

NEWSLETTER May 2007

Last issue: December 2006

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From the President

It's been a busy summer for BotSoc—three stimulating meetings, trips to interesting places—both near and far, BioBlitz, a detailed submission on the draft Otari-Wilton's Bush Management Plan, several other submissions, a couple of working bees, a display, planning the programme for the year ahead, starting to promote the award we sponsor for young scientists through the Science Fair, and now, our latest newsletter.

We've also reached another major milestone with our 50th Bulletin. The cover and associated story reminds us of BotSoc's heritage. Jeremy Rolfe has done his usual excellent job of formatting and design. John Sawyer's editorial records some of the Society's successes, but also encourages us to keep thinking about the future and how we want to develop. He offers some suggestions—look for the phrases with the words "must" and "could". This year's Annual General Meeting on 20 August 2007 provides an opportunity for members to let the incoming Committee know what they value about their membership of the Society and what they see as the priorities in a changing world.

Our May meeting, on Monday 21 May, is our annual Members' Evening. This meeting provides an opportunity for members to share their botanical experiences. I'm particularly looking forward to re-living highlights of last summer's trip to Rakiura/Stewart Island and the Catlins. All forms of contributions are welcome—photos, writings, visual art, readings and...

Bev Abbott, President

New members

We welcome the following new members to BotSoc: Matu Booth, Peter Nichols, Jo Schofield, Marc Slade.

Wellington Botanical Society						
President:	Bev Abbott	475 8468				
Vice-Presidents:	Mick Parsons	473 1142	475 7253 (fax)			
	Robyn Smith	236 6086				
Secretary:	Barbara Clark	233 8202	233 2222 (fax)			
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Newsletter Editor:	Chris Horne	475 7025	475 7253 (fax)			
28 Kaihuia St, Northland, Wellington 6012						
Annual	ordinary \$20; country \$15; student \$5;					
Subscription:	group/family \$25.					
Send your subscription to Treasurer, WBS, Box 10 412, Wellington 6143.						
New subscribers: Pl	lease complete form at	the back of this	s Newsletter.			

Articles for web site

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

Please send your article to:

Richard Herbert, 8 Duval Grove, Redwood, Wellington

ph 232 6828

fax 381 4518

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

Manawa Karioi Society Revegetation Programme Workbees

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

Bring your lunch.

Contact:

Peter Russell ph 383 6898 or Sally Bowman ph 934 7041

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.

ATTENDING FIELD TRIPS AND MEETINGS

Ideas please

We welcome your ideas about:

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

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

Field trips

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

Clothing for field trips

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

Day trip gear

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

Overnight trip gear and food

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

1 = wool, polypropylene or polarfleece as applicable.

2 Optional

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

BotSoc equipment

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

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

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

Health and safety

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

Fitness and experience

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

Transport reimbursement of drivers

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

Meetings

Public transport to meetings

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

TO MEETINGS

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

No. 23 Mairangi: 6.55 pm from Southgate,

7.05 Hospital, 7.15 Courtenay Place, 7.22 Pastoral House, 7.27 University.

No. 22 Southgate: 6.55 pm from Mairangi,

7.10 University.

No. 23 Houghton Bay: 7.25 pm from Mairangi,

7.40 University.

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

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

FROM MEETINGS

No. 23 Southgate: 9.10 from University.

No. 23 Southgate: 10.10 from University.

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

Last service 10.01 p.m.

For further information ring Metlink 0800 801-700.

FIELD TRIPS AND EVENING MEETINGS: MAY – OCTOBER 2007

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.

Monday 21 May: Evening meeting

Members' evening

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

Saturday 2 June: Field trip

Redwood Bush KNE

Botanise this 10-ha reserve bordering suburban Tawa. One of the few remaining stands of mature tawa/kohekohe lowland forest close to suburban areas within Wellington City, along with regenerating and revegetated margins. Easy walking via tracks constructed by Friends of Tawa Bush Reserves and Wellington City Council. Map R27 and street map. Meet 9 a.m. at Achilles Close (off Oriel Avenue) entrance to Redwood Bush. Catch Paraparaumu line train to Redwood Stn, departs 8.30 a.m. from Wellington or 8.05 a.m. from Paraparaumu. Phone leader for pick-up, or walk 20 minutes to site. Leader: Richard Herbert 232 6828, 027- 445 5942.

Monday 18 June: Evening meeting

Revegetation vs restoration

Speaker: Dr Ian Atkinson, a well-known ecologist (see article in this *Newsletter*). When does revegetation become restoration, and how do we decide which path to follow?

Sunday 1 July: Field trip

Matiu/Somes Island

NOTE NOT SATURDAY

Join Forest & Bird planting workbee in the morning and botanise island after lunch. Map R27. Meet Queens Wharf 9.45 a.m. to catch East by West ferry - departs Wellington 10 a.m., Petone 10 a.m.; departs Somes Island to Petone 2.15 p.m., to Queens Wharf 3.10 /4.25 p.m. On arrival at Somes be prepared for baggage check for mice etc. Ferry fares: adult \$18.50 return; student/senior citizen \$15.50. Tickets can be booked in advance at 499 1282. Please note: sailings may be cancelled at short notice owing to weather. To check the day's sailing status, phone 494 3339 then press 4; website http://www.eastbywest.co.nz . Wellington contact Sunita Singh 387 9955.

Saturday 14 July: Field trip

Te Marua workbee

In partnership with Greater Wellington, BotSoc has been committed since 1989 to do weed control and revegetation in this important matai/totara/maire remnant in Kaitoke Regional Park. Our biennial workbees must continue with planting and weeding, particularly around the plantings, so please come to help with this important work. Bring: gloves, kneeler, weed bag, and your favourite planting and 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. Maps: R26 Paraparaumu and Upper Hutt street map. Co-leaders: Glennis Sheppard 526 7450, Sue Millar 526 7440.

Monday 16 July: Evening meeting

Hebe or *Veronica* – why change back?

In 1786 Forster gave koromiko the name of *Veronica salicifolia*. Cheesman's Manual (1925) retains *Veronica* for the group we currently call *Hebe*, although before that some authorities were differentiating NZ hebes from the largely northern hemisphere genus *Veronica*. From 1926 *Hebe* increasingly became the accepted name for the genus. Speaker Phil Garnock-Jones, Professor of Plant Science at Victoria University, will explain why it is now proposed to revert to the name *Veronica* for this common group of plants. He has an extensive knowledge of the genus and has published widely on the group. He was closely involved in the recently published "*An Illustrated Guide to New Zealand Hebes*" by Michael Bayly and Alison Kellow.

Saturday 4 August: Field trip

Belmont Regional Park and Korokoro Dam

Botanise regenerating and mature native forest and shrublands in Korokoro valley. Meet in Cornish St, off SH2 just north of Petone overbridge at 9.00 am. We will sort out transport there with a view to starting the walk from Oakleigh St, Maungaraki and finishing in Cornish Street. There will be an option of a short or longer walk. Map R27 and street map. Co-leaders: Rodney Lewington 970 3142 rodneyil@clear.net.nz and Sheelagh Leary 527 7380

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

Monday 20 August: Evening meeting

1. Annual General Meeting 2. AP Druce Memorial Lecture: Vascular flora and some fauna of small northern NZ islands

Speaker: Ewen Cameron, Curator of Botany, Auckland Museum. From the Three Kings to the Bay of Plenty, exploring and documenting the flora of small northern islands and islets has been an enjoyable pastime. Difficulty of access is all part of the challenge. Their definite boundaries make them ideal study areas. The often unknown factor of what is present adds to the excitement. Unusual natives or new weeds all help to indicate the wider picture: the status of both the native and naturalised flora. Islands with large seabird populations and no rats make interesting comparisons to those without seabirds and with rats. A range of different islands and their biota will be presented, including a range of "island species".

Saturday 1 September: Field trip

Mount Victoria, Town Belt

Self-guided 'treasure' trail around the Mount Victoria section of the Town Belt. Learn more about some of the resident plants (both remnants and introductions), and help us update a species list for the area. Test your local plant knowledge, as well as your navigation skills. Leaders: Lara Shepherd w 463 5026, Leon Perrie 381 7261 w, h 386 2618 h.

Monday 17 September: Evening meeting

Otari-Wilton's Bush

1. David Sole, Acting Manager, Natural and Botanic Areas, will provide an insight into the management plan, its intentions and implications. 2. Rewi Elliot, Curator/Manager, Otari-Wilton's Bush, will discuss the collections review.

Saturday 6 October: Field trip

Pakuratahi forest: "Munitions Creek", Goat Rock

Botanise regenerating forest above "Munitions Creek" and along to Goat Rock on and off-track. Map S27, Lake Wairarapa. Meet 9 a.m. at start of Rimutaka Rail Trail, off SH2 beyond top of Kaitoke Hill.

Co-Leaders: Chris Horne 475 7025, Barbara Mitcalfe 475 7149.

Shift in timing of summer trip?

The Committee has recently been discussing shifting next summer's trip from the Christmas-New Year period to some time in late January-early February. There are several potential advantages, particularly if we decide to go to Great Barrier Island. These include:

- less crowding the population of GBI increases from about 1000 to several thousand over the main holiday period
- • the weather is likely to be more stable
- members who have family commitments over the Christmas-New Year period will be able to take part.

Actual dates have not yet been set and are dependent on the availability of accommodation. We are looking for about 10 days between 29 January and xx February. We'll probably aim to avoid the two holiday weekends in Auckland (their Anniversary Day is 28 January and Waitangi Day is 6 February). We also want to get in before schools start booking the sort of accommodation we prefer. Enabling people to get home in time for the International Festival of the Arts in Wellington which starts on 22 February is another consideration.

We are proposing that individuals make their own travel bookings to and from GBI. There are several options for getting to Auckland. From there, travel is by air or ferry. Current fares (one way by air) from Auckland to GBI seem to range from \$76 to at least \$96. The ferry trip takes between two and a half hours and four and a half hours, depending on the company. Ferry fares for an adult are currently \$105 (return) with Fullers or \$65 one way for an adult on Sealink. Parking is available near the Sealink Ferry terminal for 8–14 days for about \$85.

It's not possible at this stage to provide reliable estimates of the costs for accommodation, food or travel on the island. We will need to check the options when we have a better idea of how many people are interested. One option is to reduce the work and risks associated with organising our own food by seeking accommodation that provides meals. One of the outdoor education lodges provides three meals a day for \$25. They also have tent sites at \$10 per person per night, backpackers' accommodation at \$18 per person per night as well as larger self-contained units.

Please let Barbara Clark know your views on this proposal by phone (04) 233 8202 or email bj_clark@ xtra.co.nz as soon as possible. Early indications of likely attendance would also be useful so we know how much accommodation we need to find/book.

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.

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.

Index to Bulletins Nos. 1-35.

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

EVENTS

- 15 May. Otari-Wilton's Bush Trust AGM. 7.15 p.m. Te Marae o Tane, 160 Wilton Rd, Wilton. Margaret Crimp 475 3263 e-mail m.crimp@extra.co.nz
- 17 May. Ulva Island public workshop. 7 p.m. Kelvin Hotel, Invercargill. Note: this will be a tele-conference. Contact Peter Wilson, Southland Conservancy, DOC, for instructions/advice – ph 03 211 2400, fax 03 214 4486, e-mail rakiura@doc.govt.nz
- 19 May. WCC Berhampore Nursery Open Day. Emerson St., Berhampore. 10 a.m. 2 p.m. Theme: Natives as ground-cover. Native and adventive plant sales; displays including the BotSoc display; self-guided nursery tours. Talks: natives as ground-cover; tree-pruning; succulents; orchids. Contact Jonathan Bussell 389 9729.
- 27 May. Guided walk to the giant rimu. 2 4.30 p.m. Meet at Otari Information Centre, 160 Wilton Rd, Wilton.
- *May November.* **Mana Island weeding weekends.** Depart Friday return Sunday. 5 people/weekend. 26-27/5, 16-17/6, 14-15/7, 11-12/8, 8-9/9, 6-7/10, 17-18/11. Ferry departs Mana Cruising Club Fridays at 6 p.m. possibly earlier in winter. Bookings essential Julia White 938 5102, 021 112 8841.
- 5 June. Arbor Day.
- June September. Planting on Matiu/Somes. Sundays 3/6, 17/6, 1/7, 15/7, 29/7, 19/8, 2/9. Alex Kettles 569 6208, or Stan Butcher 567 7271.
- 24 June. Learn about what goes on behind the scenes at Otari.
 2 p.m. Meet at Otari Information Centre, 160 Wilton Rd, Wilton.
 Leader: Rewi Elliot, Curator.
- 27 June. Cockayne Lecture: Birds in paradise the role of birds in shaping NZ's terrestrial biodiversity. Dr Bill Lee, Landcare Research, Dunedin. 7.30 p.m. Science House, Turnbull St, Thorndon.
- 29 June 1 July. ECO Conference 2007: "Community action the future is in our hands". Riverside Community, RD2, Upper Moutere. Topics include: Climate change; ocean and marine matters; new NZ Coastal Policy Statement; biodiversity review; environmental education. Programme update at www.eco.org.nz. Environment and Conservation Organisations of NZ Inc, PO Box 11057, WN. Ph/fax 385 7545, eco@reddfish.co.nz
- 4 7 July. Conserve-vision. Conference to celebrate 20 years
 of integrated conservation management by the Department of
 Conservation, and plan for the future. http://www.waikato.ac.nz/
 wfass/Conserv-Vision/index.shtml
- 6 12 August. Conservation Week "Focus on outdoor recreation". Kerry Swadling and Matt Barnett, Wellington Conservancy, Department of Conservation, ph 472 5821. Events will be listed on www.doc@govt.nz
- 11 August. WCC Otari-Wilton's Bush Open Day. 160 Wilton Rd., Wilton. 9.30 a.m. – 2 p.m. Native plant sales; displays including BotSoc's display. Contact Rewi Elliot 475 3245.
- 22 25 August. NIWA Wellington Regional Science and Technology Fair. Laby Building, Victoria University, Kelburn Pde, WN. Sylvia Nichol, 386 0396, s.nichol@niwa.co.nz. BotSoc contact: Joyce Stretton 934 2437.
- 27 November 4 December. Chatham Islands botanical camp. Canterbury BotSoc, c/- Margaret Geerkens, 03 352 7922, bert.marg@xtra.co.nz

PUBLICATIONS

- 1a. Science and technical publications 2006. Catalogue, 19 p.
 1b. NZ Threat Classification System lists 2005. R. Hitchmough,
 L. Bull, P. Cromarty 2007. 194 p.
- 1c. **Border control for potential aquatic weeds. Stage 3. Weeds risk management**. P.D. Champion, D.E. Hofstra, J.S. Clayton 2007. *Science for Conservation 271*. 41 p.
- 1d. Understanding public conservation awareness within Waikato Conservancy. J. Fitchman 2007. DOC Research & Development Series 267. 22 p.
- Science & Technical Publishing, Department of Conservation, PO Box 10 420, WN 6143.
- 2. **FOOTnotes.** Issue 27, 4/07. Marine reserve for Wellington; WN Visitor Centre moves to 18-32 Manners St; Restoration Day to focus on lowland forest; etc.
- Department of Conservation, PO Box 5086, WN. Ph 472 5821.
- 3a. Stewart Island/Rakiura Conservation Management Strategy Review & Rakiura National Park Management Plan Review – summary of submissions. 4/07.
- 3b. Rakiura Planning Newsletter. 22/2/07 & 24/4/07.
- Southland Conservancy, Department of Conservation, PO Box 743, Invercargill 9480. See also Events section.
- 4. Museum of NZ/Te Papa Tongarewa Annual Report 2005/2006. 88 p.
- Te Papa, PO Box 467, WN. Ph 381 7000, fax 381 7070, e-mail mail@tepapa.govt.nz
- 5a. Frequently asked questions about open space covenants. A4 brochure.
- 5b. Assisting landowners protect special features on their land. A4 brochure.
- 5c. **Open Space.** No. 69 4/07: QEII National Trust 30th anniversary celebration, Lake Pounui 16/3/07; visual landscape values in covenants; NZ's freshwater lake plants; dryland ecosystem biodiversity (abridged version of poster produced for NZ Freshwater Sciences Soc.); booklets on pest trap guidelines; *Pseudopanax ferox/* fierce lancewood; etc.
- QEII National Trust, PO Box 3341, WN. Ph 472 6626, fax 472 5578, freephone 0508 732 878, e-mail qe2@qe2.org.nz www.openspace.org.nz
- 6. **Weedbusters! Issue 11 3/07.** Review of national biodiversity strategy gives Weedbusters an honourable mention; weeds affecting wetlands; etc.
- Weedbusters, PO Box 4055, Hamilton. 0274 434 431, info@weedbusters.org.nz
- 7a. **Proposed 2007/08 Annual Plan.** Incorporating a proposed amendment to the 2006-16 Ten-year Plan (LTCCP). See Submissions section.
- 7b. **So you're thinking about a pond.** A guide to the design, management and consent requirements for landowners. 8 p.
- Greater Wellington Regional Council, PO Box 11 646, WN. 384 5708, www.gw.govt.nz
- 8. **Branch Out.** Vol 23: Summer 07: study of Ohariu Stream; protecting bush corridors, reserves, track networks and streams from urban development; BioBlitz; restoring northern rata to Wellington; Regional Pest Management Strategy review; etc.
- Wellington City Council, PO Box 2199, WN. 499 4444, lyn.murphy@cc.govt.nz
- 9a. **NZ Botanical Society Newsletter.** No. 86, 12/06: Cheeseman Symposium; regional BotSoc news; etc. No. 87, 3/07: digitisation of NZ BotSoc Newsletter; a new Hebe species in Canterbury?; regional BotSoc news; etc.
- <u>9b.</u> **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.

- 10. Trilepidea. No. 37 12/06: plant of the month -Nationally Endangered aromatic woody tree, Brachyglottis huntii/rautini/Chatham Is. Christmas tree; NZ Threatened Plant Committee re-formed; NZ naturalised vascular plant list published; identification of your Important Plant Areas; etc. No. 38 1/07: plant of the month - Pseudowintera insperata/Northland horopito; NZ threatened plant seed bank to be established at AgResearch, Palmerston North; origin and diversification of the austral genus Drachophyllum; etc. No. 39 2/07: plant of the month - Nationally Endangered Pittosporum obcordatum; fact sheets for NZ's 14 indigenous vagrant vascular plants; 12,000 images on web site - more sought; Sue Wickison paints the extinct Adams mistletoe/Trilepidea adamsii for annual Individual Conservation Achievement Award; seed of NZ Gaultheria sought; Otari's BioBlitz; etc. No. 40 3/07: plant of the month – Bragginsella anomala, a Nationally Critical liverwort; QEII Covenant surveys for threatened plants begins; Auckland Regional Council wins NZPCN plant conservation award; submissions sought on status of NZ's threatened vascular plants; threatened plant survey begun in Bay of Plenty; GlobalRestorationNetwork.org launched in Arizona; etc. No. 41 4/07: plant of the month - Range Restricted Cenchrus caliculatus/large burr grass/devil grass/owee grass - Raoul Island; images of all 106 NZ orchid taxa now on NZPCN web site; two new species of Dianella recognised; fungal guide web site; flora of Southland's South Coast Track; obituary for Nancy Adams, botanical artist and historian; etc.
- NZ Plant Conservation Network, PO Box 16 102, WN.
- 11. 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.
- 12a. Rangitoto Island vegetation & flora a brief introduction. Register your name and address with "Rangitoto Book" at the address below.
- 12b. **Auckland Botanical Society Journal.** Vol 61 (2) 12/06: Lucy Cranwell Lecture 2005: "Biosystematics—more than providing a name"; vascular flora of 12 small northern NZ islands; field trip reports; etc.
- 12c. **Dictionary of Maori plant names.** J. Beever 1991. 75 p. Sale price \$2 incl. p&p.
- 12d. **Meanings and origins of botanical names of NZ plants.** Marie Taylor 2002. \$27 incl. p&p.
- ABS, c/- Mei Nee Lee, PO Box 26391, Epsom, AK.
- 13. **Rotorua Botanical Society Newsletter.** No. 47 12/06: 20 m by 20 m plot work on Mt Ngongotaha as part of restoration of indigenous ecology; National Forestry Herbarium news specimen information is on web page at www.ensisjv.com/herbarium; Okareka mistletoe restoration project; etc.
- RBS, c/- The National Forestry Herbarium, Ensis, Te Papa Tipu Innovation Park, Private Bag 3020, Rotorua 3046.
- 14. **Waikato Botanical Society Newsletter.** No. 24 12/06: threatened plant garden update; Nationally Endangered plant profile *–Hebe speciosa*/napuka/titirangi
- WBS, c/- Department of Biological Sciences, University of Waikato, Private Bag 3105, Hamilton.
- 15. **BioBlitz 23 24 March 07.** Report. 1 p. See article in this Newsletter
- Complete results at <u>www.otari100.org.nz</u>

- 16. Forest & Bird. No. 323, 2/07: Biodiversity Strategy reviewed; rautini/Chatham Is. Christmas tree voted Plant of the Year 2006; Ata Rangi and Project Crimson saving northern rata in Wairarapa; Kupe/Kevin Smith Marine Reserve, Wellington South Coast; phoenix palms and agapanthus pest plants in Auckland; pollination in native orchids; community conservation efforts on Great Barrier Is./Aotea; Geoff Park on impacts of climate change on forests; Matiu/Somes Island project's 25th anniversary; etc.
- Royal Forest & Bird Protection Society, PO Box 631, WN. Level 1, 90 Ghuznee St, WN. Ph 385 7374, fax 385 7373, e-mail office@forestandbird.org.nz, web www.forestandbird.org.nz
- 17. **Rahui.** Summer 06: responding to climate change; etc. Winter 07: protection of Makara Estuary; Aro Valley restoration project; formation of rare plants group on Mana Island; etc.
- Wellington Branch, Royal Forest & Bird Protection Society, PO Box 4183, WN.
- 18. Friends of Wellington Botanic Garden Newsletter. 3/07: progress with weeding native forest areas; designing new nursery building; etc.
- FoWBG, PO Box 28 065, WN.
- 19. **Southern Environmental Association Newsletter.** 12/06-1/07: purchase of 1.3 ha bush area near Island bay donations to Island Bay Natural Heritage Trust welcome!; recent research into loss of native bush; report on revegetation work in 2006; Ohiro Road bush threatened; etc.
- SEA and IBNHT, 36 Ribble St, Island Bay, WN. southern. environmental @xtra.co.nz
- 20a. **Celebrating 25 years of restoring forests.** Frequently asked questions; list of covenanted properties; etc. 4 p.
- 20b. Canopy. No.45 Autumn 06: 152 ha Cynthia Hewett Reserve, southwest of Kaikohe, Northland; etc.
- NZ Native Forests Restoration Trust, PO Box 80 007, Green Bay, Auckland 1230. www.nznfrt.org.nz
- 21. **Coast Care News.** 1/07: Coastal Dune Vegetation Network (CDVN) becomes Dune Restoration Trust of NZ; spinifex seed collection; etc.
- Environment Bay of Plenty, PO Box 364, Whakatane 3158.
- 22. **Friends of Mana Island Newsletter.** No.30 2/07: threatened plants translocation to Mana; *Muehlenbeckia astonii/* shrubby tororaro; GPS mapping of weed distribution; etc.
- FoMI. PO Box 54 101, Mana 5247.
- 23. **ecolink.** 12/06: review of NZ Coastal Policy Statement; scrutiny of Bluegreen proposals; reassessing 1080; etc.
- Environment and Conservation Organisations of NZ Inc, PO Box 11 057, WN. Ph/fax 3857545. eco@reddfish.co.nz
- 24. **Pipipi.** No.27 3/07: Stony Bay valley added to Hinewai donations sought!; 1.6 ha gully above Long Bay Road added to Hinewai; mamaku found; etc.
- Hinewai Reserve, RD 3, Akaroa.
- 25. Common Seaweeds of NZ. Nancy M Adams 1997. A5, 48 p and 48 colour plates.
- Bookshops.
- 26. **Muelleria.** BotSoc receives this biannual from the National Herbarium of Victoria, Royal Botanic Gardens, Melbourne. It is available for viewing at our evening meetings.
- 27. **Journal of the Torrey Botanical Society.** BotSoc receives this quarterly from Kansas, USA. It is available for viewing at our evening meetings.
- 28. Natural variation and conservation of *Lepidium* sisymbrioides Hook. f. and *L. solandri* Kirk (Brassicaceae) in South Island, NZ, based on morphological and DNA sequence data. P.B. Heenan, A.D. Mitchell, P.A. McLenachan, P.J. Lochart, P.J. de Lange 2007.
- NZ Journal of Botany 45: 237-264.

- 29a. **Field guide to rushes, sedges and allied plants.** Each species illustrated with grey–tone (digital photo) silhouettes, and a brief text description emphasising distinguishing field features on opposite page. Keys included. A5, wire ring binding. \$15.
- 29b. Field guide to ferns and fern allies. Format as above. \$10.
- <u>GTJane@clear.net.nz</u> 07 570 3123.
- 30. **A botanist's notebook.** Eric Godley 2006. >70 botanical essays. 235 p. A5 with 126 B & W illustrations. \$25 incl. p&p.
- Manuka Press, PO Box 245, Cromwell 9342,

sales@manukapress.co.nz

- 31. **NZ Native Orchid Group.** Journal No. 102, 2/07: role of cultivation in orchid conservation; etc.
- NZ Orchid Group, c/- Ian St George, 22 Orchard St, Wadestown, WN.
- 32. A different view. Comments by Bethney McLennan on the Chatham Islands' flora.
- The Dominion Post. 28/4/07.

AWARDS AVAILABLE

- 31 May. Loder Cup. New Zealand's premier conservation award. In 1926, Gerald Loder donated the Cup to encourage and honour New Zealanders who work to investigate, promote, retain and cherish NZ's indigenous flora. Awarded annually to the person, group of people, or organisation, which has exceeded all other nominees in furthering the aims and objects of the donor of the cup, it is entrusted to the Minister of Conservation who appoints the Loder Cup Committee and awards it. Nominations must be endorsed by a botanical society.
- Nominations to Anne McLean, DOC, PO Box 10 420, WN. Ph 04 471 3182.
- 29 June. Wellington Conservation Awards. Information and nomination forms at www.doc@govt.nz
- *30 June.* **H. H. Allan Mere Award 2007**. The award is made annually to a person or persons who have made outstanding contributions to botany in New Zealand, either in a professional or amateur capacity.
- Nominations to Ewen Cameron, Secretary, NZ Botanical Society, c/- Canterbury Museum, Rolleston Avenue, CH 8013.

GRANTS AVAILABLE

- 21 May, 20 August, 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
- 21 May. **Biodiversity Advice Fund.** This fund assists with the provision of advice on the management of indigenous biodiversity on private land only.
- 21 May. Biodiversity Condition Fund. This fund assists with the management of indigenous biodiversity on private land only.
- Funds Co-ordinator, Siobain Finlow-Bates, ph 0800 86 2020, www.biodiversity.govt.nz
- 31 July, 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 www.wellington.govt.nz/services/grants
- $15\ November$: Wellington Botanical Society Jubilee Award. See article in this issue.
- 16 March 2008. **Take Care Programme restoration of threatened ecosystems.** This programme supports projects based around rivers, streams, wetlands, lakes, dunes, coastal areas and estuaries. Note: applications open <u>9 February 2008</u>.
- Paula Loader, Take Care Co-ordinator, Greater Wellington Regional Council, PO Box 11 646, WN. Ph 0800 496 734, www.gw.govt.nz/apply

SUBMISSIONS DUE

- 17 May. Ulva Island, Rakiura National Park pre-draft policy. Discussion document for tele-conference, Kelvin Hotel, Invercargill. Peter Wilson or Anke de Jong 03 211 2400, rakiura@doc.govt.nz.
- 18 May. Wellington City Council draft annual plan 2007/08 amendment to the long-term plan. Copies available from 499 4444 and www.Wellington.govt.nz. Submissions to Wellington City Council, PO Box 2199, WN.
- 2 July. Proposed changes to infill housing in Wellington. These
 may have implications for areas of indigenous vegetation on
 private land. Director Planning and Urban Design, Wellington
 City Council, PO Box 2199, WN. Ph 499 4444.

SUBMISSIONS MADE

- Otari Native Botanic Garden and Wilton's Bush Reserve draft management plan. 25/1/07. See article in this Newsletter.
- Application for the reassessment of 1080 under the Hazardous Substances and New Organisms Act 1996. 30/1/07. We supported the continued use of 1080 for the control of introduced animals in indigenous plant communities, because it is the only practical method in the rugged mountain ranges.
- WCC Off-road mountain bike policy. 9/3/07. We listed the impacts of mountain bikes on walkers and on tracks, and listed the seven reserves we have held field trips in in the last two years. We recommended that, as a general rule, tracks in indigenous forest reserves, except Makara Peak, the city's dedicated mountain bike park, and the gently graded track from Fitzgerald Place to Wright Hill, be closed to mountain bike use, to protect the indigenous plant communities and their supporting soils, and to protect walkers on the tracks which are often narrow and steep.
- Battle Hill Farm Forest Park draft management plan. 12/4/07. We supported most of the proposals. We recommended that the condition of indigenous ecosystems and revegetation plantings be monitored for the impacts of pest animals and pest plants and other weeds. We expressed our concern that any adventive plant species may have long-term adverse effects on indigenous ecosystems, because experience shows that it can take 50 years before it becomes obvious that an alien plant species will become invasive.
- Greater Wellington Regional Council Proposed 2007/08
 Annual Plan, incorporating a proposed amendment to the 2006-16 ten-year plan (LTCCP). 6/5/07.
 - We listed eight field trips we had in regional parks in recent years, and workbees at Te Marua Bush, and monitoring riparian plantings on the banks of the Hutt River. We recommended that funding be allocated to produce a Report card on indigenous ecosystems in the next "State of our environment - annual summary", and noted that the 2005/06 edition lacked one. We supported intensive pest animal and pest plant and other weeds control in the Hutt, Orongorongo and Wainuiomata catchments, and in the regional parks and forests, given their high ecological significance. We supported vegetation monitoring, to enable Council to measure the efficacy of its pest animal and pest plant control work. We sought assurance that Council would continue to support our work on revegetation and weed control at Te Marua Bush. We opposed the proposal to defer the introduction of ranger services for the new wetland regional park at Lake Wairarapa. We recommended the establishment of a regional park on the southwest Wellington peninsula, and a regional coastal trail from the Wairarapa to Kapiti. We recommended that funding be provided to fence areas of indigenous vegetation on Whareroa Farm, Mackays Crossing. We recommended that funding be provided for eliminating goats from the wild on the Wellington southwest peninsula.

QEII Trust Open Space Covenants

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

- Tararua D.C./Ellingham 3.2 ha forest
- Masterton D.C./Bartlett 35.3 ha forest
- Masterton D.C./Birch 9.1 ha forest
- Masterton D.C./Joblin 11.5 ha –forest
- Masterton D.C./Waimapu Land Developments Ltd 0.8 ha forest
- Wellington C.C/Wellington Natural Heritage Trust Inc. –
 8.2 ha forest

Source: Open Space no. 69, 4/07

Land protection

Wellington Conservancy, Department of Conservation, has recently protected the following sites:

- Mahaki covenant, Kapiti Area. 18.8 ha. Protects lowland forest adjoining Paraparaumu Scenic Reserve.
- Ata Rangi Conservation Covenant, Wairarapa Area.
 33.5 ha. Protects podocarp forest with alluvial stream flats, podocarp-beech on terrace risers, and beech forest associated with incised stream.
- Fairbrother's Conservation Covenant, Wairarapa Area.
 43.25 ha. Protects riparian beech forest with an 'incised-to-bedrock' stream bed. The forest, on the older soils of the Aorangi Range, has a denser understorey than the more recent alluvial terrace forest in the nearby Ata Rangi Covenant. The forest contains the rare leafless mistletoe.
- Kanuka Management Agreement, Wairarapa Area. 1
 ha. Protects a small, dense area of mixed divaricating
 shrubs, including populations of Coprosma obconica,
 Pittosporum obcordatum and at least 30 individuals of
 Coprosma pedicellata.

David Bishop, Community Relations Officer Wellington Conservancy, Department of Conservation Ph 472 5821

Call for applications for Wellington Botanical Society Jubilee Award 2007

Wellington Botanical Society invites applications for an Award of up to \$2000 to encourage and assist applicants to increase knowledge of the New Zealand indigenous flora, and to commemorate the 50th Jubilee of the Society.

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

Matiu matters

Another plant can be added to the 146 indigenous species listed by Peter de Lange et al in *Matiu/Somes Island – a plan for conservation management* (Department of Conservation 9/06). It is *Parsonsia heterophylla/* akakaikiore/NZ jasmine, probably self-introduced, being among trees on the west coast, which was grass-covered before the revegetation programme began in 1981. When the management plan is reviewed, a list of seaweed species would be a valued addition.

This season Lower Hutt Forest and Bird will be planting on lawn areas retired by DOC, and among trees where light wells have been created by pruning ngaio which dominates the canopy. BotSoccers' help would be welcome! – see Events section in this *Newsletter*.

Eight animal species have been introduced: Cook Strait giant weta, Wellington tree weta, tuatara, kakariki, North Island robin, forest gecko, green gecko and ornate skink. We hope that fluttering shearwaters will be attracted by recorded bird-calls to artificial burrows at the south end of the island.



Green gecko, recently released on Matiu/Somes. Photo: Bryan Welch.

Red admiral butterflies are now rare after the virtual elimination of perennial nettle/*Urtica dioica*, a weed. Perhaps scrub nettle/*Urtica incisa*, or even ongaonga/giant nettle/*Urtica ferox*, should be introduced?

Stan Butcher

Nancy M Adams CBE QSO, 1926 – 2007

Nancy, the phycologist and renowned botanical artist, died on 27 March.

Nancy is probably best remembered for her distinctive illustrations and series of remarkable books. She will be well known to several generations of botanists for her work on probably the most popular NZ native plant book ever produced for a general audience – *Trees and shrubs of NZ* – (Poole & Adams 1963), which ran to six editions and is still available.

Source: NZ Plant Conservation Network
A full obituary by Dr Wendy Nelson will appear in our next
Newsletter.

Grace Radcliffe 31 October 1917 – 30 March 2007

Grace died at the end of March following a stroke.

She joined BotSoc in 1971 when we had both attended a Workers' Education Association (WEA) Native Plant Course tutored by another BotSoc member, Graeme Smith. Graeme was then a school teacher in Wellington.

Grace, and her husband Bill, had an intense interest in and knowledge of New Zealand natural history. This they shared with the WEA Botany Field Group—in Grace's case for over thirty years. Members of BotSoc also benefited, as Grace was a regular at evening meetings and on day trips.

In 2004 Grace reluctantly admitted that the years had crept up on her and resigned from the Society, generously enclosing a donation to the Jubilee Award Fund with her letter of resignation.

Darea Sherratt

Sheila Natusch ONZM

We congratulate Sheila, appointed an Officer of the NZ Order of Merit in the New Year's Honours, for her work as a botanical author and illustrator.

Editor

Maureen Young honoured

We congratulate Maureen, winner of the NZ Plant Conservation Network 2006 Individual Award. Maureen, a skilled botanist, is "one of the most important advocates for plant conservation in Auckland. She has assisted the Department of Conservation with locating threatened plant sites over many years ... she is a legend". Maureen has been on several of our summer field trips, including our Borland Lodge, Southland, trip in 2000/01, a long way from her home in Warkworth!

Editor

New discoveries in wetlands

In November, I visited three swamps on a property north of Otaki to look at covenanting them with Queen Elizabeth II National Trust. Two of these swamps were recognised as "eco-sites" on the Kapiti Coast District Plan. One eco-site swamp was a very degraded *Carex virgata* swamp with a large area of shallow open water at one end. This pond contained a thick 'soup' of floating and aquatic plants including the free-

floating fern *Azolla filiculoides*, *Lemna minor*/duckweed, and *Myriophyllum propinguum*/water milfoil, .

Also present in large numbers was another plant which I had never seen before. I took some photos and looked up my well-worn "Wetland Plants in New Zealand", by Peter Johnson and Pat Brooke, at home to try identify it-to no avail. I then e-mailed my photos to Paul Champion at NIWA. Paul identified the plant as Ricciocarpos natans, a floating liverwort. According to "The Liverworts of New Zealand", by KW Allison and John Child (1975), it is found in Europe and has been found several times in Auckland and "should be looked for throughout the North Island". Allison and Child also say that it is rarely found with capsules. The authors presume that reproduction is probably vegetative with the thallus (plant body not differentiated into stems and leaves) splitting into two. The thallus is shaped like partially opened wings and is green but the most striking feature of the plant is the beautiful dark purple scales attached to its undersurface.



Ricciocarpus natans in a recently created QEII Covenant north of Otaki. Photo: Robyn Smith.

Peter de Lange's comments on the distribution are as follows "....I know it from Lake Wairarapa—where it used to be quite common along the Western Lake Reserve shoreline in 1990–1991. I also saw it in the Te Hapua wetlands, northern end, in 1993. I also know it from Lake Mangakaware, near Ngahinapouri in the Hamilton Basin..."

Since the discovery at the Otaki wetlands I have also found it in two other covenants at Te Hapua swamp on the Kapiti Coast but in much smaller numbers than further north.

Paul also identified *Wolffia australiana*, reputed to be the smallest flowering plant in the world. *Wolffia* has a luminous sheen to it in the sun, and according to Peter Johnson's book, this plant sinks to the bottom over winter. [There will be more on *Wolffia australiana* in *Bulletin 51*. Ed.]

In another wetland on the property, not listed as an ecosite, the vegetation is a mix of *Coprosma propinqua*, *C. tenuicaulis*, *Leptospermum scoparium*, *Carex virgata* and *C. secta*, plus a large area of *Baumea teretifolia*, which is not common in the lower North Island. When I moved further into the wetland I came across a large patch of *Korthalsella salicornioides*/leafless mistletoe, on manuka.

The wetland on the property is a small part of a much larger wetland on the neighbouring property. The vegetation is very similar to the second wetland, although I haven't found the mistletoe on it...yet. Covenants on all three wetlands were approved in March 2007.

Robyn Smith Wellington Regional Representative QE II National Trust

Otari-Wilton's Bush BioBlitz

Ten teams of botanists headed for different tracks and gorges in Otari-Wilton's Bush (OWB) just before 3 p.m. on Friday 23 March 2007 when Wellington's Mayor, Kerry Prendergast, announced the start of BioBlitz. Three hours later, as fading light forced them to return, many participants regretted the end of daylight saving one week earlier. Nevertheless, the 24-hour challenge of identifying all the plants growing in OWB was well underway.

BioBlitz is a concept developed in the USA to promote urban biodiversity and public awareness of biodiversity. The OWB BioBlitz was organised by Otari-Wilton's Bush Trust and Wellington City Council, with the support of many other organisations as part of the Centenary celebrations (August 2006 – August 2007). It was not just about plants; others surveyed birds, zooplankton, insects, fish, reptiles and fungi.

The preparation for the botanical surveys had started months before. We knew from checks of previous species lists, herbarium specimens and some preliminary forays, that 608 plant species had been recorded in OWB at some time in the past (439 natives and 169 adventives). What we couldn't predict, however, was how many we'd find and identify in the next 24 hours. We wondered if any of the weeds had been eradicated, or if new ones had arrived? We knew we'd be lucky to find some of the orchids at this time of the year, for

example, *Pterostylis banksii* and a caladenia. Additions to the known mosses, liverworts and lichens were all possible.

Wellington is fortunate in having several institutions with botanists on staff. This meant that the botanical teams included botanists from Te Papa, Victoria University, the Department of Conservation and Otari/Wellington City Council as well as BotSoc members. In all, some 27 amateur and professional botanists took part.

Teams were back in the field early Saturday morning and in the 24 hours the botanical teams found and identified 497 species of plants –343 indigenous and 154 adventives. (BioBlitz and the species counts did not include species in the formal gardens/collections but did include non-Wellington species such as beech and kauri that were either self-introduced or planted in the bush areas).

Contributions from the specialists recording animals and other taxa brought the total number of species identified during the 24 hours of BioBlitz to 1345.

Twenty-seven adventive plants were added to the list during the BioBlitz including Phil Garnock-Jones's find of *Veronica javanica*. This is a new record for New Zealand.

Twenty-five native plant species were recorded at OWB for the first time during BioBlitz, and still more could be added later this year. Barbara Polly, lichenologist from Te Papa, was confident of finding new records among the specimens she

Otari-Wilton's Bush Plant Summary from BioBlitz 23/24 March 2007. List compiled by Rodney Lewington.

	Species previously reported and found during the BioBlitz	Species not previously reported but found during the BioBlitz	Species previously reported and NOT identified during the BioBlitz	Totals
Native gymnosperm trees and shrubs	8	0	1	9
Native monocot trees	2	0	0	2
Native dicot trees and shrubs	76	9	4	89
Native monocot lianes	2	0	0	2
Native dicot lianes	9	0	1	10
Native psilopsids, lycopods and quillworts	2	1	0	3
Native ferns	49	4	8	61
Native orchids	4	1	2	7
Native sedges	9	0	2	11
Native grasses	4	0	2	6
Remaining native monocots	6	5	0	11
Native composite herbs	3	0	1	4
Native dicot herbs	10	5	9	24
Adventive gymnosperm trees and shrubs	1	0	1	2
Adventive trees and shrubs	14	1	20	35
Adventive dicot lianes	7	1	5	13
Adventive lycopods	0	1	0	1
Adventive ferns	0	0	1	1
Adventive grasses	13	4	6	23
Adventive sedges	3	1	1	5
Adventive monocot herbs (other than orchids, grasses, sedges and rushes)	6	1	4	11
Adventive composite herbs	20	3	1	24
Adventive dicot herbs	62	15	2	79
Mosses	69	4	25	98
Hornworts and liverworts	42	10	31	83
Lichens	10	0	60	70
Totals	431	66	187	684
Total plants identified during BioBlitz	497		_	

had collected but not formally identified during BioBlitz. To date, only 70 lichens have been recorded from Otari-Wilton's Bush though New Zealand has over 1700 species. Barbara says it can take several hours to identify an unfamiliar lichen.

Ferns are an important component of plants at OWB. Our pre-BioBlitz species list included 55 ferns and most were found again. Leon Perrie added some *Asplenium* hybrids, and Patrick Brownsey confirmed *Cyathea cunninghamii* after some earlier detection work by Chris Horne. Kidney fern (now called *Hymenophyllum nephrophyllum*) remained elusive for a long time but Barbara Mitcalfe and Chris Horne were eventually successful thanks to assistance from Dave Bidgood, one of the Otari staff.

At the end of the 24 hours of BioBlitz, there were also some surprises amongst the species still on the "missing" lists. We could scarcely believe that no-one had found *Blechnum fluviatile*. There is perhaps some good news in the fact that no one found cotoneaster, holly or boobialla/"Tasmanian ngaio".

BioBlitz was not just a scientific inventory. It also provided opportunities for the public to learn more about OWB through talks, guided walks and displays. The Society produced several large posters to increase awareness of the plants and past changes in the vegetation of OWB and these will be offered to Otari for their use.

Bev Abbott Field coordinator, botanical teams.

Pest animal alert

At the behest of United Future NZ, the Government is to set up a consultation panel to consider recreational and environmental matters concerning deer, chamois, tahr and pigs.

Given the tendency for pest animals to browse preferred palatable species to near-extinction, or actual extinction, in areas they infest, it is essential that the proposed panel includes 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 control operations whenever it is deemed necessary. Peruse the Public Notices in your daily paper for information about the panel, its publications, and deadlines for submissions.

Editor

Pests on Rakiura/Stewart Island

During our eight days on the island, we spent several of them botanising the bush and walking the tracks in and around picturesque Halfmoon Bay/Oban, and the nearby bays. We were struck by the beauty and luxuriance of the native plant communities, often with plants new to us, and by the abundance of bird-life. Kereru, kaka, kakariki, and tui were abundant. It was obvious to us that the intensive possum- and rodent-killing programme in this, the inhabited part of the island, was of great benefit to indigenous ecosystems.

Some pest plants and other weeds are being controlled, but more intensive control is required. BotSoccers Richard and Margaret Herbert were so concerned about the weediness of this part of Rakiura that they wrote to Environment Southland (ES)/Te Taiao Tonga. In his reply, Randall Milne, Biosecurity Officer – Pest Plants, wrote "that the emphasis

to date had been on pest animal control in the Halfmoon Bay area. This has been driven by SIRCET (Stewart Island Rakiura Community Environment Trust), with support from agencies such as ES and the Department of Conservation (DOC). SIRCET now have a 'weed person', and have adopted areas to carry out weed control and revegetation work. Chilean flame creeper/*Tropaeolum speciosum*, and Darwin's barberry/*Berberis darwinii* are two weed species of particular focus for the project". Richard and Margaret reported seeing *Bomarea caldasii* which Randall will try to get controlled.



Tropaeolum speciosum/Chilean flame creeper. Photo: DOC.

He reports that "for the past five years, DOC, ES and Southland District Council (SDC) have contributed to an extensive programme to control Darwin's barberry in the Halfmoon Bay area. DOC has been the major partner in the programme, which is appropriate given the values at risk, and its capacity to access funding for such an extensive programme. There is considerably less flowering/fruiting Darwin's barberry now than at the start of the programme ... DOC has worked on Chilean flame creeper and Selaginella kraussiana/African club moss ... using funds from ES over the past five years. The level of funding does not appear to have been sufficient to halt the spread of Chilean flame creeper in particular. We hope that the increased publicity on weeds associated with SIRCET will increase the efforts by landowners to take on this and other weeds on their property".

In 2006 ES sent a pamphlet about weeds to all Rakiura landowners. It describes Chilean rhubarb/*Gunnera tinctoria*, several cotoneasters, holly, African club moss and escallonia. In the draft Regional Pest Management Strategy, ES is proposing to classify Chilean rhubarb as an 'Eradication Pest Plant''. Randall writes that "We hope we have caught gunnera in time to make the brave (or foolish?) claim that we will eradicate it from Stewart Island''.

We wish SIRCET, ES, DOC and SDC all the best in their drive to eliminate pest animals and pest plants and other weeds from the Halfmoon Bay area. Their work is critical to the protection of indigenous ecosystems there, and all over Rakiura.

Editor

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.

Otari-Wilton's Bush Mangement Plan approved

BotSoc presented written and oral submissions to Wellington City Council (WCC) on the draft Otari-Wilton's Bush Management Plan. WCC has now approved the final Plan and sent it to the Minister of Conservation for final sign-off under the Reserves Act.

Although WCC responded positively to many of the 80+points in our submission, we were not successful in some key areas. We know this because the papers that WCC staff presented to the Strategy and Policy Committee record the staff reaction to each of the points in all of the 28 submissions received. The following table shows some of our successes and disappointments.



The Otari-Wilton's Bush alpine garden prior to redevelopment. Photo: Jeremy Rolfe.

BotSoc

Range of native plant species grown at Otari is too restricted...the alpine genera and be

species are grossly under-represented in the collections.

Cultural heritage section should include reference to ... the Druce and Dench collections held at Otari.

There should be an alpine house

The Plan should include measurable targets for the control of adventive weeds.

Hybrids and cultivars and plants of dubious provenance, lacking value for education or research should be moved to the Botanic Garden, Bolton St Memorial Park or Truby King Park.

Recommend the scope of the library be increased by purchase of more books... if library were to be expanded, our Society would consider adding to the collection.

Council response

There is potential to manage our current collections better and there are also opportunities to better utilise the space available within the collections area. This is a priority before we'd look to extend any collection area. Also we do not believe that quantity is necessarily a reflection of quality. We will be in a better position to understand the need for an extension of collection space by the next management plan review, along with the additional resources that would be necessary.

Amend historical outline appendix 2

2004 A duplicate collection was initiated of the Dench Collection, a private plant collection held by Arnold and Ruth Dench. This consisted of predominantly alpine plants, several of which were rare in cultivation.

2005. A duplicate collection was initiated of the Druce Collection ...held at Percy Scenic Reserve...predominantly alpine plants several of which were threatened species in the wild, and rare in cultivation.

At this point we consider the resources required for specialised buildings to be too expensive for too little return. We are better served by growing what we can well and establishing strong relationships with partner sites/gardens that can grow these plants.

Any measurable targets will be included in the next level down, as part of the Weed Management Plan. This could be changeable from year to year and would be down to implementation as to how it would occur.

We have needed to balance this opinion with that of others, for example, that cultivars are an important aspect of native plants in horticulture (one of the historic roles of OWB). However, only cultivars of historic or horticultural significance are to be retained and these must be clearly labelled and in keeping with collection themes. In addition, plants may be deaccessioned if hybridising ...

Thank you for the offer. We have included a new implementation statement. Enhance reference library by recording and documenting all resources in an easily accessible manner.

DOC Wellington Visitor Centre

Te Pae Manuhiri, Te Rohe ō Te Whanganui ā Tara

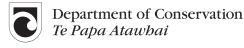
Conservation House, 18-32 Manners St

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Koiata Botanical Trust

The objectives of the trust are to:

- increase public awareness of NZ's vegetation and flora
- support one or more NZ botanists to undertake research
- help with publication of the research
- encourage interaction with the public through popular publications, lectures and field trips.

History of the trust

- Established in 1988 from generous, private donations
- Since its inception, has provided a part-time stipend to Hugh Wilson, the noted botanist, and manager of Hinewai Reserve, Banks Peninsula.

With support from the trust, Hugh Wilson has achieved the following:

- Published revised field guides to plants of Mount Cook and Stewart Island
- Completed a guide to small-leaved shrubs of NZ, with illustrator Tim Galloway
- Contributed numerous papers to scientific journals and proceedings
- Produced many popular articles and numerous book reviews
- Presented many lectures on botanical topics
- Provided expert botanical advice on plant identification, conservation matters and research projects.

The trust is supporting Hugh Wilson's work on the following projects:

- A book on the geological and botanical history, and present-day flora and vegetation of Banks Peninsula
- A contribution of chapters on the vegetation of Banks Peninsula and of the Canterbury mountains to the new edition of Natural History of Canterbury
- Monitoring and recording of revegetation of Hinewai Reserve as former farm land returns to native bush.

PLEASE HELP THE KOIATA BOTANICAL TRUST!

The trust depends on interest earned from investments made from donations. BotSoccers may wish to support the trust. Single or annual donations or bequests are welcome.

Your donation would increase the activities and security of the trust. If its income allows, the trust would employ more botanists.

If you would like to make a donation to the trust, please send your cheque, name, address and phone number to:

Mr. C.A. Hooker, Secretary, Koiata Botanical Trust, PO Box 4415, Christchurch.

Karori Sanctuary Botanical Trail

Members will note that the Sanctuary's official title has recently been amended by the Trust to omit the word "wildlife" which they say has proved misleading in the minds of overseas visitors in particular.

The Sanctuary has now obtained funding for a brochure to accompany self-guided walkers along Te Mahanga Track. BotSoc initiated the idea and is part-funding the brochure, which is designed for walkers with little or no botanical background. It describes some of the plants seen en route, and includes selected, relevant, phenological and ecological information. Barbara Mitcalfe and Chris Horne have spent many months as volunteers drafting the text and negotiating amendments to meet both the Sanctuary's and BotSoc's precise requirements.

The Ornithological Society of NZ

OSNZ promotes the study of birds by organising, providing some equipment, and helping to fund, bird study in NZ. It publishes *Notornis*—a quarterly scientific journal, *Southern Bird*—a magazine, and occasional books describing the results of bird studies in NZ, the southwest Pacific and Antarctica.

OSNZ is a voluntary group dependent on the enthusiasm, active participation, knowledge and financial support of its members. It has no paid staff, and is a charitable society. It runs field trips to teach people more about birds, where to find them and how to study them.

OZNZ is not a conservation organisation, but the studies its members do provide information on which sound conservation decisions can be made.

Subscriptions: Ordinary: \$57.50; student: \$30; life: \$1150; institute/group: \$115; corporate: \$290.

OSNZ Membership, PO Box 12-1039, Henderson, Auckland.

Black maire returns to three Wellington sites

1. Wellington Botanic Garden's native bush areas

Black maire, *Nestegis cunninghamii*, were once a numerous component of Wellington forest ecosystems but almost all were felled for the excellent firewood which they provided. Fortunately, one large, historic, black maire survives beside Mamaku Way in the Botanic Garden. It produces seedlings, and last Spring the Mayor ceremoniously planted out one of them which had been propagated by staff member Peter Tijsen in the Garden Nursery. Later, staff member James Jones planted several more in designated canopy gaps, a significant step in restoring these unique, pre-European, indigenous bush areas. Staff are now treating or removing Japanese honeysuckle, old man's beard, *Prunus avium* and other invasive exotics, and Greater Wellington is to survey rat and possum numbers along 2 × 200 m transects.

2. A neighbouring gully

As part of a continuing project, Kelburn School pupils helped plant three more of the black maire seedlings in the gully below the school, which in early times was ecologically continuous with what is now the Botanic Garden. In 1858 Charles Barraud painted the vicinity in 1875.

3. Long Gully Bush

Long Gully Bush is a QEII-covenanted forest remnant in Wellington's southwestern hinterland, owned by Wellington Natural Heritage Trust. Last Spring, WNHT approached David Sole, Manager, Wellington Botanic Garden, who kindly gave permission for three more of the maire seedlings from the same parent tree to be planted in Long Gully Bush. This decision was made on the basis that black maire was recorded by AP Druce as formerly growing in the western Wellington Hills, so it was, therefore, an appropriate species for restoring to the Bush. The seedlings had to be stoutly protected right from the time of planting, because they are highly palatable and the Bush is not yet fully fenced.

Barbara Mitcalfe

Ian Atkinson honoured

"The Ian Atkinson Laboratory for Biodiversity and Restoration Ecology Research" has been established at Victoria University, the first university in New Zealand to recognise formally the importance of such studies. It also recognises and honours the personal, lifelong work of internationally known ecologist Dr Ian Atkinson, to promote interest in restoration ecology as a means of making our conservation methods more effective "Studying restoration ecology furthers our efforts to protect the nation's native plants and animals as well as the biological communities essential for their survival," says Ian, a longterm BotSoccer.We congratulate Ian on his well-deserved distinction, and the invitation from Victoria to use a work station there. This has given him the chance to interact with both students and staff, which he says is, "always a stimulating way of clarifying one's thinking and perhaps coming up with an idea that will work!"

Ecological restoration programmes

Victoria University, with Karori Sanctuary, and Massey University, is offering three programmes: MSc, Postgraduate Diploma, and Postgraduate Certificate in Ecological Restoration.

Visit www.vuw.ac.nz/sbs or contact: Ecological Restoration Co-ordinator, School of Biological Sciences, Victoria University, P.O. Box 600, WELLINGTON. Ph 04-463 5339; Fax 04-463 5331

E-mail: biosci@vuw.ac.nz.

Rakiura Matters

The draft Rakiura/Stewart Island Conservation Management Strategy and the draft Rakiura National Park Management Plan issued in September 2006 attracted over 400 submissions. Recently a spate of letters to *Southland Times* shows that DOC's proposed eradication of marram grass, an invasive, Australian species, from areas of Stewart Island's Mason Bay, is a "hot" issue for some. Meanwhile, pingao and sand tussock, (both in gradual decline nationally), spinifex, and even the nationally critically endangered Rakiura endemic *Gunnera hamiltonii* are being smothered by billowing hectares of marram, a sight which those of us BotSoccers who were in Mason Bay last January will not be likely to forget.

Barbara Mitcalfe



Gunnera hamiltonii. Photo: Chris Rance/DOC.

Karori Tunnel eastern portal planting

Once an eyesore, this steep face is now an example of how a weedy, rubbishy, "waste" area can be transformed by appropriate planting, with the cooperation, resources and services of WCC's Berhampore Nursery. Next time you're going through the tunnel towards Karori, glance up and enjoy the sight of wharariki, harakeke, silver tussock and kowhai, all supplied by the Nursery, plus some assistance with planting on this potentially hazardous site. With some more tussocks and flax to be planted this Spring, the site should be virtually self-sustaining. It is just one of many sites which could do with some community interest and input—is there such a site near you? If you and your neighbours combine and agree on a planting plan, you can order some free, native plants early in the year and a Nursery staff person will visit the site and advise you on what they can supply for you to plant in the following Spring.

Barbara Mitcalfe



Poa cita. Photo: Jeremy Rolfe.

The plight of urban trees

Wellington City Council recently reduced the amount of "yard" space which can be taken up by infill buildings, but existing city trees still have a tough time, especially in areas where there is development pressure, and unfortunately Wellington has no tree-protection rule. The city's few rata are a case in point, for example, the fine, shapely northern rata near the corner of Victoria and Abel Smith streets. It grows at the intersection of several property boundaries and its crown overhangs two of them slightly. With resource consent, a contractor has erected a two-storeyed building on the property immediately south of the rata. Care has been taken to protect the rata trunk, but construction has necessitated some root and crown trimming. A Council arborist has been regularly monitoring the site and advising the contractor and it remains to be seen how the tree responds.

TRIP REPORTS

28 December 2006 – 11 January 2007: Rakiura National Park/Stewart Island and Catlins, eastern Otago

Thirty-nine members of the Wellington and Otago Botanical Societies joined in all or part of this trip. We spent eight days on Stewart Island based in Oban and a further six days based at the Tautuku Outdoor Education Centre in the Catlins.

On Stewart Island the party was somewhat spread out each day.

Two groups (one of eight and one of nine people) made the tramp between Mason Bay and Freshwater Huts and took in Rocky Mountain, using a water taxi between Freshwater and Oban and flying between Mason Bay and Invercargill.

Sixteen of the party chartered the catamaran *Aurora* for the day to visit Port Pegasus and botanise ashore in North Arm and the sub-alpine flora on the track to the base of Bald Cone. Four people climbed Mt Anglem. Every one spent a day on Ulva Island, some returning for a second day.

Around Oban individuals visited most of the walks and took in some of the tourist attractions. These include the highly praised underwater viewing from the glass-sided boat, and some inshore fishing.

In spite of the other attractions, some serious botany was undertaken. Vascular plant lists have been updated for the following areas:

- Back Road, Horseshoe Bay
- Garden Mound
- Golden Bay Walk Halfmoon Bay
- Kaipipi Scenic Reserve
- Ryan's Walk Halfmoon Bay
- Ulva Island
- Bald Cone, Port Pegasus
- Fuchsia Walk, Oban
- Raroa Walk, Oban
- Maori Beach Scenic Reserve
- Mason Bay to Freshwater Hut
- Mt Aglem Track
- Rocky Mountain, Stewart Island

We enjoyed the varied flora in the areas visited. However we were dismayed at the lack of many species in the forest. Close to human habitation, edible species such as fuchsia, five-finger, pate, mahoe, *Raukaua edgerleyi* and lemonwood were plentiful, forming a "green wall" at the sides of tracks. Elsewhere these were almost

absent leaving an understorey of crown fern and *Coprosma foetidissima* with no young trees such as kamahi and *Griselinia littoralis*. We also noted that there is virtually no epicormic growth on the mature *Griselinia littoralis*. Quite what the deer are living on now is open to question.

Of the sites visited only on Ulva Island was there a substantial understorey. Even here, after more than 25 years without deer browsing, the understorey and regeneration is not fully restored.

On the way to Tautuku most of the party visited Curio Bay to see the fossilised remnant of forest, and some visited other reserves. Over the next five days we visited local reserves and observed the penguins at Nugget Point. On the last day most of us walked the two northern sections of the Catlins River Walk. Members of the party often went to different sites so that at the end of the stay we were able to update the vascular plant lists for the following locations:

- McLean Falls
- · Tautuku Nature walk
- Tautuku Beach dunes
- Tautuku Peninsula cliffs
- Tahakopa Coach and Circle walks
- Shanks's Bush QEII, Papatowai
- Cathedral Caves Waipati Beach
- Lake Wilkie, Tautuku Bay
- Catlins River Walk

Many of us took advantage of the DOC Summer Programme and attended a lecture by Fergus Sutherland at the Owaka Community Hall. He spoke on the geology of the Catlins, which gave a new perspective on the landscape and generated some discussion in the following days.

Allison, supported by John Knight, gave an evening PowerPoint presentation "Co-evolution in the Galapagos Islands". This gave an interesting coverage of the reptiles, birds and plant and their interaction. It brought home the impact of environment on the evolution of divergent species.

Leaving Tautuku Outdoor Centre on 11 January quite a few of us visited Nugget Point, and one group spent a few hours at Awikiwi Reserve south of Balclutha.

Participants: Bev Abbott, Ted Abraham, Margaret Aitken, Beth Andrews, Robyn Bridges, Rita Chin, Barbara Clark, Gael Donaghy, Audrey Eagle, Ian and Jill Goodwin, Bryan and Robin Halliday, Barbara Hammonds, Richard and Margaret Herbert, Chris Horne, Graeme Jane, Allison and John Knight, Gordon and Sheelagh Leary, Rodney Lewington, Barbara and Kaaren Mitcalfe, Donella, Peter and Freya Moss, Mick Parsons, Emil Schmieg, Darea Sherratt, Robyn Smith, Val Smith, Alf and Kirsa Webb, Yvonne Weeber.

Rodney Lewington

A Stewart Island delight: usually an unseen forest

Some of us were fortunate enough to experience a forest without the usual emergents, canopy trees and shrublands. The sky was not the limit for the 'tree tops'—it was the surface of the sea that restricted any emerging.

A comfortable way to explore this forest was in a boat with sloping windows that enable you to see sideways and below. With the engine silenced, we drifted through a soundless forest of bladder kelp fronds. They appeared to dance as they bowed to the current's whim. The beauty of the motion was enhanced by the glowing, warm, apricot-shaded light shining through the semi-transparent kelp. The surrounding water was in shades of aquamarine, a colour no human hand could duplicate as background scenery to a choreographic display.

Further down, the eye followed the swaying stems or 'trunks' of the kelp forest to where they were rooted in the gleaming white sand, ten or so metres below. There a shrubland of gently waving, brilliant green, sea-lettuce added yet another colour treat to the scene. We felt transported to another world of graceful movement, form, and magical colour. It was certainly a highlight for this plant enthusiast! Oh yes, there were fish, a few large ones in the depths, and small butterfly fish flitting among the 'tree-tops'.

Audrey Eagle

3-4 February 2007: Dunvegan Station and Bankview Station, Wairarapa

3 February: Dunvegan Station

The weather failed to dampen spirits as a group of 16 people visited Dunvegan Station north of Masterton to survey the forest remnants on the river flats and scarps above. The bush consists of a fenced area with some very large podocarps, an adjacent treeland that is grazed and another fenced site which adjoins the Trimble Foundation pine forest.

The trip started in a fenced area of bush which contains some very large podocarps and black maires. With a season or two without grazing the understorey is starting to come back with ferns and some sedges and grasses on show and regeneration of the main tree species also evident. The area consists of a river flat flanked by a boulder scarp which was steep and rather slippery in the conditions. Some people managed to find the *Korthalsella lindsayi* growing on *Melicope simplex*.

We then proceeded through the treeland area to look at the two larger species of mistletoe, *Ileostylus micranthus* (mainly on *Podocarpus totara* and *Tupeia antarctica* (on *Pittosporum eugenioides*).



Ileostylus micranthus. Illustration by Eleanor Burton.

The afternoon took us into another area of fenced bush again with some big podocarps but with much more understorey and a slightly different assemblage of species. Five additions were made to the original list.

The Wyeth family is very conservation-minded and is to be complimented on their having fenced off these two areas of bush.

4 Feb: Bankview Station

Sunday saw much improved weather conditions for a visit to Bankview Station. The area of interest is locally called Longbush Gully and consists of a broad-bottomed valley seasonally ranging from boggy to standing water in parts. The valley doglegs giving a range of aspects to the valley sides with a consequent variance in vegetation. There is an area of permanent standing water surrounded by raupo towards the head of the valley and another area that has standing water for a good part of the year drying out in summer. The area is grazed but had not had stock on it for some time prior to our visit.

Where we entered the valley the True Right is a shaded, damper bush area with *Hoheria angustifolia*, *Myrsine divaricata* and other species that like these sorts of conditions.



Myrsine divaricata. Photo: Jeremy Rolfe.

On the ground here was quite a bit of *Mazus novaezeelandiae* subsp. *novaezeelandiae* in flower. The valley floor at this point is very wet for most of the year and supports a good population of *Coprosma pedicellata* growing under kahikatea. *Olearia virgata* is also common here.

Of interest also was a population of *Ranunculus macropus* growing on the drying mud. Several "islands" in this wet area were showing two or three *Pterostylis* species in seed so a return visit will have to be made to find out just what they were.

We lunched where a small side stream entered the main valley where the vegetation was more suited to the rather hot dry conditions set up by the dogleg in the valley. Quite a few additions were made to the list in this side valley. As time was moving on the pace increased as we proceeded up the valley to get past the raupo area and cross over to botanise the True Left side on our return to the cars. This side is again a bit damper and the vegetation again changes with black beech with an understorey of coprosma species, Pittosporum divaricatum, swamp lawyer, a few more Coprosma pedicellata bushes and small patches of the mazus.

Our thanks to Sean Dunbar for permission to visit the area.

Participants: Bev Abbott, Gavin Dench, Geoff Doring, Jenny Doring, Pat Enright (leader/scribe), Bryan Halliday, Chris Hopkins, Chris Horne, Olaf John, Rodney Lewington, Pat McLean, Barbara Mitcalfe, Donella Moss, Mick Parsons, Darea Sherratt, Sunita Singh, Trevor Thompson, Julia White.



Coprosma pedicellata. Photo: Jeremy Rolfe.

25 February 2007: Wainuiomata water catchment

Twenty-five BotSoccers joined scheduled, public trip into Greater Wellington Regional Council's (GW) Wainuiomata catchment, part of the recently fenced Wainuiomata-Orongorongo "mainland island". After a briefing by Ranger Mark McAlpine, sixty walkers with volunteer guides left the water treatment station and proceeded to George's Creek. The standard route for these scheduled walks is a road with no off-track sorties permitted, but the quality of this roadside, heritage forest is such that there is plenty of interest for all. Regionally significant, it is virgin southern North Island rata/podocarp forest. Walkers marvelled at 30-m rata, pukatea and rimu towering above, densely clad in luxuriant epiphytesorchids, lianes, ferns and even an occasional Pittosporum cornifolium and Brachyglottis kirkii.

Mark led the way to the tunnel which pipes water from the Orongorongo catchment to the treatment plant, and showed us the tiny



Pittosporum cornifolium. Photo: Jeremy Rolfe.

train used for infrastructure maintenance—no rides for us though! Also with us was staff member Allan Mason who toils to keep invasive weeds such as *Buddleja davidii* from choking the creeks. Back on the main route and continuing north, we passed through former farmland now reverting under kanuka, an educative contrast to what we had seen in George's Creek. Here we noted with concern that *Erica*

lusitanica/Spanish heath, has colonised many of the steep, road cuttings, but before long we were once again in tall forest.

Lunchtime, in the company of a *Raukaua edgerleyi* epiphytic on a tree fern, beneath magnificent rata and kahikatea, was busy with questions and comments, then it was time to return, dawdling, savouring the privilege of being in this beautiful, pristine, old forest which protects our water supply.

Participants: Bev Abbott, Ros Batcheler, Barbara Bond, Annadel Bouch, Gavin Dench, Raewyn Empson, Ian and Jill Goodwin, Margaret and Richard Herbert, Edith Hodgson, Chris Horne, Louise Huxley, Barbara Mitcalfe (scribe), Chris Moore, Donella Moss, Leon Perrie, Karen Palmer, Jan Rowland, Sunita Singh, Marc Slade, Joyce Stretton, James Templeton, Yvonne Weeber, Cathy Wylie.



Raukaua edgerleyi. Photo: Jeremy Rolfe.

Saturday 31 March: Druce covenant workbee

The virtually weed-free condition of the Druce Covenant is living testimony to six decades of Tony's and Helen's dedicated, hard work. Only in recent times has tradescantia become established in the former orchard, and veldt grass has invaded a few places near the house. As well, there is one small area of gorse ranging from seedlings to 2 m tall, needing regular attention. BotSoccer (and Wellington Queen Elizabeth II rep.) Robyn Smith has since sprayed the tradescantia and

workbee members weeded veldt grass and gorse. At Helen's request, two of us created a canopy gap around a grove of elegant *Dracophyllum latifolium* collected in Waima Forest, on the BotSoc Jubilee trip to the Far North in the summer of 1988/89. Near the dracophyllums is a tall, slender, sapling *Halocarpus kirkii* collected by Tony about 30 years ago from Kauaeranga Valley, Coromandel, which is at last reaching the canopy. Up the hill, under planted beeches, I delivered a dose

of Helen's granulated fertiliser to the *Metrosideros bartlettii*, still a sapling c. 25 years after being planted. Others cleared the tracks of abundant leaf litter and judiciously trimmed overhanging branches.

Participants: Penny Currier, Helen Druce (leader), Bryan Halliday, Chris Hopkins, Chris Horne, Rosalind Iles, Lynsie Kerr, Rodney Lewington, Barbara Mitcalfe (scribe).

6-9 April 2007 (Easter): Tautane Station

On Friday afternoon, we explored Cape Turnagain, a spectacular combination of landforms with massive mudstone cliffs, active sand dunes and a coastal platform of sand-covered, bearing rock and rock-fall debris. Interesting plants seen included a hybrid flax (Phormium cookianum x P. tenax), Coprosma acerosa, Pimelea arenaria and pingao (Desmoschoenus spiralis). We worked off a species list developed over several trips in the early 1980s by Tony Druce and Geoff Park. We didn't find all 120 species they had recorded but would have had to spend more time on the cliffs and cliff tops to establish the changes since then.

We spent Saturday exploring two steep covenants on Tautane Station and preparing species lists from scratch. The first covenant, of 32 ha, has been fenced for about 10 years and is in good condition with 80% forest cover including some virgin forest with magnificent podocarps, pukatea, a northern rata and rewarewa. The second was smaller with less understorey as the fencing was more recent and still vulnerable to slumping. This area lacked the diversity of the larger area but did have some species we hadn't found in the morning, for example, lemonwood (Pittosporum eugenioides).

Sunday's challenge was three covenants on a property on Route 52. The first, of little more than one hectare, had been fenced for two years but its tree species, including kahikatea, ngaio

and black beech were already producing a healthy crop of seedlings. There were also a surprising number of plants of *Asplenium hookerianum*. The second covenant, spanning a steep gully, has been fenced for a year. It features a big rimu, a big hinau, *Drymoanthus adversus* and a developing understorey.

Three generations of the family joined us for a picnic lunch high above the third covenant before we dropped into a different association of plants for the afternoon. This covenant has a mosaic of plant communities ranging from vigorously regenerating manuka shrubland acting as a nursery and buffer, and black beech forest on a dry spur, to broadleaf forest in the gullies. We also found some carexes, orchids, nikau and *Helichrysum lanceolatum*. Features include a large hinau, big kanuka and the future challenge of removing pine trees from steep cliffs.

Our inspirational and enthusiastic guide and contact for our visits to these covenants was Marie Taylor, who worked in the area for the Queen Elizabeth II Trust for many years and has now left to start growing Hawke's Bay native plants commercially.

On Monday we were joined by Bill Wallace from Pahiatua who now oversees these covenants for the trust. Bill led us onto two small covenants where the collecting habits of one of the former owners provided us with some new identification challenges; he'd planted a variety of species from outside the area including puriri and mangeao (*Litsea calicaris*).

We felt very privileged to have been able to visit such a variety of covenants during this trip. All New Zealanders owe a real debt of gratitude to the current owners and their ancestors for saving these remnants of the former vegetation and for providing for their on-going protection through covenants. The surrounding hills seemed very dull and barren in comparison.

Our trip finished with a surprise visit to the top of the Puketoi Range, a prominent range east of Pahiatua. As we gazed out on 360 degree views in calm sunny conditions, it was hard to believe Bill's stories about the dreadful weather that usually affects this public conservation land. The bush, however, provided the confirmation that we'd left the dryness of Hawke's Bay. We were now amongst dense mountain horopito, *Olearia ilicifolia* and even mountain cabbage tree. There were even several filmy ferns for those who were suffering withdrawal symptoms.

Participants: Bev Abbott, Margaret Aitken, Barbara Clark, Gavin Dench, Val Erhardt, Ian and Jill Goodwin, Bryan Halliday, Chris Horne, Louise Huxley, Kay Griffiths, Rodney Lewington, Donna Miller, Barbara Mitcalfe, Syd Moore, Donella Moss, Mick Parsons, Oliver Parsons, Darea Sherratt, Owen Spearpoint, Jeanette Skinner, Sunita Singh, Marie Taylor and Bill Wallace.

Evening meeting 16 April 2007: Karaka can be a weed

Many of us have observed that karaka (*Corynocarpus laevigatus*) can be weed in the Wellington area. It is a weed in that it naturalises where it has no history of occupation, to the detriment of the pre-existing vegetation.

In her illustrated talk, Jessica Costall demonstrated and quantified the extent of invasiveness of karaka out of its native geographic area.

Jessica, supported by her supervisor Gill Rapson, summarised the results of a study she did with three fellow Massey post-graduate students. They compared 14 pairs of plots, with and without karaka, in the North Island south of New Plymouth. Their field work also measured dispersal and recruitment patterns around parent trees.

The areas studied were mainly wellestablished groves of karaka planted by Maori as a source of food. Whilst the extent of "weediness" varied, the study clearly demonstrated that:

- Karaka seeds mostly fall near the parent but establishment improves outside the shade of the parent tree
- Karaka seed can be widely dispersed by kereru/NZ pigeon
- Karaka plots have fewer non-karaka native trees and woody seedlings
- Karaka plots have more exotic species than the non-karaka plots
- There is a management problem with karaka outside their native area in that they suppress other species. This is likely to lead to a decrease in species diversity.

The wide discussion following the talk emphasised that birds do spread karaka over a wider area. It was mentioned that, in the southern North Island, exotic bird species are as likely to be carriers as the kereru.

Shading seemed to be the main deterrent to the growth of other species. One discussant observed that regeneration appeared to be discouraged in soil even after karaka had been removed. The possibility was mooted that a chemical, associated fungi or bacteria, in the roots of karaka might deter other species.

A full report of the study can be found in the *New Zealand Journal of Botany*, 2006, Vol. 44: 5–22.

Rodney Lewington