student Award in Bryology**

2006	Expenditure	2007	2006	Income	2007
				Opening Balance	1,213
				1,135 Donations	300
1,213	Closing Balance	1,607	78	Interest on investment	94
<b>\$1,213</b>		<b>\$1,607</b>	<b>\$1,213</b>		<b>\$1,607</b>

**Student Field Grant**

2006	Expenditure	2007	2006	Income	2007
			8,010	Opening Balance	7,637
1,800	Grants to Students	1,500	507	Interest on Investment	592
7,637	Closing Balance	7,649	920	Transfer from General Account	920
<b>\$9,437</b>		<b>\$9,149</b>	<b>\$9,437</b>		<b>\$9,149</b>

**Provision for Bulletin**

2006	Expenditure	2007	2006	Income	2007
			11,226	Opening Balance	9,066
2,419	Printing <i>Bulletin</i>	2,136	454	Sale of <i>Bulletin</i>	366
195	Distribution costs	281			
9,066	Closing Balance	7,015			
<b>\$11,680</b>		<b>\$9,433</b>	<b>\$11,680</b>		<b>\$9,433</b>

**Balance Sheet at 30 June 2007**

2006	Liabilities	2007	2006	Assets	2007
2,010	Life Membership Fund	2,010	691	BNZ Current Account	2,070
			3,040	BNZ Savings Account	623
38,150	Jubilee Award Fund	45,012	3,731	Bank Funds on current account	2,693
1,213	Tom Moss Student Award in Bryology	1,607			
7,637	Student Field Grant Fund	7,649	318	Computer less depreciation	254
			252	Fax machines less depreciation	202
9,066	Provision for <i>Bulletin</i>	7,015	680	Display unit less depreciation	544
			30	Projector	30
			16	Stock of Bulletins	16
				Stocks of cards	96
			24	Camping equipment	24
387	Sundry creditors	13		Sundry debtors	223
				Investments	
42,432	Accumulated fund as at 30 June 2006		11,800	Tower Mortgage Plus Fund	11,800
	add surplus for the year	481	10,279	National Bank	10,279
	Accumulated fund at 30 June 2007	42,913	47,108	BNZ Finance	50,217
			26,656	Westpac Term Investment	29,841
					102,137
<b>\$100,895</b>		<b>\$106,219</b>	<b>\$100,895</b>		<b>\$106,219</b>

Note that the Society has a No. 2 Current Account used for handling moneys for field trips. At 30 June 2007 this had a credit of \$345. This account is not included above and is not subject to audit.

I have examined the accounting records of the Wellington Botanical Society Inc. and have received all the explanations requested. I believe the accounts and balance sheet to be a true and fair record of the Society's operation and its financial position at the close of the financial year.

Peter Beveridge  
Hon. Auditor

16 August 2007

## *Pseudopanax crassifolius* and *P. lessonii* in Wellington

*Pseudopanax crassifolius* and *P. lessonii* hybridise wherever they meet, producing a diverse array of morphological forms (see figure). *Pseudopanax crassifolius* (horoeaka, lancewood) occurs throughout New Zealand, but the natural distribution of *P. lessonii* (houpara, coastal five-finger) is restricted to the northern North Island (about Kawhia and East Cape northwards). However, *P. lessonii* and derivative cultivars, as well as hybrids with *P. crassifolius*, have been widely planted, and have become naturalised (weedy) in many regions south of their natural distribution, including Wellington.

We are using DNA analyses to investigate the hybridisation between *Pseudopanax crassifolius* and *P. lessonii*. Our focus is on determining the extent of gene-flow amongst the species in northern populations, and the dynamics of these natural hybrid zones. But we are also interested in what happens when naturalised *P. lessonii* populations meet indigenous *P. crassifolius* populations, as is the case around Wellington. To this end, we would be grateful for reports of sizeable populations (say, 10 or more individuals) within the Wellington region of:

- *P. lessonii*, its cultivars, and/or hybrids.
- *P. crassifolius*, where there are mature adults, and particularly if *P. lessonii*, its cultivars, and/or hybrids occur nearby.

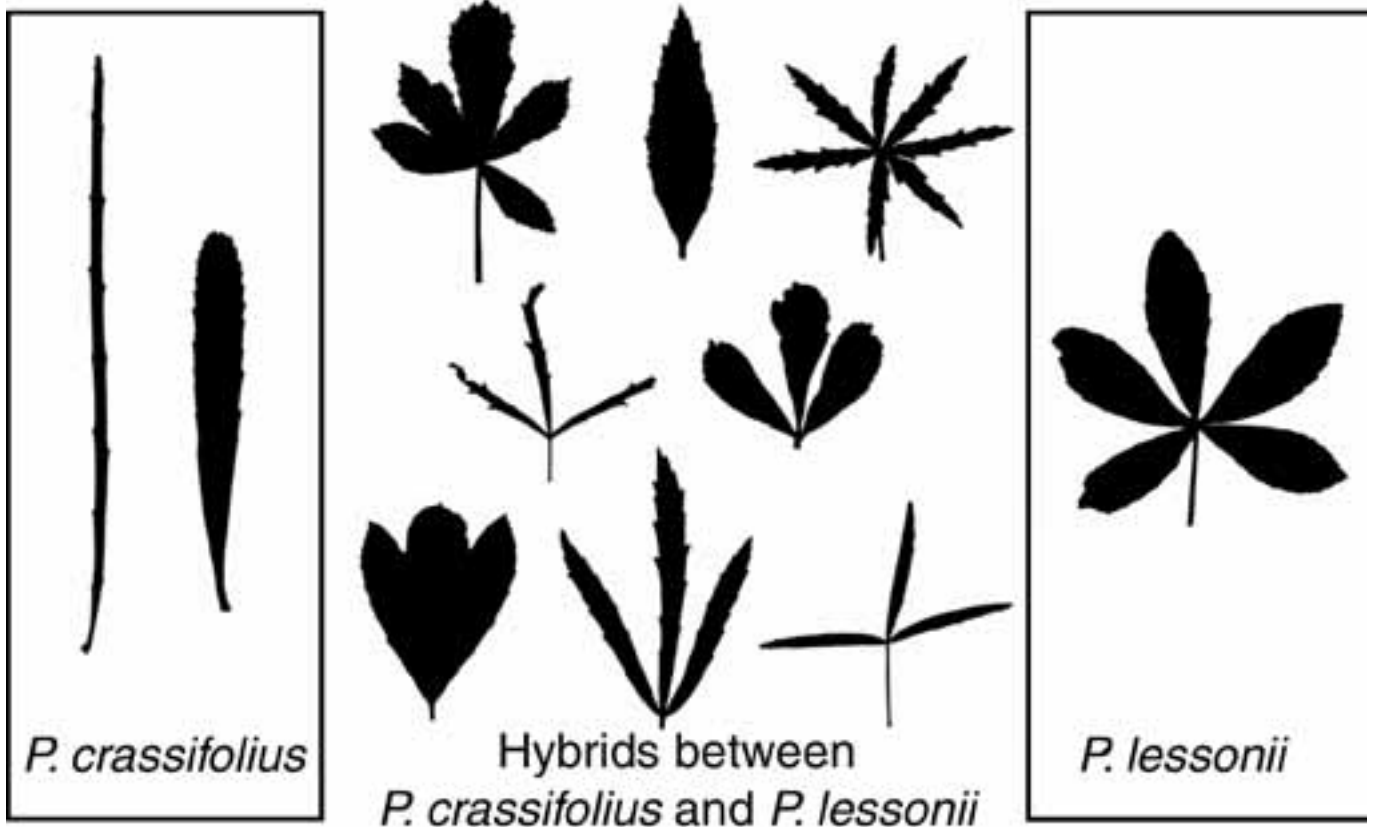
Any individual that looks like *P. crassifolius* but has at least some leaves with two or more leaflets is, we believe, actually a hybrid with *P. lessonii*. *Pseudopanax lessonii* might be confused with the common *P. arboreus* (whauwhaupaku, five-finger) in having leaves with five or so leaflets. However, *P. arboreus* has leaflets with distinct petiolules (i.e., the leaflets have prominent stalks), and the leaves have a sheathing stipule (i.e., the stalk bases of the leaves clasp the stem). We believe that *P. arboreus* does not hybridise with either *P. crassifolius* or *P. lessonii*. However, we would be delighted to hear from anyone with evidence to the contrary.

Leon Perrie and Lara Shepherd

[leonp@tepapa.govt.nz](mailto:leonp@tepapa.govt.nz)

04 381 7261

Tē Papa, P.O. Box 467, Wellington



*Pseudopanax crassifolius* × *P. lessonii* (left) growing next to *P. arboreus* in bush at Stokes Valley. Photo: Jeremy Rolfe.

## Percy Scenic Reserve news

### Redevelopment news—State Highway 2 realignment

On 6 August 2007 the bulldozers moved in.

The propagation house has been removed from Percy SR, so the facilities at Summit Rd Depot are being used. A shade house constructed for the interim period is being used to hold the overflow plants, and those awaiting planting in the new car park (2009).

The Druce and other threatened plant collections are 85% duplicated, with insurance plants residing at Otari-Wilton's Bush, the Dench property at Newlands, and the Waireka Property at Omata, Taranaki.

The tender documents for the construction and landscaping plan do not include the nursery facilities. Transit NZ will be responsible for constructing the new entrance, off Dowse Drive, and car parking area, relocating the caretaker's house and erection of the plant stand-out.

Hutt City Council will be responsible for upgrading the nursery facilities.

### DOC Restoration projects

Percy SR is still growing plants for DOC restoration projects.

#### *Sebaea ovata*

We have been growing this for several years for the Whitiua SR site south of Wanganui. This year a site at Farewell Spit has been found, and the Kaipara Harbour site needs more plants to provide insurance plantings.

So Percy SR is growing c. 400 to be planted at these sites.

#### *"Celmisia Mangaweka"*

We have been growing this plant for several years too. Seed received from the original Ruahine site has germinated. We will trial root-trained plants in a papa/bark potting medium to try and reduce transplant shock, as last year's PB5 planting failed. The 2005 plantings were washed out when the Manawatu region was flooded.

### *Adiantum hispidulum*

We recently discovered a population of *Adiantum hispidulum* in the south-west Aorangi Range. The distribution of this fern is exceedingly sparse south of about Taupo. The only other records we are aware of are a couple from the Chatham Islands, a couple from Taranaki, one from a Levin garden, and one from Wellington (near Ngauranga). Several of these specimens are morphologically unusual, and merit further investigation. We would be grateful for details of additional populations from the lower North Island or South Island.

Leon Perrie and Patrick Brownsey

Te Papa,  
P.O. Box 467,  
Wellington

[leonp@tepapa.govt.nz](mailto:leonp@tepapa.govt.nz)

04 381 7261

#### *Ranunculus recens*

Forty plants were propagated this year for the Manaia area in South Taranaki.

#### *Matiu/Somes Island*

Seed of *Aceana pallida* and *Tetragonia tetragonioides* has been provided to Stan Butcher (Forest & Bird), and plants of *Austrofestuca littoralis* and other species will be provided for seasonal plantings. *Leptinella nana* plugs will be planted in the rare plants garden

### Excell Corporation wins the Hutt City horticultural contract

Excell, my employer, was busy putting together methodologies for the Hutt City Parks & Reserves contract.

The horticultural contract, which includes Percy Scenic Reserve, called for tenders, and Excell has re-won the contract for the next three years + 3 years.

### Threatened plants from Norfolk Island

The threatened plants from Norfolk Island grow in the Offshore Island Garden at Percy SR. I confirmed the details with Peter de Lange who replied "...believe the two plants you have (male and female) are all there are in New Zealand".

"The small-leaved taupata look-alike is *Coprosma baueri* and it is threatened with imminent extinction. It survives only on Phillip Island where it is threatened by hybridism with *C. repens*."

"The big hairy one is *Coprosma pilosa*—that's more common on Norfolk but as far as I know you have the only plants of it in New Zealand."

The original plants were becoming leggy and struggling in the clay soils in Korokoro, so cuttings have been taken. Some of the young seedlings off one parent have flowered, and are showing female. The other parent seedlings are yet to flower, so may have to wait until next year to confirm the sex.

Jill Broome

Plant Collections Supervisor

Percy Scenic Reserve



*Adiantum hispidulum* from the south-west Aorangi Range.  
Photo: Leon Perrie.

## Eco-sourcing – it’s in the genes.

One of the biggest challenges of managing the forest reserve at Otari-Wilton’s Bush is protecting and maintaining its natural character in the face of a variety of external influences.

Vegetation is a key part of this character, and revegetation efforts at Otari have resulted in some real success stories where areas have been restored to a vegetation cover more in keeping with what was once there.

Part of this work involves considering how the genetic make-up of the existing vegetation shapes the forest’s character. We think carefully about where we source our plants and seed, and we ensure our sources are from local populations of our unique vegetation—commonly known as eco-sourcing.

A plant’s physical appearance and chemical make-up are determined by its genes, passed on through successive generations, and by the changing environments in which those generations grow and reproduce.

There can be a variety of forms of a single gene (called alleles) that correspond to a variety of plant traits or characters. These characters may be visible, such as slightly smaller or larger leaves, greater or lesser amounts of pollen production, and variable timing of seasonal events such as flowering and fruiting. Alternatively, they may be cryptic and require detailed analysis, such as differing palatability of leaves to predators.

This variety of forms of a single gene means that the genes of a local species can differ slightly from that of any other population of the same species. That is, a population of a species from Gisborne is likely to differ genetically from a population of the same species from Nelson.

Eco-sourcing—sourcing local plants for local plantings—is becoming the norm for revegetation projects. This is generally considered the best way to alleviate concerns that revegetation might change the genetic character of local populations. Because we cannot be sure how the introduction of a plant from outside the Wellington region

will affect the genetic character of the same species naturally occurring in Otari, all plants used for revegetation within the forest reserve at Otari are eco-sourced.

The introduction of non-local plants could introduce undesirable forms of a gene into the existing population—called genetic pollution—with the resulting change in genetic character termed genetic erosion.

Of course, changes in genetic character do occur naturally, and genetic material is dispersed as far as pollen and seed is carried across the New Zealand landscape. This can be a considerable distance for some species, possibly as far as Australia!

Movements such as this are termed gene flow, and the overall effect is to decrease naturally the differences between populations. The potential for this gene flow diminishes as the distance between populations becomes greater, and varies between pollination mechanisms and seed-dispersal mechanisms—commonly achieved by birds and the wind.

The further apart populations become, the less likely they are to be influenced by natural gene flow and the more likely they are to begin to separate from the prevailing gene pool. This is termed genetic drift and is considered to be one of the factors that can result in the evolution of a new species over time.

So despite restrictions on the source of Otari’s revegetation plants, we do not want to disrupt the natural introduction of new forms of genes. In the future, corridors of restored vegetation may link important areas of vegetation in Wellington and help this important gene flow to occur.

When we engage in revegetation at Otari, we want to be considerate and thoughtful, to the best of our abilities and knowledge, about representing the uniqueness and character that we are trying to protect and maintain. Eco-sourcing is one of these measures.

*Rewi Elliot, Curator/Manager,  
Otari-Wilton’s Bush.*

## Matiu Matters

Botanically there is little new to report about Matiu/Somes Island, that gem in Wellington Harbour. Tree planting is now much reduced as the 25-year programme winds down. Fortnightly, Sunday-group planting days will cease; small, infill planting will be done fortnightly by Lower Hutt Forest and Bird’s, Monday work parties. The branch appreciated the help of the small BotSoc party on 1 July. They expressed surprise (and implied censure ?) to see well-grown *Meryta sinclairii* / puka beside the track above the western coast. The Department of Conservation has employed contract planters to work on some of the steeper areas. There are now 18 threatened species in the small garden beside Forest and Bird House. More are being sought.

The big news is the discovery of a clutch of Brothers Island tuatara eggs, the first proof that the adults introduced in 1998 are breeding. Two eggs were viable and have hatched. The young will be returned to the island. North Island robin numbers have declined despite successful breeding in 2006, their first year. This August, 10 more were brought to the island from Karori Sanctuary.

*Stan Butcher.*

## Another Te Marua Bush Extension???

At only 0.9ha, the Bush needs to expand to reduce the “edge effect”, and thereby increase its long-term sustainability. GW Ranger, Steve Edwards, suggested to us that in addition to continuing to infill-plant the new Te Marua Bush extension, we begin planting the strip of road reserve bordering the west side of the pony paddock immediately north of the Bush. Steve’s idea has the full support of GW’s Philippa Crisp, Principal Adviser, Planning, P:arks, and was warmly received by the workbee members on the day. Next Autumn, as preparation for planting, GW will first rip the strip, as they did for the new extension, since the substrate is likely to be at least as bouldery as the Bush itself. Imagine eventually a stately avenue of podocarp-broadleaf forest, adding to existing indigenous biodiversity and local amenity. There is no shortage of locally sourced seedlings, and provided Upper Hutt Forest and Bird Branch are willing and able to continue their staunch propagating and potting-up efforts, and as long as we, BotSoc, continue our own efforts, it will be yet another stage in our long-term, botanical partnership with GW. So, congratulations, Steve, for an inspirational idea!

*Barbara Mitcalfe.*

## Wellington Botanical Society Jubilee Award 2007 – applications sought

Wellington Botanical Society invites applications for an Award of up to \$2500 to encourage and assist applicants to increase knowledge of the New Zealand indigenous flora, and to commemorate the 50th Jubilee of the Society in 1989.

### Purpose of the award

The Award is open to anyone working in New Zealand. It will be granted for:

fieldwork; artistic endeavour; publication; research; propagation or cultivation of NZ native plants for educational purposes and/or other studies which promote the better understanding of the NZ indigenous flora and vegetation.

The interpretation of these conditions will be flexible, except that the main criterion will be the furtherance of knowledge or promotion of the intrinsic value of the indigenous NZ flora and vegetation.

The Award may be used to defray costs such as travel, accommodation, materials or publication.

### Applications for the Award

Applications should be made in typescript to:

Secretary, Wellington Botanical Society, PO Box 10 412, Wellington by 15 November 2007.

There is no prescribed application form, but the following must be provided:

- the applicant's name, postal address, telephone number
- any relevant position held
- a summary statement of the applicant's accomplishments in the field of botany – no more than one page
- an outline and timetable for the proposed project for which the Award is sought
- a proposed budget for the project

### Selection

The Award will be made to one or more applicants selected by a subcommittee nominated by the general committee of Wellington Botanical Society. Award(s) will be made, and applicants informed of the results in writing, by 24 December 2007. Successful applicants will be required to provide, at an agreed time, a short report on what they have achieved, and an account of their expenditure of Award funds.

The names of the Award recipients, the value of the Award(s), and a synopsis of the project(s) will be published in the Annual Report of Wellington Botanical Society.

*Barbara Clark, Secretary*

## Cars, carbon and climate

Dieter Steinegg, Tree Officer, Christchurch City Council, spoke to Canterbury BotSoc about modern arboriculture, and the role of trees in urban areas. He highlighted the influence of trees on the climate, and estimated the number of trees required to offset the carbon emissions of one of the more than 303,125 motor vehicles registered in Christchurch. There are about 150,000 trees on council land now, but about 3,637,500 trees would be required to offset the emissions of the city's vehicle fleet.

Dieter said that in 50 years, one tree recycles over \$37,000 worth of water, provides \$31,000 worth of erosion control, \$62,000 worth of pollution control, and produces

\$37,000 worth of oxygen. Trees near buildings can reduce air-conditioning needs by 30%, and can save 20-50% in energy used for heating. They aid stormwater management, reduce runoff and erosion, and help to recharge groundwater supplies. He said that every 1000 urban trees we plant today will save over \$1m in stormwater management, pollution abatement, and energy costs.

Dieter encourages people to plant more trees, and notes that people who plant trees become healthier, better looking, richer, and have more friends!

*Source: Canterbury Botanical Society Newsletter, 8/07.*

## Peter Johnson honoured

We congratulate Dr Peter Johnson, who has been awarded the 2007 H.H.Allan Mere Award, for his outstanding contribution to botany in New Zealand. Peter has been an active member of the botanical fraternity for many decades and has published widely in both the academic and popular press. His publications include the well-known *Wetland Plants in New Zealand*, which he co-authored with P.A. Brooke, and books on weeds and wildflowers. His reports to biodiversity protection agencies, all accompanied by detailed plant species lists, informative illustrations and perceptive advice, have led to the protection of many areas in southern New Zealand. Herbariums throughout the country include specimens he has collected. Audiences at many conferences, schools and organisations have appreciated his first rate communication and photographic skills, his sense of humour, and passion for New Zealand's plants.

Wellington Botanical Society and the Botanical Society of Otago both nominated Peter for the Award. Carol West and Bill Lee wrote letters of support for our nomination.

The name of the Award recognises the Harry Howard Allan, the first Director of the former DSIR Botany Division and the symbol of the award, a handsome pounamu (nephrite) mere (handclub). It was originally presented to DSIR Botany Division in 1982 to commemorate the 100th anniversary of Allan's birthday. The award is now administered by the New Zealand Botanical Society.

*Bev Abbott, President*

## BotSoc Bulletins

Expand your collection of our "flagship" publication and boost BotSoc's bank balance! The following back issues are available:

**1950s:** no.23, 9/50; no.30, 12/58.

**1960s:** no.32, 12/61; no.33, 2/66; no.34, 11/67; no.36, 12/69.

**Index to Bulletins Nos. 1-35.**

**1970s:** no.37, 11/71; no.38, 9/74; no.39, 10/76; no.40, 8/78.

**1980s:** no.41, 9/81; no.42, 9/85; no.43, 4/87; no.44, 11/88.

**1990s:** no.46, 12/94; no.47, 9/96.

**2000s:** no.48, 9/02, no.49, 12/05.

Cost \$3 per issue, incl. p&p; \$12 for any five issues incl. p&p.

Copies of our latest *Bulletin*, no.50 3/07, 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*

## OBITUARY

### Nancy Adams, CBE, QSO, 1926–2007

Jacqueline Nancy Mary Adams was born on 19 May 1926 in Levin, New Zealand, only child of Kenneth and Jessie (nee Whitaker). She grew up in Brooklyn Wellington, attending primary school as a boarder at the Quaker School in Wanganui, then at Brooklyn Primary School, followed by Wellington Girls' College.

She began her botanical professional life in 1943 at age 16 when she joined Botany Division of the Department of Scientific and Industrial Research (DSIR). She was recommended to a position of technician in the Department and in her interview impressed the director with her knowledge of the native trees in the garden outside; when asked about the plants, she was able to name them all correctly.

Nancy initially worked with Dr Lucy Moore, who was at that time researching the economic uses of seaweeds and particularly looking for New Zealand sources of the polysaccharide, agar. Nancy became adept at recognising seaweeds, a part of the New Zealand flora that had received very little attention until that time. She pressed many herbarium specimens from Lucy's explorations of the east coast of the North Island, as well as material she collected around the Cook Strait shores of Wellington (sites which were accessible by bus during the war years when fuel was at a premium). Seaweeds were being collected by various amateur botanists at that time and sent to Botany Division. Material from the Bay of Islands came from Victor Lindauer, headmaster and teacher at Russell, from the Chatham Islands collected by Robert Gilpin, school teacher at Te One, and from Stewart Island collected Mrs Willa. Nancy handled this material and was responsible for the labelling and registration. In later years she spoke of the sheer volume of this work, and the problems of working at a time when even basic supplies such as paper were at a premium. But she also recognised the benefits of handling specimens and learning by doing – exposure to a wide range of material was in Nancy's view the best way to learn about the flora.

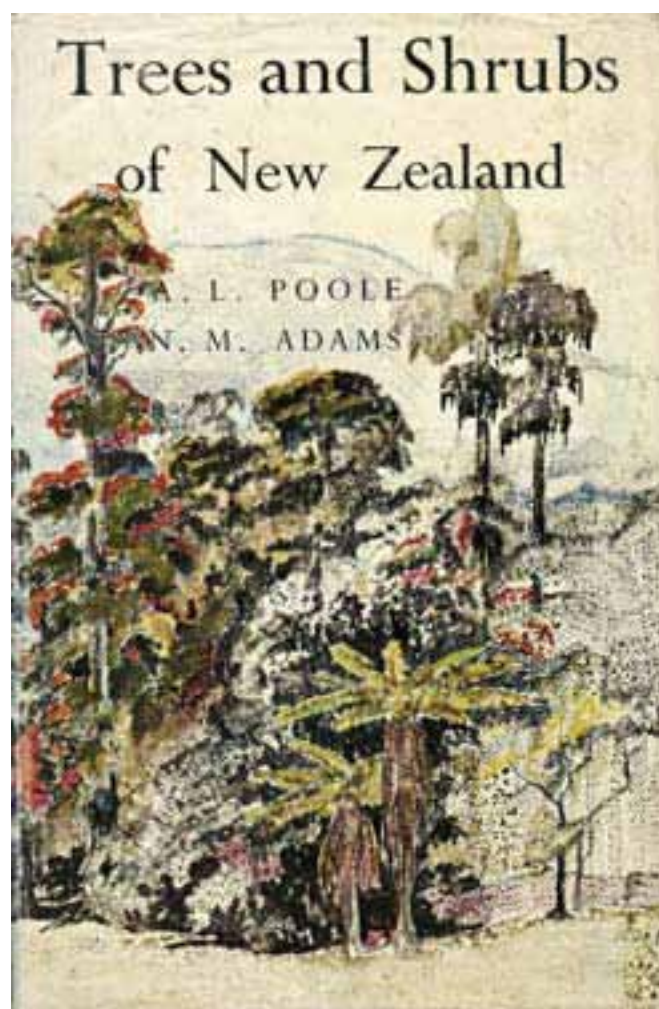
Whilst working full time, Nancy studied both Botany and Zoology at Victoria University of Wellington, although she was unable to complete her degree. Nancy had an extended period of ill-health in her early 20s, paralysed with polio, and her prolonged convalescence involved re-learning how to walk. In later years she was uncomplaining and stoic when her mobility was greatly restricted.

Work on algae was only one of a number of duties that Nancy had at Botany Division where research and documentation of the flora were moving on a number of fronts. Nancy's artistic skill and illustrative abilities were recognised: her first illustrations (of seaweeds) were published in a Post-Primary School Bulletin in 1948, and she co-authored her first scientific paper in 1949, on fruit of *Pittosporum dallii*. In 1950 she became the Botanical Artist to Botany Division, a position she held until 1959. Exhibitions of her paintings were displayed at the Auckland Institute and Museum, Architectural Centre Gallery in Wellington, and the Hawke's Bay Museum. During the 1950s she worked on a wide variety of taxa and projects, from poisonous plants (Henry Connor: *The poisonous plants in*

*New Zealand* -1951), to the moss flora (G.O.K. Sainsbury: *Handbook of the New Zealand mosses* -1955), from the first volume of the angiosperm flora (H.H. Allan: *Flora of New Zealand* Vol. 1 – 1961), to a book on coastal plants (Moore & Adams: *Plants of the New Zealand coast* – 1963).

During the years Nancy worked at DSIR, Botany Division moved from its offices in Wellington to buildings in Christchurch. In 1959 Nancy returned to Wellington to join the Dominion Museum (later the National Museum of New Zealand, now Museum of New Zealand Te Papa Tongarewa) as Artist, a role that saw her involved in a wide range of activities, responsible for preparing exhibitions, illustrating and registering collections including colonial furniture, costumes, and natural history specimens.

During the 1960s Nancy worked on a wide range of botanical illustrations, almost all in her own time. In 1963 the first edition of "*Trees and Shrubs*", published with Lindsay Poole, was published. It was reprinted in its first year and went on to be reprinted many more times as well as being fully revised twice (1979, 1990). This book is still available, testament to the quality of Nancy's illustrations. For many of us it has been the standard text we turn to when checking an identification or a name. Nancy's line drawings are uncluttered, conveying key characters but also capturing the subtlety of form, texture and habit which enable instant



Trees and Shrubs of New Zealand, first published in 1963.



recognition. Nancy was involved in illustration of 12 guides to National Parks (published from 1959 to 1971), and worked on guide books to trees, wildflowers and alpine plants. Nancy collaborated with Professor Alan Mark of Otago University to produce Mark & Adams "*New Zealand alpine plants*". This magnificent book was first published in 1973, revised and reprinted in 1979, and in 1986 and then revised and reprinted again in 1995. It includes ca. 450 illustrations, painted from fresh material and captured for the first time the great variety and beauty of the alpine flora.

In 1969 Nancy moved within the Museum to take up a position as Assistant Curator of Botany and returned to working with algae. From the mid-1970s she enjoyed working within a collegial team at the Museum alongside Patrick Brownsey (Curator of Botany). When she began in the herbarium there was a staggering volume of unregistered material, packets which had remained unwrapped for long periods, including valuable historical material that had remained unrecognised. She began the task of bringing the herbarium into order and also began research on early collectors, and botanists, including John Buchanan, an explorer, artist, and the first botanist to be appointed to the Colonial Museum. Nancy's final publication (in 2002) was the culmination of years of research on this important early New Zealand botanist.

During the 1970s the advent of SCUBA opened new opportunities and many new discoveries were made. Nancy received newly accessible subtidal specimens from a number of collectors, both scientists on the staff of the museum and from keen amateurs. Nancy was involved in teaching field courses on the Wairarapa coast for the Continuing Education department of Victoria University of Wellington. Students of those courses, fired with enthusiasm for macroalgae continued to supply Nancy with specimens

In 1972 Nancy began what was to become a series of regional flora lists with the publication of *The marine algae of Wellington*. There have been 11 of these regional lists published, ten of which Nancy authored or co-authored. Nancy recognised the need to assemble what was known about the species found in particular areas of New Zealand. The preparation of these lists also heightened her awareness of distribution and biogeography of the flora and served as a valuable precursor to her major work published in 1994. *Seaweeds of New Zealand – an illustrated guide* was the first detailed and colour-illustrated treatment of the whole macroalgal flora since 1855. It provides descriptions and illustrations for three quarters of an estimated 800 species that occur around a diverse coastline, extending from the subtropical Kermadecs in the north to the subantarctic islands in the Southern Ocean, including 116 colour plates.

Nancy hoped this book would help people working in the field and engender more interest in the algae. It has more than met Nancy's aspirations. It is both instructive and a pleasure to use. The beauty and clarity of Nancy's artwork, coupled with her observational skill, extraordinarily accurate colour palette and the ability to bring life to the species illustrated, is a remarkable legacy.

Nancy was an exacting and careful worker who set very high standards for herself and was very modest. She had a razor-sharp mind and extraordinary breadth of knowledge of the flora. Nancy could be very blunt and did not suffer fools gladly. She was also extremely generous with her knowledge and time, very perceptive and a supportive colleague, as well as being a kind-hearted friend.

Unfortunately, there were relatively few exhibitions of Nancy's paintings, in part probably a resulting of her retiring personality. She often needed encouragement to put her work forward for exhibition, and sadly there were relatively few occasions when the public had a chance to see the breadth of her talent. A major exhibition of her work toured from 2003 until late 2006, visiting many centres throughout New Zealand, providing people with an opportunity to see the breadth of her work. In the many reviews of this exhibition that appeared in newspapers around the country, the same themes appeared – the exquisite colour, botanical accuracy, and the delicacy and subtlety of her paintings.

Nancy's was a long-standing member of Wellington Botanical Society and was President for a term in 1968-69. Her contributions across botany were recognised in a number of awards and prizes: she was awarded the Loder Cup in 1964 by the Royal New Zealand Institute of Horticulture, and in 1985 she was invited to present the Banks Lecture when she spoke on "Botanical Illustration in New Zealand – the Kew connection". In 1989 she was awarded the Queen's Service Order, in 1990 a Commemorative Medal for services to Botany, and in 1996 made a Companion of the British Empire. Nancy has been recognised both in species epithets (*Polysiphonia adamsiae* Womersley; *Lessonia adamsiae* C.H.Hay, *Porphyra adamsiae* W.A.Nelson, and in two genera (*Nancythalia* A.J.K.Millar & W.A.Nelson; *Adamsiella* L.E.Phillips & W.A.Nelson).

A few weeks before her death in March 2007, negotiations were completed for the Museum of New Zealand Te Papa Tongarewa, to acquire her entire archive of paintings and drawings. This represents a hugely valuable resource for future botanists, but it also ensures that Nancy's work takes its rightful place alongside New Zealand's most talented artists who are represented in our national museum.

Wendy Nelson

## QEII Trust Open Space Covenants

The trust has recently registered the following Open Space Covenants in the Wellington region:

- Manawatu R.C./Martin - 27.9 ha forest
- Tararua D.C./Perry & Hindmarsh - 36.8 ha forest
- Tararua D.C./Speedy (x2) – 19.9 ha forest
- Tararua D.C./Wright – 3.7 ha forest
- Masterton D.C./Campbell – 10.5 ha forest and wetland
- Carterton D.C./Guscott & Joblin – 17.4 ha forest

Source: *Open Space* no. 70, 7/07

## 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. Ph 233 8202, fax 233 2222, [bj\\_clark@xtra.co.nz](mailto:bj_clark@xtra.co.nz)

## Conservation Awards

We congratulate BotSocers Jean Luke, for her work at Queen Elizabeth Park, and Clive Paton, for incorporating conservation into Ata Rangi Vineyard's business plan. They received their awards from Hon Chris Carter, in the Great Hall at Parliament.

Editor

## Pest animal alert, Mk. II

At the behest of UnitedFuture, Hon Chris Carter, Minister of Conservation, set up an independent panel to consider recreational and environmental matters concerning deer, chamois, thar and pigs. According to the discussion paper just released by the panel, "environmental pests such as feral deer and pigs could be developed as 'game' animals by adding females to boost breeding numbers, or releasing sires with better quality genes" (*The Dominion Post* 19/9/07).

According to panel chair, Margaret Austin, a former Minister of Science, "There is a long-standing controversy over the significant impact these animals have on many of New Zealand's fragile native habitats".

As noted in our May 2007 *Newsletter*, pest animals tend to browse preferred palatable species to near-extinction, or actual extinction, in areas they infest. We said that it is essential that the panel include ecologists and botanists to present the case for retention of pest animal status for all four species in the wild. This will ensure that the Department of Conservation and district and regional councils will be able to mount pest control operations whenever necessary. We welcome the appointment to the panel of Sue Maturin, Forest and Bird, and Graham Nugent, Landcare Research.

See Submissions Due section in this *Newsletter*.

Editor

## Karori Tunnel Planting

Despite the difficulties presented by this site, the previous plantings are looking good. Another 50 *Phormium cookianum* and *Poa cita* were planted here last week by three generations of Mitties and a Horne, but there are still spaces needing filling with next year's plants, to control weeds, add amenity and increase indigenous cover.



Spider orchids, *Nematoceras trilobum* agg., Tararua Range. August 2007. Photo: Jeremy Rolfe.

## DOC Wellington Visitor Centre

*Te Pae Manuhiri, Te Rohe o 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](mailto:wellingtonvc@doc.govt.nz)

Web: [www.doc.govt.nz](http://www.doc.govt.nz)



Department of Conservation  
*Te Papa Atawhai*

## TRIP REPORTS

### January 2007: Waimapihi Reserve, Wellington city

This 70-ha reserve is situated adjacent to the historic central city suburb of Aro Valley in a steep upper catchment area previously depleted by heavy livestock grazing. A group of eleven members compiled a list of 94 vascular species, many of which would not exist without the community restoration work of the past 25 years. Although small, canopy species such as tawa, titoki, rewarewa and nikau are now well established. There were some unexpected "finds" that have established such as the crepe fern, *Leptopteris hymenophylloides*, and *Sophora tetraptera*. The latter is one of many commemorative plants in the reserve.

A highlight of the trip was a lunchtime talk by local architect and long time member of the restoration group, David McGill, who outlined some of the colourful, social history of the valley.

### 5 May 2007: Johnny's Bush and Fenaughty covenant

#### Johnny's Bush

BotSoc spent 2.5 hours in Johnny's Bush, adding eleven species to the plant list. Advanced, second-growth podocarp/tawa/kohekohe forest with emergent rewarewa and pukatea, the Bush is surrounded by largely-indigenous shrubland and reverting pasture. Some years ago, Chris and I saw from near British Peak, what looked like a substantial area of tawa forest nestled in a steep-sided valley, invisible from, and about a kilometre west of, Makara Road. We resolved to explore it and in 2001, with permission from Meridian Energy, we dropped down into it from near Quartz Hill. Its size, the stature and species diversity of the forest immediately impressed us although it was then being grazed by stock and heavily browsed by possums and goats. We advised Meridian and Wellington Conservancy of the Department of Conservation, of its significance, and a DOC Covenant

and chickens, are noticeably more numerous. The presence of a large, ancient karaka with 4 trunks of (est.) d.b.h. 30, 30, 35 and 45 cm. respectively, makes one wonder whether this sheltered, well-watered, gently-contoured, forested site might have been a kainga in earlier times.

Barbara Mitcalfe, (scribe).

#### Fenaughty covenant

Fenaughty's Bush is 5.5 ha of semi-coastal forest which has been fenced off by the owners for the past 12 years and has recently been registered as a QEII covenant. Much of the canopy is ngaio, although there is also manuka, mahoe and mapou. Hawthorn, barberry and holly have grown up with the canopy and at this stage, ancient pine trees are the only emergent trees. There are also two small areas of pine plantation within the covenant, and when they are harvested, sufficient monies from the harvest will be used to revegetate these areas with local native species.

Wellington Regional Council has funded poisoning of many of the exotics from their covenant establishment fund, however more funding will be applied for from the Biodiversity Condition Fund to finish the work.

The Fenaughtys control mustelids, rats and possums in the covenant, and this is evident by the presence of many healthy possum-preferred species such as *Pseudopanax* spp, titoki, wineberry, kohekohe, mahoe and milk tree. The discovery of the milk tree caused much discussion as to which species it was, however it has been provisionally recorded as *Streblus banksii*. With Johnny's Bush and Post Office Bush less than 3km of kereru flight away, it won't be too long before tawa and kohekohe appear in large numbers.

**Participants:** Bev Abbott, Marc Slade, Julia White, Rodney Lewington, Sheelagh Leary, Barbara Mitcalfe, Chris Horne, Jill Fenaughty, Jack Fenaughty (co-leader), Lysie Kerr, Barry Dent, Sue Freitag, Peter Simpson, Cathye Haddock, Mick Parsons, Chris Hopkins, Robyn Smith (co-leader, scribe)



BotSoccers in Johnny's Bush.  
Photo: Jack Fenaughty.

is now being negotiated. DOC has repaired the fencing, enabling groundcover and understorey species to recover—palatable fern species such as *Asplenium bulbiferum*/hen

## Saturday 14 July 2007: Te Marua Bush workbee

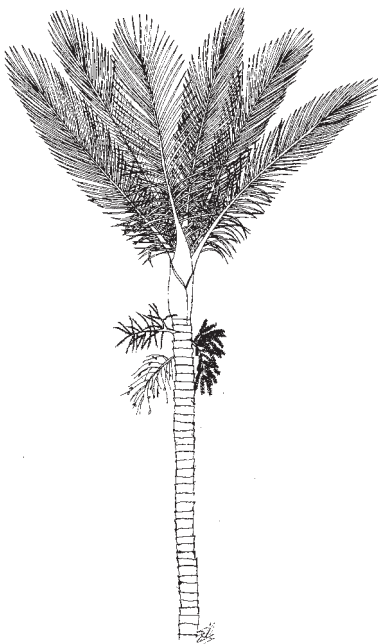
After several weeks of cold, grey days and plenty of rain and wind, it was wonderful to have a perfect, fine, still morning to plant on. When we arrived, everything was white, after a heavy frost, but it soon thawed, and everyone digging holes in the very stony "soil" soon thawed out too!

This is the second year of planting the new, southern extension of Te Marua Bush. Last year we planted 302 trees in this new area, most of which have thrived, though we did lose 16 to a light-fingered plant fancier. This year, with 13 willing workers, we added another 315 plants and covered the

## 4 August 2007: Belmont Regional Park— Korokoro Dam

This winter walk in a corner of Belmont Regional Park started from Oakleigh Street and finished at Cornish Street, a relatively short distance, but the bush on the slopes down to Korokoro Dam, and the valley to Petone held our interest until late afternoon.

The whole area is regenerating bush, generally dominated by tawa. Here and there are mature rimu and miro. Titoki, karaka, pukatea, kohekohe and nikau are represented by adult trees. In the understory is a good range of Wellington native flora with *Cyathea* and *Dicksonia* aplenty. Pleasing finds were young and not so young five-finger and pate, a sure sign that possum control has been effective.



Nikau. Illustration by Eleanor Burton.

remaining area by lunch-time.

Next year, infill planting will be done as needed—we already have some small seedlings potted up, sourced from the old, heavily fruiting kahikatea in the main Bush. These should be ready for planting in 2008.

**Participants:** Kerry Brickell, Roz Brown, Barbara Clark, GW Ranger Steve Edwards, Bart Hogan, Chris Horne, GW Ranger Mark McAlpine, Rob Merrifield, Barbara Mitcalfe, Alan Perry, Reuben Tipoki, Glennis Sheppard, (co-leader), and Sue Millar (co-leader and scribe).

The list of native vascular plants found list runs to 168 species. This included *Adelopetalum* (= *Bulbophyllum*) *tuberculatum*, found by Chris Hopkins who had seen it in the area a decade before. This orchid is on rock, track side—well down Korokoro Stream valley.

We added black and white maire to the list from previous visits over the past fifteen years, and also *Dracophyllum longifolium*, forest cabbage tree and lowland horopito.

Native species we had hoped to find, but did not, included *Winika cunninghamii* and *Hymenophyllum flexuosum*. These had been seen previously but even the promise of chocolate fish was not enough to entice a sight of them.

The area we walked through had its share of weeds. In the stream and immediately below the dam, there are garden plants, presumably washed down garden rubbish tipped "over the bank" from the subdivisions upstream. Tradescantia, montbretia, ehrharta and selaginella are worrying in that they spread readily and smother other species. Japanese honeysuckle and banana passionfruit are also of concern in the area around the dam.

**Participants:** Bev Abbott, Barry Dent, Sue Freitag, Dave Holey, Chris Hopkins, Chris Horne, Sheena Hudson, Sheelagh Leary (co-leader), Rodney Lewington (co-leader and scribe), Barbara Mitcalfe, Syd Moore, Gail Mosey, Grant Roberts, Darea Sherratt.

## 1 September 2007: Mount Victoria

Eleven BotSoccers and others completed a three-hour circuit on the city-flank of Mount Victoria. Beginning at the summit car-park, we descended (indirectly) to the grassed area above Majoribanks Street. From here we made our way, with a couple of detours, via the city-Hataitai walkway up to Alexandra Road, along which we returned to the car-park.

Mount Victoria would have been covered in coastal broadleaved forest, but now pines, macrocarpa, and eucalypts dominate the canopy. The two common pines are the three-needled, large-coned monterey pine (*Pinus radiata*) and the two-needled, smaller-coned bishop pine (*P. muricata*), and we learnt to distinguish the two, even at a distance. The seedlings we saw were three-needled; bishop pine is not recorded as naturalised in Wellington (1, 2). We saw single adult individuals of two other pine species. One was later identified as maritime pine (*P. pinaster*), while we could not reach leaves or cones of the other, but it had distinctive mottled bark, somewhat reminiscent of matai.



Maritime pine (*Pinus muricata*)



Female cones and leaves of *Pinus radiata* (left) and *P. muricata*. Photos: Leon Perrie.

Several *Eucalyptus* species are present, but we could identify only one: *E. leucoxylon*, popular with tui on the hillside above Majoribanks Street.

Exotic plants are also present under the canopy, including 'gems' such as climbing asparagus (*Asparagus scandens*), old man's beard (*Clematis vitalba*), wandering willie (*Tradescantia fluminensis*), elaeagnus (*Elaeagnus ×reflexa*), holly (*Ilex aquifolium*), hazel pomaderris (*Pomaderris aspera*), willow-leaved hakea (*Hakea salicifolia*), Japanese honeysuckle (*Lonicera japonica*), periwinkle (*Vinca major*), broom (*Cytisus scoparius*), *Teline* spp., and boneseed (*Chrysanthemoides monilifera*). Saplings of bay tree (*Laurus nobilis*) were common above Pirie Street; this species is not recorded for Wellington by (1), but is by (2). We spotted two species of *Viburnum*, *V. tinus* and *V. japonicum*. The former is listed only from the South Island by (1), while the latter was not listed at all by (1), but has recently been recorded as naturalised in the Waitakere Ranges (Ewen Cameron, pers. com.). Adults of both species are scattered widely around Mount Victoria, but seedlings were not seen.



Bay tree (*Laurus nobilis*). Photo: Leon Perrie.

Species native to New Zealand, but not to Wellington, were also prominent, particularly karo (*Pittosporum crassifolium* and *P. ralphii*), houhere (*Hoheria populnea*), karaka (*Corynocarpus laevigatus*), and *Pseudopanax crassifolius* × *lessonii*. The morphologies in the latter hybrid swarm were impressively diverse. Interestingly, although we passed several adults, there was little evidence of regeneration by pohutukawa (*Metrosideros excelsa*).

Even for species native to Wellington, such as lemonwood/tarata (*Pittosporum eugenioides*), kōhūhū (*P. tenuifolium*), akeake (*Dodonaea viscosa*), and five-finger (*Pseudopanax arboreus*), we pondered their ultimate origins: remnants from the original Mount Victoria forest, colonists from remnants elsewhere in Wellington, or escapees from neighbouring gardens? How could we ever tell? We also hoped that those groups undertaking revegetation plantings were keeping detailed records. If not, distinguishing the genuine locals from the introductions will only get murkier. Perhaps this is something the council could coordinate, if it is not already.

Highlights amongst the native species included five *Asplenium* species (*A. appendiculatum* subsp. *maritimum*, *A. flabellifolium*, *A. flaccidum*, *A. hookerianum* var. *colensoi* and var. *hookerianum*, and *A. oblongifolium*) together on one trackside bank, while *A. gracillimum* was sighted elsewhere. *Asplenium appendiculatum* subsp. *appendiculatum* might also be present, which, if confirmed, would make this site scientifically important, as the two subspecies of *A. appendiculatum* are otherwise not known (at least by me)

to occur together. Another bank holds a good population of rasp fern (*Doodia australis*), which is uncommon around Wellington. A juvenile *Cyathea cunninghamii* amongst a grove of *C. medullaris* was conveniently at ground level to enable close examination. An abundant population of *Meliccytus crassifolius* was encountered in one gully, although, as may be emblematic of the intertwining of native and exotic vegetation on Mount Victoria, it was being smothered by climbing asparagus, ivy (*Hedera helix*), periwinkle, and Japanese honeysuckle.

Thank you to Barry Sneddon and Ewen Cameron for assistance with some identifications.

**Participants:** Gavin Dench, Trish Godfrey, Peter Graham, Bryan Halliday, Chris Hopkins, Chris Horne, Barbara Mitcalfe, Leon Perrie (co-leader/scribe), Lara Shepherd (co-leader), Sunita Singh.

Leon Perrie

(1) Webb CJ, Sykes WR, Garnock-Jones PJ. 1988. Flora of New Zealand, Volume IV.

(2) McAlpine K, Sawyer J. 2003. Pest Plant Atlas. Wellington Conservancy excluding the Chatham Islands. Volume 2.



Climbing asparagus smothering *Meliccytus crassifolius*. Photo: Leon Perrie.

## 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.

# EVENING MEETING REPORTS

## 21 May 2007: Members' evening

On 21 May, 33 members enjoyed a full evening of slides taken on field trips, artwork featuring native plants, a display of native plants, and a reading. Those who contributed were:

- Margaret Aitken – slides taken on field trip to Rakiura and the Catlins
- Jill Broome – plants from Percy Scenic Reserve
- Eleanor Burton – pen and ink drawings
- Arnold & Ruth Dench – threatened plants
- Julian Fitter & Jayne Invermay – slides of work of Woodlands Trust
- Bryan Halliday – paintings
- Margaret & John Harper – slides taken at Lake Baikal, Siberia
- Chris Horne – reading from Dr Leonard Cockayne
- Rodney Lewington – slides of BioBlitz at Otari
- Andy Malone – slides taken on Enderby Island and other Auckland Islands
- Barbara Mitcalfe – slides of Kinnoull Station, black maire transplanting, Victoria St n. rata, weed fern *Polypodium vulgare*, field trips to Wainuiomata catchment, Rakiura and Catlins
- Mick Parsons – slides taken on field trips to Makara Foreshore Reserve, southern Hawke's Bay, and Rakiura
- Joyce Stretton – painting of *Olearia lacunosa*
- Sunita Singh – slides taken on field trips to Clive Paton's bush, Nga Manu, Redwood Bush, Wainuiomata catchment, and southern Hawke's Bay

Congratulations to the contributors—the good turnout was worth your efforts!

Editor

## 16 July 2007: *Hebe* or *Veronica* – why change back?

My talk was based on a recent paper (Garnock-Jones, Albach, & Briggs 2007) where we transferred all the Southern Hemisphere veronicas (*Hebe*, *Parahebe*, *Heliohebe*, *Chionohebe*, *Leonohebe*, *Hebejeebie*, *Derwentia*, and *Detzneria*) back into the genus *Veronica*. The long introduction to the talk dealt with the nature of science and the extent to which taxonomy is or isn't scientific. I believe strongly that hierarchical classifications are important, because they're information-rich and predictive, and that the best classifications are cladistic ones, which coincide as closely as possible with the natural groupings produced by the evolutionary process.

For these reasons *Hebe* as recognised by Bayly & Kellow (2006) would be acceptable (it comprises a group of closely related species), but *Parahebe* and *Veronica* are not acceptable (some of their members are more closely related to *Hebe*). However, while cladistic approaches allow us to define groups of related species, they don't provide objective methods for deciding at what rank these groups should be recognised. Our approach to that question has been to try to minimise the disruptive effects of name changes. In this, the decision was between (1) splitting *Veronica* into 8 natural groups (five of them new genera) that couldn't be recognised by their morphology and that would cause name changes for

193 species (including most of the 17 weedy species in New Zealand), or (2) combining the southern veronicas with their close northern relatives, affecting 120 species in New Zealand and a dozen or so in each of Australia and New Guinea. Many New Zealand species already have names in *Veronica* that were in common use until the middle of last century.

Some people argue that distinctive groups should be given taxonomic recognition even if they aren't natural. So I additionally looked at whether continued separation of northern and southern *Veronica* could be justified simply on the basis of morphological differences. While most hebes are different from most veronicas, not one character difference can separate the two groups (not even chromosome number, e.g. *V. campylopoda* has  $2n=42$ ). Some New Zealand plants, especially among the parahebes, are very *Veronica*-like, as noted by Oliver (1944).

So we now recognise *Veronica* as New Zealand's largest genus, with 120 native and 17 naturalised species. All the New Zealand natives belong in *Veronica* sect. *Hebe*. We recommend the name *hebe* be retained as a common name (just as *azalea* is now a common name for some *Rhododendron*), and can be used with cultivar names (e.g., *hebe* 'Blue Gem'). Most species (87%) keep the same specific epithet (e.g., *Hebe speciosa*

reverts to its old name *Veronica speciosa*; *Hebe flavida* becomes *Veronica flavida*). Only 16 species (13%) needed to have new specific epithets (e.g. *Parahebe laxa* becomes *Veronica zygantha*; *Hebe carnosula* becomes *Veronica baylyi*); nearly all of these are narrowly distributed species that are not widely known.

I appreciate that people feel attached to the name *Hebe* and that it's quite a wrench to get used to 120 different names. In an attempt to smooth the way, I've produced a cross-referenced double checklist where names can be translated in both directions.

Discussion after the talk was robust and will no doubt continue for years to come.

A conspectus of the NZ *Veronica* is enclosed with this newsletter.

### References

- Bayly M.J. & Kellow, A.V. 2006. An Illustrated Guide to New Zealand Hebes. Te Papa Press, Wellington.
- Garnock-Jones, P. J.; Albach, D.; & Briggs, B. G. 2007 Botanical names in Southern Hemisphere *Veronica* (Plantaginaceae): sect. *Detzneria*, sect. *Hebe*, and sect. *Labiatooides*. *Taxon* 56: 571–582.
- Oliver, W.R.B. 1944. The *Veronica*-like species of New Zealand. *Rec. Domin. Mus.* 1: 228–231.

Phil Garnock-Jones, Victoria University of Wellington.

## Summer trip information: Great Barrier Island

This year's trip, to Great Barrier Island, is from Wednesday 30 January to Friday 8 February. This will be nine nights.

Registrations are open now. If you intend to come, we would appreciate knowing as soon as possible. Accommodation cannot be guaranteed for bookings made after 30 September. A registration form is attached to this newsletter.

The ferry to Great Barrier Island does not sail everyday. Flights leave several times per day. Please take this into consideration if you are not staying the full time.

### Accommodation

We are booking this as a group; see the registration form for options. Bring your own sleeping bag, pillow slip and sheets. If you wish to hire bed linen you must order it in advance from the camp.

Orama Christian Camp  
Karaka Bay Road  
Port Fitzroy, Great Barrier Island  
Phone 09 429 0063  
[www.orama.org.nz](http://www.orama.org.nz)

This is what Orama had to say about themselves:

*Orama is situated just north of Port Fitzroy in the midst of Great Barrier Island Conservation Reserve – ideal for activities or relaxation. Tramp, swim, play table tennis, fish, sunbathe, surf, snorkel, or just relax in our beautiful grounds which lead down to the sea.*

*Our accommodation is not luxurious but very comfortable, clean and wholesome. This means we can offer very reasonable pricing. Orama is a non-profit trust and placed handy to the best tramping areas. It is the largest accommodation facility on Great Barrier with backpackers, cabins, a lodge and self-contained houses and units.*

*You'll just love the relaxed lifestyle here on Karaka Bay where we have been for more than forty years.*

### Transport to and from the Camp

It is your responsibility to arrange and pay for transport to and from the campsite at Port Fitzroy. You can travel there by ferry or plane. Get in early for the best prices. Discounts for groups.

#### Ferry

Sealink Freephone 0800 732 546 [www.sealink.co.nz](http://www.sealink.co.nz) Fare \$110 return

This is a 4.5 hour trip from Auckland to Tryphena, the main ferry wharf on Great Barrier Island. You can wait for the boat to unload, and then continue on to Port Fitzroy but it is far quicker to take a shuttle. The ferry leaves Auckland from 45 Jellicoe Street at 6 a.m. Ferries are once a day but not every day. The return ferry on Friday 8 February departs from Tryphena at 7 p.m.

#### Plane

Great Barrier Airlines  
Freephone 0800 900 600

[www.greatbarrierairlines.co.nz](http://www.greatbarrierairlines.co.nz)

Fares \$76-\$96 one way. Fourteen people per plane. Okiwi airport is the closest to Port Fitzroy.

Flights depart from the domestic terminal at Auckland Airport four times a day

#### Transport to Orama Christian camp

Shuttle buses from the airport must be pre-booked. If a large group is planning to travel together by ferry, it would be a good idea to pre-book that shuttle too. Freephone 0800 426 832 or [www.greatbarriertravel.co.nz](http://www.greatbarriertravel.co.nz)

Trips out and about on the island will require extra transport, such as shuttle vans. We do not know the costs for this.

### Other useful information

There are no banks or ATM machines on the island. EFTPOS facilities are available at most shops.

Food will be supplied for shared breakfasts and packed lunches. We will share the preparation of breakfasts and lunches, as on previous trips. Evening meals will be catered by Orama @ \$12 per person.

### Possible botanical trips

- Mt Hobson (Hirakimata), the most diverse and spectacular walk in the Auckland botanical region.
- Te Ahumata Plateau (Whitecliffs), stunted vegetation, mineral soils, hot pools and lush vegetation.
- Kaitoke Wetland, the largest and most pristine in Auckland.
- Whangapoua Estuary, the best unmodified estuary in northern New Zealand. QEII covenants etc.

More information to come.

### Maps

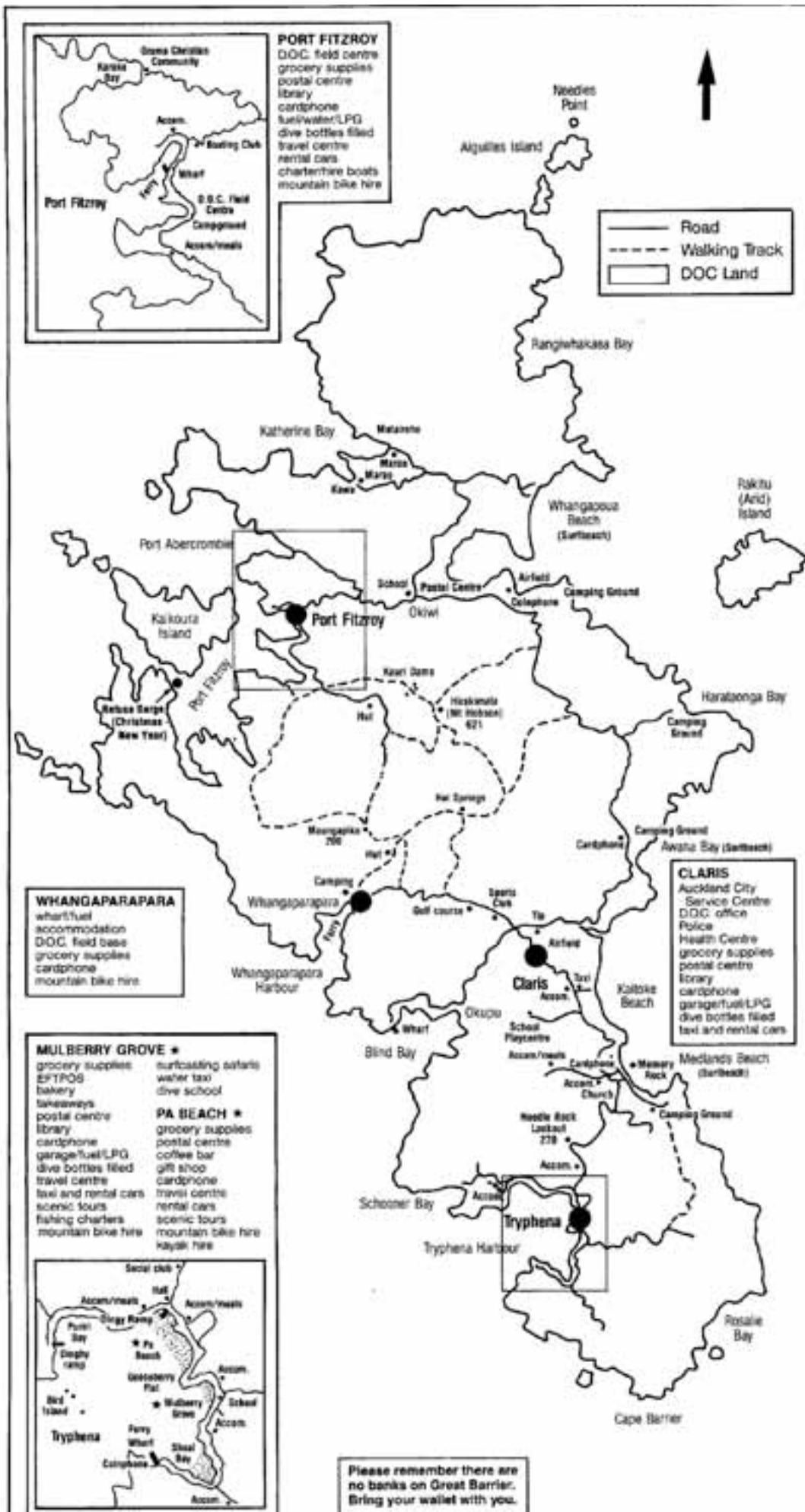
NZMS 260 series, S08 & T08, S09 and T09. Three maps in total. Or look for the now out-of-print Great Barrier Island and Little Barrier Island NZMS259, 1974.

### Other references

Armitage, D. 2004: Great Barrier Island. Revised edition. 192 p, p/b. \$39 95. Available at bookshops.

Higham, T. 2006: Great Barrier/Aotea Island. *Forest & Bird* 322. 38–40.

Higham, T. 2007: Catching the new wave. *Forest & Bird* 323: 32–34.



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 library  
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 mountain bike hire



Please remember there are  
 no banks on Great Barrier.  
 Bring your wallet with you.



## Registration form: Wellington BotSoc summer camp at Orama Christian Camp, Great Barrier Island

**From Wednesday 30 January to the evening of Friday 8 February 2008**

Please post this completed registration form together with your deposit of \$200 to:

Frances Forsyth  
 55 Holloway Road  
 Aro Valley  
 Wellington 6021  
 Phone 04 384 8891  
 MOB 021 072 5210  
 Email [frances.forsyth@paradise.net.nz](mailto:frances.forsyth@paradise.net.nz)

Please let us know as soon as possible if you intend to come, and for how long, so that accommodation can be reserved. Bookings received after 30 September cannot be guaranteed a place. You will be invoiced for the balance of your costs at the conclusion of the trip.

Name/s \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_ E-mail \_\_\_\_\_ @ \_\_\_\_\_

### Payment method

I have enclosed a cheque for \$200 per person payable to Wellington Botanical Society account number two	
Paid by direct debit to BotSoc account 02 0536 0017812 02 quoting GBI with the name/s of the person/s registering	

Please fill in the table below. This will allow us to firm up the bookings for accommodation. We will also be able to use this table for the final invoice.

If you stay for the full period, you will be on the island for nine nights.

Options (Prices are best current estimates and include GST)	Number of nights / meals	Total costs GST incl
Tent site @ \$10 pp		
Bunkroom @ \$20 pp		
Cabins, double-bed share @ \$30 pp		
Cabins, twin share @ \$30 pp		
Catered evening meals @ \$12 pp		
Shared breakfast & lunch @ \$5 pp per day approx		
Island transport unknown as yet		
Other costs		
Subtotal		
Balance to pay (total less deposit of \$200 per person)		\$_____.

There will be some additional cost to cover transport on the island and for plant lists, group maps and some minimal overheads.

Please contact Orama yourself if you wish to hire bed linen. Phone 09 429 0063, [www.orama.org.nz](http://www.orama.org.nz)

Please make a copy of this registration form for your own records before posting it with your cheque/ payment details.



# 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 \$20; Country \$15; Student \$5. Group / family \$25.

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**

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

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Action	Init.	Date
N/L, flyer etc		/ /
Ty. Address list		/ /
Ty Bank		/ /
Address label		/ /
Secretary		/ /

## 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 / / 07

Name..... Signed..... Date / / 07

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





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Alphabetical list of names in New Zealand *Veronica*

- Note:** This list works in both directions, from Hebe to *Veronica* and from *Veronica* to Hebe.
- Veronica adamsii* 8
  - Veronica albicans* 9
  - Veronica amplexicaulis* f. *amplexicaulis* 10
  - Veronica amplexicaulis* f. *hirta* 11
  - Veronica angustissima* 12
  - Veronica annulata* 13
  - Veronica arganthera* 14
  - Veronica armstrongii* 15
  - Veronica barkerei* 16
  - Veronica bayleyi* 27
  - Veronica benthamii* 17
  - Veronica biggarii* 18
  - Veronica birleyi* 122
  - Veronica bishoptiana* 19
  - Veronica bollonsii* 20
  - Veronica brachysiphon* 21
  - Veronica breviracemosa* 23
  - Veronica buchananii* 24
  - Veronica calcicola* 25
  - Veronica canterburienensis* 26
  - Veronica catarractae* 125
  - Veronica chiliflora* 28
  - Veronica cheesemanii* subsp. *cheesemanii* 126
  - Veronica cheesemanii* subsp. *flabellata* 127
  - Veronica chionohebe* 3
  - Veronica ciliolata* var. *ciliolata* 1
  - Veronica ciliolata* var. *fordensis* 140
  - Veronica ciliolata* var. *pumila* 141
  - Veronica cockayneana* 29
  - Veronica colensoi* 30
  - Veronica colostylis* 123
  - Veronica corrigani* 36
  - Veronica cryptomorpha* 33
  - Veronica cupressoides* 119
  - Veronica decora* 128
  - Veronica densifolia* 2
  - Veronica dieffenbachii* 35
  - Veronica dilatata* 36
  - Veronica diosmitolia* 37
  - Veronica elliptica* 39
  - Veronica epacridea* 40
  - Veronica evensosa* 51
  - Veronica flavida* 42
  - Veronica gibbsii* 43
  - Veronica glaucophylla* 44
  - Veronica haastii* 45
  - Veronica hectorii* subsp. *coarctata* 46

- Veronica hectorii* subsp. *demissa* 47
- Veronica hectorii* subsp. *hectorii* 48
- Veronica hookeri* 118
- Veronica hookeriana* 129
- Veronica hulkeana* subsp. *evestita* 111
- Veronica hulkeana* subsp. *hulkeana* 112
- Veronica insularis* 50
- Veronica kellowiae* 80
- Veronica lanceolata* 130
- Veronica laavidiana* 113
- Veronica lelophylla* 51
- Veronica ligustrifolia* 52
- Veronica lilliputiana* 124
- Veronica linifolia* 132
- Veronica lyalii* 133
- Veronica lycopodioides* 53
- Veronica macrantha* var. *brachyphylla* 54
- Veronica macrantha* var. *macrantha* 55
- Veronica macrocalyx* var. *macrocalyx* 57
- Veronica macrocarpa* 58
- Veronica masoniae* 59
- Veronica melanocephala* 134
- Veronica mooreae* 60
- Veronica murrellii* 61
- Veronica myosotoides* 4
- Veronica notialis* 68
- Veronica obtusata* 62
- Veronica ochracea* 63
- Veronica odora* 64
- Veronica pareora* 66
- Veronica parviflora* 67
- Veronica pauciflora* 69
- Veronica pentasepala* 114
- Veronica perbella* 70
- Veronica petriei* 71
- Veronica phormiophila* 65
- Veronica pimeleoides* subsp. *faucicola* 72
- Veronica pimeleoides* subsp. *pimeleoides* 73
- Veronica pinguiifolia* 74
- Veronica poppelwellii* 135
- Veronica poppelwellii* 49
- Veronica propinqua* 75
- Veronica pubescens* subsp. *pubescens* 76
- Veronica pubescens* subsp. *rehaurum* 77
- Veronica pubescens* subsp. *sejuncta* 78
- Veronica pulvinaris* 5
- Veronica punicea* 22
- Veronica quadrifida* 117
- Veronica rakaiensis* 79

**Reference for this treatment:**

Garnock-Jones, P., Albach, D., & Briggs, B. 2007: Botanical names in southern hemisphere *Veronica* (Plantaginaceae): sect. *Dezneria*, sect. *Hebe*, and sect. *Labiotoides*. *Taxon* 56(2): 571–582.

Alphabetical list of names in New Zealand *Hebe* and related genera

- Note:** This list works in both directions, from Hebe to *Veronica* and from *Veronica* to Hebe.
- Chionohebe ciliolata* var. *ciliolata* 26
  - Chionohebe densifolia* 37
  - Chionohebe glabra* 25
  - Chionohebe myosotoides* 74
  - Chionohebe pulvinaris* 95
  - Chionohebe thomsonii* 129
  - Hebe acutiflora* 103
  - Hebe adamsii* 1
  - Hebe albicans* 2
  - Hebe amplexicaulis* f. *amplexicaulis* 3
  - Hebe amplexicaulis* f. *hirta* 4
  - Hebe angustissima* 5
  - Hebe annulata* 6
  - Hebe arganthera* 7
  - Hebe armstrongii* 8
  - Hebe barkerei* 9
  - Hebe benthamii* 11
  - Hebe biggarii* 12
  - Hebe bishoptiana* 14
  - Hebe bollonsii* 15
  - Hebe brachysiphon* 16
  - Hebe breviflora* 96
  - Hebe breviracemosa* 17
  - Hebe buchananii* 18
  - Hebe calcicola* 19
  - Hebe canterburienensis* 20
  - Hebe carnosula* 10
  - Hebe chiliflora* 22
  - Hebe cockayneana* 29
  - Hebe colensoi* 30
  - Hebe corrigani* 32
  - Hebe crenulata* 110
  - Hebe cryptomorpha* 33
  - Hebe decumbens* 36
  - Hebe dieffenbachii* 38
  - Hebe dilatata* 39
  - Hebe diosmitolia* 40
  - Hebe divaricata* 124
  - Hebe elliptica* 41
  - Hebe epacridea* 42
  - Hebe evensosa* 43
  - Hebe flavida* 44
  - Hebe gibbsii* 45
  - Hebe glaucophylla* 46
  - Hebe haastii* 47
  - Hebe hectorii* subsp. *coarctata* 46
  - Hebe hectorii* subsp. *demissa* 49
  - Hebe hectorii* subsp. *hectorii* 50
  - Hebe imbricata* 90
  - Hebe insularis* 65
  - Hebe lelophylla* 59
  - Hebe ligustrifolia* 60
  - Hebe lycopodioides* 64
  - Hebe macrantha* var. *brachyphylla* 65
  - Hebe macrantha* var. *macrantha* 66
  - Hebe macrocalyx* var. *humilis* 67
  - Hebe macrocalyx* var. *macrocalyx* 68
  - Hebe macrocarpa* 69

- Hebe masoniae* 70
- Hebe mooreae* 72
- Hebe murrellii* 73
- Hebe obtusata* 76
- Hebe ochracea* 77
- Hebe odora* 78
- Hebe paludosa* 85
- Hebe pareora* 79
- Hebe parviflora* 80
- Hebe pauciflora* 77
- Hebe pauciramosa* 81
- Hebe perbella* 83
- Hebe petriei* 84
- Hebe pimeleoides* subsp. *faucicola* 86
- Hebe pimeleoides* subsp. *pimeleoides* 87
- Hebe piriquifolia* 88
- Hebe propinqua* 91
- Hebe pubescens* subsp. *pubescens* 92
- Hebe pubescens* subsp. *rehaurum* 93
- Hebe pubescens* subsp. *sejuncta* 94
- Hebe rakaiensis* 98
- Hebe ramosissima* 56
- Hebe rigidula* var. *rigidula* 101
- Hebe rigidula* var. *suicata* 102
- Hebe rupicola* 104
- Hebe salicifolia* 105
- Hebe salicomioides* 106
- Hebe scopulorum* 107
- Hebe societatis* 111
- Hebe speciosa* 113
- Hebe stenophylla* var. *hesperia* 115
- Hebe stenophylla* var. *oliveri* 116
- Hebe stenophylla* var. *stenophylla* 117
- Hebe stricta* var. *akinsonii* 121
- Hebe stricta* var. *egmontiana* 118
- Hebe stricta* var. *leta* 119
- Hebe stricta* var. *macroura* 120
- Hebe stricta* var. *stictica* 121
- Hebe strictissima* 122
- Hebe subalpina* 123
- Hebe taiarwhiti* 125
- Hebe tetragona* subsp. *subsimilis* 126
- Hebe tetragona* subsp. *tetragona* 127
- Hebe topleira* 130
- Hebe townsonii* 131
- Hebe traversii* 132
- Hebe treadwellii* 133
- Hebe truncatula* 135
- Hebe urvilleana* 137
- Hebe venustula* 138
- Hebe verucosa* 139
- Hebeohebe acuta* 108
- Hebeohebe hulkeana* subsp. *evestita* 53
- Hebeohebe hulkeana* subsp. *hulkeana* 54
- Hebeohebe laavidiana* 58
- Hebeohebe pentasepala* 82
- Hebeohebe raoulii* subsp. *maccaskillii* 99
- Hebeohebe raoulii* subsp. *raoulii* 100
- Leonchebe cheesemanii* 97
- Leonchebe ciliolata* 51
- Leonchebe cupressoides* 34
- Leonchebe tetrasicha* 128
- Leonchebe tumida* 136
- Parahebe birleyi* 13
- Parahebe brevistylis* 31

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