



BOTANICAL SOCIETY

OF OTAGO

Newsletter Number 60 July 2010

BSO Meetings and Field Trips

21 July, 5.30 pm. Members “Show and Tell”. This is an opportunity for members to bring and discuss any object of botanical interest. You can bring plant specimens, books, photos, poems, drawings, objects of historical interest or put together a brief presentation – or just come and enjoy the biodiversity! See meeting details on p. 3.

7 August, 9 am – 3 pm. Lichen talk, workshop and field trip. A combined BSO – Orokonui Ecosanctuary event. Allison Knight will share her enthusiasm for lichens and introduce species that may feature in the illustrated introductory field guide to lichens. Meet 9 am Botany Dept Car Park to car pool to Orokonui. Bring hand lens, camera, lunch and \$15 for entry into the EcoSanctuary, and maybe a bit extra for hot food and drinks at the café there. Bring suitable outdoor gear. Check the website for further details. Contact: Allison Knight Ph. 4878 265.

11 August, 5.30 pm. Rare and threatened Lichens. Illustrated talk by Allison Knight. With over 1700 taxa, and new species still being found, lichens make up a significant part of New Zealand’s botanical biodiversity. This is an opportunity to see some of the seldom seen and less common lichens that the Threatened Lichen Group are working on. See meeting details on p. 3.

15 September, 6 pm. Burns 1 Lecture Theatre. Baylis Lecture Phil Garnock-Jones Plant taxonomy: how can we tell if we're wrong? Plant taxonomy is practiced in many different ways by different taxonomists, but are there any unifying or general principles that can be applied? In this lecture, I'll look at the two main types of problems that taxonomists try to solve – the delimitation of species and the classification of those species into higher-ranked taxa – using examples from groups I'm familiar with. For example, in Veronica, we have new taxonomic revisions of all the New Zealand groups, but we still don't understand the

relationships of many of the species, especially among the shrubby hebes. Forty years ago, we had an outline by Lucy Moore of how the different groupings might be related to each other, a new Flora treatment that included a long list of species of uncertain status (e.g. *Hebe biggarii*), a suspicion that hebes hybridise more than is quite decent, and an almost complete list of chromosome numbers that suggested new understandings at species and higher ranks. Field work throughout New Zealand, new data from chemistry and genetics, and the framing of questions as explicit hypotheses have helped a group of us answer some of the questions, but many puzzles remain to keep the next generation of taxonomists busy. **Drinks and nibbles will be available in the Castle Concourse from 5.00pm to 6.00 pm.** Lecture begins 6 pm at **Burns 1 Lecture Theatre**. The winning entries for the Audrey Eagle Botanical Drawing Competition will be on display. The 2011 BSO Calendar will be on sale.

25-26 September, 9 am. Weekend field trip to Thisbe Stream, Catlins. We will stay at Thisbe Stream where there is a six-bed hut and good sites for camping. We will see beech forest with *Peraxilla* mistletoe, and frost hollow vegetation with the shrubs *Melicytus flexuosus* and *Coprosma elatirioides*. If we are fortunate we may see mohua; not botanical but really cool little birds. Contact Leader Graeme Loh Ph. 487 6125 by Wednesday 22 Sept.

9 October, 9 am. Field trip to McPhee's Rock, Rock and Pillar Range. A great chance to experience some wonderful alpine vegetation on the outskirts of Dunedin City. Leader Bill Wilson.

20 October, 5.30 pm. Botany Colloquium winners. This evening of talks will be presented by the winners of the prizes at the Botany Postgraduate Research Colloquium. The student speakers will talk about their research, which will almost certainly be on a diverse and interesting range of topics. See meeting details on p. 3.

14 November, 9 am. Field trip to Mt Cargill. There is a swampy clearing in a pine plantation below and to the north of the summit of Mt Cargill. This area has not been investigated botanically and appears to contain a number of uncommon plants in the Dunedin area. Plants found there include *Coprosma decurva*, *Aciphylla scott-thomsonii*, *Thelymitra cyanea* and *Forstera tenella*. Meet at Botany Department car park at 9.00am. Leader David Lyttle phone 454 5470.

17 November, 5.30 pm. Life in your backyard: bringing the social into the natural sciences. A talk by Prof. Katharine Dickinson, Department of Botany, University of Otago. See meeting details on p. 3.

7 December, Old Man Range with French Botanic Society. Contact: Mark Hanger naturequest@ihug.co.nz, 489 8444

10 December, Meet the French Botanic Society at the Dunedin Botanic Gardens: Contact: Mark Hanger naturequest@ihug.co.nz, 489 8444.

15 December, End of year Dinner. Check the website for details of restaurant and time.

29 December – 7 January Summer Camp at Boyd Creek, Southland, with Wellington Botanical Society. We will be based at the Southland Boys High School hut at Boyd Creek in the Eglington Valley. Botanising possibilities include Lake Marian, Gertrude and Hollyford Valleys, Milford Sound, Key Summit, Eglington Valley, Hutt Creek, Knobs Flat and Boyd Creek tops. Check the Wellington Bot Soc website in October for more details: www.wellingtonbotsoc.org.nz or contact Mick Parsons: mtparsons@paradise.net.nz, 04 972 1142

Meeting details: Talks are usually on Wednesday evening, starting at 5:20 pm with drinks and nibbles (gold coin donation), unless otherwise advertised. Venue is the Zoology Benham Building, 346 Great King Street, behind the Zoology car park by the Captain Cook Hotel. Use the main entrance of the Benham Building to get in and go to the Benham Seminar Room, Room 215, 2nd floor. Please be prompt, as we have to hold the door open. Items of botanical interest for our buy, sell and share table are always appreciated. When enough people are feeling sociable we go out to dinner afterwards – everyone is welcome to join in. Talks usually finish around 6:30 pm, keen discussion might continue till 7 pm.

Field trip details: Field trips leave from Botany car park 464 Great King Street, unless otherwise advertised. Meet there to car pool (10 c/km/passenger, to be paid to the driver, please). 50% student discount now available on all trips! **Please contact the trip leader before Friday for trips with special transport, and by Wednesday for full weekend trips.** A hand lens and field guides always add to the interest. It is the responsibility of each person to stay in contact with the group and to bring sufficient food, drink and outdoor gear to cope with changeable weather conditions. Bring appropriate personal medication, including anti-histamine for allergies. Note trip guidelines on the BSO web site: <http://www.botany.otago.ac.nz/bs/>.

Contents

BSO Meetings and Field Trips.....	1
Chairman's Notes.....	4
Editor's Notes.....	5
Correspondence and News.....	5

Erratum: Newsletter 59.....	5
2011 Botanical Society of Otago Calendar	6
25 th John Child Bryophyte and Lichen Workshop	6
New book available - The Kingdom Fungi.....	8
BSO 5 th Audrey Eagle Botanical Drawing Competition - Reminder	9
Tom Moss Student Award in Bryology 2010	9
NZPCN conference	10
Web key for Coprosma	12
New publication on wetland restoration	12
Book reviews.....	12
Threatened Plants of New Zealand	12
Illustrated guide to New Zealand sun orchids, <i>Thelymitra</i> (Orchidaceae).....	13
Articles	14
Plant profile: <i>Ripogonum scandens</i> J.R. et G. Forst.	14
Where did all the Scrophs go?.....	17
Threatened and uncommon plants of the Otago Peninsula.....	20
New fungal record from Dunedin and New Zealand ... and a warning!.....	22
Meeting and trip reports.....	24
Heyward Point Scenic Reserve 14 February 2010.....	24
Visit to 'The Fernery' 27 March 2010	26
AGM and Photo Competition 21 April 2010	27
Field trip to Colinswood Bush, Macandrew Bay and the Pyramids 15 May 2010	29

Chairman's Notes

David Lyttle

Our May meeting held jointly with the Otago Peninsula Biodiversity Group proved highly successful with over 70 people attending. It was held in the Macandrew Bay Hall and focused on plant biodiversity values of the Otago Peninsula. The associated field trip to Colinswood Bush and the Pyramids held the following weekend was equally successful with the participants learning something of the local flora. All things considered it was a useful exercise for the BSO to engage with the local community and promote biodiversity values especially as 2010 is the International Year of Biodiversity. I hope that all participants gained something of value though on reflection the practical plant identification component that was included in the evening meeting was not particularly engaging due to the lateness of the hour

when the presentations concluded. We did however have a winner for The Very Challenging Plant Identification Competition. Congratulations to Moira Parker who identified 11 out of 12 specimens correctly. I would be happy for the BSO to hold similar open public events in the future. The BSO needs to show the public that the study of plants can be an interesting and enjoyable experience through the medium of these meetings and workshops. As with any organisation we always need to recruit new members to remain viable. Thanks to John Barkla, Nigel McPherson, Moira Parker and Mike Thorsen for their excellent presentations - all very different but giving a comprehensive view of elements needed to preserve and enhance biodiversity on the Otago Peninsula. A special thanks to Moira for her work in organising the evening

and liaising with the Otago Peninsula Biodiversity Group.

Two further BSO fieldtrips/workshops are scheduled with the Orokonui Ecosanctuary. A fungal foray on the 12th June led by David Orlovich will have been held by the time this newsletter goes to print and a lichen talk, workshop and field trip led by Allison Knight will be held on the 7th August. These workshops will be open

to the public as well as members and there will be a charge to assist in raising funds for the Orokonui Ecosanctuary.

I would like to remind members that entries are due for the 2010 Audrey Eagle Botanical Drawing Competition on Tuesday 31 August. The entries will be displayed and the winners announced at the Baylis Lecture on the 15th September.

Editor's Notes

We need help! I'm filling in until an Editor much more able than me can be found. If you want to explore your artistic/design side and help out the Society please contact David Lyttle. Please submit copy for next newsletter by 31 Oct 2010.

Editor's guidelines: Try to aim for a 0.5–1 page of 14 pt Times for news, trip/meeting reports and book reviews, and 1–5 pages, including illustrations, for other articles.

Correspondence and News

Erratum: Newsletter 59

Somewhere in the machinations of computing the underlines disappeared from those species of *Cotoneaster* now naturalised in New Zealand. Those that should be underlined are:
P. 11 *C. frigidus*

John Barkla

Electronic submission (by email to the editor: david.orlovich@otago.ac.nz) is preferred. Send photos as separate files and remember to include photo captions and credits.

Disclaimer: The views published in this newsletter reflect the views of the individual authors, and are not necessarily the views of the Botanical Society of Otago,

John Steele

P. 12 *C. glaucophyllus*, *C. pannosus*, *C. lacteus*

P. 14 *C. microphyllus*, *C. bullatus*, *C. franchettii*, *C. simonsii*

P. 15 *C. horizontalis*

2011 Botanical Society of Otago Calendar



The Botanical Society of Otago's
2011 calendar is on sale now

\$20 ea. (or two for \$36)

(add \$2.50 for mail orders)

Available from the Botany Department Reception, University of Otago
For electronic payment email the Botanical Society of Otago
(bso@botany.otago.ac.nz)

with your name and address and payment details will be sent
All proceeds to the Botanical Society of Otago www.botany.otago.ac.nz/bso/

25th John Child Bryophyte and Lichen Workshop 4 – 9 December 2010, Riverton, Southland, New Zealand

You are warmly invited to come to the special 25th John Child Bryophyte Workshop, now expanded to include lichens. This informal annual gathering welcomes anyone interested in mosses, liverworts and/or lichens, from beginners to professionals.

Riverton, 'the Riviera of Foveaux Strait' is our base this year, in the far south of NZ. From here possible field trips offer a wonderfully diverse range of habitats. Nearby are rocky shores, coastal turfs and kamahi forests shading many kilometres of accessible, bryophyte-covered clay banks alongside historic water races and logging tracks. Old *Nothofagus* beech forest coats streams and rivers in the heart of the Longwood Range, giving way to subalpine scrub and sphagnum bogs above tree line. Further afield are lowland mixed podocarp forests, limestone areas, estuaries and coastal wetlands, including the Waituna

Wetland, which has been internationally recognized under the RAMSAR convention since 1976.

This year's format is: Arrive afternoon/evening Saturday 4 Dec for beer and pizza at The Globe, a quaint and clean Pub and Backpackers that will provide enough beds, bunks and full bedding at around \$20/night for a group booking. There is room for tenting on the lawn at the Globe, and a cheaper backpackers @ \$10/night that provides duvets and is just a block away.

Sunday morning will start with brief introductory talks for beginners, followed by field trips finishing mid - late afternoon. Identification, with tuition for beginners and microscopes for everyone, will be set up in the spacious RSA indoor-bowling hall directly across the road.

Each night the RSA team will cook a very reasonably priced dinner while we go through our collections.

Monday – Wednesday will be spent in the field, followed by opportunity for further identification and short talks on one or two evenings. Transport and collecting permits will be available for those who need them. Those who can provide transport are welcomed and will be reimbursed for field trip travel.

Students are encouraged to apply for the Tom Moss Award of \$330, which will be extended to lichen as well as moss and liverwort topics this year. Details are attached and below.

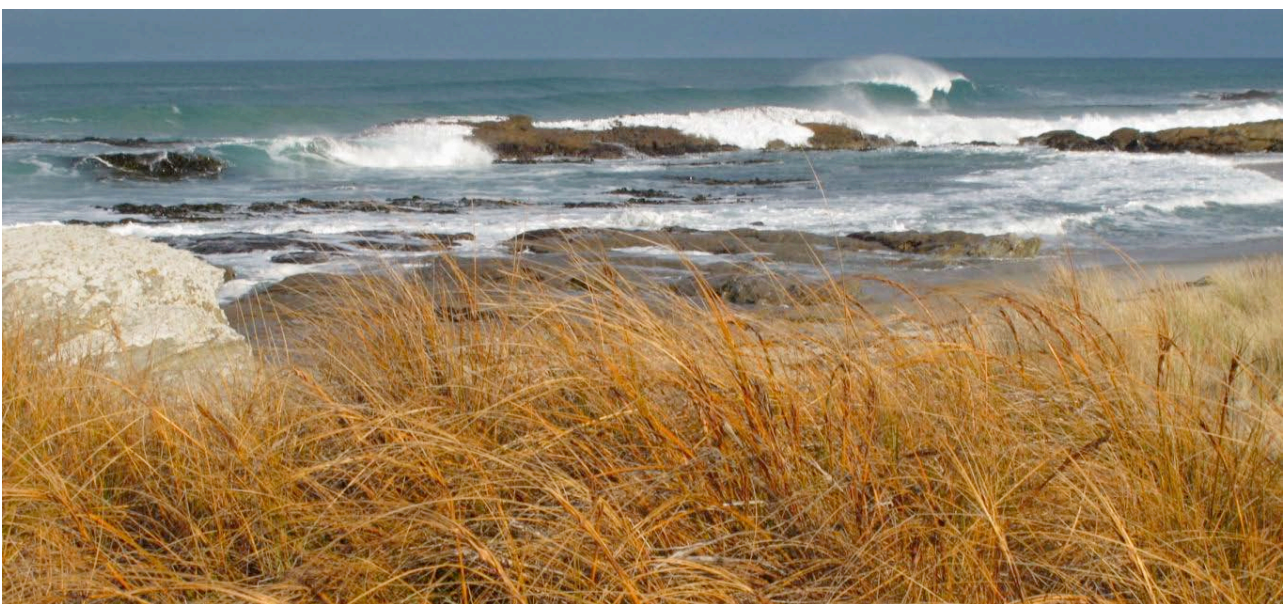
Transport: The nearest airport is at Invercargill and we may be able to provide transport from there or Dunedin to /from Riverton. There is also a shuttle bus between Riverton, Invercargill and Dunedin.

A second circular with full details will be sent out in September to those who expressed interest.

To help us plan, and to receive the second circular, please email alli_knight@hotmail.com, saying whether you are definitely or possibly interested.

We have set the Workshop dates to follow on from the New Zealand Ecological Society Meeting in Dunedin on 21 – 25 November and the Australian Systematic Botany Conference at Lincoln, 29 November - 2 December, which ends with a field trip to Arthurs Pass on 3 December.

Organisers are: John Steel: john.steel@botany.otago.ac.nz, 64 3 479 4572
Maia Mistral: maia.mistral@botany.otago.ac.nz,
Allison Knight: alli_knight@hotmail.com, 64 3 487 8265, all associated with the Botany Department, University of Otago, New Zealand



Pingao (*Ficinia spiralis*) on Watsons Beach. Photo John Barkla

New book available – The Kingdom Fungi

AVAILABLE SPRING 2010 FROM TIMBER PRESS:

The Kingdom Fungi

THE BIOLOGY OF MUSHROOMS, MOLDS, AND LICHENS

Steven L. Stephenson

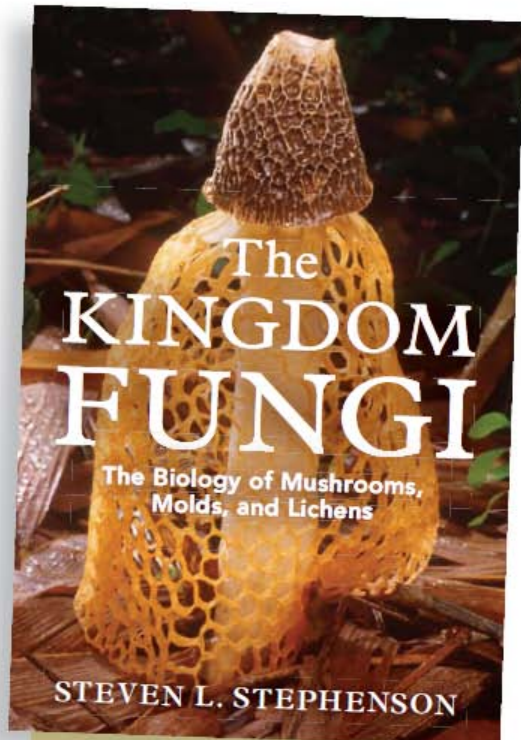
The ubiquitous fungi are little known and vastly underappreciated. Yet, without them we wouldn't have bread, alcohol, cheese, tofu, or the unique flavors of mushrooms, morels, and truffles. We can't survive without fungi.

The Kingdom Fungi provides extensive information on the biology, structure, and morphological diversity of these necessary organisms. It sheds light on their important role in nature, their fascinating relationship with people, plants, and animals, and their practical application in the manufacture of food, beverages, and pharmaceuticals. Stephenson includes information about "true" fungi, fungus-like creatures (slime molds and water molds), and a group of "composite" organisms (lichens) that are more than just fungi. Particular attention is given to examples of fungi that might be found in the home and encountered in nature.

The Kingdom Fungi is a useful introductory text for naturalists, mycologists, and anyone who wants to become more familiar with, and more appreciative of, the fascinating world of fungi.

STORY IDEAS

- The most common household fungi
- The human-fungi relationship
- How fungi have shaped human history
- Little-known facts about fungi
- How fungi are important in nature
- The different kinds of fungi



Pub Date: May 2010

ISBN: 978-0-88192-891-4

328 pp, 56-page color insert

hardcover, 6 x 9"

\$34.95

STEVEN L. STEPHENSON is a research professor at the University of Arkansas in Fayetteville, where he has been appointed director of a worldwide project funded by the National Science Foundation to document the distribution of all the slime molds and their relatives. Dr. Stephenson has researched fungi and slime molds on six continents in climates ranging from the tropics to the polar regions of both the Arctic and Subantarctic.

PLEASE SEND TEAR SHEETS
TO THE ADDRESS BELOW



TIMBER PRESS, INC.

133 S.W. Second Avenue, Suite 450

Portland, OR 97204-3527

Tel: 800-827-5622 Fax: 503-227-3070

E-mail: publicity@timberpress.com

BSO 5th Audrey Eagle Botanical Drawing Competition - Reminder

Entries due Tuesday 31 August 2010. Post to the Botanical Society of Otago, PO Box 6214, Dunedin North 9059 or entries can be handed in to Trish Fleming in the Botany Dept Office
Botanical artistry is not a widespread skill, so there's a good chance of

winning the first prize of \$100, second prize of \$50 or third prize of \$25!

Entry form can be downloaded from the web:

<http://www.botany.otago.ac.nz/bsa/eagle.php> or picked up from the display shelves outside the Botany Department office.

Tom Moss Student Award in Bryology 2010

Tom Moss, who died in 2005, will be remembered by many for his love of native plants, particularly bryophytes, and his dedication in finding rare and unusual species. He was a life member of the Wellington Botanical Society and an active participant in the annual John Child Bryophyte Workshops.

To commemorate his name and his contribution to New Zealand botany, a Trust Fund has been established, administered by the Wellington Botanical Society. The *Tom Moss Student Award in Bryology* provides a small annual prize for the best student contribution to New Zealand bryology or lichenology.

The Award is made at the annual John Child Bryophyte (and Lichen) Workshop. The next workshop is to be held from 4 – 9 December 2010.

Contributions that would qualify for the Award include:-

- A student presentation at the Workshop relating to New Zealand bryology or lichenology

- A paper relating to New Zealand bryology or lichenology published, or accepted for publication, and submitted for consideration in the twelve months immediately prior to the Workshop
- A significant unpublished report relating to New Zealand bryology or lichenology prepared and submitted for consideration in the twelve months immediately prior to the Workshop

Contributions will be considered from any student enrolled for a B.Sc., M.Sc., Ph.D., or equivalent degree in the twelve months immediately prior to the Workshop. Students may be enrolled in a New Zealand or overseas university, and may include work on overseas bryophytes or lichens as long as the work relates in some significant way to New Zealand botany.

An Award of \$NZ330 will be made by a panel three judges attending the Workshop and appointed by the Wellington Botanical Society. The panel may reserve the right to make no

award if there are no suitable contributions.

Publications for consideration should be submitted with a covering letter to Tom Moss Student Award, Wellington Botanical Society, P.O. Box 10 412, Wellington by 27 October 2010. Students intending to make a qualifying

presentation at the Workshop should indicate this when they enrol.

Further information about the Award may be obtained from Dr Patrick Brownsey, Te Papa, P.O. Box 467, Wellington (04 381 7135; email patb@tepapa.govt.nz).



Montia angustifolia, a tiny herb of ephemeral wetlands. Photo John Barkla.

NZPCN conference

Registration is now open for this year's NZ Plant Conservation Network conference to be held in Christchurch (7 - 10 Oct 2010). The theme of the conference is: Plants in a human landscape - conservation outside nature reserves

The conference programme is already looking very good with more than 35 speakers confirmed including the Tane Ngahere Lecture by Emeritus Professor Alan Mark.

Please register via the Network website (<http://www.nzpcn.org.nz> - credit card payment is required). Network

members should log on as a member to receive discounted prices.

For information about speakers and symposia see:

http://www.nzpcn.org.nz/page.asp?nzpcn_events_conference_2010_Speakers

For information about field trips see:

http://www.nzpcn.org.nz/page.asp?nzpcn_events_conference_2010_field_trips

We look forward to seeing you in October

Eric Scott
NZPCN Administrator
E: info@nzpcn.org.nz

PLANTS IN A HUMAN LANDSCAPE CONSERVATION OUTSIDE NATURE RESERVES



Friday 8 – Sun 10 October 2010 *

Canterbury Horticultural Society rooms

* Welcome drinks at Botanic gardens on evening of Thursday 7 October.

Conference themes and symposia

Friday 8 October: The science of plant conservation

Symposia

1. Threatened plants in human-dominated landscapes
2. Ecosystems – their status and classification
3. Plant research on private land, in urban environments and in production, agricultural landscapes
4. Hybridism and the science of restoration of human dominated landscapes

Organised by the
New Zealand Plant
Conservation Network
in conjunction with:



QEI National Trust
Open Space New Zealand
Ngā Kaiwhiri Papa



Saturday 9 October: Stopping the decline

Symposia

5. Tangata whenua perspectives – plant conservation by the people
6. Biodiversity is a farmer's business – a farming view of plant conservation
7. Plants and the law (tenure review and the RMA)
8. Exotic plants in a human landscape New Zealand (where to from here?)
9. Can gardeners have a role in plant conservation?

Sunday 10 October 2010: Field trips

10. *Quail Island*
Habitat restoration
11. *Biodiversity is a farmer's business*
Economic uses for native plants. The Greening of Waipara, the Waipara biodiversity trail and plant conservation by Canterbury farmers
12. *Banks Peninsula*
Covenants, gardens and urban plant conservation



Department of
Conservation
Te Papa Atawhai

Christchurch
Botanic Gardens

More information will be published in the Network newsletter and posted from time to time on the Network's website: www.nzpcn.org.nz

If you would like to present a paper please e-mail us the title and the most suitable symposium for it.

If you are not a Network member and would like to receive more information about this conference please e-mail us to be put on the mailing list: info@nzpcn.org.nz

Web key for *Coprosma*

Google: Coprosma key these days and you'll get...

A Key to the Coprosmas of New Zealand — Part I, 1961

by G. Marie Taylor *nee* Bulmer

and then this very useful and up-to-date interactive key.....

Key to *Coprosma* species of New Zealand, 2010 **David Glenny, Jane Cruickshank & Jeremy Rolfe**. This Lucid 3 interactive key will allow you to identify any of the 53 species of *Coprosma* currently recognised in New Zealand. The key is illustrated with 500 images of species and the features used to identify them and has a factsheet for each species that provides a list of

Allison Knight

distinct features, comparisons with similar species, description, habitat and distribution details, and references to literature.

The key is designed for those with some experience in plant identification and will allow species to be identified without fruit being present. A glossary is linked to each facts sheet to help the user understand the terminology used in the factsheets.

Well worth a look if you are interested knowing more about our fascinating native small-leaved shrubs.

New publication on wetland restoration

I would like to raise your awareness of a new publication designed for both specialists and non-specialists on wetland restoration. Although a technical manual, the emphasis has been on creating a user-friendly resource which showcases the diversity of wetlands in NZ as well as projects underway to restore them. The 280pp handbook is available in 2 forms: online and hardcover with internal spiral bind. I would be grateful if you could include a small blurb along the following lines in your next Bot Soc newsletters.

Monica Peters

The following websites have information on Handbook content as well where to purchase from.

Online Version:

<http://www.landcareresearch.co.nz/services/biocons/wetlands/>

Order form:

<http://www.mwpress.co.nz/store/viewItem.asp?idProduct=908>

General book information:

<http://www.landcare.org.nz/news-features/wetland-restoration-handbook-launch/>

Book reviews

Threatened Plants of New Zealand.

de Lange, P.J.; Heenan, P.B.; Norton, D.A.; Rolfe, J.R.; Sawyer, J. (2010)

479 pp. Canterbury University Press, Christchurch.

Authorship alone will stamp its authority on this fine, dual-purpose book on New Zealand's rare plants. Dual purpose because it will double as a fascinating, addition to the coffee-table library as well as an authoritative update of Wilson and Given's 1989 book of the same name and a more readable advance on Dopson, *et al's* 1999 *The conservation requirements of New Zealand's nationally threatened vascular plants*.

Divided into two main parts, extinct (five species and one variety) and threatened (184 species and varieties), the latter is further divided depending on the degree of threat – nationally critical (94), nationally endangered (46) and nationally vulnerable (44). The whole is a timely reminder of the dangers visiting our native plants.

Each plant covers two facing pages with ample, quality photographs and a descriptive format roughly akin to that of Wilson and Given and also Dopson with minor additions and differences in information. One excellent addition is a panel highlighting the plant's differences from similar species. Most of the information presented is available elsewhere, but the improved layout and generally higher quality photographs make it more accessible.

A well-written introduction explains the system of threat classification for New Zealand plants and the book ends with a comprehensive reference section and

basic glossary. Any downside to the book? At \$99 it is an expensive addition to the bookshelf, never mind the coffee table, but, like many such books, has the un-put-downable attraction of dragging you from one page to the next when you least have the time.

References: Dopson, S.R.; Lange, P.J. de; Ogle, C.C.; Rance, B.D.; Courtney, S.P.; Molloy, J. (1999) *The conservation requirements of New Zealand's nationally threatened vascular plants*. Department of Conservation, Wellington.

Wilson, C.M.; Given, D.R. (1989) *Threatened plants of New Zealand*. DSIR Publishing, Wellington.

Colour field guide to the orchids of New Zealand, 2nd edition.

Scanlen, E.; St. George, I. (2009) 82 pp. New Zealand Native Orchid Group, Wellington.

Illustrated guide to New Zealand sun orchids, *Thelymitra* (Orchidaceae).

Rolfe, J.R.; Lange, P.J. de (2010) 57 pp. Jeremy Rolfe, Lower Hutt.

There are probably more books published on the New Zealand Orchidaceae than any other family and these two books take the number even further. The former is a complete revision of the earlier field guides and a continuation of the extensive work already done by members of the New Zealand Native Orchid Group. 193 orchids are briefly described and each with a colour photograph of the flower; 87 of these are un-named species

suggesting there are a few more editions of the book to come. The name changes in the New Zealand Orchidaceae are considerable and it would be a help to know the earlier synonym at least to help the lesser enthusiast to keep up. The accent is invariably on the flower, which is not overly helpful for field workers with the problem of identifying species from their vegetative parts alone.

The second book covers *Thelymitra* which can be a tricky genus, but this small book has a colour key of the features to be considered. Fifteen (of the 37 or so listed in Scanlen and St. George) are shown here with their main

identifying character photographed in the key and a quality photograph of the complete flower in the body of the book. The excellent photographs are shown together which aids comparison and the descriptive texts follow later. Certainly a handy little reference - provided you have not found one of the species not covered!

The former is available from New Zealand Native Orchid Group \$20 from <http://www.nativeorchids.co.nz/Publications.htm> and the second from the New Zealand Plant Conservation Network for \$25 from http://www.nzpcn.org.nz/shop_products.asp.



Ranunculus recens, a rare coastal buttercup. Photo John Barkla

Articles

Plant profile: *Ripogonum scandens* J.R. et G. Forst.

Alexandra DiNicola and John Steel*

Order: Lilales
Family: Ripogonaceae

Ripogonaceae is a small family, close to Smilacaceae in which it was until recently included, with the one genus and only six species, one of which is

endemic to New Zealand and the others in Australia with one shared with Papua New Guinea.

Often only seen by the tangle of brown, only slightly roughened, brown stems hanging from the canopy or covering the ground in a tangles mass, closer inspection can reveal young, glossy-black shoots, often a couple of metres long heading skywards until they fall over onto a potential host to climb up by twining round it. Near the tip, the shoots tend to brownish with a roughened texture. In more open areas it is possible to find the leafy shoots and

the clusters of bright red fruits. Round the turn of the year, careful inspection can reveal the clusters of small, greenish flowers which, close up, are quite pretty. Supplejack is, surprisingly to some, a monocot so the floral parts are in multiples of three. The leaves are quite tough and not unlike *Parsonsia*, but readily distinguished by the vein that runs parallel to the outside edge of the leaf. The leaves are usually in opposite pairs, but may also be alternate to sub-alternate.

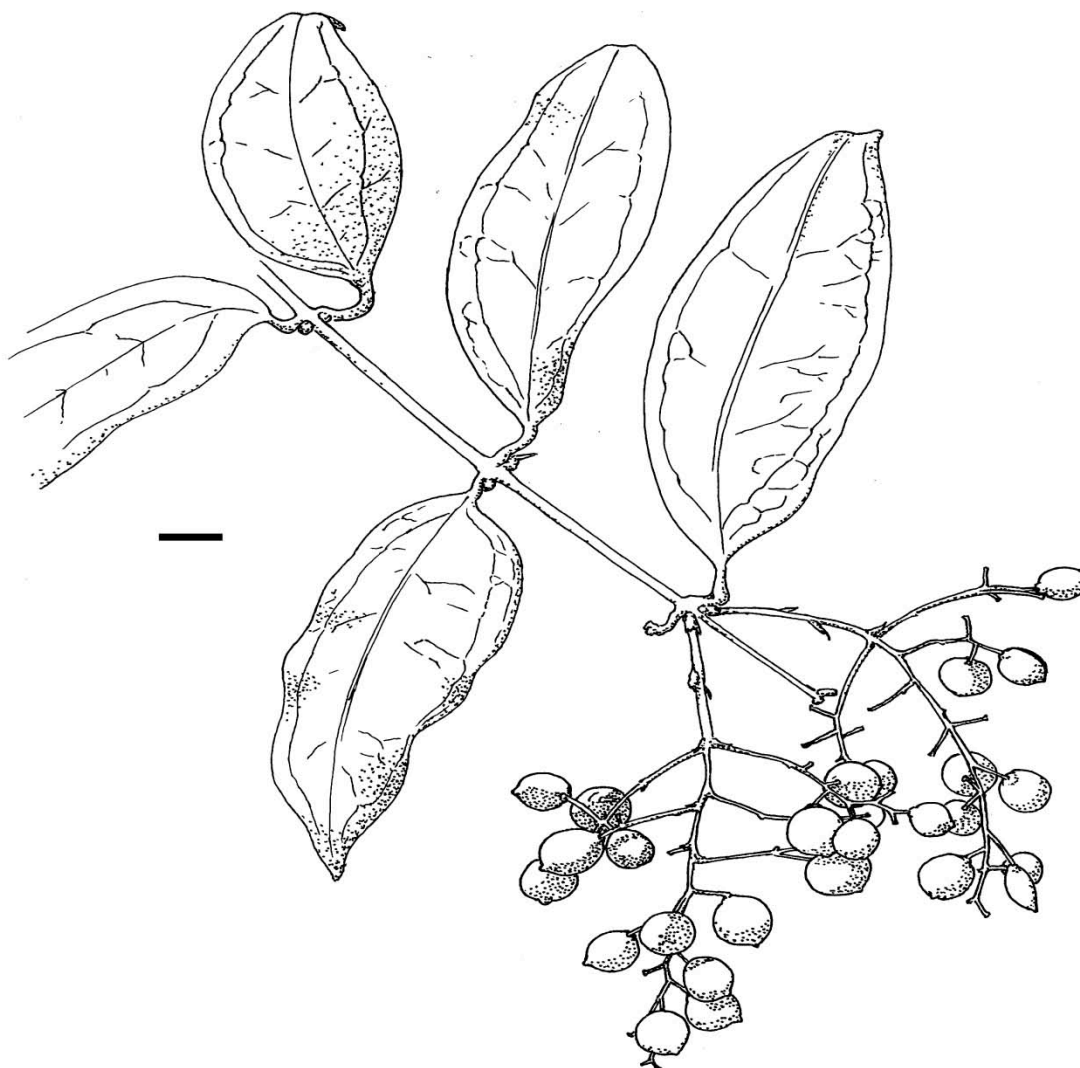


Fig. 1. A pair of axillary fructescences and the opposite leaves with the distinctive veins parallel to the leaf edge.

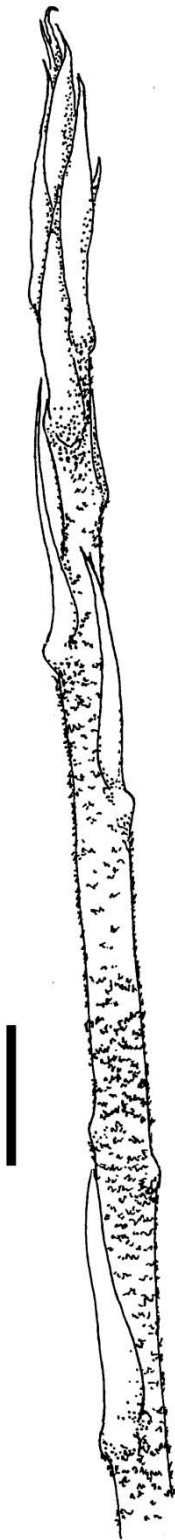


Fig. 2. A young shoot tip or kotau showing the long bracts and scabrid, upper stem.

Bush bashers will be well aware of this endemic, climbing vine as supplejack, or wait-a-bit for its knack of slowing one's progress through the undergrowth. Māori have their own word for this entanglement, taeo, which, according to Riley (1994), so slowed Kupe's journey through the North Island, it gave rise to the proverb, the obstructions of Kupe, in reference to seemingly overwhelming problems. I suppose one should be grateful for its lack of thorns!

Supplejack or kareao (the more common of many Māori names) has, like its relative, sarsaparillo, long been known for its medicinal and nutritional properties. The young shoots are asparagus-like and, from personal experience, delicious. Apparently they taste even better cooked. The roots, shoots and sap cover most ailments from easing rheumatism, as a cure for urinary problems, sore throats, as a tonic, an abortifacient and an aphrodisiac. From personal experience, they make useful garden hoops for supporting peas. It also makes, so I am told, a very pleasant beer.

Reference: Riley, M. (1994) *Māori healing and herbal: New Zealand ethnobotanical sourcebook*. Viking Sevenses, Paraparaumu.

* Alexandra DiNicola is a student of Ohio State University and spent six months at Otago University's Department of Botany as part of the U.S. Study Abroad Programme.

Where did all the Scrophs go?

Janice Lord

Recent work on higher level taxonomy in flowering plants has revealed that the well known Snapdragon family Scrophulariaceae is in fact a disparate group of plants lacking a common ancestor. Many New Zealand members of the Scrophulariaceae are now more correctly placed in Plantaginaceae, but if you have been wondering what happened to other “scrophs” the following table should help.

All genera, and subsequently renamed portions there-of, listed in Scrophulariaceae in Webb et al. (1988) have been moved to Plantaginaceae with the exception of :

<i>Euphrasia, Micrargeria, Odontites, Parentucellia</i>	Orobanchaceae
<i>Glossostigma, Mazus, Mimulus</i>	Phrymaceae
<i>Calceolaria, Jovellana</i>	Calceolariaceae
<i>Paulownia</i>	Paulowniaceae
<i>Nemesia, Phygelius, Scrophularia, Verbascum</i>	Remain in a much reduced Scrophulariaceae

Also recently combinations in *Veronica* have been published for New Zealand members of the “Hebe alliance” to address the taxonomic problem that Southern hemisphere genera are nested within Northern Hemisphere *Veronica*. The following table collates all new combinations in *Veronica* and covers all New Zealand *Hebe*, *Parahebe*, *Chionohebe*, *Leonohebe*, *Heliohebe* and *Hebejeebie* species.

Combinations and Authorities in *Veronica* for *Hebe*, *Chionohebe*, *Hebejeebie*, *Heliohebe*, *Leonohebe* and *Parahebe*.

Previous name	Combination and authority in <i>Veronica</i>
<i>Chionohebe ciliolata</i>	<i>V. ciliolata</i> (Hook.f.)Garn.-Jones Including <i>ssp. ciliolata</i> and <i>ssp. fiordensis</i>
<i>Chionohebe ciliolata</i> ssp. <i>pumila</i>	<i>V. pulvinaris</i> (Hook.f.)Cheeseman
<i>Chionohebe densifolia</i> = <i>Hebejeebie densifolia</i> = <i>Leonohebe densifolia</i>	<i>V. densifolia</i> (F.Muell.)F.Muell
<i>Chionohebe myosotoides</i> = <i>C. thomsonii</i>	<i>V. thomsonii</i> Cheeseman
<i>Chionohebe pulvinaris</i>	<i>V. pulvinaris</i> (Hook.f.)Cheeseman
<i>Chionohebe thomsonii</i>	<i>V. thomsonii</i> Cheeseman
<i>Chionohebe thomsonii</i> var. <i>glabra</i>	<i>V. chionohebe</i> Garn.-Jones
<i>Hebe acutiflora</i>	<i>V. rivalis</i> Garn.-Jones
<i>Hebe adamsii</i>	<i>V. adamsii</i> Cheeseman
<i>Hebe albicans</i>	<i>V. albicans</i> Petrie
<i>Hebe albiflora</i>	<i>V. albiflora</i> (Pennell)Albach
<i>Hebe amplexicaulis</i>	<i>V. amplexicaulis</i> J.B.Armstr.
<i>Hebe amplexicaulis</i> f. <i>hirta</i>	<i>V. amplexicaulis</i> f. <i>hirta</i> (Garn.-Jones & Molloy)Garn.-Jones
<i>Hebe angustissima</i>	<i>V. angustissima</i> (Cockayne)Garn.-Jones
<i>Hebe annulata</i>	<i>V. annulata</i> (Petrie)Cockayne ex. Cheeseman
<i>Hebe arganthera</i>	<i>V. arganthera</i> (Garn.-Jones,Bayly,W.G.Lee & Rance)Garn.-Jones
<i>Hebe armstrongii</i>	<i>V. armstrongii</i> Johnson ex J.B.Armstr.
<i>Hebe barkeri</i>	<i>V. barkeri</i> Cockayne

<i>Hebe benthamii</i>	<i>V. benthamii</i> Hook.f.
<i>Hebe biggarii</i>	<i>V. biggarii</i> Cockayne
<i>Hebe bishopiana</i>	<i>V. bishopiana</i> Petrie
<i>Hebe bollonsii</i>	<i>V. bollonsii</i> Cockayne
<i>Hebe brachysiphon</i>	<i>V. brachysiphon</i> (Summerh.)Bean
<i>Hebe brassii</i>	<i>V. brassii</i> (Pennell)Albach
<i>Hebe brevifolia</i>	<i>V. punicea</i> Garn.-Jones
<i>Hebe breviracemosa</i>	<i>V. breviracemosa</i> W.R.B. Oliv.
<i>Hebe buechananii</i>	<i>V. buechananii</i> Hook.f.
<i>Hebe calicola</i>	<i>V. calicola</i> (Bayly & Garn.-Jones)Garn.-Jones
<i>Hebe canterburiensis</i>	<i>V. canterburiensis</i> J.B.Armstr.
<i>Hebe carnosula</i>	<i>V. baylyi</i> Garn.-Jones
<i>Hebe chathamica</i>	<i>V. chathamica</i> Buchanan
<i>Hebe ciliata</i>	<i>V. ionantha</i> Albach
<i>Hebe cockayneana</i>	<i>V. cockayneana</i> Cheeseman
<i>Hebe colensoi</i>	<i>V. colensoi</i> Hook.f.
<i>Hebe corriganii</i>	<i>V. corriganii</i> (Carse)Garn.-Jones
<i>Hebe crenulata</i>	<i>V. simulans</i> Garn.-Jones
<i>Hebe cryptomorpha</i>	<i>V. cryptomorpha</i> (Bayly,Kellow,G.Harper & Garn.-Jones)Garn.-Jones
<i>Hebe cupressoides</i>	<i>V. cupressoides</i> Hook.f.
<i>Hebe decumbens</i>	<i>V. decumbens</i> J.B.Armstr.
<i>Hebe dieffenbachia</i>	<i>V. dieffenbachia</i> Benth.
<i>Hebe dilatata</i>	<i>V. dilatata</i> (G.Simpson & J.S.Thomson)Garn.-Jones
<i>Hebe diosmifolia</i>	<i>V. diosmifolia</i> R.Cunn. ex A. Cunn.
<i>Hebe divaricata</i>	<i>V. subfulvida</i> (G.Simpson & J.S.Thomson)Garn.-Jones
<i>Hebe elliptica</i>	<i>V. elliptica</i> G.Forster
<i>Hebe epacridea</i>	<i>V. epacridea</i> Hook.f.
<i>Hebe evenosa</i>	<i>V. evenosa</i> Petrie
<i>Hebe flavida</i>	<i>V. flavida</i> (Bayly,Kellow & de Lange)Garn.-Jones
<i>Hebe gibbsii</i>	<i>V. gibbsii</i> T.Kirk
<i>Hebe glaucophylla</i>	<i>V. glaucophylla</i> Cockayne
<i>Hebe gracillima</i>	<i>V. leiophylla</i> Cheeseman
<i>Hebe haastii</i>	<i>V. haastii</i> Hook.f.
<i>Hebe hectorii</i>	<i>V. hectorii</i> Hook.f.
<i>Hebe hectorii</i> subsp. <i>coarctata</i>	<i>V. hectorii</i> subsp. <i>coarctata</i> (Cheeseman)Garn.-Jones
<i>Hebe hectorii</i> subsp. <i>demissa</i>	<i>V. hectorii</i> subsp. <i>demissa</i> (G.Simpson)Garn.-Jones
<i>Hebe hulkeana</i>	<i>V. hulkenana</i> F.Muell.
<i>Hebe hulkeana</i> subsp. <i>evestita</i>	<i>V. hulkenana</i> subsp. <i>evestita</i> (Garn.-Jones)Garn.-Jones
<i>Hebe imbricata</i>	<i>V. poppelwellii</i> Cockayne
<i>Hebe insularis</i>	<i>V. insularis</i> Cheeseman
<i>Hebe ligustrifolia</i>	<i>V. ligustrifolia</i> R.Cunn. ex A.Cunn.
<i>Hebe lycopodioides</i>	<i>V. lycopodioides</i> Hook.f.
<i>Hebe macrantha</i>	<i>V. macrantha</i> Hook.f.
<i>Hebe macrantha</i> var. <i>brachyphylla</i>	<i>V. macrantha</i> var. <i>brachyphylla</i> Cheesem.
<i>Hebe macrocalyx</i>	<i>V. macrocalyx</i> J.B.Armstr.
<i>Hebe macrocalyx</i> var. <i>humilis</i>	<i>V. macrocalyx</i> var. <i>humilis</i> (G.Simpson)Garn.-Jones
<i>Hebe macrocarpa</i>	<i>V. macrocarpa</i> Vahl.
<i>Hebe murrellii</i>	<i>V. murrellii</i> (G.Simpson & J.S.Thomson)Garn.-Jones
<i>Hebe obtusata</i>	<i>V. obtusata</i> Cheeseman
<i>Hebe ochracea</i>	<i>V. ochracea</i> (Ashwin)Garn.-Jones
<i>Hebe odora</i>	<i>V. odora</i> Hook.f.
<i>Hebe paludosa</i>	<i>V. phormiiphila</i> Garn.-Jones
<i>Hebe pareora</i>	<i>V. pareora</i> (Garn.-Jones & Molloy)Garn.-Jones
<i>Hebe parviflora</i>	<i>V. parviflora</i> Vahl.
<i>Hebe pauciflora</i>	<i>V. notialis</i> Garn.-Jones
<i>Hebe pauciramosa</i>	<i>V. pauciramosa</i> (Cockayne & Allan)Garn.-Jones
<i>Hebe pauciramosa</i> var. <i>masoniae</i>	<i>V. masoniae</i> (L.B.Moore)Garn.-Jones
<i>Hebe perbella</i>	<i>V. perbella</i> (de Lange)Garn.-Jones
<i>Hebe petriei</i>	<i>V. petriei</i> (Buchanan)T.Kirk

<i>Hebe pimeleoides</i>	<i>V. pimeleoides</i> Hook.f.
<i>Hebe pimeleoides</i> subsp. <i>faucicola</i>	<i>V. pimeleoides</i> subsp. <i>faucicola</i> (Kellow & Bayly)Garn.-Jones
<i>Hebe pinguifolia</i>	<i>V. pinguifolia</i> Hook.f.
<i>Hebe polyphylla</i>	<i>V. wilhelminensis</i> Albach
<i>Hebe propinqua</i>	<i>V. propinqua</i> Cheeseman
<i>Hebe pubescens</i>	<i>V. pubescens</i> Banks & Sol.
<i>Hebe pubescens</i> subsp. <i>rehuarum</i>	<i>V. pubescens</i> subsp. <i>rehuarum</i> (Bayly & de Lange)Garn.-Jones
<i>Hebe pubescens</i> subsp. <i>sejuncta</i>	<i>V. pubescens</i> subsp. <i>sejuncta</i> (Bayly & de Lange)Garn.-Jones
<i>Hebe rakaiensis</i>	<i>V. rakaiensis</i> J.B.Armstr.
<i>Hebe ramosissima</i>	<i>V. kellowiae</i> Garn.-Jones
<i>Hebe raoulii</i>	<i>V. raoulii</i> Hook.f.
<i>Hebe raoulii</i> subsp. <i>maccaskillii</i>	<i>V. raoulii</i> subsp. <i>maccaskillii</i> (Allan)Garn.-Jones
<i>Hebe raoulii</i> var. <i>pentasepala</i>	<i>V. pentasepala</i> Garn.-Jones
<i>Hebe rapensis</i>	<i>V. rapensis</i> F.Br.
<i>Hebe rigida</i>	<i>V. inflexa</i> Albach
<i>Hebe rigidula</i>	<i>V. rigidula</i> Cheesem.
<i>Hebe rigidula</i> var. <i>sulcata</i>	<i>V. rigidula</i> var. <i>sulcata</i> (Bayly & Kellow)Garn.-Jones
<i>Hebe rubra</i>	<i>V. carminea</i> Albach
<i>Hebe rupicola</i>	<i>V. rupicola</i> Cheeseman
<i>Hebe salicifolia</i>	<i>V. salicifolia</i> G.Forster
<i>Hebe salicornioides</i>	<i>V. salicornioides</i> Hook.f.
<i>Hebe scopulorum</i>	<i>V. scopulorum</i> (Bayly, de Lange & Garn.-Jones)Garn.-Jones
<i>Hebe societatis</i>	<i>V. societatis</i> (Bayly & Kellow)Garn.-Jones
<i>Hebe speciosa</i>	<i>V. speciosa</i> R.Cunn. ex A.Cunn.
<i>Hebe stenophylla</i>	<i>V. stenophylla</i> Steud.
<i>Hebe stenophylla</i> var. <i>hesperia</i>	<i>V. stenophylla</i> var. <i>hesperia</i> (Bayly & Garn.-Jones)Garn.-Jones
<i>Hebe stenophylla</i> var. <i>oliveri</i>	<i>V. stenophylla</i> var. <i>oliveri</i> (Bayly & Garn.-Jones)Garn.-Jones
<i>Hebe stricta</i>	<i>V. stricta</i> Banks & Sol.
<i>Hebe stricta</i> var. <i>egmontiana</i>	<i>V. stricta</i> var. <i>egmontiana</i> (L.B.Moore)Garn.-Jones
<i>Hebe stricta</i> var. <i>lata</i>	<i>V. stricta</i> var. <i>lata</i> (L.B.Moore)Garn.-Jones
<i>Hebe stricta</i> var. <i>macroura</i>	<i>V. stricta</i> var. <i>macroura</i> (Hook.f. ex Benth.)Garn.-Jones
<i>Hebe strictissima</i>	<i>V. strictissima</i> (T.Kirk)Garn.-Jones
<i>Hebe subalpina</i>	<i>V. subalpina</i> Cockayne
<i>Hebe tairawhiti</i>	<i>V. tairawhiti</i> (B.D.Clarkson & Garn.-Jones)Garn.-Jones
<i>Hebe tenuis</i>	<i>V. strigosa</i> Albach
<i>Hebe tetragona</i>	<i>V. tetragona</i> Hook.f.
<i>Hebe tetragona</i> subsp. <i>subsimilis</i>	<i>V. tetragona</i> subsp. <i>subsimilis</i> (Colenso)Garn.-Jones
<i>Hebe topiaria</i>	<i>V. topiaria</i> (L.B.Moore) Garn.-Jones
<i>Hebe townsonii</i>	<i>V. townsonii</i> Cheeseman
<i>Hebe traversii</i>	<i>V. traversii</i> Hook.f.
<i>Hebe treadwellii</i>	<i>V. treadwellii</i> (Cockayne & Allan) Garn.-Jones
<i>Hebe truncatula</i>	<i>V. truncatula</i> Colenso
<i>Hebe urvilleana</i>	<i>V. urvilleana</i> (W.R.B.Oliv.)Garn.-Jones
<i>Hebe venustula</i>	<i>V. venustula</i> Colenso
<i>Hebe vernicosa</i>	<i>V. vernicosa</i> Hook.f.
<i>Hebejeebie densifolia</i>	<i>V.</i>
<i>Heliohebe acuta</i>	<i>V. scrupea</i> Garn.-Jones
<i>Heliohebe laudiana</i>	<i>V. laudiana</i> Raoul.
<i>Leonohebe cheesemanii</i>	<i>V. quadrifaria</i> T.Kirk
<i>Leonohebe ciliolata</i>	<i>V. hookeri</i> (Buchanan)Garn.-Jones
<i>Leonohebe mooreae</i>	<i>V. mooreae</i> (Heads)Garn.-Jones
<i>Leonohebe tetrasticha</i>	<i>V. tetrasticha</i> Hook.f.
<i>Leonohebe tumida</i>	<i>V. tumida</i> T.Kirk
<i>Parahebe birleyi</i> = <i>Hebejeebie birleyi</i>	<i>V. birleyi</i> N.E. Br.
<i>Parahebe canescens</i>	<i>V. lilliputiana</i> Stearn
<i>Parahebe catarractae</i>	<i>V. catarractae</i> G.Forster
<i>Parahebe catarractae</i> subsp. <i>lanceolata</i>	<i>V. lanceolata</i> Benth.
<i>Parahebe catarractae</i> subsp. <i>martinii</i>	<i>V. melanocaulon</i> Garn.-Jones
<i>Parahebe cheesemanii</i>	<i>V. cheesemanii</i> Benth.

<i>Parahebe cheesemanii</i> subsp. <i>flabellata</i>	<i>V. cheesemanii</i> subsp. <i>flabellata</i> (Garn.-Jones)Garn.-Jones
<i>Parahebe decora</i>	<i>V. decora</i> (Ashwin)Garn.-Jones
<i>Parahebe hookeriana</i>	<i>V. hookeriana</i> Walp.
<i>Parahebe linifolia</i>	<i>V. linifolia</i> Hook.f.
<i>Parahebe linifolia</i> subsp. <i>brevistylis</i>	<i>V. colostylis</i> Garn.-Jones
<i>Parahebe lyallii</i>	<i>V. lyallii</i> Hook.f.
<i>Parahebe papuana</i>	<i>V. papuana</i> (P.royen & Ehrend.)Albach
<i>Parahebe planopetiolata</i>	<i>V. planopetiolata</i> G.Simpson & J.S.Thomson
<i>Parahebe planopetiolata</i> var. <i>laxa</i>	<i>V. zygantha</i> Garn.-Jones
<i>Parahebe senex</i>	<i>V. senex</i> (Garn.-Jones)Garn.-Jones
<i>Parahebe spathulata</i>	<i>V. spathulata</i> Benth.
<i>Parahebe spectabilis</i>	<i>V. spectabilis</i> (Garn.-Jones)Garn.-Jones
<i>Parahebe trifida</i> = <i>Hebejeebie trifida</i>	<i>V. trifida</i> Petrie

References

Garnock-Jones P., D. Albach, B.G. Briggs. 2007. Botanical names in Southern Hemisphere *Veronica* (*Plantaginaceae*): sect. *Detzneria*, sect. *Hebe*, and sect. *Labiatooides*. *Taxon* 56: 571-582.

Meudt, H. 2008. Taxonomic revision of Australasian snow hebes (*Veronica*, *Plantaginaceae*). *Australian Systematic Botany* 21: 387-421

Threatened and uncommon plants of the Otago Peninsula

John Barkla

In 2004 the Save The Otago Peninsula (STOP) Inc. published a book by Dr Peter Johnson titled 'Otago Peninsula Plants – An annotated list of vascular plants growing in wild places'. Table 8 in that publication is a list of nationally threatened and uncommon plants which have been recorded on the Otago Peninsula. Subsequently the threat status of vascular plants of New Zealand have been reassessed by the NZ threatened plant panel (de Lange et al. 2009) using a revised threat classification system (Townsend et al. 2008). Further exploration has also uncovered new threatened species.

Table 1 below updates the list in Johnson (2004) to reflect the recent threat reassessment, additional taxa that have been discovered since 2004, and nomenclatural changes.

Seven taxa on the Otago Peninsula are now ranked as 'Threatened' in the categories Nationally Critical, Nationally Endangered and Nationally Vulnerable. A further 34 taxa are ranked as 'At Risk' in the categories Declining, Naturally Uncommon and Relict. Three taxa for which there are insufficient information to assign a category are placed in 'Data Deficient'.

Table 1 Plant taxa listed as Threatened, At Risk & Data Deficient by de Lange et al. (2009) and which have been recorded on Otago Peninsula

Current name & threat ranking	Previous threat ranking (de Lange et al. 2004)	Concordance with Johnson (2004)
Threatened - Nationally Critical		
<i>Myosurus minimus</i> subsp.	Nationally Endangered	<i>Myosurus minimus</i> subsp. <i>novae-</i>

<i>novae-zelandiae</i>		<i>zelandiae</i>
Threatened - Nationally endangered		
<i>Isolepis basilaris</i>	Chronically Threatened – Serious Decline	<i>Isolepis basilaris</i>
Threatened - Nationally Vulnerable		
<i>Carex cirrhosa</i>	Chronically Threatened – Gradual Decline	<i>Carex cirrhosa</i>
<i>Geranium retrorsum</i>	Not threatened	<i>Geranium retrorsum</i>
<i>Lepidium oleraceum</i>	Nationally Endangered	<i>Lepidium oleraceum</i>
<i>Olearia fimbriata</i>	Chronically Threatened – Gradual Decline	<i>Olearia fimbriata</i>
<i>Pachycladon cheesmanii</i>	Chronically Threatened – Gradual Decline	<i>Ischnocarpus novaezelandiae</i>
At Risk - Declining		
<i>Anemanthele lessoniana</i>	At Risk - Sparse	<i>Anemanthele lessoniana</i>
<i>Brachyglottis sciadophila</i>	Chronically Threatened – Gradual Decline	<i>Brachyglottis sciadophila</i>
<i>Carex litorosa</i>	Chronically Threatened – Serious Decline	<i>Carex litorosa</i>
<i>Coprosma acerosa</i>	Not threatened	<i>Coprosma acerosa</i>
<i>Geranium sessiliflorum</i> var. <i>arenarium</i>	Not threatened	<i>Geranium sessiliflorum</i> var. <i>arenarium</i>
<i>Lepidium tenuicaule</i>	Chronically Threatened – Gradual Decline	<i>Lepidium tenuicaule</i>
<i>Myosotis pygmaea</i>	Chronically Threatened – Serious Decline	<i>Myosotis pygmaea</i> var. <i>pygmaea</i>
<i>Olearia fragrantissima</i>	At Risk - Sparse	<i>Olearia fragrantissima</i>
<i>Olearia lineata</i>	At Risk - Sparse	<i>Olearia lineata</i>
<i>Ranunculus recens</i>	Chronically Threatened – Gradual Decline	<i>Ranunculus recens</i> var. <i>recens</i>
<i>Raoulia monroi</i>	Chronically Threatened – Gradual Decline	<i>Raoulia monroi</i>
<i>Tupeia antarctica</i>	Chronically Threatened – Gradual Decline	<i>Tupeia antarctica</i>
At Risk - Naturally Uncommon		
<i>Acaena microphylla</i> var. <i>pauciglochidiata</i>	At Risk – Range Restricted	<i>Acaena microphylla</i> var. <i>pauciglochidiata</i>
<i>Atriplex buchananii</i>	At Risk - Sparse	<i>Atriplex buchananii</i>
<i>Chaerophyllum</i> (a)(CHR 364086; "minute flower")	At Risk - Sparse	<i>Oreomyrrhis</i> "minute flower"
<i>Crassula ruamahanga</i>	At Risk - Sparse	<i>Crassula ruamahanga</i>
<i>Drymoanthus flavus</i>	Chronically Threatened – Serious Decline	<i>Drymoanthus flavus</i>
<i>Einadia allanii</i>	Not threatened	<i>Einadia allanii</i>
<i>Elymus falcis</i>	At Risk – Range Restricted	<i>Elymus falcis</i>
<i>Helichrysum selago</i> var. <i>tumidum</i>	At Risk – Range Restricted	<i>Helichrysum intermedium</i> var. <i>selago</i>
<i>Hymenochilus tristis</i>	At Risk - Sparse	<i>Pterostylis tristis</i>
<i>Korthalsella salicornioides</i>	At Risk - Sparse	<i>Korthalsella salicornioides</i>
<i>Lepilaena bilocularis</i>	Data Deficient	<i>Lepilaena bilocularis</i>
<i>Lobelia perpusilla</i>	Not threatened	<i>Pratia perpusilla</i>
<i>Mimulus repens</i>	At Risk - Sparse	<i>Mimulus repens</i>
<i>Montia angustifolia</i>	Data Deficient	<i>Neopaxia linearifolia</i>
<i>Myosotis rakiura</i>	At Risk – Range Restricted	<i>Myosotis rakiura</i>
<i>Pseudopanax ferox</i>	At Risk - Sparse	<i>Pseudopanax ferox</i>
<i>Puccinellia walkeri</i>	At Risk – Range Restricted	Not recorded
<i>Senecio carnosulus</i>	At Risk - Sparse	<i>Senecio carnosulus</i>
<i>Senecio glaucophyllus</i> subsp. <i>basinudus</i>	At Risk – Range Restricted	<i>Senecio glaucophyllus</i> subsp. <i>basinudus</i>
<i>Stenostachys laevis</i>	Data Deficient	Not recorded

At Risk - Relict

<i>Ficinia spiralis</i>	Chronically Threatened – Gradual Decline	<i>Desmoschoenus spiralis</i>
<i>Sonchus kirkii</i>	Chronically Threatened – Gradual Decline	<i>Sonchus kirkii</i>

Data Deficient

<i>Coprosma rubra</i>	Not threatened	<i>Coprosma rubra</i>
<i>Euchiton ensifer</i>	At Risk – Sparse	Not recorded
<i>Lachnagrostis tenuis</i>	Not threatened	<i>Lachnagrostis tenuis</i>

References:

de Lange, PJ, Norton, DA, Heenan, PB, Courtney, SP, Molloy, BPJ, Ogle, CC, Rance, BD, Johnson, PN, Hitchmough, R, 2004: Threatened and uncommon plants in New Zealand. *New Zealand Journal of Botany* 42: 45-76.

de Lange PJ, Norton DA, Courtney, SP, Heenan PB, Barkla JW, Cameron EK, Hitchmough R, Townsend A.J 2009. Threatened and uncommon plants of New Zealand (2008 revision).

New Zealand Journal of Botany 47: 61-96.

Johnson, PN , 2004: Otago Peninsula Plants. An annotated list of vascular plants growing in wild places. Save The Otago Peninsula (STOP) Inc. Portobello, Dunedin.

Townsend AJ, de Lange PJ, Duffy CAJ, Miskelly CM, Molloy J, Norton DA 2008. New Zealand Threat Classification System manual. Science & Technical Publishing, Department of Conservation, Wellington.

New fungal record from Dunedin and New Zealand ... and a warning!

John Steele



Dunedin has the dubious honour of being the first place to record the fungus, *Chondrostereum purpureum*, on *Azara microphyllum*, in New Zealand. This cosmopolitan species has previously been recorded on 82 host species in New Zealand, but, as far as I can tell, does not appear in any collections between Edendale in Southland and Christchurch. Of these, 10 are species of *Eucalyptus*, 10 are species of *Prunus* and 11 are species of *Populus*. Three North Island collections are from *Nothofagus solandri* var. *cliffortioides*, *Pittosporum crassifolium* and *P. tenuifolium* so it would appear to prefer exotic trees - at least so far.



Better known as silverleaf or silver blight, it is a serious fungal pest of fruit trees often resulting in the death of the host. Control measures are possible and HortResearch have produced a fact sheet with advice on how to control

infections and possibly cure infected trees. See:

<http://www.hortnet.co.nz/publications/hortfacts/hf205015.htm>

Our specimen was found by a member of the public from his garden in Maori Hill where it had infested a 25-30 year old tree now showing serious evidence of decline. It has been treated by injecting it with the biological control agent, a species of the beneficial fungus, *Trichoderma*, and only time will tell if this has been successful. Infection is by entry of the spores through damaged areas caused by pruning or natural means and since spores are released on still, wet days, care needs to be exercised when pruning takes place.

The fungus comprises a purpley-grey, almost velvety, thallus which spreads (at least in this case) in a line up the tree, there being many such lines of thalli each about 6 cm long by 3 cm wide. The upper edge of the thallus turns up and slightly backwards as it matures. After spore-release, it dies off to leave a brown, crusty, almost gall-like growth about 2 cm high on the bark. On fruit trees, the results can be reduced leaf and fruit growth and a silvery sheen on the leaves, hence the common names.

I could not find any other infected trees in the immediate area, but would be glad to hear of any. I suspect this fungus may be established on other trees in Otago as many of the hosts already found are common throughout the region.

Meeting and trip reports

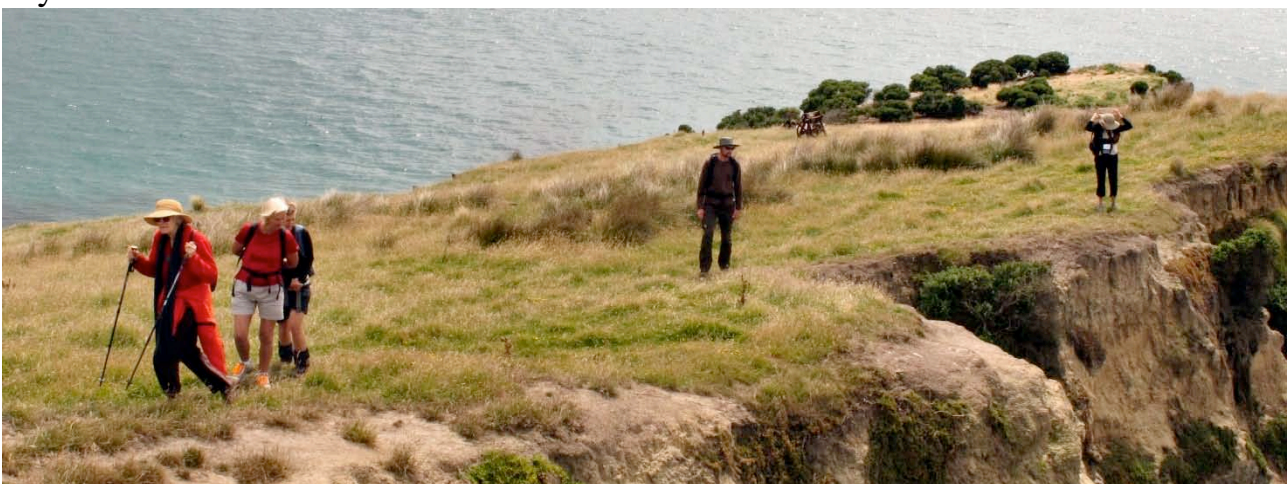
Heyward Point Scenic Reserve 14 February 2010

Robyn Bridges

It seems aeons away now when a group of hearty BotSoccers headed up the track from Aramoana to meander along the high cliffs to Heyward's Point on St Valentine's Day earlier this year. I know procrastination has played its part in the delay of this report, but I thought if I didn't have a pen and paper in my hands I would be safe in terms of furnishing a trip report. Wrong! So here are my unreliable memories of a day well spent exploring this wonderful remnant of coastal Otago vegetation and the headland of the Heyward Point Scenic Reserve.

It was an exceptional day, brilliantly sunny with no wind. The sea was sparkling and the views of inland and coastal horizons were back dropped in sharp relief. The sight of the wind-sculptured lobes of *Coprosma crassifolia* clinging to the edge of the cliffs, reminded us how rare this still day was!

John Barkla prepared us well by distributing an early Lands and Survey Report (1975) on the area that is worth quoting. It says of the reserve 'A very valuable reserve, both botanically and scenically. Unusual and interesting vegetation pattern, with several species now rare in the area, for instance matai.' The report noted that an area outside this reserve should be fenced and protected, 'to increase the botanical value of the reserve.' It is gratifying the Chapman family who farm the area adjacent to the reserve had the wisdom and commitment to do this and have covenanted more land alongside the reserve. These efforts have paid off as the reserve is in good shape and there was no evidence of grazing. That we did not see young matai on this trip is not due to its absence but more likely to the fact that we did not penetrate the middle of the reserve.



Returning from the tip of Heyward Point. Photo John Barkla

We had lunch at the tip of Heyward Point near a rusted winch which once hauled oil up to the lighthouse and stands as a lonely relic to earlier times. The area is a mixture of introduced grass and native species and is grazed. However there are some indigenous species surviving, in particular the lovely blue wheat grass, *Elymus* sp. with nodding seed heads. Perched on the cliffs we watched with interest as Graham Loh navigated his way across the channel to the outlying island that forms the tip of Heyward Point. Sometime ago Graham had done several plantings of Cook's scurvy grass, *Lepidium oleraceum*, and he wanted to check on their growth. The good news was that most are thriving. Heading back up to the bush area of the reserve we came across several large desiccated trunks lying in the grass, many with skinks on them, warming themselves in the sun.

Plants that have stayed in my memory from this day include, the wind shorn coprosma clinging to the cliff edge with its distinct and much divided bushy lobes; a very large specimen of *Olearia fragrantissima*, the largest I have seen; the creeping *Brachyglottis sciadophila* unfortunately not with its lovely yellow flowers; being shown the difference between the introduced Australian ngaio (accidentally planted some time ago on the track alongside the reserve), and our native *Myoporum laetum*, the latter having distinctive black growing tips and larger flowers. Then, as only could take place on a BotSoc trip, witnessing the intense debate as to which species of

divaricating small leaved plants we were looking at! The 'jury' favoured *Melicytus micranthus*! There were good specimens of *Pseudopanax crassifolium* and *P. ferox*, and several good examples of Hall's totara, *Podocarpus hallii*, whose stocky form reflected the extremes of the environment it was growing in. Moira spotted a *Pennantia corymbosa* with its signature duck's feet leaf shape and Alf a *Pterostylis* sp?, but as it was not flowering it was too hard to identify.

A highlight of the day proved to be a little more elusive but John's persistence paid off. This reserve is home to the only specimen of *Olearia hectorii* north of Owaka. A good 3 metres high specimen, it's a lonely and rather straggly one that does not set viable seed. However it's likely that as with other areas where this wonderful tree daisy grows, competing introduced grasses mean young plants would probably not successfully establish. The Otago Regional Council has done a great job of planting more in an area that has been covenanted by the Chapman family.

As well as the skinks other wildlife seen were very young seals taunting each other (seal bullrush?) on the beach below the cliffs, and one or two sooty shearwaters flying round the island at the point. As one of the few remaining areas of coastal vegetation Heyward Point Scenic Reserve deserves its status as an area that is 'botanically and scenically valuable' and does provide 'pleasant walking and rewarding views of coastline and inland.' It is gratifying

that the recommendations of the then Dunedin Metropolitan and Regional Planning Authority in 1975 have been adopted and the area is protected.

Thanks to John Barkla for leading this trip, and for so willingly and patiently, sharing his knowledge with us.



Moira, Alf, Bradley and Graeme admire Cook's scurvy grass. Photo John Barkla

Visit to 'The Fernery' 27 March 2010

The trip was led by Abe Gray into the darker recesses of Pinehill, often glimpsed from the Northern Motorway, but rarely visited, at least by me. The first problem was getting there and at least one carload arrived fairly late after shunning the advised route. There was 8-10 of us.

Bill Wilson

We started with a short visit to a reserve between the end of Hillary St. and the Northern Motorway. The reserve was grassed, with a variety of exotic trees. It had a great view of passing traffic and there was some discussion about whether a plantation on the far side was of Macadamians or not. The issue was not resolved.

We briefly visited Abe's nearby house to inspect it and his baby son and then went on to The Fernery. This house and garden fills the lower part of the valley at the north end of Hillary St.

From 1880–1973 it had been a fruit and berry farm, then for 25 years was owned by a florist, Peter Johnson. He kept on as a florist, and the present owners, Professor Brian Cox and his partner Mary Jane Sneyd continue to supply him with cut flowers, especially round Anzac Day. He rings up and specifies what he wants, frequently white Hydrangeas and Laurel and exactly where to find it.

The extensive garden looks as if it got a little out of hand at one stage, and a lot of clearing and putting in of paths and steps has been done by the latest owners. Most of the vegetation is exotic, though there is a small bush area of natives down by the creek.

During a recent storm one large Radiata had shed its top few metres onto an aluminium boat which had been parked at the pine's base. Unfortunate, especially as it had just been sold. A lot of the trees, especially pines and eucalyptus are well established. Down by the creek were lots of large Gunnera. Up by the house the dominant species are Hydrangeas, Rhododendrons, Laurels Birches and varied European exotics interspersed with flower beds. These contained, among other things, Sedums, Roses, Spraxias, ferns, Geums, Euphorbia, Lilies and more. At the back of the house are a number of glass houses with mainly exotic fruits including citrus and berries. We wandered round for an hour arguing about what was what and marvelling at the energy of the owners in bringing order to a wilderness. Many thanks to Abe for organizing it all.

AGM and Photo Competition 21 April 2010

Allison Knight

The 2010 **AGM** sped by in 11 minutes. The following were elected unopposed: Chairman, David Lyttle; Secretary, Allison Knight; Treasurer, Rebecca James; Web Manager, David Orlovich; Communications, Robyn Bridges, Social functions, Bill Wilson. Committee; John Barkla, Mike Thorsen, Bastow Wilson, Tina Summerfield and Max Crowe. A Newsletter editor and more committee members could be co-opted. Your skills would be welcomed!

The **Photo Competition** was the star attraction. Eleven contributors,

including 4 students, put in a total of 29 prints, which were on display. Members voted for their favourite print. Mike Thorsen's stunning image of the Teviot cushion wetland as a runaway winner. Then the two expert judges, Peter Johnson and Rod Morris, gave a spectacular PowerPoint presentation on the big screen, making constructive comments on every image and passing on useful photographic tips, such as how to get both the sky and the plants optimally exposed.

As a final treat Peter presented a selection of his own quirky images, accompanied by insights from Rod. Peter's kereru in the over-browsed kowhai brought forth some interesting observations. Apparently the kereru population round Oban is so voracious that no kowhai can survive there.

2010 Prize winners

Members' Choice – Mike Thorsen with an overwhelmingly popular view of Teviot wetland

Botanical portrait – Allison Knight with a menacing '*Menegazzia* monster'

Plants in the Landscape – John Barkla with a cloud of *Ranunculus lyalli* high above the Matukituki Valley

Plant interactions – Annika Korsten with a beautiful frosted *Celmisia*

Student winner – Annika Korsten, as above

Overall winner – Allison Knight, as above.



'*Menegazzia* monster' overall winner in photographic competition. Photo Allison Knight

Field trip to Colinswood Bush, Macandrew Bay and the Pyramids 15 May 2010

Colinswood Bush is a private covenant located in Macandrew Bay. This bush remnant was fenced to exclude stock 20 years ago. Since that time considerable progress has been made in restoring the bush and enhancing its biological health.

We were shown through the bush by Nigel McPherson the present convener of the Colinswood Bush Committee. Nigel showed us the large old matai tree, one of the few remaining on the Otago Peninsula and pointed out the regenerating seedlings from the tree that had appeared unexpectedly. Matai are dioecious and there are no male trees in the immediate vicinity.

The bush has a framework of large old trees predominantly of totara (*Podocarpus hallii*), broadleaf (*Griselinia littoralis*), kowhai (*Sophora microphylla*) and ribbonwood (*Hoheria angustifolia*). Initially fast-growing species such as ngaio (*Myoporum laetum*), kohuhu (*Pittosporum tenuifolium*), lemonwood (*Pittosporum eugenioides*), mapou (*Myrsine australis*) and *Coprosma propinqua* were planted to fill gaps and close the canopy. Various podocarps including totara (*Podocarpus hallii*) rimu (*Dacrydium cupressinum*) matai (*Prumnopitys taxifolia*), miro (*Prumnopitys ferruginea*), kahikatea (*Dacrycarpus dacrydioides*) were also planted early in the project and are now flourishing. Controlling weedy vines mainly exotic escapees; Bomarea, old man's beard,

banana passion fruit and ivy from the adjacent suburban gardens has been a major problem in the past but at these are largely under control.

The focus is now shifting to controlling woody weeds such as sycamore, elder and *Hoheria sexstylosa* a native species that is outside its natural range. This latter species is particularly problematical as it hybridises with the local species *Hoheria angustifolia*. As natural regeneration is proceeding well, the aim of the present planting programme is to introduce greater natural diversity compatible with the locality.

Walking round Colinswood Bush is a very enjoyable experience. Although it is located in the heart of Macandrew Bay it has the feel of a forest and resounds with the songs of bellbirds and tuis. The present health of the reserve is a tribute to the foresight of the owners, the Hellyer family, and the stewardship of Nigel and his predecessor, the late Angus Black. In the afternoon the group continued to the Pyramids to look at the diverse vegetation types found there. On the track up to the summit of the Small Pyramid specimens of each species of divaricating shrub growing there were collected and passed back down the line with every person having to repeat the name on John's insistence- an invaluable learning experience!

A plant of *Dianella nigra* was found growing in a rock crevice just below the summit of the small Pyramid. This is a new record for this species for the Peninsula. The group then headed round the southern side of the Small Pyramid to look at the stand of *Carmichaelia petriei* growing there. This form has narrow branches and would have formerly been known as *Carmichaelia virgata*.

No field trip would be complete without a “bush bash” through waist high bracken and flax to complete the circum-navigation of the Small Pyramid. The trip was finished by a quick visit to the salt marsh at the edge of Papanui Inlet Bay to see the rare sedge *Carex litorosa*, and the grasses *Lachnagrotis tenuis* and *Stenostachys laevis* which John and Mike had found growing there.



The group on top of Little Pyramid. Photo David Lyttle

Botanical Society of Otago: PO Box 6214, North Dunedin 9059, NZ

Patron: Audrey Eagle

<http://www.botany.otago.ac.nz/bs/>

Committee 2010-2011

Chairman: **David Lyttle**

djlyttle@ihug.co.nz

Secretary: **Allison Knight**

alli_knight@hotmail.com

Treasurer: **Rebecca James**

jamre398@student.otago.ac.nz

Communications: **Robyn Bridges**

robyn.bridges@otago.ac.nz

Program Manager, Trips: **Mike Thorsen**

mthorsen@doc.govt.nz

Web: **David Orlovich**

david.orlovich@otago.ac.nz

Newsletter Editor

Vacant (please help!)

Committee:

John Barkla

jbarkla@doc.govt.nz

Max Crowe

croma101@student.otago.ac.nz

Tina Summerfield

tina.summerfield@otago.ac.nz

Bastow Wilson

bastow@otago.ac.nz

Please submit copy for next newsletter to David Orlovich by 31 Oct 2010

This Newsletter was published on 20 July 2010. ISSN 0113-0854

Membership form: Botanical Society of Otago, 2010

This form is also available on our website;<http://www.botany.otago.ac.nz/bs/>

Preferred title: _____

Name: _____

Mailing Address

(work or home) _____

E-mail address: _____

Electronic Newsletter only? Yes/No

Phone: work () _____ home () _____

Annual Subscriptions are due by the beginning of each calendar year.**Only \$5 Concessional (student /unwaged), [\$20 for 5 years]****\$15 Full (waged/salary/philanthropist) [\$60 for 5 years],****\$20 Family (2 adults + children) [\$80 for 5 years]**

Please circle amount paid. Donations are welcomed

Cheques to: "Botanical Society of Otago".**Post** to: Treasurer, BSO, P.O. Box 6214, Dunedin North 9059, New Zealand**Correct amount of cash** may be lodged at the Department of Botany Office

BOTANY DEPARTMENT
UNIVERSITY OF OTAGO



Botanical Society of Otago, PO Box 6214, North Dunedin 9059, NEW ZEALAND



BOTANICAL SOCIETY

OF OTAGO