Wellington Botanical Society

NEWSLETTER December 2002

Last Issue: September 2002 **ISSN 1171-9982**

What are their new addresses?

Mail to the following members has been returned "Gone – no address" Can you help us by telling me their new addresses please?

Michael Campbell, Frank Li, Alex James, Mrs K S Bourke, Jo Mackay, Randall Milne, Jeremy Rowson, Royal NZ Institute of Horticulture, Jayne Drysdale, K F Ross, Dr Fran Kell, Clare Miller, Kirsty Yeats, Whanganui Museum Botanical Group, Nick Robinson, Phil Swallow, Kathryn Hurr, Rebecca James.

Jane Humble, Treasurer
Ph: 04 971 6970

Newsletter delivery

If you are receiving hard copy of the Newsletter, when you asked to receive it by e-mail, ***please let us know.*** We still have a few bugs in our system!

If you now want to receive a PDF of your Newsletter electronically, please send your e-mail address to Penny Currier pennyc@clear.net.nz.

The Committee

WBS Bulletin

We welcome articles for consideration for the next issue of the Bulletin. Members with interesting observations on field trips, and memories of other special occasions, are invited to submit articles.

Please send your article ASAP to John Sawyer, Editor, WBS Bulletin, Department of Conservation, PO Box 5086, Wellington. Ph 04 472 5821, fax 04 499 0077, e-mail: jsawyer@doc.govt.nz

Wellington Botanical Society

President:	**Chris Horne**	**475 7025**	
Secretary:	**Barbara Clark**	**233 8202**	**233 2222 (fax)**
Treasurer:	**Jane Humble**	**971 6970**	
Auditor:	**Peter Beveridge**	**237 8777**	
Submissions co-ordinator:	**Barbara Mitcalfe**	**ph/fax 04 475 7149**	
Address:	**PO Box 10-412, Wellington 6036**		
Web site:	www.wellingtonbotsoc.wellington.net.nz		
Bulletin Editor:	**John Sawyer, DOC, PO Box 5086, Wellington**		

Contributions for Newsletter (news, views, information) to:
Chris Horne, 28 Kaihuia St, Northland, WN 5. Tel 475 7025
Annual Subscription: ordinary $27; country $22; student $17.
Send your subscription to Treasurer, WBS, PO Box 10-412, WN.
Please use the subscription form at the back of the newsletter.

Manawa Karioi Society Revegetation Programme WORK BEES

10.00 am every Wednesday and 2nd Sunday each month. Lunch provided.

Potted locally-sourced native seedlings welcome. Thank you.

Contact:
Morgan Cox ph 383 5168 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, Wellington Anniversary Weekend and Easter.

Hebe elliptica var. *crassifolia*.
Illustration by Lisa Paton.

DEADLINE FOR COPY FOR NEXT ISSUE – 1 April 2003

ATTENDING FIELD TRIPS AND MEETINGS

Ideas please

We welcome your ideas about:
- places to visit on field trips
- topics for evening meetings
- speakers at evening meetings.

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. This will enable him/her to arrange for a copy of the species list for you, and to let you know of any changes and/or particular requirements. If you cannot ring so far in advance, you are still welcome to join on the day.

Clothing for field trips

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

Day trip gear

First aid kit, compass[2], map[2], insect repellant, whistle, matches in waterproof container, water purification tablets, water bottle, thermos, pocket knife, camera[2], binoculars[2], hand lens[2], note book[2], pen and pencil[2], 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[3], 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 our long field trips, we have the following for use on any field trip:
- a first aid kit
- 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.

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.

Reimbursement of drivers

If you travel on a trip in someone else's vehicle, please pay your share of the running costs to your driver. If a trip on the inter-island ferry is involved, please pay your driver your share of the ferry fare.

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 pm.

For further information ring Ridewell Enquiry Service 801-7000.

Help the Editor

Compiling this newsletter takes several days. If you can help by word-processing your own material and sending it on disk, preferably in Microsoft Word, it would be much appreciated.

FIELD TRIPS AND EVENING MEETINGS: JANUARY–JUNE 2003

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 January 18: Field trip **Rimutaka Forest Park**

Botanise Whakanui Track from Sunny Grove, Wainuiomata, to McMcKerrow Junction. Return via Nikau Stream to Hine Road. The area contains at least 55 species of fern, silver beech, tussock and fine rimu and rata.
Meet 9 am at carpark on east side of Woburn Railway Station. Catch 8.35 am train from Wellington, or 8.30 am train from Upper Hutt.
Map R27 Wellington.
Phone leader: Chris Hopkins 564 3980; deputy leader Chris Horne 475 7025.

Saturday February 1-2: Field trip **Wharekauhau Stream and Mukamuka coastline**

Saturday: Botanise Wharekauhau Stream for first time. Walk up stream bed through surrounds that change from severely eroded fault lines, elevated flats to a patch of podocarp forest. Very easy gradient but variable terrain from walking in the stream bed to clambering up banks.
Sunday: Explore coastline from Corner Creek to Windy Point, including Mukamukaiti Stream, provided the coast road is accessible by 4WD saloon cars or if other suitable transport is available. More 4WD saloons would be useful. Alternatives include local patches of bush or botanising forest remnants near Pirinoa and Whangaimoana.
Phone co-leaders: Sunita Singh and Gavin Dench Ph 387 9955.
Accommodation: Sunita's bach: will sleep four on bunks, two on double air mattress on floor, plus floor space for one on own mat. Two tent sites available as well as public camping areas near Corner Creek, five minutes walk away.
Note: wet feet crossing streams unavoidable. Pot luck dinner.
Meet 9 am at Dorset Square Native Reserve, cnr SH2 and Moore St which becomes Western Lake Road and goes directly to Ocean Beach, Palliser Bay.
Ring Chris Horne 475 7025 re car offers/bookings, etc.

Monday February 17: Evening meeting **Links between invertebrates and plants**

Speaker: Dr George Gibbs, Senior Associate, School of Biological Science, Victoria University.
Most insects rely on plants for their livelihoods. How plant-lovers see insects depends very much on their viewpoint, either as pests or benefactors. George will review various New Zealand cases.

Saturday March 1: Field trip **Eastbourne hills**

Walk from Days Bay, climb the ridge behind it into beech forest and walk towards Lowry Bay. Return by various routes; options to be discussed before the start of the walk. Plenty of birdlife and good views.
Public transport: 10 am ferry from Wellington to Days Bay. Travel time under half an hour. Single trip ticket Senior Citizen/Student $6.00; Adult $7.50. Note two singles cheaper than return.
Meet 10.30 am at Days Bay wharf.
Phone leader: Ian Goodwin, ph 475 7248; deputy leader Peter Beveridge 237 8777.
Bring: Offtrack boots and plenty of water as there are no sources of water on the walk.

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

Please help to make this evening a success by bringing a selection of your favourite slides and photographs to share with us. This your evening—make it memorable.

Sunday March 23: Field trip **Huntleigh Park forest remnant**

Share your knowledge of native plants with others on this trip which is BotSoc's contribution to Wellington City Council's STEPPING OUT! programme of walks.

Meet 9.15 am at Crofton Downs Station carpark. Catch 9.02 am train on Johnsonville line to Crofton Downs Station. Postponement date 30 March.
Co-leaders: Barbara Mitcalfe 475 7149, Chris Horne 475 7025
For further Stepping Out! walks or information please check out steppingout.feelinggreat.co.nz or contact AndyNelson on 801 3604.

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

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

Botanise 30 splendid hectares of lightly milled private forest which includes mature rimu, miro and beech, and over 50 species of fern. Forest of this sort is rare in the southern North Island and is well worth a visit. Terrain varies between extremely steep and easy, and has good tracks.
Address: 63F and 63G Sierra Way, off the top of Blue Mountains Rd. Park at 63 Sierra Way; some spaces to right just beyond mail boxes.
Arrival time: 9.30 a.m. RSVP, if attending, a fortnight in advance would be appreciated. Bring lunch and contributions towards a potluck barbecue in the evening. Phone first to check what to bring.
Catch 8.35 am train on Hutt line from Wellington Station to Silverstream Station or 9.00 am from Upper Hutt.
Field leaders: Sheelagh and Gordon Leary, 527 7380 and Patricia Tankersley 528 9022. Transport co-ordinator: Chris Horne 475 7025.

Friday–Monday April 18-21: Field trip **Te Maunga and Mt Ross, Aorangi Forest Park**

Stay at DOC Waikuku Lodge and explore Mt Ross track and Te Maunga. Costs: $8 per person per night or $100 per night, whichever works out cheaper. Further details to be made available at an evening meeting.
Co-leaders: Chris Horne 475 7025; Barbara Mitcalfe 475 7149.

Monday April 28: Evening meeting **Macro photography of native orchids**

NOTE: NOT THIRD MONDAY. Speaker: Ian St. George, well known for his guides and photographs of native orchids including *The nature guide to New Zealand's native orchids*. Member of the New Zealand Native Orchid Group. Macro photography of native orchids with a side venture into reflectance photography.

Sunday May 4: Field trip **Kaukau Skyline Walkwayh& Bledisloe Creek/Otari**

NOTE: SUNDAY Enjoy marvellous vistas from the elevated position of the Kaukau Skyline Walkway; study wind-shorn native shrublands, and savour a complete change of environment through bush in Otari on this walk.
Meet at 8.30 a.m. at the Woodmancote Street entrance to the Khandallah Swimming Pool. Trip expected to end mid to late afternoon. Boots essential. Catch 8.02 am train on Johnsonville line from Wellington to Khandallah Station.
Leader: Joyce Wilson 934 2437; deputy leader: Barbara Clarke 233 8202.

Monday May 19: Evening meeting **Restoration and community partnerships**

Present and future initiatives for restoring 'Wellington's Living Cloak', and some of the work with local communities and volunteers.
Speakers: Mike Oates, Manager, Natural & Botanic Areas, and Jo Gillanders, Curator, Town Belt and Reserves, Wellington City Council.

Saturday June 7: Field trip **Moonshine Road – private forest**

Botanise 40 hectares of an interesting mix of bush from valley to ridge including coastal and ridge top vegetation. Help compile a species list, including birds. The Regional Council are interested in identifying this forest as a Key Native Ecosystem and the owners are considering covenanting. A species list will help with these aims.
Bring: Boots essential for some steep land.
Transport: Public transport will take you to Trentham only so it will be necessary to make personal arrangements. Passengers can help with car costs using our standard rate per kilometre. Meet Ian and Merryl at 9.00 am at cottage at 196 Moonshine Road—third house on right hand side. Turn off State Highway 2 at Riverstone exit.
Transport co-ordinator: Sunita Singh 387 9955. Phone if you have transport to offer or need some.
Leaders: Ian Flux and Merryl Park, h:025 88 3489, w: 471 3232.

Monday June 16: Evening meeting **Sub-Antarctic Islands' flora**

Speaker: Jane Wright, Assistant Curator, Otari Wilton's Bush, Wellington.
Jane will talk about the flora and fauna of the Sub Antarctic Islands which she will have visited recently.

Saturday June 21: Field trip **Te Marua Bush workbee**

PLEASE NOTE THIS EXTRA FIELD TRIP IN YOUR DIARY NOW
BotSoc has been committed since 1989 to do weed control and revegetation work in this important matai\totara\maire remnant in Kaitoke Regional Park. With the aid of a grant from the Wellington Regional Council, we have been able to hire a contractor to speed the task of weed control, but our biennial workbees must continue so that we keep ahead of reinvasion by weeds, particularly around the plantings. So please come to help with this important work and also help with more plantings.
Bring: gloves, kneeler, weed bag, and your favourite weeding tools e.g. trowel, hand fork, loppers, pruning saw.
Catch 8.05 am train on Hutt Line from Wellington Station.
Meet 9 am at Upper Hutt Station carpark, or 9.30 am at Te Marua Bush, 250 m north of Te Marua Store, and 50m off SH2 along the road to Te Marua Lakes, Kaitoke Regional Park. Maps R26 and Upper Hutt street map.
Co-Leaders: Glennis Shepperd 526 7450; Sue Millar 526 7440.

EVENTS

1. **Regional outdoors programme**. ***5 January – 2 March.*** Greater Wellington – the regional council. Ph 04 384 5708, www.gw.govt.nz

2 **Plant care work parties ,** Otari/Wilton's Bush***. Saturday 4 January and Saturday 1 February***, 9.30 – 11am. Meet at Te Marae o Tane Information Centre, 160 Wilton Road, Wilton.

3 **Workshop: Getting to grips with divaricating trees and shrubs.** ***Saturday 22 February.*** 9.30 am – 12 noon. Leader: Dr John Dawson. Te Marae o Tane Information Centre, as in 1 above. $3.00. Bookings 499 1400.

4. **Divaricating trees and shrubs in Otari-Wilton's Bush**. ***Saturday 22 February.*** Meet at 2pm at Te Marae o Tane Information Centre, as in 1 above. Leader: Dr John Dawson

5. **Otari-Wilton's Bush Restoration Day.** ***Saturday 3 May***. Meet at 9.30am.at Te Marae o Tane Information Centre as in 1 above. Bring gloves, favourite weeding tools etc.

6. **Hunza Pamir wild flowers tour.** ***June 2003.*** Visit the rich and diverse mountains of northern Pakistan with Cathy Jones. Plenty of botanising in exciting landscapes , some trekking, some camping, invigorating mountain air and friendly people. Contact Cathy Jones. Ph 03 546 9499, e-mail: cjones@doc.govt.nz, or Silk Road Adventures NZ Ltd, ph 0800 349 739, e-mail: Rubicon.Travel@xtra.co.nz

PUBLICATIONS

1a *FOOTnotes*, Issue 18, 11/02: What are NZ's 10 most popular native plants?; Working together to save streams and native forests; Arbor Day 5 June; Conservation Week awards etc.

1b. *Mountain plants of Wellington Conservancy*. Leaflet.

1c. *Pest plants of Kapiti Island and neighbouring islands – inventory, abundances and distributions.* 6/01.

1d. *Coastal foredune vegetation in Wellington Conservancy: current status and future mangement.* $15.

1e. *Monitoring terrestrial habitats in Wellington Conservancy: A strategy for 2003–2012*

Wellington Conservancy, DOC, Box 5086, WN. Ph 04 472 5821, fax 04 499 0077.

2a. *ConScience No. 45*, 15/11/02: Future research directions for the Species and Ecosystems Under Threat Portfolio, 2003 onwards. Evaluation of six multiple-species projects in the conservation of threatened species.

2b. The effectiveness of the brochure *Garden Escapes*. A Fraser 2002. *Science for Conservation 205. 50 p. $25.00.*

2c. Structure and canopy tree species regeneration requirements in indigenous forests, Westland, NZ. GH Stewart 2002. *DOC Science Internal Series 66.* 33 p. $10.00.

2d. The effect of fire on boneseed and gorse germination. K McAlpine, S Timmins. 2002. Poster 56. A3 - $3.50; A2 - $10, A1 - $20, A0 $50..

2d. Biological control of weeds on conservation land: Priorities for the Department of Conservation. P Syrett 2002.*DOC Science Internal Series 82.* 28 p. $7.50.

2e. NZ Threat Classification System lists 2002. R Hitchmough 2002. *Threatened Species Occasional Publication 22*. 26 p. $15.00

*2*f. A weed risk assessment system for new conservation weeds in NZ. PA Williams, M Newfield 2002. *Science for Conservation 209*. 23 p. $15.00.

2g. A proposed conservation weed risk assessment system for the NZ border. PA Williams, A Wilton, N Spencer 2002. *Science for Conservation 208*. 47 p. 25.00.

DOC Science Publishing, Box 10 420, WN, fax 04 496 1929, e-mail science.publications@doc.govt.nz.

3. Mount Bruce News. 9/02.

National Wildlife Centre Trust, Mount Bruce, RD 1 Masterton.

4. *Threatened Plants of South Marlborough – A Field Guide*. Cathy Jones and Ingrid Hutzler. 2002. *Occasional publication No.53*. $20.00.

Nelson/Marlborough Conservancy, DOC, PBag 5, Nelson.

5a. *Open Space No.55* 8/02: Weed profile- Moth plant, *Araujia sericifera;* lowland totara or Hall's totara?; Ecosystem succession – Part 1: the role of N-fixing shrubs

5b. *Aroha Island Ecological Centre*, 12 km north of Kerikeri. Pamphlet.

5c. *Clay Cliffs/Paritea Open Space Covenant*, 10 km west of Omarama. Pamphlet.

5d. *Takaka Hill Walkway*, a Harwood Family covenanted property. Leaflet.

QEII National Trust, Box 3341,WN. Ph 04 472 6626l.

6a. *Rimutaka Trig Track*, Pakuratahi Forest. Leaflet.

6b. *Mount Climie Track*, Pakuratahi Forest. Leaflet.

6c. *Elements*, Issue 19, 10/02: Hutt catchment; Te Horo beach care; M I R O project, Eastbourne; Otaki wetland restored; stream management; reversing wetland decline; banana passionfruit; etc

6d. *Elements*, Issue 20, 12/02: flax planting/pa harakeke; regional outdoors programme 5/1/03 – 2/3/03.

Greater Wellington – the regional council, Box 11 646, WN. Ph 04 384 5708, www.gw.govt.nz

7. *Environmental Guidelines for Rural Living – Kapiti & Horowhenua*. $3.00.

Boffa Miskell, Box 11 340, WN. Ph 04 385 9315, fax 04 384 3089.

8a. *Sharing Knowledge – A guide to effective science communication*. J Cribb, TS Hartomo.

8b. Catalogues of books, CD-ROMs, journals re plant science and botany

8c. *Australian Tropical Rain Forest Plants – Trees, Shrubs, Vines* . BPM Hyland et al.

8d. *Eucalypts of Southern Australia*. MIH Brooker et al.

NOTE: the above are CSIRO publications. Enquiries to:

Manaaki Whenua Press, c/- Landcare Research, Box 40, Lincoln 8152, Canterbury.

9. *Hinewai – The Journal of a New Zealand Naturalist*. Hugh D Wilson 2002. RRP $29.95, BotSoccers - $26.95.

Shoal Bay Press, Box 17 661, Christchurch. Ph 03 384 6057, fax 384 6087, e-mail: david@shoalbay.co.nz

10a. *Botany of Rotorua*. $20 + $5 p&p.

10b. List of surplus Forest Research publications

NOTE: all profits to Rotorua Botanical Society.

Chris Ecroyd, Forest Research, PBag 3020, Rotorua. Ph 07 347 9067 (evening), e-mail: chris.ecroyd@forestresearch.co.nz

11a. *Argentine Ants*

11b. *Ferrets – pests NOT pets!*

11c. *Himalayan thar – alpine pest!*

11d *Marine invaders*

11e. *Responsible cat ownership*

11f. *1080 – killing pests and saving forests*

11g. *Wildlife-friendly areas*

NOTES:

A. The above leaflets are free, but your donation would be welcome.

B. Some of the leaflets are being revised before reprinting, so are not available immediately.

Forest & Bird, Box 631, WN. Ph 04 385 7374, fax 385 7373, www.forestandbird.org.nz

12. *Friends of Belmont Regional Park*. Pamphlet describing the aims of the group.

Annual subscription $5, families $10.

FoBRP Inc, 120 Sweetacres Drive, Belmont, Lower Hutt.

SUBMISSIONS CALLED FOR—URGENT !!!

1. **Notice under Section 5 Marine Reserves Act 1971.** The Department of Conservation(DOC) intends to apply for an Order-in-Council declaring a 1.444 ha of sea and foreshore around Volkner Rocks a marine reserve, to be known as Te Paepae Aotea (Volkner Rocks) Marine reserve. The site is 55 km north of Whakatane. Regional Conservator, DOC Box 1146, Rotorua. ***Submissions by 14 January.***
2. **Draft Revised Plant Conservation Strategy.** John Sawyer, Biodiversity – Technical Support Officer, Wellington Conservancy, Department of Conservation, Box 5086, WN. Ph 470 8427, fax 499 0077, e-mail: jsawyer@doc.govt.nz. ***Submissions by 31 January.***
3. **Marine Reserves Bill.** Copies from Bennetts Government Bookshops. Send 25 copies of submissions to Local Government and Environment Select Committee by ***31 January.***
4. **Fiordland National Park Draft Management Plan**. Inspect at any DOC conservancy office, and at www.doc.govt.nz. Copies from Freepost 62487, DOC, Box 743, Invercargill, ph 03 214 4589, or e-mail mlong@doc.co.nz. ***Submissions by 28 February.***

SYNOPSES OF SUBMISSIONS

WELLINGTON REGIONAL COUNCIL, DRAFT WETLAND ACTION PLAN

September: **Recommended** adding the following wetlands to the Action Plan, (not in priority order):

1 Opau Stream Wetland, south Makara, NZMS 260 Map R27, Pt.Q27 Wellington, centred on GR 5175955: a kahikatea\ti kouka\flax\raupo wetland, part of the DOC 135 ha Makara Covenant designated R27106 in the Wellington Conservancy Conservation Management Strategy, Volume 2.

2 Hawkins Gully Wetland, Makara, NZMS 260 Map R27, Pt.Q27, Wellington, centred on GR 5445960: a flax\sedge wetland in the mid-lower reaches of Hawkins Gully.

3 Makara Stream Estuary NZMS 260 Map R27, Pt.Q27 Wellington, centred on GR 539950: Wellington city's only estuary, part of it with Wildlife Refuge status; a flax\toetoe\shrub\rush\sedgeland containing the rare, nationally-threatened button-daisy *Leptinella dioica* ssp. *monoica*, and an extensive shrubland of saltmarsh ribbonwood, *Plagianthus divaricatus*.

4 Paiaka Stream Wetland, Fitzroy Bay. NZMS 260 R27, R28 & Pt. Q27, Wellington, centred on GR 675805: an extensive, natural, privately-owned, kahikatea\ti kouka\flax\ toetoe\sedge wetland in relatively pristine condition; formed by tectonic uplift and tilting; listed in Hutt City Council's (Transitional) District Plan as a Significant Natural Area. We believe it should also be designated a KNE. *(NOTE: protection for this and other SNAs on private land in the HCC jurisdiction will be removed as from 1 Jan 2004 unless DOC's current appeal to the Environment Court (2–5 Dec.) succeeds. See item in this newsletter).*

5 Uruti Point Wetland, eastern Wairarapa, NZMS 260 Map T27 Te Wharau, centred on GR 673043; a dune hollow parallel to the coast with an association of plants of threatened status such as *Schoenoplectus tabernaemontani* and *Coprosma acerosa*.

6 Kaiwhata River tributary near Kaiwhata River mouth, NZMS 260 Map T27 Te Wharau, GR 607968, entering the river about 200 m from the coast; has a community of *Bolboschoenus* species.

7 Horowhenua Ephemeral Wetlands, e.g. Pakipaki, Pekapeka, and those south of Hokio beach settlement.

8 The former Wainuiomata Dam

Though extensively silted up, this wetland merits restoration; *Schoenoplectus tabernaemontani* has densely colonised a seepage at the south end.

9 Karori Wildlife Sanctuary Dams

Although constructed, these have a range of natural values and their plant and animal communities are already being restored.

10 Queen Elizabeth Park Wetlands

The Whareroa and Wainui Stream estuaries contain an association of uncommon, native plants such as *Schoenoplectus tabernaemontani, Carex pumila* and *Bolboschoenus caldwellii*, and the liane *Calystegia sepium,* with e.g. *Spinifex sericeus* on nearby dunes.

10.1 Wetlands in the northern part of the Park, Raumati South: a substantial manuka\baumea*Gleichenia* wetland and a small, ephemeral wetland containing the uncommon *Rorippa palustris*, poniu, marsh yellow cress, surviving among dense, seasonal weeds. 10.2 The forested wetland: the only remaining example of a dune wetland forest south of Nga Manu.

10.3 Ephemeral wetlands south of Whareroa Road: **recommended** these wetlands be regularly monitored to check on their hydrology and the health and abundance of e.g. the rare native grass *Amphibromus fluitans.*

WELLINGTON CITY COUNCIL, SOUTH COAST MANAGEMENT PLAN – DECEMBER 2002

This was a final opportunity to comment, by invitation; our submission consisted of an annotated copy of the management plan and an attached submission; **repeated** the statement made in our submission of 5 July 2001, that a guiding principle should be that nothing in the South Coast Management Plan should compromise the likelihood or success of an eventual South Coast Regional Park; **recommended** that the *typically-Wellington* character of the South Coast be emphasised, to avoid inappropriate planting of e.g pohutukawa, karo and Norfolk pines; **attached** explanatory material about the inadvisability of pohutukawa in Wellington; **repeated** our opposition to the description of Waipapa Catchment as "sanitary works" which is surely obsolete now; **requested** the addition of *Muehlenbeckia astonii* shrubby tororaro, as a plant of conservation concern; **corrected** the listed plant names; **recommended** that additional 10 km/hr signs be placed at intervals further along the road; **strongly recommended** revising the wording to ensure the removal of plants not native to the Cook Strait Ecological District, from around baches, and a prohibition on planting species not native to the Cook Strait Ecological District; **requested** the addition of the following to the bibliography:

"Scientific Study of Vehicle Impacts on Wellington's South Coast." Harrison Grierson. (In WCC Library.)

"Some Indigenous Plant Communities of the Wellington Southwest Peninsula. A Paper for the Department of Conservation. B. J. Mitcalfe and J. C. Horne. October 1992.

Wellington's Living Cloak, a Guide to the Natural Plant Communities. Isobel Gabites. Wellington Botanical Society and Victoria University Press. 1993.

Biological Resources of the Wellington Region. Wellington Regional Council, QEII National Trust, NZ Biological Resources Centre. November 1984.

"Indigenous Vascular Plants of South Wellington Coast and Adjacent Hills." Species List No. 118. A. P. Druce.

WELLINGTON CITY COUNCIL: DISCUSSION DOCUMENT, PLANNING THE OUTER GREEN BELT
0ctober: Suggested acquisitions such as parts of Skyline ridge; the entire length of the "Parkvale Road Extension"; the Crow's Nest spur; BCL land on Kaukau and spur leading from Kaukau to summit of Owhariu Road; Totara Ridge from summit of Owhariu Road to "Spicer Hill"; British Peak to Lofty ridge, and the route of the Old Maori Track; Wellington Fault escarpment north from Ngaio Gorge and Ngauranga Gorge to Korokoro Stream; land from Malvern Road, Ngauranga via Omega Trig (Brandon's Rock") to Horokiwi Road; land to make provision for Te Ara Roa, The Long Pathway, between Colonial Knob and Rimurapa Sinclair Head, above and over lands already in public ownership; **requested** that plant and animal pest control be maintained on all parts of the OGB, and fencing to exclude stock; **recommended** highest priority be given to Key Native Ecosystems and any other areas where there are threatened/ uncommon indigenous plants or plant communities; **cautioned** that a huge range of exotic species such as pines, alder, sycamore, wattle, elm etc, because of their invasive potential, should *not* be planted on or in the vicinity of the OGB.

HUTT CITY COUNCIL RE STAFFING ISSUE
October: a submission in the form of a letter to the Chair, Operations and Compliance Cttee; **outlined** our long association with the reserve; **expressed** concern at the need to appoint a suitably-qualified person as soon as possible to replace Robyn Smith, in order to carry on the work of caring for the nationally-important native plant collections in addition to the other duties of the position. (Note: we received a reassuring reply, but 8 weeks later there had been no appointment). A second letter, this time to the C.E.O. **reiterated** our concern. However, see the good news in this issue.

C.E.O. AIRWAYS CORPORATION OF NZ, RE MATAGOURI ON AIRWAYS CORPORATION LAND, STRATHMORE
November: a submission in the form of a letter **informing** Airways that during our recent weeding work we had found more *Discaria toumatou*, matagouri, (a species in serious decline in Wellington Conservancy), bringing the total up to 14; **explained** the significance of the site, the only one known within the territorial limits of Wellington city, and **noted** also the presence of the shrubs *Melicytus crassifolius* (thick-leaved mahoe), *Pimelea prostrata* (pinaatoro), and mats of the prostrate shrub, *Leucopogon fraseri*/paatootara; **urged** consideration of formal protection of the whole site, preferably by means of a Queen Elizabeth II National Trust Open Space Covenant. (We have received an encouraging response by phone, and await their letter).

C.E.O. WELLINGTON CITY COUNCIL, RE DAMAGE TO PINGAO, ISLAND BAY
November; a letter in the form of a submission, following a visit to the site where a stretch of c. 40 metres of dune with pingao plants had been gouged out by a contractor's digger to form a walkway; **explained** that pingao is nationally and regionally in decline; **asked** that the proposed walkway be realigned and the dune restored.

C.E.O. WCC, AND SECRETARY, WELLINGTON REGIONAL COUNCIL, RE SALE OF KINNOULL STATION
November: a letter in the form of a submission **recommending** that WCC and/or WRC purchase the property as the nucleus of a regional park, because of its strategic location, its ecological, historical and recreational values.

WELLINGTON REGIONAL COUNCIL PARKS AND FORESTS DIVISION, RE TE MARUA BUSH
December: a submission in the form of a letter in which we **opposed** the idea of erecting a stone wall around the Bush on the following grounds: a wall would detract from the natural character and appearance; it would give shelter low down but create a strong whiplash or updraft effect because of its solid nature; it would be a haven for slugs and snails, which predate seedlings; it would significantly alter the microclimate in its immediate vicinity, adding a further stressor to this roadside ecosystem; **recommended** that at the northern end, allowance be made for the Bush to extend by moving the existing fence for a distance to be determined by Council in consultation with the Society.

Barbara Mitcalfe

Apologies

It has come to my attention that I have been over-zealous in forwarding e-mails to botanical society members about interesting botanical events. I won't send you any more. But if you want to access the information that I pass on to you, then contact either George Jones at George.Jones@rsnz.org or visit http://www.rsnz.org/directory/elist.php, go down to Regional, tick the Wellington Branch announcements, fill in the e-mail address part at the bottom and send.

Julia White

Donations welcomed

We thank the numerous members who have sent BotSoc donations in addition to their annual subscriptions

Jane Humble, Treasurer

Auditor

We thank Peter Beveridge for agreeing to audit our accounts this financial year. Peter is familiar with our accounts from his earlier role as BotSoc's Treasurer.

The Committee

Your involvement is welcome

We welcome your comments on how BotSoc is run, your suggestions for topics and speakers for evening meetings, and your ideas for areas and leaders for field trips.

We thank the several members who have sent us suggestions for trips and speakers.

The Committee

EVENING MEETING

16 September 2002: Dr Linley Jesson – Evolution of mirror-image flowers

Enantiostyly is a plant sexual polymorphism in which the female sex organs are deflected either to the left or right, resulting in mirror-image flowers. Although enantiostyly occurs in at least a dozen unrelated familes of flowering plants, and has been known for over a century, its adaptive significance remains enigmatic.

In this talk, I described the distribution of mirror-image flowers in the flowering plants, and outlined experiments to eludicate the genetic control of the phenomenon. Plants which are left- or right-handed are controlled by a simple, system where right-deflected styles are dominant to left deflected styles. I concluded by suggesting that mirror image flowers is a phenomenon which functions to promote the precision of cross-pollen transfer. The multiple origins of mirror-image flowers among angiosperm families provides a striking example of a floral stragety that evolves many times to promote pollen dispersal in bee-pollinated plants.

Linley Jesson
Lecturer in Plant Ecology
Victoria University of Wellington

Mistletoe as rare as in Wellington

As a small boy growing up in Nelson, I remember we bought fruit and vegetables at the local fruiterer, a small-scale shop with hand-written prices and all the associated smells of fresh produce. At Christmas time a large basket would appear which contained sprigs of mistletoe flower, probably *Peraxilla tetrapetala*. These were purchased and set up above the doorway of homes. A lucky New Year kiss was acceptable social etiquette under the mistletoe. I remember some women wearing a sprig in their hair at Christmas and New Year functions. I suppose that dispensed with the necessity for a doorway. This practice probably died out in the late 1960s.

I still visit Nelson regularly and fortunately the red mistletoes are more common than in Wellington. In winter they are very evident in deciduous introduced tree species such as elm and poplar in the Tasman District.

During the late 1970s to the early 1980s I worked as a ranger in Craigieburn Forest Park, Canterbury. The whole forest was predominantly high-altitude, mountain beech forest, and mistletoe was comparatively common. The most common species was *Alepis flavida*, which is now thought extinct in Wellington. I remember coming across a couple of old boys, sifting through a thicket of regenerating mountain beech seedling, on the edge of the road at Craigieburn. Being a keen sole-charge ranger, I stopped to see what they were up to. "Hello, what are you looking for?" "Oh we are interested in the mistletoes." "You are interested in native plants then?" "Yes, you could say that," replied Brian Molloy as he introduced me to his cohort, Lindsey Poole. When it finally clicked, I realised I certainly could not have stated the more obvious. I was of course delighted to meet such esteemed botanists and discovered they were preparing a joint publication at that time.

For the last 12 years I have worked for the Wellington Regional Council (WRC) in the pest animal field. Initially work focused on service delivery to landowners and we did a lot of rabbit and possum poisoning. With time the job has evolved with greater focus on protecting native habitat from animal pests that are threatening the future biodiversity of such areas. The WRC has a Key Native Ecosystem programme (KNE), which has surveyed native bush remnants in our region, and after a scoring exercise, the top scoring areas have had possum control work carried out in them. During the survey process I was introduced to the rare mistletoe species of the Wellington region.

I must pay a compliment to a colleague who has done an outstanding job for native plant conservation in our region and who has always been most helpful. It is of course the society's own John Sawyer, Species Protection, Department of Conservation. John has done an outstanding job in publishing various endangered plant inventories for the Wellington Conservancy (I am sure he leads the way for all conservancies). These have been instrumental in guiding people back to former locations, and the rediscovery of endangered plants. He has been very helpful and has imparted his knowledge when we have found unusual plants during our KNE surveys. I am sure he will brush this comment off and say everybody helps like a big network, but thanks John.

Red mistletoe, *Peraxilla tetrapetala*.

Initially John introduced me to the *Ileostylus micranthus* at Benge Park in Upper Hutt. This area, which is located 5-minutes walk from our Upper Hutt WRC depot, has quite a few individuals on various hosts including totara, *Melicope simplex* and *Lophomyrtus obcordata*. I consider these plants have

been successful because Benge Park is possum-free. Unfortunately there is a children's playing area associated with this reserve and several of the hosts have been recently killed by vandalism. Upper Hutt City Council Parks staff have attempted fencing and under-planting to improve habitat and prevent foot traffic and soil compaction.

I have also been most fortunate to make some mistletoe rediscoveries myself. I had collected some of the Benge Park seed and was placing it on suitable edge tree hosts at Bartons Bush in 1997, when I relocated a large *Ileostylus micranthus* that was last recorded in 1947. It was growing on a *Melicope simplex* host. I suspect that the mistletoe was more evident following possum control in Bartons Bush in 1995.

In November 1999, while doing a pre-operational field inspection in Wi Tako Reserve at Silverstream, I located a *Peraxilla tetrapetala* growing on a hard beech trunk 1.5 metres above the ground. When I first saw it I thought it looked like tanekaha, but closer inspection revealed a new mistletoe site. Three years later in January 2002, WRC Biosecurity Officer, Fiona Bancroft, while setting up invertebrate monitoring stations, located another *Peraxilla tetrapetala* 20 metres north of the one I found. It was also on a hard beech but 3 metres above the ground. This area has since had possum control work.

During September 2002, another satisfying rediscovery of *Peraxilla tetrapetala* at Silverstream Scenic Reserve, adjoining Keith George Memorial Park, was made by Chris Hopkins of Wellington Botanical Society. This was last recorded in 1948. It also has a hard beech host and is located 10 metres up the trunk. Interestingly this area has also received possum control since September 1998.

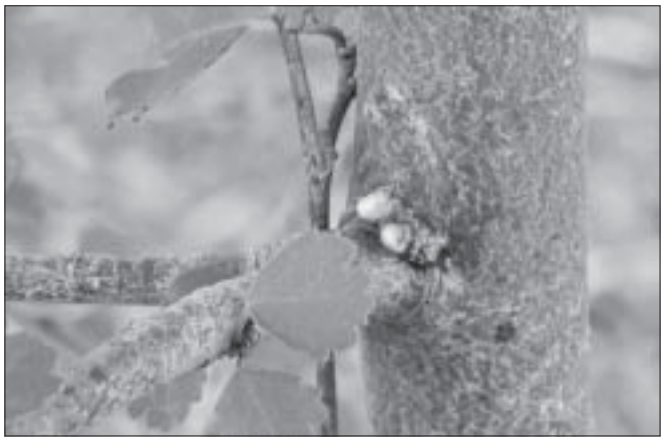
This year I observed *Korthalsella salicornioides* growing on many manuka hosts over an area of about 50 square metres. I'm not sure whether this area is recorded, but it is located on the slope adjoining the road beside the Mana boat sheds.

Another brilliant idea John Sawyer is advocating is the planting around our Upper Hutt depot of endangered plants that are important to the WRC estate. The idea is to provide propagating material and to educate our staff, about what to look for. Fortunately we have a 3-metre red beech, ribbonwood and pittosporums, so I thought I would have a go at mistletoe propagation.

I collected *Peraxilla tetrapetala* seed from Wi Tako and in April pushed the sticky seed onto the small branch axils on the red beech. Within a month all had sprouted. In November most had shrivelled up and died. A few may be hanging on, but it is hard to tell if they are alive or dead. When this seed is ripe it is still green but the outer skin is soft to touch.

I planted several *Ileostylus micranthus* on ribbonwood, *Plagianthus regius*, in May and by July they had started to germinate. In November two individuals on two hosts still survived with little cotyledons visible.

Peraxilla tetrapetala seed were planted on red beech in July, 2002 (top). All seeds germinated within a month, but by November, most had shrivelled and died (above).



Ileostylus micranthus seeds were planted on ribbonwood in May 2002. Two seedlings have survived to date.

A colleague from Wairarapa, Harvey Phillips, gave me some *Tupeia antarctica* from Solway, Masterton, on 12 June. I put these on *Pittosporum tenuifolium* hosts and by November they had all disappeared.

So when you are next out there keep a look out for mistletoes. I recommend John's book *Mistletoes in Wellington Conservancy*, available from the Department of Conservation.

Ken Wright
Biosecurity Officer, Animals
Greater Wellington – the Regional Council
Upper Hutt

TRIP REPORT

5 October 2002: Strathmore revelations

I was most dubious about whether this trip would go ahead—the weather forecast was for rain—but fortunately on the Saturday morning we woke to a brilliant fine day. I told the group how Gary James and I, both Wellington Forest and Bird Home Nursery Group members, first looked for matagouri, *Discaria toumatou*, in May 2001, but with no luck. Then John Sawyer from DOC sent us more detailed directions on its location, and in June 2001 we finally found three plants, and in September 2002, Barry Dent found nine more. During this field trip, I found two more plants, bringing the total to 14.

Our team worked hard cutting back weeds from around the matagouri, and also chopped down many boneseed plants. We saw *Melicytus crassifolius, Pimelea prostrata,* and *Leucopogon fraseri.* The scent from the flowers of the *Leucopogon fraseri* was just adorable. We also saw our share of adventive plants.

We measured the locations of the 14 matagouri. It will be interesting to go back in a year's time and see if they are still there.

Participants: Rae Collins, Gavin Dench, Jenny Dolton, Sarah and Barney Gunn, Dave Holey, Chris Hopkins, Chris Horne, Gordon Leary, Sheelagh Leary, Janet McCallum, Sarah and Rohan McRae, Cath Mathews, Barbara Mitcalfe, Sunita Singh, Patricia Tankersley, Nancy Watters, Julia White (leader)

Julia White

Environmental weeds of the Kapiti Coast dunelands

The beautiful coastline and dunelands of the Kapiti Region are under assault from a range of environmental weeds. The dunes were planted in the 1930s with marram grass (*Ammophila arenaria*). This stabilised the dynamic shifting natural dune systems, resulting in the displacement of much native pingao (*Desmoschoenus spiralis*) and spinifex (*Spinifex sericeus*).

The greatest threat to the coastal dunelands (and indeed all coastal areas) is boneseed (*Chryanthemoides monilifera*). This South African invader can grow right to the toe of the foredunes and can form complete monocultures across dunes and on coastal cliffs. Currently the KCDC, WRC and DOC are engaged in attempting to get rid of boneseed on the coast.

A close second to boneseed is the European native evergreen buckthorn (*Rhamnus alaternus*). This plant grows freely on the dune lands but can grow well inland. Like boneseed, this plant is bird-spread and similarily can invade native ecosystems, completely dominating the flora within a few years.

Dune smotherers such as cape ivy (*Senecio angulatus*) and agapanthus (*Agapanthus praecox*) can be very damaging to coastal areas. These plants tend to spill down dune slopes, excluding native vegetation. Once established these robust plants are very difficult to control.

Non-endemic native plants such as pohutukawa (*Metrosideros excelsa*) and karo (*Pittosporum crassifolium*) can be as detrimental to the Kapiti dune ecosystems as exotic weeds. Pohutukawa not only spread rapidly onto cliffs and beaches, but are also known to hybridise freely with northern rata, threatening the long-term viability of this species. Karo can dominate coastal vegetation and change the low forest stature of the flax and divaricating plants forest type (1–2 m) on our coastal escarpments. Bird-spread, karo can grow throughout this zone ultimately displacing our own special flora right up to the water line. Witness this process in action on the hills overlooking Houghton Bay.

One of the reasons put forward for the big assault on our dune lands is that New Zealand's flora evolved without a great number of dune colonisers. Battling amongst the plethora of dune weeds are taupata (*Coprosma repens*), ngaio (*Myoporum laetum*), flax and toetoe—but these plants are a minority. Not only do they face stiff competition from the plants above but also there is the nasty African boxthorn (*Lycium ferocissimum*), and abundant wattle (*Paraserianthes lophantha*) and pampas grass (*Cortaderia selloana*). To a lesser degree, nasturtiun (*Tropaeolum majus*), kikuyu grass (*Pennisetum clandestinum*) and tree lupin (*Lupinus arboreus*) are problems, and in the dune hollows blackberry (*Rubus fruticosus*) and cotoneaster (*Cotoneaster glaucophylla*). On the toe of the foredunes exotic iceplant (*Carpo brotus edulis*) is also doing well.

There are many other pest plants waiting in the wings as many residents are dumping garden waste in the dune areas. These dumpings are the reservoirs of weed invasion for the future. Without the cessation of this practice, and the arresting of the spread of some of the worst bird-spread coastal weeds, our coastal dune lands face a difficult and uncertain future.

Mike Urlich
Biodiversity Officer – Pest Plants
Greater Wellington – the Regional Council
PO Box 40 847, Upper Hutt
Ph: 526 5325

TRIP REPORT

Saturday 19 October 2002: Te Marua Workbee

Perfect weather and the success of the recent Tradescantia control by BotSoccer Darryl Kee of "Weedworks" helped make this workbee especially enjoyable. The tarata were at their best, as they were all around Wellington in October, laden with flowers and delicately perfumed. The sound of bees in the canopy was a good omen for a plentiful crop of seeds, and black maire fruit were thick on the ground in places.

Our first task was to plant several *Clematis paniculata* and *C. foetida*, grown by Upper Hutt Forest and Bird. Glennis and Allan Sheppherd had brought old carpet squares to put round the plants to control weeds, and we anchored them well with large boulders.

Then, following Ian Atkinson's suggestion, we formed a "shoulder-to-shoulder" line at the stock cars fenceline and did four sweeps across the reserve looking for remaining *Tradescantia* and reminding ourselves of what it *used* to be like, with thick carpets of *Tradescantia* all the way. This time, eight of us working from 9.30 am to 1 pm, only just filled a rubbish bag. Later we removed young montbretia plants which were easy weeding in softer ground.

At the sunny northern end, we inspected the *Ileostylus micranthus* in flower. Its host, *Melicope simplex*, was smothered in small, fragrant blooms, a contrast to the ones in the shade which had either no flowers or very few. We heard no tui but quail were calling from time to time as we sat under our favourite matai for scroggin, noting that the colony of bag moths on its trunk was just as numerous as usual.

The sapling kahikatea planted out in 2000 looks unlikely to survive. The only kahikatea seedling found in the Bush, it was then only 25 mm high, carefully potted up and planted out at about 20 cm high in 2000. The long drought must have affected its chances of survival—now brown, it has no new leaves but is still very firmly rooted, so perhaps there is hope. Its assumed parent, the female kahikatea near the south end of the reserve, needs to be relieved of the 2 × 2 m concrete slab (probably an old shed foundation) at its base. Until it was discovered during a workbee last year we often wondered why there were no kahikatea seedlings. Perhaps a friendly Transit digger might be persuaded to take it away when operating on the SH2 realignment in the vicinity next year.

The only additions to the species list were unfortunately all weeds: Himalayan honeysuckle, *Leycesteria formosa;* hemlock, *Conium maculatum*, and elderberry, *Sambucus nigra.*

At the next work bee, much needs to be done—the plants put in over the last three years at the south end are deep in rank grass and need releasing. The narrow track between the pony club fence and the Bush needs to be kept clear of rank grass because it is hiding large clumps of Tradescantia just beginning to reinvade the reserve. Seedlings and saplings of sycamore, wild plum, hawthorne, Mediterranean laurel and wild cherry are still appearing here and there. We need to be vigilant for these and for the lianes ivy and Japanese honeysuckle.

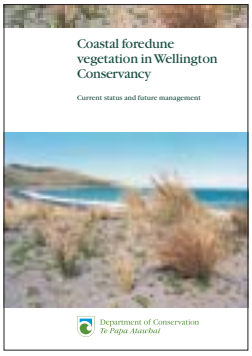
In the Regional Council Te Marua Development Plans, mention is made of the intention to erect a local-stone wall round Te Marua Bush. (See "Synopses of Submissions" in this newsletter.)

Participants:

Stan Butcher, Helen Druce, Dave Holey, Barbara Mitcalfe, (Leader), Sunita Singh, Allan and Glennis Shepperd, Julia White.

Barbara Mitcalfe

Current status of coastal foredunes in Wellington Conservancy



A report entitled *Coastal foredune vegetation in Wellington Conservancy: current status and future management* has just been published by the Department of Conservation (DOC). Coastal dune conservation has been identified by DOC as a high priority. This report provides valuable baseline information about the status of dunes in the region.

This report identifies 10 key foredune ecosystems in Wellington Conservancy. It contains:

- Information about the cultivation of key foredune plants
- Maps showing the distribution of five key foredune plant species (*Austrofestuca littoralis*, *Desmoschoenus spiralis*, *Coprosma acerosa*, *Pimelea* aff. *arenaria* and *Spinifex sericeus*)
- A list of past and present dune conservation projects
- Contact names and addresses for people involved in dune protection
- Recommendations for protection and restoration of coastal dunes

Copies of the report are available from DOC, Wellington Conservancy (price $15).

John Sawyer
Biodiversity – Technical Support Officer
Wellington Conservancy
Department of Conservation
PO Box 5086, Wellington
Tel: 04 470 8427;
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E-mail: jsawyer@doc.govt.nz

TRIP REPORT

3 November 2002: Kapiti Island

We were lucky with the weather and no one missed the boat. Having inspected our packs for unwanted stowaways we were efficiently transported to the island by Ross Leger of Kapiti Marine Charter.

At Rangatira Point, which is the only point of entry permitted under the conditions of the Department of Conservation permit, we assembled for an introductory talk about the history of the settlement and the flora and fauna of Kapiti by John Barrett. Considering the number of times John must have given this talk, his enthusiasm and passion for the island were infectious and as we sat listening we had the feeling that we were entertaining the local kaka as much as they were entertaining us.

Because of Kapiti's history as an inhabited island, the botanical debate is whether specimens are "natural or planted" and we were grateful to John Sawyer at DOC for providing us with plant lists from S.A. Fuller's 1984/85 report on a vegetation survey of Kapiti Island and a list of corrections made by Colin Ogle in 1986. Cross pollinations between the natural and planted species have futher complicated the botanist's life (thank goodness), see *Kaptiti Island Vegetation* by C.C. Ogle Jan 1986. Examples of this on the island include miro, wineberry, *Coprosma areolata*, taupata, karaka, hinau, tree fuchsia and rewarewa.

It was interesting to see the abundant regeneration of plant life and evident, even to those of us who hadn't visited the island in the past, that the huge effort of clearing the island of introduced predators is paying off. At the same time it was frustrating that, under the rules of DOC's permit, we were not to be allowed to help them with some weeding.

Everyone made it to the trig, Tuteremoana (521 m) for lunch to eat our sandwiches with spectacular views of the island. *Metrosideros colensoi* was added to the plant list and wall lettuce to the weed list.

Participants: Beth Andrews, Peter and Barbara Beveridge, Annedel Bouch, Gavin Dench, James Fitzsimon, Jill Goodwin, Michael Gould, Dave Holey, Anthea Holey, Chris Hopkins, Chris Horne, Jane Humble, Sheelagh and Gordon Leary, Diane Lowe, Barbara Mitcalfe, Donella Moss, Nan Phillips, Lynne and Tahuwhenua Pomare, Belinda Pope, Emil Schmieg, Sunita Singh, Nancy Watters.

Jane Humble

Percy Scenic Reserve news – August 2002

Kia ora tatou

Winter at the reserve means re-potting all plants in the collections that cannot be planted out. This means the alpine collection, the fern collection and all those tiny, fascinating herbs in the shadehouse. In reality most gets done, except for all of the alpine collection, of which roughly half is done over winter and some of the rest is done during summer after flowering.

Some of the plants which have been re-propagated from the house garden due to the SH2 extensions have been planted in the reserve. Not all plants have been able to be duplicated, some because they are difficult i.e. some pittosporum, some because of lack of time.

There has been a lot of activity in the nursery, pricking out seed sown last summer/autumn. We are bulging at the seams at the moment waiting for these babies to grow so they can be bagged on and then put down in the stand-out to grow on.

Four hundred *Sebaea ovata* from the Whanganui area have been pricked out and will be grown on until October when they will be translocated to Poutu Point on Kaipara Harbour by Jim Campbell at Whanganui DOC. The reasoning behind moving them to another region is to maximise their survival. Poutu Point is a pristine dune system, is dotted with dune lakes and wetlands and is perfect for *Sebaea*. Jim says there is a lot of paperwork involved in a translocation as it needs to be justified on all levels and care has to be taken to ensure the *Sebaea* doesn't displace other native plants in its new home.

New gardens have been planted near the Settlers Museum on Petone Esplanade. The gardens next to the museum are Wellington coastal plants, i.e. *Aciphylla squarrosa*, *Craspedia uniflora* var. *maritima*, *Coprosma* "Red Rocks", *Raoulia* "Coast", *Poa cita*, *Melicytus crassifolius*, *Melicytus obovatus* ssp. "Coast" and *Brachyglottis greyii* var. *compacta* are now starting to put on new growth. The other gardens have had some rocks placed beautifully by Gavin Dench to enhance and protect large *Xeronema callistemon* which will hopefully flower this summer.

In conjunction with Conservation Week, Hutt City Council had guided tours of the alpine collection at the reserve on Sunday 4 August and Arnold Dench kindly helped with his alpine plant expertise. The number of people who turned up was very disappointing; however, we will probably hold another open day when the weather is better and during the main flowering time. Keep an eye out in your local paper.

Robyn Smith
Percy Scenic Reserve

We apologise for not including this article in the September Newsletter. Since we received this article, Robyn has resigned from Percy Reserve. See Percy Reserve article on p. 15. Editor

EVENING MEETING

18 November 2002: Steve Urlich: Monitoring terrestrial habitats in Wellington Conservancy, a strategy for 2003–2012[1]

Terrestrial habitat monitoring is a key area for the Department of Conservation (DOC). Monitoring enables DOC to detect changes in health and functioning of ecosystems, as well as enabling regular reporting on their condition. Monitoring also enables DOC to determine the effectiveness of conservation management, and to provide confidence in DOC's ability to achieve its strategic objectives.

A strategy has been prepared that describes the vision of ecological monitoring in Wellington Conservancy. It also describes five ecological research themes:

- Effects of invasive species
- Disturbance ecology
- Fragmentation ecology
- Threatened plant communities
- Habitats sustaining threatened biota

These themes are structured around better understanding processes that maintain indigenous species diversity, ecosystem stability, structure, and functioning, and will be used to guide management at important sites within the Conservancy.

A ten-year monitoring programme that integrates outcome, result and surveillance monitoring[2] techniques has been devised, which also identifies monitoring priorities. The combination of monitoring approaches in key ecosystems will provide data for managers, leading to an increased capacity to measure conservation achievement, as well as more efficient and effective use of resources.

The strategy includes a review of habitat monitoring in Wellington Conservancy that demonstrates the value of historical investment in monitoring done from the 1950s to the 1980s. Vast amounts of data were collected on the condition of large tracts of forest, subalpine and alpine vegetation. Since the 1990s, emphasis has switched from monitoring ungulate impacts to focusing more on possum outcome and result monitoring, and result monitoring of weed control programmes. To achieve a more robust picture of ecological management, the strategy recommends a balance of surveillance monitoring of ungulate impacts and weed invasions, combined with possum and weed outcome and result monitoring.

Finally, the strategy acknowledges the need for working with iwi, conservation groups, regional and district councils, and enthusiastic members of the community, to increase our ecological knowledge.

1 This talk, presented to the meeting by Steve Urlich, was based on the strategyjointly prepared for DOC by Steve Urlich and Phil Brady. The strategy will be published early in the new year.

2 **Outcome monitoring** is the measurement of change in the native species condition after control.
Result monitoring is the measurement of change in the pest affecting native species after control.
Surveillance monitoring is measurement of long-term changes in managed and unmanaged areas.

New Open Space Covenants

The QEII National Trust has been busy lately and has registered the following Open Space Covenants in the Wellington Region:

- 11 ha of coastal dunelands off Te Hapua Road, near Pekapeka.
- 2 ha of lowland broadleaf and beech forest within council lands east of Naenae.
- 11 ha of kohekohe forest and manuka scrub off Waterfall Road, near Paraparaumu.
- 1 ha of lowland modified primary tawa-titoki forest on alluvial plain near Kopuaranga.
- 50 ha of regenerating lowland mahoe forest and tauhinu scrub adjoining Karori Sanctuary. (Congratulations Wellington Natural Heritage Trust)
- 0.2 ha of lowland titoki forest with ngaio and tawa, adjoining Barr Brown Bush north of Featherston

We now protect a total of 4570 ha with 128 Open Space Covenants in the Wellington region.

The National Trust are grateful for the support of Wellington Regional Council, Kapiti Coast District Council and Wellington City Council this year. A number of covenant prospects are arising as a result of the Porirua City Council's Sites of Ecological Significance project which is now in the landowner consultation phase. If you know of any landowners whose land has important open space or ecological values, and who might be interested in having discussions with the Trust, please contact us.

Tim Park
QEII National Trust
PO Box 3341, Wellington
E-mail: tpark@qe2.org.nz
www.national trust.org.nz
04 472 6626 (office)
027 218 2552 (mobile)

Getting a little bit closer with your camera

Photographing botanical and similarly small subjects successfully is a challenge despite the expensive cameras, lenses and accessories that are now available. Acquiring the variety of equipment available does not necessarily improve the end result although it can severely erode your bank balance and give you a pain carrying it.

Numerous books detail the intricacies of macro photography, but unless you are particularly dedicated to developing this area of photography and are prepared to buy the professional equipment made for the purpose, you can bypass most of it. You can make satisfying images with your camera provided it is a SLR (with interchangeable lenses) and explore the macro world of plants, animals and inanimate objects around you with a relatively small investment in time and money.

Close-up or macro photography consists of making a lens focus closer, and the simplest and least expensive way is to add a supplementary lens to it. These lenses are also known as *diopters* or close-up lenses. Looking like filters they screw onto the front of your camera lens and are available in standard sizes of 52 mm, 58 mm and 62 mm in diameter. Starting price $65.

Attaching a diopter to either a fixed focal-length or zoom lens increases the close-up range of the particular focal-length, or in other words, the subject appears enlarged and closer in the view finder. As diopters generally come in sets of three with powers indicated by +1, +2, +4, individual filters can be selectively combined or all used together for the desired magnification. Each number indicates an increase in magnification, however the quality may drop off if all three are used together. Depending on the quality of the diopter you may find that the sharpest point of focus is in the middle of the frame with a blurring towards the edges. Check the lenses for this when considering purchase.

One of the laws of optics is that as magnification increases, depth of field decreases. Diopters (and expensive macro lenses) have a very limited depth of field, i.e. the distance between the front and rear points in your image that is in focus. To maximize this distance, or *depth of field* of focus, you can use the smaller *f*-stops, i.e. *f*11 upwards to *f*22, but that will mean that the *shutter speed* will be very slow and any movement will create a blur. The blur resulting from hand-holding the camera can be overcome by using a tripod, but if there is a breeze causing the subject to move, a fast shutter speed is required. 1/125th of a second is a safe speed.

However you may not be able to use a small *f*-stop to maximize the depth of field because of *insufficient light* which requires you to use the larger apertures. Crouching over mosses or orchids in awkward places contributes to cutting out precious light but may be unavoidable, and this in turn forces the use of a slower shutter speed, which in turn could contribute to a blurred image.

The solution to the problem of insufficient light is to provide some artificially. This could be done by using a flash (an option not explored here because of its complexity and expense) or simple home-made **reflectors**. A reflector is simply a piece of corrugated or plain cardboard covered with aluminium foil that has been crumpled and then mostly smoothed out. Crumpling gives a nice diffused highlight. A covering with a plain, uncrumpled foil will create more of a spotlight effect. Two reflectors of any convenient size will not only reflect more light when needed, but can be also used to reduce harsh shadows or to highlight the main subject to make it stand out against the backdrop. Unwanted areas of light creating an uneven backdrop can be eliminated by placing a person or object in the way, thereby casting a shadow which can then have more even light reflected back into it with the reflectors.

Once in the field a few techniques and tips will help improve close-up photography:

- **Controlling movement** can be achieved either by using shutter speeds of 1/125th of a second when hand-holding the camera or by using a tripod. Inexpensive ($9.95+) and simple pocket-size tripods, no more than 618cm high, come in the form of a spike or three flexible legs. A taller extendable one is available for $24.95. All are light and easy to carry.
- **Paralleling the subject** is ensuring that the film plane, i.e. the camera back, is parallel to the subject. Find the plane of focus for your subject by examining it through the lens to find which angle will include all or as much as possible of it in the available depth of field.
- **Choosing the essential elements** ensures that the defining parts of the subject are in focus. This is especially relevant if the entire subject cannot be fitted into the depth of field.
- **The depth of field** button, if your camera has one, is extremely valuable. When depressed it will show an image to be in focus though it appears blurred through the lens. This is because depressing it shows the actual focus when the shutter is tripped.
- **Overcast days** are ideal for plant photography. Shadows disappear because the sky becomes one big reflector.

(*John Shaw has published many simple, well-illustrated, instructive books on photographic techniques that are worth buying or browsing at our libraries*)

Sunita Singh

Over the Hill

"It's not going to be one of those things they write when someone dies." Final instructions from a valued colleague before he left and, of course, after he found out that BotSoc wanted to mark his time in Wairarapa.

So, no, Aalbert—it's not one of those, but you certainly left an imprint and a big set of footprints behind you. Maybe it's the time for change—not only Aalbert Rebergen, well known for his work with DOC in Wairarapa and occasional guiding of BotSoc trips on this side of the hill, but Robyn Smith, equally well known for her amazing ability to coax life from the most reluctant of seeds, both striking out for fresh pastures—Aalbert off to Dunedin and the Otago Regional Council and Robyn a shorter distance, to Newtown and Wellington Zoo.

Both made huge advances in their time at DOC and Percy Reserve, respectively—Robyn could entice a fencepost to put out shoots, and the collection at Percy Reserve is a result of huge effort sustained over a long time.

Things such as *Sebaea ovata*, *Celmisia philocremna* and the Charleston *Gentiana*, that were thought difficult, sprang to life and vigour, and in many cases were produced in quantities sufficient for a return to the wild. For many plants the next step after discovery of a new population was getting material to Percy Reserve for Robyn to weave her magic, and when anyone wanted to see an example of even the most obscure species, the chances were that it was somewhere within reach in one of the glasshouses or in the garden. Many people got an introduction to the true breadth of the NZ flora with Robyn beside them and are the better for it.

Aalbert too was a grower of rare talent: pot after pot in his backyard and many hundreds of rare species on the hillside at Tinui bear testament to that. But for most of us it was in the field that we got to see him in his element. He is a great binocular botanist who could spot an *Olearia gardneri* at 50 paces through heavy bush (and did on a couple of occasions), has a wealth of knowledge about native fish and was Lake Wairarapa's best mate.

I've had great days with both of them and trust that there are more to come—but the day that Aalbert and I came across *Coprosma obconica*, *Olearia gardneri*, *Coprosma pedicellata* and *Pittosporum obcordatum* has to stand out—not so much for the finds themselves, amazing as they were—but later in the afternoon, back at the office in the middle of a meeting whose contents are long forgotten, there was Aalbert miles away with a grin, still enjoying one of those rare days where every terrace and slope held a new discovery.

As expected, his first field trip turned up new Otago records for a couple of threatened species and he was quick to report *Ileostylus micranthus* growing on a neighbouring property.

All the best you two, keep in touch, and thanks for everything.

Tony Silbery

Matiu Matters

Forest and Bird's 2002 planting season on Matiu/Somes Island ended in September with a tally of 6693. There was a good response from voluntary planters, up to 45 on each of the five group planting days. The fortnightly work day team contributed to the total plantings.

Production of plants for the 2003 season is continuing. Small plants purchased by DOC are being potted on, along with all the contributions from home nurseries. And now two chainsaws are at work creating light wells for the successional species. The removal of karo, *Pittosporum crassifolium*, not a naturally-occurring plant of the Wellington Ecological District, is providing the first sites.

One addition has been made to the plant species list—*Parsonsia heterophylla*. A well-grown vine was found among trees on the west coast. It was self-sown.

A kereru has been seen on the Island these past two months. Tree lucerne *Chamaecytisus palmensis*, planted with kereru in mind, provides food especially in winter.

Forest and Bird House with accommodation for eight is available to BotSoc members. Contact Nancy Bell, 567-1686.

Stan Butcher

Northern rata monitoring on Matiu/Somes Island

Wellington Botanical Society is interested in the growth rates of northern rata, *Metrosideros robusta* in the Wellington region. BotSoc is strong in its advocacy for the planting of northern rata instead of pohutukawa, *Metrosideros excelsa*

On Matiu/Somes Island, four contrasting sites were chosen for monitoring growth rates. These were:

- open area in full sun, in grass (Nos. 1,2 & 8)
- open area in full sun, sheltered by shrubs (Nos. 3,4 & 7)
- within tall trees below a light well (No. 5)
- within tall trees under closed canopy (No. 6)

We will advise you of progress with the trial in future Newsletters.

Stan Butcher
Lower Hutt Forest and Bird

Six reasons why NOT to plant pohutukawa in the Wellington Region.

1 POHUTUKAWA DOES NOT NATURALLY OCCUR IN WELLINGTON

Pohutukawa, *Metrosideros excelsa,* is a NZ native species, but *does not naturally occur south of the volcanic plateau, i.e. it does not belong in Wellington.* This is why you will not find it among the recommended plants listed in the Wellington Regional Council booklet, *Wellington Regional Native Plant Guide* 1999.

2 POHUTUKAWA IS AN INVASIVE "WEED" IN PARTS OF THIS REGION.

A further cause of concern is that pohutukawa, though a beautiful tree, has become an invasive "weed" on the Wellington region's coastline and in waste places because it has self-seeded so successfully. It has taken over many of the ecological sites where Wellington's own northern rata, *Metrosideros robusta,* rightly belongs.

3 POHUTUKAWA IS OCCUPYING SITES WHERE NORTHERN RATA SHOULD BE

During the early Colonial phase, settlers burnt huge tracts of northern rata, Wellington's crimson-flowering "Xmas tree". Later, noting how bare the hills had become, they brought down pohutukawa from northern regions and planted it extensively. Thus, northern rata in the Wellington area is now reduced to small, remnant populations and the Department of Conservation has written a strategy for its recovery.

4 RISK OF LOSING NORTHERN RATA THROUGH HYBRIDISATION

Another concern is that pohutukawa, being closely related to northern rata, has the potential to hybridise, and this is already happening in Wellington. Hundreds of seedlings thought to be northern rata and recently propagated in a Forest and Bird nursery turned out to be hybrids with pohutukawa. Around the Wellington region, which includes Porirua, there are still some pure stands of northern rata, but botanists advise that the *widespread planting of pohutukawa, out of its natural range, threatens the survival of northern rata as a separate species.*

5 POHUTUKAWA INHIBITS THE GROWTH OF OTHER PLANTS

Pohutukawa is known to produce chemical substances in its roots and leaves which inhibit the growth of other plants and can alter the soil composition significantly.

6 NORTHERN RATA'S FLORAL DISPLAY IS MAGNIFICENT

Pohutukawa is a fine tree, but so is northern rata, producing a magnificent display of crimson, nectar-bearing flowers in December. Anyone seeing it in bloom, such as in Lower Hutt this summer, could not fail to wonder why pohutukawa should be favoured over Northern rata.

A CAMPAIGN NEEDED ?

I think what is needed is for interested people to ask for northern rata in their local plant nurseries, and not to be fobbed off by being offered hybrids or pohutukawa instead. REMEMBER, IF IT HASN'T GOT THAT NOTCH AT THE TIP OF ITS LEAVES, IT AINT NORTHERN RATA!

Barbara Mitcalfe

Book Review: *The Wollemi Pine*

I strongly recommend this book, published in 2000. Woodford is an accomplished and popular environmental reporter who, as well as close contact with botanists and ecologists, took steps to brush up on his botanical knowledge before writing this absorbing, well-illustrated descriptive text.

That a new genus, *Wollemi*, and a tree of this stature closely related to *Agathis* (kauri pines) and *Araucaria* (all now in the Araucaracaeae family) was "rediscovered" only 8 years ago in two small relict populations in an area a little bigger than a large backyard only 100 km from Sydney is truly amazing. It can be fairly compared to the dawn redwood genus (*Metasequoia*) in China about 50 years ago, now grown in many botanic gardens. Like the dawn redwood, its fossilised ancestry was held in the rocks and mysterious pollen remains.

Wollemi, now a National Park, is part of the rain forest around the Blue Mountains, which are part of Australia's Great Dividing Range. The number of fire-immune canyons in Wollemi is around 500, some up to 400 m deep; of these, around 100 are thought never to have been visited by a white person. It was at the bottom of one of these that *Wollemi nobilis* was "rediscovered" in 1994. These canyons represent a microclimate rain forest almost completely foreign to the usual Australia of gum trees, boronias and banksias.

But this is only a fraction of the fascinating reading; equally engrossing is how this new genus came to be classified as such, with its weird "bubbly" bark and being described by someone as "looking like a fern on steroids".

Dave Holey

The iron-hearted trees: pohutukawa and rata

The Project Crimson Trust has been encouraged to write a comprehensive book on our Christmas trees, pohutukawa and rata. I have been given the honour of writing the book. I want to reflect the many interests that people have in these trees. The success of *Dancing Leaves: the story of NZ's cabbage tree, ti kouka* shows that many readers enjoy comprehensive yet accessible description of our important plants. Hence *Iron-hearted trees* will be a detailed account of the natural history of pohutukawa and rata (northern, southern and Bartlett's), including their origin and relationships, ecology and structural adaptations, and their importance to Maori and Pakeha in practical, spiritual and aesthetic ways. Project Crimson grew from concern about the loss of these chiefly trees, and the book will explore their conservation needs.

I seek your help with stories and memories of pohutukawa and rata trees significant to your family and district: important landmark trees, historical and present uses of the timber and other products, accounts of crimson Christmas holidays on northern beaches, wildlife activities in the flowering canopy, paintings and poems stimulated by their beauty and the landscapes they create, examples of good or shocking pruning jobs, and unnecessary losses of trees, Arbor Day and other planting events…. any observations or records that may add to the overall story. Please tell me about any people who may have stories to share. Your contributions will be used to weave an understanding about how these trees have enriched our lives.

Iron-hearted trees will be a large-format book in full colour, emulating the stature of pohutukawa and rata. For a more detailed outline of the book, and to provide your stories and memories, contact me.

Philip Simpson
Faulkner Road, Pohara
RD 1, Takaka
Ph 03 525 6223
E-mail: philip@goldenbay.net.nz

A New Population of *Carmichaelia muritai*

Some Wellington BotSoccers will remember the 1980s trip when we first set eyes on "that new Chordospartium", now *Carmichaelia muritai*, in a dry, Clifford Bay gulch. Its noticeably-different, upright branching habit was what immediately claimed Tony Druce's attention as we walked along the clifftop searching for it.

This Marlborough endemic was thought to be restricted to c. 20 plants at Clifford Bay, carefully monitored by DOC, but Cathy Jones reports that a new population has been found at the south end of Cloudy Bay. South Marlborough DOC workers grubbing *Nassella* tussock at White Bluffs reported about 50 plants including juveniles. Perhaps the nationally critically-endangered conservation status of *C. muritai* will be able to be revised as a result.

Barbara Mitcalfe

Percy Scenic Reserve News

Robyn Smith resigned from her position at the reserve and is now working at Wellington Zoo as Horticultural Curator. We wish her well in her new position. BotSoc wrote to HCC to express concern that after eight weeks, a suitably-qualified successor had not been appointed, possibly putting the native plant collections at risk. However we are very pleased to advise that the position has now been revised and a new appointee, Lyn Ayres, began work as the Plant Collection Supervisor at the reserve on 3 December. She is qualified at Masters level.

President

WBS Bulletin No.48

We congratulate Dr Carol West on her editing of our latest Bulletin, and Jeremy Rolfe for his expert formatting of it

The Committee

BotSoc Songbook

Copies are still available. Donations of $6 or more (plus $1 p&p) will be welcome to cover the cost of production. Please send your donation to:

Chris Horne,
28 Kaihuia St,
Wellington 5.

Thank you!

Report on WRC Hutt River riparian plantings

A brief inspection of two of the plantings produced the following results:

1. Maoribank, 29 October 02

ROW 1: 45/50 *Phormium tenax* remain, (1 dead, 4 missing)
ROW 2: 45/*50 Phormium cookianum* remain, (1 dead, 4 missing)
ROW 3: 46/50 *Cortaderia fulvida* remain, (4 missing)
ROW 4: 49/50 *Podocarpus totara* remain, (1 missing)
Row 5: 48/50 *Plagianthus regius remain,* (2 missing)

Many of the flaxes had yellowleaf disease, which must have been present when the plants were still in the nursery. The 2 "dead" flaxes may yet recover—I didn't test their roothold. The site is becoming overgrown with blackberry, which could make monitoring difficult next year. Fortunately there are two releases programmed into the trials.

2. The WRC "Old Plant Nursery site", 8 October 02

ROW 1: *32/50 Dicksonia squarrosa* remain, (12 missing)
ROW 2: 45/50 *Pittosporum tenuifolium* remain (1 missing)
ROW 3: 49/50 *Pittosporum eugenioides* remain (1 missing)
ROW 4: 49/50 *Plagianthus regius* remain (1 missing)
ROW 5: 49/50 *Podocarpus totara* remain (1 missing)

About 90% of the site is now under tall, dense weeds, mostly fennel (>1 metre), tall fescue (1 m), and blackberry (c. 80 cm), so it was very difficult at first to find the planted species. We were glad that at the time of planting, someone had had the good idea of placing boulders round most of the plants. The boulders were more visible through the weeds than the plants, which they also helped anchor. It is possible that some of the "missing" plants are still there and that we couldn't find them in the time we had available. Fortunately, despite the weed infestation, the natives plants seemed in good health.

A clipboard was left behind at one of the monitoring sessions. Please phone me on 04 475 7149 if it's yours.

Barbara Mitcalfe

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 pennyc@clear.net.nz,

OR post it to Wellington Botanical Society, PO Box 10 412, Wellington, attention: Penny Currier and Julia White;

OR fax it to Barbara Mitcalfe 04 475 7149.

Karori Tunnel eastern portal: native planting

Many locals have commented on this planting of ti kouka and coastal flax which went ahead as planned, in October. Plentiful rain in spring has helped settle the plants into the steep site above the tunnel. They are closely spaced so as to better suppress weed growth. The next instalment will be planted next spring, including, we hope, some kowhai.

Barbara Mitcalfe

That unwelcome Aussie immigrant, boobialla

In response to my article on boobialla in the last BotSoc newsletter, Frank Rogers, a keen BotSoccer holidaying in Gisborne was disappointed to find boobialla planted all around the James Cook memorial. He complained by letter to the local DOC office who have promised to put things right. Well done!

Barbara Mitcalfe

What are NZ's top 10 native plants?

The Isaac Centre for Nature Conservation (based at Lincoln University) is inviting people to contribute to the first of an annual countrywide survey to seek personal selections for the top 10 favourite New Zealand native plants. These could include a selection of trees, shrubs or wildflowers.

You are invited to select up to 10 of your most favourite native plants and send your list to the address below, in order of preference and including either common names or scientific names. You may also like to comment on your personal selection and say why they are your favourites or why they should be in the top 10 list. There are some prizes to give away. After the closing date, the first three entries drawn from the nominations will be awarded prizes.

Entries close on ***4 January 2003***.

The results and the winners of the prize draw will be made known in the March issue of the New Zealand Gardener.

The prize draws are vouchers for New Zealand Native Plants:

1. $250 from Titoki Nursery, Palmers Rd., RD1, Brightwater, Nelson
2. $150 from the Isaac Centre for Nature Conservation
3. $100 from the Isaac Centre for Nature Conservation

Don't forget to include your name and contact details.

Please post or e-mail your suggestions (with name and contact details) to:

'The top ten New Zealand native plants',
c/o The Isaac Centre for Nature Conservation,
P.O. Box 84, Lincoln University, Canterbury.
E-mail: Spelleri@lincoln.ac.nz

Subscription form – Wellington Botanical Society Inc.

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