



## Newsletter Number 56 April 2009

### **BSO Meetings and Field Trips**

- 22 April, 5:20 pm. An evening of Botanical Photography and AGM.** Following on from last year's successful formula we have again lured renowned photographers Rod Morris, Peter Johnson and Kelvin Lloyd back to judge our third BSO photographic competition following a brief AGM. Entries will be on display, photographic tips given and prizes presented. It's not too late to enter — the deadline has been extended. **Entries close 15 April, 5 p.m.** See BSO website or notice board for entry forms. Contact Robyn Bridges, [robyn.bridges@otago.ac.nz](mailto:robyn.bridges@otago.ac.nz), phone: (03) 479 8372. See page 2 for meeting details
- 26 April, Sunday 9:00 am. Field Trip to Lower Taieri Gorge.** The lower Taieri Gorge between Henley and Taieri Mouth is representative of the original vegetation of the District and has an exceptional variety of plant communities in a small area. Highlights include large populations of the threatened scented tree daisy and fierce lancewood, along with several other threatened species, and one of the few sites in the District with regenerating kahikatea and matai. We'll shuttle vehicles to enable us to walk the well-formed track that sidles the gorge from Henley to the end near Taieri Mouth. Depart Botany carpark 9 am, returning mid afternoon. Contact John Barkla, [jbarkla@doc.govt.nz](mailto:jbarkla@doc.govt.nz), phone: (03) 476 3686.
- 20 May, 5:20 pm. Positive interactions and interdependence in plant communities.** A talk by Dr Ragan Callaway, The University of Montana. The individualistic view of plant communities has led to successful research on the importance of the abiotic environment and competition as factors structuring plant communities. Negative interactions such as predation, competition for resources, and allelopathy have been central to the study of ecology and evolution. However, it has become clear that organisms can greatly enhance the performance of their neighbors as well as modify the environment in ways that benefit other species. Positive interactions among plants, or facilitation, occur

when the presence of one plant enhances the growth, survival, or reproduction of a neighbor. Until recently, examples of facilitation have been relatively rare; however, this rarity may have been an artifact of scientific disinterest rather than ecological frequency. But in the last 20 years, hundreds of peer-reviewed papers have been published on the positive effects of plants on each other. This research challenges a strict definition of the theory of individualistic plant communities, one of the most basic and widely accepted conceptual models in ecology, as a foundation for understanding how groups of plant species are organized. I will discuss this research and its theoretical implications. See below for meeting details.

**23-24 May, Sat-Sun trip. Fungal Foray to the Catlins.** A two-day trip to collect fungi in the Catlins. We'll explore the many patches of native bush in the Catlins area. Bring your camera along. Leader, David Orlovich. Accommodation on Saturday night will be at Nugget Point Lighthouse Keepers house (numbers limited). Day-trippers are welcome to join us on either day. To reserve accommodation or find out more contact David Orlovich by Wednesday 20 May. Leave from Botany carpark at 8.30 am Saturday. Return late afternoon Sunday. Contact David Orlovich, david.orlovich@otago.ac.nz, phone: 479 9060.

**10 June, 5:20 pm. Ecological excuses for a visit to China.** A talk by Emeritus Prof. Alan Mark, who will recount his recent visit to China. See below for meeting details.

**20 June, Sunday 8:30 am. Ross Creek ferns field trip.** A field trip to discover the ferns of Ross Creek, led by John Steel. It will be to practice using John's "Key to the ferns of Dunedin". There are close to a hundred species of ferns in the greater Dunedin City area and John has produced this key over the last ten years using student feedback to iron out the more common problems found when trying to identify them. A great opportunity to master this fascinating component of the Dunedin environment. Leave from Botany carpark at 8.30 am. Contact John Steel, john.steel@botany.otago.ac.nz, phone: (03) 479 4572.

**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, 2<sup>nd</sup> 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 (10c/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/>

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*Pimelea lyallii* at Mason Bay, Stewart Island. Photo by David Orlovich.

## Chairman's Notes

I hope you all had a pleasant break over the New Year period and managed to find something of botanical interest in your travels. I spent time on the beaches of Northland and admired the wonderful sight of gnarled pohutukawa in full flower, clinging tenaciously to the cliffs and headlands. The water temperature was a welcome surprise too!

Our AGM is just around the corner and we will need some new people to join the committee to replace those leaving

## Editor's Notes

Welcome to *BSO Newsletter No. 56*! I do apologise for the lengthy delay in producing this issue of the *Newsletter*. **Please submit copy for next newsletter by 15 June 2009.**

**Editor's guidelines:** Contributions are always welcome. Authors don't need to format their submission, but 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. Electronic submission (by email to the editor: david.orlovich@otago.ac.nz) is preferred. Please send photos as

*John Barkla*

the District. If you think you may be interesting in joining our happy group then let me or one on the committee members know. Once again we'll be combining the AGM with a photo competition. It's time to sort through those images and get your entry in — more details later in the newsletter.

Finally, we'd be thrilled to hear from you if you've got ideas of places the Society could visit or people we could approach as speakers at our monthly meetings.

*David Orlovich*

separate files (not embedded in Word documents) and remember to include photo captions and credits.

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## Correspondence and News

### Botanical Society of Otago Photo Competition 2009

The BSO photo competition has been a popular event for the last two years. This year the format has been changed to give every entrant a better chance. There will be no subject categories, and each member can submit up to three glossy 6 x 8 inch prints on any botanical topic. Our 3 popular and expert judges, Rod Morris, Natural History New Zealand, plus professional botanists Peter Johnson and Kelvin Lloyd will use a selection of images to discuss photographic techniques and then announce the best student print and the three best prints from the rest of the members. Each of these will receive a prize of \$50. There will be an additional 'Members' choice' prize of \$50. On the night of the AGM all the entries will be displayed, and each BSO member present can vote for the one they like the best. So it's still possible to win

\$100 if your image has universal appeal and it's well worth coming just to see all the stunning images on display, and to pick up some good photography tips.

Entry forms can be picked up from the display shelves outside the secretary's office in the Botany Department or downloaded from the BSO web site <http://www.botany.otago.ac.nz/bsol>

**We've extended the closing date! Entries close on 15 April**, and must reach The Botanical Society of Otago, PO Box 6214, North Dunedin 9059, or be handed in to Trish Fleming at the Department of Botany office, by this date. Don't forget to include an electronic copy, or email one to: [bsol@botany.otago.ac.nz](mailto:bsol@botany.otago.ac.nz). The judges might show your image on the big screen, or it could feature in the BSO calendar, Newsletter or Website!

### *Hebejeebie* lives on?? But are all *Hebe* now *Veronica*??

Allison Knight

In 2003 The Botanical Society of Otago Newsletter achieved fame and notoriety by publishing a taxonomic article by Michael Heads, creating a new genus, *Hebejeebie*, which incorporated *Chionohebe densifolia*, *Parahebe birleyi* and *Parahebe trifida*. The name *Hebejeebie*, Michael said, 'refers to the anxiety these plants have often caused taxonomists'.<sup>1</sup>

reference, they make no comment on *Hebejeebie*, though Wagstaff *et al.*'s phylogenetic tree in their book does show the close relationship of the three *Hebejeebie* species.

In 2006 Michael Bayly and Alison Kellow produced a very useful and beautifully illustrated guide to New Zealand *Hebe*<sup>2</sup>. This book covers only *Hebe* and *Leonohebe*. Apart from the

They thoughtfully discuss the definitive limits between *Hebe* and *Veronica* (pages 16 – 17). In conclusion they take the view that "... much effort has gone into understanding the diversity and relationships of the *Hebe* complex, and that lumping all members into a large and variable genus, (especially *Veronica*, rather than a purely

Australasian genus) would create a classification which is information – poor, obscuring obvious diversity and some clear relationships.”

The earliest recorded description of a *Hebe* was by George Forster in 1786 (as a *Veronica*). In 2007, in the light of recent findings that the southern *Hebe* complex is nested within the northern *Veronica* clade, Phil Garnock-Jones *et al.* published a paper transferring *Chionohebe*, *Hebe*, *Hebejeebie*, *Heliohebe*, *Leonohebe* and *Parahebe* to *Veronica*<sup>2</sup>. Their handy cross-classified lists of old and new names can be found on the BSO website: <http://www.botany.otago.ac.nz/bso/veronica.pdf> (though *Hebejeebie* is omitted).

However, *Veronica* does not seem to be widely accepted yet and certainly not by the New Zealand Plant Conservation Network (<http://www.nzpcn.org.nz/>). A search for *Veronica* on this site brings up all the *Hebe* names, and their allies, including Michael Heads' three *Hebejeebie* species, but mentions only one *Veronica*. On the other hand, a search on Landcare's New Zealand Plant Database (<http://nzflora.landcareresearch.co.nz/>) does throw up lots of *Veronica* names. However, it relegates most *Veronica* to synonyms of *Hebe* names, still giving *Hebe* as the preferred name. It completely ignores *Hebejeebie*.

So, despite these two very good national websites, when it comes to *Hebe*, *Hebejeebie* or *Veronica* there's no absolute guidance for the earnest

botanist searching for the 'right' name to use. In the end it's up to each individual to accept or reject any new name, and either choice is a valid name. Only time will tell whether a new name finally comes to be accepted or rejected by the botanical community as a whole.

Meanwhile *Hebejeebie* is still getting noticed in the international literature, at least in a recent letter to *New Scientist*<sup>4</sup>. Henk Beentje, from the Royal Botanic Gardens, Kew, ranks it highly as an idiosyncratic name, along with *Aquilegia flabellate nana pumila alba* “*Rama Lama Ding Dong*”, a cultivar of dwarf white columbine, and *Erigonum inflatum* var. *deflatum* of the family Polygonaceae.

You can find out more about weird botanical names, and about taxonomy in general at [www.curiooustaxonomy.net](http://www.curiooustaxonomy.net)

1. Heads, M. 2003. *Hebejeebie* (Plantaginaceae), a new genus from the South Island, New Zealand, and Mt Kosciusko, SE Australia. *Botanical Society of Otago Newsletter* 36: 10-12.
2. Bayly M. J and A.V. Kellow. 2006. *An Illustrated Guide to New Zealand Hebes*. Te Papa Press, Wellington
3. Garnock-Jones, P., Albach, D., Briggs, G. 2007. Botanical names in Southern Hemisphere *Veronica* (Plantaginaceae): sect. *Detzneria*, sect. *Hebe*, and sect. *Labiatooides*. *Taxon* 56: 571-582
4. Beentje, H. 2009. Punning Stunts. *New Scientist* 14 Feb: 27



***Echium monstrosus* – new species from Port Chalmers?**

John Steel

Every year I look forward to the variety of botanical oddities brought in for me to identify and last year produced its share of interesting and not-so-interesting examples. In October I received a call from a Mr. Conway of Port Chalmers regarding an interesting specimen of *Echium* growing on wasteland on Back Beach Road opposite the yacht club and which, he felt, might be a hybrid between *Echium candicans* and *Echium pininana*.

The photograph does not do justice to the spectacular specimen of *Echium pininana* that greeted me and which I assumed was a distortion caused by

weed spraying. Sure enough, Port Otago contractors had earlier sprayed gorse using the glyphosate-based weedkiller, Roundup, and some of this had obviously drifted onto the nearby vegetation. *Echium pininana* is a biennial weed that is common round the harbour and recognised by its magnificent, two metre-high, blue-flowered spikes, which don't generally appeal to the small home garden. However, if anyone wants to try creating their own conversation piece, try a little Roundup on a second year plant at the beginning of October and watch what happens!



*Echium pininana*. Photo by John Steel.

## Articles

### Plant foods of six bird species in the Dunedin Botanic Garden

Alan Baker

From June 2003 to May 2007 I noted the plant foods I saw being eaten in the Dunedin Botanic Garden by NZ pigeon, tui, bellbird waxeye, blackbird and song thrush. Below is a list of the

foods I recorded on at least four days for one bird species, with the number of days on which I saw each bird taking the food.

BLA SON PIG TUI BEL WAX

| <b>Nectar – NZ native plants</b>      |  |  |  |    |    |    |
|---------------------------------------|--|--|--|----|----|----|
| <i>Clianthus maximus</i>              |  |  |  | 2  | 4  | 0  |
| <i>Fuchsia excorticata</i>            |  |  |  | 10 | 59 | 30 |
| <i>Metrosideros</i> spp.              |  |  |  | 14 | 16 | 16 |
| <i>Phormium</i> spp.                  |  |  |  | 29 | 34 | 0  |
| <i>Pittosporum</i> spp.               |  |  |  | 4  | 7  | 17 |
| <i>Pseudopanax</i> spp.               |  |  |  | 13 | 19 | 16 |
| <i>Sophora</i> spp.                   |  |  |  | 51 | 67 | 34 |
| <i>Vitex lucens</i>                   |  |  |  | 18 | 37 | 14 |
| <b>Nectar – Exotic plants</b>         |  |  |  |    |    |    |
| <i>Acer</i> spp.                      |  |  |  | 3  | 2  | 9  |
| <i>Aloe</i> spp.                      |  |  |  | 1  | 7  | 0  |
| <i>Anigozanthos flavidus</i>          |  |  |  | 1  | 19 | 0  |
| <i>Arbutus</i> spp.                   |  |  |  | 4  | 25 | 1  |
| <i>Banksia</i> spp.                   |  |  |  | 67 | 79 | 1  |
| <i>Berberis</i> spp.                  |  |  |  | 0  | 5  | 12 |
| <i>Buddleja colvilei</i>              |  |  |  | 3  | 7  | 0  |
| <i>Callistemon</i> spp.               |  |  |  | 0  | 13 | 12 |
| <i>Camellia</i> spp.                  |  |  |  | 2  | 13 | 10 |
| <i>Chamaecytisus palmensis</i>        |  |  |  | 0  | 15 | 1  |
| <i>Chiranthodendron pentadactylon</i> |  |  |  | 30 | 52 | 11 |
| <i>Clematis napaulensis</i>           |  |  |  | 8  | 8  | 0  |
| <i>Colquhounia coccinea</i>           |  |  |  | 0  | 10 | 3  |



|                                    |    |   |    |    |    |    |
|------------------------------------|----|---|----|----|----|----|
| <i>Correa</i> spp.                 |    |   |    | 0  | 12 | 2  |
| <i>Cotoneaster</i> spp.            |    |   |    | 0  | 1  | 16 |
| <i>Daphne bholua</i>               |    |   |    | 0  | 6  | 6  |
| <i>Enkianthus campanulatus</i>     |    |   |    | 0  | 0  | 4  |
| <i>Eriobotrya japonica</i>         |    |   |    | 0  | 8  | 0  |
| <i>Eucalyptus</i> spp.             |    |   |    | 54 | 67 | 8  |
| <i>Grevillea</i> spp.              |    |   |    | 3  | 39 | 23 |
| <i>Greyia sutherlandii</i>         |    |   |    | 1  | 0  | 12 |
| <i>Isoplexis isabelliana</i>       |    |   |    | 0  | 1  | 6  |
| <i>Kniphofia</i> spp.              |    |   |    | 10 | 70 | 26 |
| <i>Leonotis leonurus</i>           |    |   |    | 0  | 4  | 0  |
| <i>Leptospermum polygalifolium</i> |    |   |    | 3  | 7  | 0  |
| <i>Leucosceptrum canum</i>         |    |   |    | 6  | 1  | 5  |
| <i>Lobelia tupa</i>                |    |   |    | 5  | 19 | 7  |
| <i>Mahonia</i> spp.                |    |   |    | 0  | 18 | 9  |
| <i>Melaleuca</i> spp.              |    |   |    | 0  | 6  | 0  |
| <i>Paraserianthes lophantha</i>    |    |   |    | 1  | 7  | 0  |
| <i>Penstemon</i> spp.              |    |   |    | 0  | 0  | 4  |
| <i>Phygelius</i> spp.              |    |   |    | 0  | 11 | 26 |
| <i>Pieris</i> spp.                 |    |   |    | 0  | 0  | 18 |
| <i>Prunus</i> spp.                 |    |   |    | 2  | 8  | 23 |
| <i>Pyrus communis</i>              |    |   |    | 1  | 0  | 4  |
| <i>Rhododendron</i> spp.           |    |   |    | 0  | 1  | 29 |
| <i>Ribes sanguineum</i>            |    |   |    | 0  | 3  | 5  |
| <i>Salvia</i> spp.                 |    |   |    | 0  | 13 | 13 |
| <i>Stachyurus</i> spp.             |    |   |    | 0  | 4  | 0  |
| <b>Fruits – Native</b>             |    |   |    |    |    |    |
| <i>Aristotelia serrata</i>         | 5  | 1 | 10 | 0  | 2  | 12 |
| <i>Carpodetus serratus</i>         | 7  | 1 | 4  | 1  | 3  | 1  |
| <i>Coprosma</i> spp.               | 35 | 0 | 1  | 10 | 45 | 39 |
| <i>Cordyline</i> spp.              | 16 | 6 | 20 | 1  | 4  | 21 |

|                                 |    |    |    |    |    |    |
|---------------------------------|----|----|----|----|----|----|
| <i>Corokia</i> spp.             | 5  | 0  | 3  | 1  | 2  | 4  |
| <i>Dacrycarpus dacrydioides</i> | 14 | 1  | 11 | 6  | 3  | 7  |
| <i>Fuchsia excorticata</i>      | 15 | 7  | 6  | 0  | 0  | 0  |
| <i>Griselinia littoralis</i>    | 22 | 9  | 8  | 2  | 1  | 5  |
| <i>Ileostylus micranthus</i>    | 6  | 0  | 2  | 3  | 17 | 0  |
| <i>Lophomyrtus</i> spp.         | 14 | 1  | 3  | 9  | 3  | 6  |
| <i>Melicytus</i> spp.           | 9  | 1  | 6  | 0  | 9  | 20 |
| <i>Muehlenbeckia</i> spp.       | 16 | 0  | 0  | 1  | 10 | 23 |
| <i>Myoporum laetum</i>          | 26 | 13 | 24 | 8  | 3  | 10 |
| <i>Myrsine</i> spp.             | 57 | 9  | 8  | 10 | 25 | 24 |
| <i>Neomyrtus pendunculata</i>   | 1  | 0  | 0  | 0  | 1  | 4  |
| <i>Nestegis</i> spp.            | 4  | 0  | 12 | 0  | 0  | 2  |
| <i>Pittosporum</i> spp.         | 0  | 0  | 0  | 0  | 0  | 8  |
| <i>Podocarpus totara</i>        | 8  | 1  | 1  | 15 | 14 | 0  |
| <i>Pseudopanax</i> spp.         | 34 | 4  | 6  | 0  | 1  | 81 |
| <i>Schefflera digitata</i>      | 10 | 5  | 4  | 0  | 0  | 15 |
| <i>Solanum laciniatum</i>       | 2  | 0  | 7  | 0  | 0  | 9  |
| <b>Fruits – Exotic</b>          |    |    |    |    |    |    |
| <i>Aralia californica</i>       | 4  | 0  | 0  | 0  | 0  | 5  |
| <i>Arbutus</i> spp.             | 30 | 1  | 9  | 0  | 0  | 4  |
| <i>Aronia melanocarpa</i>       | 10 | 2  | 0  | 0  | 0  | 0  |
| <i>Azara serrata</i>            | 3  | 1  | 0  | 0  | 2  | 8  |
| <i>Berberis</i> spp.            | 3  | 1  | 0  | 0  | 0  | 4  |
| <i>Celastrus orbiculatus</i>    | 0  | 0  | 0  | 0  | 0  | 4  |
| <i>Cornus capitata</i>          | 5  | 0  | 0  | 1  | 0  | 11 |
| <i>Cotoneaster</i> spp.         | 30 | 3  | 0  | 0  | 0  | 3  |
| <i>Crataegus</i> spp.           | 36 | 1  | 7  | 0  | 0  | 0  |
| <i>Hippophae rhamnoides</i>     | 6  | 0  | 0  | 0  | 0  | 0  |
| <i>Ilex aquifolium</i>          | 17 | 0  | 8  | 0  | 0  | 0  |
| <i>Lonicera</i> spp.            | 1  | 0  | 0  | 0  | 0  | 9  |
| <i>Luma apiculata</i>           | 7  | 0  | 1  | 0  | 0  | 0  |

|                             |    |    |    |   |    |   |
|-----------------------------|----|----|----|---|----|---|
| <i>Magnolia</i> spp.        | 5  | 0  | 0  | 0 | 0  | 2 |
| <i>Mahonia lomariifolia</i> | 10 | 7  | 0  | 0 | 0  | 6 |
| <i>Malus</i> spp.           | 18 | 1  | 11 | 0 | 0  | 0 |
| <i>Michelia doltsopa</i>    | 6  | 0  | 0  | 0 | 0  | 0 |
| <i>Myrica</i> spp.          | 12 | 0  | 0  | 0 | 0  | 0 |
| <i>Prunus</i> spp.          | 26 | 3  | 4  | 0 | 0  | 2 |
| <i>Pyrus communis</i>       | 13 | 0  | 0  | 1 | 12 | 2 |
| <i>Rosa</i> spp.            | 8  | 0  | 0  | 0 | 0  | 0 |
| <i>Sorbus</i> spp.          | 26 | 1  | 0  | 0 | 0  | 0 |
| <i>Stranvaesia davidina</i> | 8  | 0  | 0  | 0 | 0  | 0 |
| <i>Taxus baccata</i>        | 37 | 45 | 19 | 0 | 0  | 0 |
| <i>Viburnum</i> spp.        | 5  | 0  | 0  | 0 | 0  | 3 |

| <b>NZ Pigeon</b>   |                                |    |
|--|--------------------------------|----|
| <b>Leaves, buds or flowers - Native</b>                  | <i>Calystegia tuguriorum</i>   | 17 |
|  | <i>Hoheria</i> spp.            | 6  |
|  | <i>Parsonsia</i> spp.          | 4  |
|  | <i>Plagianthus regius</i>      | 17 |
|  | <i>Sophora</i> spp.            | 67 |
| <b>Leaves, buds or flowers - Exotic</b>                  | <i>Chamaecytisus palmensis</i> | 22 |
|  | <i>Crataegus</i> spp.          | 15 |
|  | <i>Genista stenopetala</i>     | 6  |
|  | <i>Laburnum anagyroides</i>    | 30 |
|  | <i>Magnolia</i> spp.           | 7  |
|  | <i>Populus nigra</i> "Italica" | 5  |
|  | <i>Prunus</i> spp.             | 35 |
|  | <i>Robinia pseudoacacia</i>    | 19 |
|  | <i>Salix</i> spp.              | 14 |
|  | <i>Sophora japonica</i>        | 21 |
|  | <i>Spartium junceum</i>        | 5  |
|  | <i>Ulmus</i> spp.              | 48 |
|  | <i>Virgilia</i> spp.           | 23 |
| Unidentified deciduous tree (possibly <i>Celtis</i> sp.) | 4                              |    |

### Acknowledgements

Thanks to Allison Booth and Tom Myers of the Botanic Garden staff for identifying plants

### Book reviews

John Steel

Teele, R.L.; Teele, B.W.; Lawrence, R.J. (2008) *Arrowtown wildflowers: riverside and trackside*. 150 pp. Lakes District Museum, Arrowtown. \$20.00

This is a delightful little book that other writers and publishers could well take note of. Handy, pocket-sized, spiral wire-bound with waterproof (at least water resistant) paper, it fits easily into a jacket pocket or bag and makes for an ideal travel companion. Although aimed at the Arrowtown visitor, many of the plants described are common enough throughout that it will be a useful aid elsewhere. It is written with the novice in mind, but still manages to impart enough technical information to make it interesting to a wider audience.

Ninety-three species are covered and arranged in four sections according to flower colour, generally one species per two pages with a full-colour, good quality, photograph on one page and a description on the opposite. The sections are in alphabetical order by

common name and includes the scientific name with occasional synonym and etymological explanation. This is followed by a brief description and then a usually larger account of the history of the plant's introduction to New Zealand, its origins and some charming little anecdotes that appeal to the curious.

The photographs are well chosen and informative. Comparisons with similar species are considerately used, including a helpful table to key out the troublesome hawkweeds.

This is an unpretentious, educational, entertaining and functional guide to the wild flowers, not just of Arrowtown, but of many, suburban, urban and rural tracks and roadsides. Any profits go to the Lakes District Museum and at \$20 is excellent value.

Foster, T. (2008) *Plant heritage New Zealand: te whakapapa a nga rakau; interpreting the special features of native plants*. 207 pp. Penguin Group, Rosedale. \$50.

This well presented book has proven rather difficult for me to read. I was immediately put off by the use in the title of "heritage", a much overused, abused, meaningless, and thankfully fast-disappearing buzz-word from the

advertising lexicon. The poor editing must be a disappointment to the author and an embarrassment to the publisher, Penguin, of whom I expect much better. Typographical errors are scattered throughout like confetti; a

series of maps showing the decline in New Zealand's forest cover is out of order (the book was released without an erratum slip even though they were aware of the error); a photograph of a wetland scene with flax and cabbage trees looks to me more like one of *Dracophyllum* and *Astelia*, and not particularly wet at that!

So what of the content? The first third of the book comprises a discussion on various aspects of the composition, evolution and characteristics of the natural environment and a short chapter on the Maori ideas of plant origins. The remaining four chapters cover the conifers (14 pp.), the flowering trees, shrubs and climbers (78 pp.), the flowering grasses, sedges and allies (16 pp.), and the ferns (18 pp.); i.e.,

another book on New Zealand trees and shrubs.

The descriptions, roughly one or two to a page, are brief, concise and relevant and accompanied by some excellent photographs and a panel of varied and interesting anecdotes and curiosities, often of a historical and/or Maori bent. As such it does lend itself to browsing and the photographs are generally excellent and informative, tending to highlight important features.

The over-ambitious title and editing errors aside, this book gives a pleasurable insight into some components of the New Zealand flora. I enjoyed the panels of peripheral information and many of the detail photographs.



*Crassula multicaulis* - a rare wetland herb with a stronghold in Otago. Photo by John Barkla.



## Meeting and trip reports

### Ross Creek Field Trip. 9 November 2008

*John Barkla*

A small group met leader Brian Heenan at the Cannington Road entrance to Ross Creek Reserve. Brian outlined his thoughts on the reserve as we walked one of the many tracks leading down towards Leith Stream. Brian would like to see the reserve have a visionary management plan, a task that would among other things, require a detailed systematic baseline documentation of the reserve's natural environment. This is where the BSO has a contribution to make using its expertise to help document the flora.

We walked down to the Leith, admiring the diverse fern understorey, before returning back up towards and around the Reservoir. Our route then followed the "Podocarp Track" past some impressive rimu and kahikatea through to "The Glen" and along the "Golf Course Track" back to Cannington Road. Our walk covered only a small portion of the many tracks that crisscross the reserve leaving plenty of future opportunities to expand our modest plant list.



*Clematis quadribracteolata* - the first of our native clematis species to flower in spring. Photo by John Barkla.

**Preliminary list of vascular plants and lichens of Ross Creek Reserve, Dunedin City, Otago Centred on NZMS 260 Sheet I44 156814. 9 November 2008**

*John Barkla & Allison Knight with assistance from other BSO members*

\* adventive species                      # indigenous species outside natural range

**Trees and shrubs**

\**Acer pseudoplatanus*

*Aristolelia serrata*

*Carpodetus serratus*

*Coprosma areolata*

*C. crassifolia*

*C. grandifolia*#

*C. linariifolia*

*C. propinqua*

*C. repens*#

*C. rhamnoides*

*C. robusta*#

*C. rotundifolia*

*C. tayloriae*

*Cordyline australis*

\**Cotoneaster simonsii*

\**Crataegus monogyna*

\**Cytisus scoparius*

*Dacrycarpus dacrydioides*

*Dacrydium cupressinum*

*Dodonaea viscosa*#

*Fuchsia excorticata*

*Griselinia littoralis*

*Hebe salicifolia*

\**Hypericum androsaemum*

*Ileostylus micranthus*

\**Ilex aquifolium*

*Kunzea ericoides*

\**Leycesteria formosa*

*Melicope simplex*

*Melicytus ramiflorus*

*Myrsine australis*

*Nothofagus fusca*

*Olearia arborescens*

*O. avicenniifolia*

*O. paniculata*#

*Pennantia corymbosa*

*Pittosporum eugenioides*

*P. tenuifolium*

*Podocarpus totara*

*Prumnopitys ferruginea*

*P. taxifolia*

\**Prunus* sp.

*Pseudopanax colensoi* var. *ternatus*

*P. crassifolius*

*Pseudowintera colorata*

\**Rubus fruticosus*

\**Salix fragilis*

\**Sambucus nigra*

*Schefflera digitata*

*Solanum laciniatum*

*Sophora microphylla*

\**Teline monspessulana*

**Herbs**

*Astelia fragrans*

\**Bellis perennis*

\**Cirsium arvense*

\**Digitalis purpurea*

\**Galeobdolon luteum*

\**Galium aparine*

\**Geranium robertianum*

\**Hypochoeris radicata*

\**Leucanthemum vulgare*

*Libertia ixioides*

\**Mimulus guttatus*

\**Mycelis muralis*

\**Myosotis laxa*

\**Nemesia floribunda*

*Phormium tenax*

\**Prunella vulgaris*

\**Ranunculus repens*

\**Senecio jacobaea*

*S. minimus*

**Lianes**

*Clematis paniculata*  
 \**Hedera helix*  
*Metrosideros diffusa*  
*Muehlenbeckia australis*  
*Parsonsia* sp.  
*Ripogonum scandens*  
*Rubus cissoides*  
*Solanum dulcamara*

**Grasses**

*Microlaena avenacea*

**Sedges and rushes**

*Carex forsteri*

**Ferns**

*Asplenium appendiculatum*  
     subsp. *appendiculatum*  
*A. bulbiferum*  
*A. flabellifolium*  
*A. flaccidum*  
*A. lyallii*  
*Blechnum chambersii*  
*B. colensoi*  
*B. discolor*  
*B. fluviatile*  
*B. novaezelandiae*  
*B. procerum*  
*B. vulcanicum*  
*Cyathea smithii*  
 \**Dryopteris filix-mas*  
*Leptopteris hymenophylloides*  
*Microsorium pustulatum*  
*Pneumatopteris pennigera*  
*Polystichum novozelandica*  
     subsp. *zerophyllum*  
*P. vestitum*

**Lichens**

*Bacidia* cf. *minutissima*  
*Bactrospora arthonioides*  
*Chrysothrix candelaris*  
*Cladonia* spp.  
*Coenogonium implexum*  
*Collema* sp.  
*C. subconveniens*  
*Graphis librata*  
*Lepraria lobificans*  
*Melanelia glabratuloides*  
*Menegazzia subpertusa*  
*Nephroma* sp.  
*Opegrapha agelaeoides*  
*O. atra*  
*Pannaria leproloma*  
*Parmelia crambidiocarpa*  
*P. cunninghamii*  
*Parmotrema perlatum*  
*Peltigera* sp.  
*Phlyctis uncinata*  
*Phyllospora* sp.  
*Physcia adscendens*  
*P. caesia*  
*P. poncinsii*  
*Pseudocyphellaria dissimilis*  
*P. fimriatoides*  
*P. lividofusca*  
*Psiloechia lucida*  
*Punctelia borreri*  
*P. subflava*  
*P. subrudecta*  
*Ramalina celastri*  
*R. glaucescens*  
*R. inflexa*  
*Teloschistes chrysophthalmus*  
*T. velifer*  
*Thelotrema lepadinum*  
*Usnea* spp.





*Cortinarius rotundisporus* seen on the NZ Fungal Foray in Dunedin, 2008. Photo by David Lyttle.

### Talk Report: 19th November, 2008

Allison Knight

#### *Alpine Plants of the Southern Mountains: A Botanical Odyssey*

At very short notice, after Mascha called in sick, David Lyttle turned up trumps with a superb photographic survey of the alpine plants found in the Otago/Southland region. He mesmerized us with 150 brilliant images – mostly of alpine flowers, with a smattering of stunning landscapes and local botanists to put things in perspective. It was a magic carpet tour of the southern mountains; over the more centrally placed Maungatua, Blue Mountains, Rock & Pillar Range, Old Man Range and Pisa Range, on to the Ohau Range, St Marys Range, Hawkdun Range and Ida Range further north, then south west to Mt Bee in the Eyre Mountains and Mt Burns in the Hunter Mountains and finally a flight over the sea to the Chatham Islands.

Amazingly, nearly everything was in flower!

A small selection of the many plants that caught my eye included the bright yellow *Ranuncululus pachyrrhizus*, so characteristic of the Central Otago mountains, the shy white *Psychrophila obtusa* (previously *Caltha*), which flowers as soon as the snow melts, and the recently described *Lobelia glaberrima*. There were great drifts of *Celmisia brevifolia* on the Old Man Range, clumps of hedgehog-like *Aciphylla simplex* on a rocky herbfield and the internationally famous plant of *Celmisia densiflora* in the Pisa Range. We were treated to the endemic *Celmisia philocremna* from the Eyre Mountains and a perfect *Ranunculus*



*lyallii* (Great Mountain Buttercup) on Mt Burns. The St Marys Range yielded, among others, the cryptic, black-flowered *Leptinella atrata*, the low, spiky *Aciphylla dobsonii* and the vegetable sheep, *Raoulia exima*, both characteristic of N. Otago and S. Canterbury alpine ridges. Two less sheepish *Raoulia*, *R. youngii* and *R. petriensis* also came from there. No

wonder there was such a good response to David's field trip to the St Marys Range in December.

All in all a glorious evening. For those who missed it, don't despair. David admits he has hundreds more images, so let's hope for another spectacular presentation some time in the future. Thank you David!!!



*Ranunculus pachyrrhizus*. Photo by David Lyttle



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Please submit copy for next newsletter to David Orlovich by 15 June 2009

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