



BOTANICAL SOCIETY

OF OTAGO

Newsletter Number 66 July 2012

BSO Meetings and Field Trips

18th July 5.20 pm **Effects of secondary woody succession in dry eastern South Island on indigenous plants and animals.** Speaker Susan Walker, Landcare Research, Dunedin

Mixed indigenous and exotic communities dominated by shrubs and small trees, at different stages of recovery from fire, now cover about one fifth of land that has not been intensively developed within eastern South Island 'dryland' environments. The benefits and drawbacks of this increasing 'woodiness' for indigenous plant and animals have been debated, but there have been few studies of its ecological effects. Susan will describe some insights from recent research in dry Central Otago.

21st July Field Trip to the Lyttle Properties, Otago Peninsula. David and Belinda Lyttle will host the BSO on a visit to their native plant nursery on Centre Road. There will be an opportunity to visit some native forest remnants on the adjoining farm owned by Donald Lyttle. This particular remnant is representative of the local flora and contains some uncommon species including *Brachyglottis sciadophila*, *Coprosma rubra*, *Clematis foetida* and *Raukaua edgerleyi*. The adjacent pasture contains a number of interesting herbaceous natives including the bidibid *Acaena microphylla* var *pauciglochidiata*, *Celmisia gracilentata* and *Raoulia glabra*. A good winter outing with a chance to come in out of the cold and enjoy some hot soup at lunchtime. Meet 9.00 am at the Botany Dept Car Park, 464 Great King St. Contact David Lyttle, Ph: (03) 454 5470.

25th July 12 noon **What Makes a Good Neighbour? Drivers of facilitation in alpine cushion plant communities** Britt Cranston, PhD candidate. A Botany Department seminar. Union St Lecture Theatre, Cnr Union St West & Great King St.

15th August 12 noon **Tapeworms in elasmobranch fishes: providing insights into marine ecosystems** Dr Haseeb Randhawa, Senior Teaching Fellow, Ecology Program. A Botany Department seminar. Union St Lecture Theatre, Cnr Union St West & Great King St.

15th August **11th Annual Geoff Baylis Lecture Relationships of marine algae in New Zealand: new discoveries provide more pieces for the puzzle.** Speaker Dr Wendy Nelson NIWA

Recent collections from sites throughout the New Zealand archipelago, including samples from deep waters in northern and eastern New Zealand (up to 110m depth), intensive collections from the Bounty and Antipodes Islands, and algae associated with northern rhodolith beds as well as soft sediment habitats, have resulted in the recognition of many new taxa. These provide new

perspectives on the relationships of the New Zealand flora – and raise some more challenging questions!!

Talk to be held in Burns 2 Lecture Theatre, University of Otago. Drinks and nibbles will be available from 5.00 pm in the Castle Lecture Theatre Concourse.

18th August Saturday Field trip to Brighton and/or Bruce Rocks Dr Wendy Nelson, this years Baylis lecturer, has kindly agreed to lead a field trip to look at marine algae. Both sites are on the same coast though it is possible we will only do one as the intertidal window is narrow. This is a good opportunity for members to do something a bit different and learn from an international specialist in the field. It will be worth getting up early for. To catch the outgoing tide we need to meet at the Botany Dept car park, 464 Great King St. at the earlier time of **7.30 am (sharp)**. Gumboots and wet weather gear essential. Wet weather alternative Sunday 19th August. Contact Robyn Bridges, Ph: (03) 472-7330

29th August 2012 12 noon. Thyme travels across Central Otago: Above- and Below-ground ecological studies of a space invader Jacqui Nielsen, PhD candidate. A Botany Department seminar. Union St Lecture Theatre, Cnr Union St West & Great King St.

3rd September Deadline for entries for the BSO Audrey Eagle Botanical Drawing Competition. Entry forms and judging criteria are on the BSO website:

<http://www.botany.otago.ac.nz/bs0/eagle.php> Organiser Allison Knight, Ph: (03) 487 8265.

16th September Saturday Field Trip to Alexandra. We will travel to Alexandra and visit the DOC Springvale and Chapman Road Reserves to see native spring annuals and some rare dryland plants. The tiny buttercup relatives *Ceratocephala pungens* and *Myosurus minimus* subsp. *novae-zelandiae* will be flowering. Other plants that are likely to be present on these dry saline sites are *Myosotis brevis*, *Lepidium kirkii* *Atriplex buchananii* *Raoulia beauverdii* and *Ryditosperma merum*. Leaders David Lyttle and John Barkla. Meet 8.00 am at the Botany Dept Car Park, 464 Great King St. Distance 193 km Return time 6pm. Contact David Lyttle, Ph: (03) 454 5470.

25th September. Tuesday Hocken visit to see the Banks' Florilegium Anne Jackman, Hocken curator *Banks' Florilegium* is a collection of copper plate engravings of plants collected by Sir Joseph Banks and Daniel Solander while they accompanied Captain James Cook on his voyage around the world between 1768 and 1771. They collected plants in Madeira, Brazil, Tierra del Fuego, the Society Islands, New Zealand, Australia and Java. **Note Tuesday date.** See [http://en.wikipedia.org/wiki/Banks%27_Florilegium] Meet at 5.30pm in the foyer of the Hocken Library.

13th October Saturday Molteno's Regenerating Bush, Opoho Tess and Anthony Molteno will host the BSO on a visit to their property at 236 Signal Hill Road, Opoho. Tess and Anthony have owned the property for the past 25 years. The property was originally a dairy farm and later a nursery but had been neglected for the 30 years or so before they bought it. At the time they fenced off a 2-3 Ha stand of kanuka on the west in the hope of regenerating the native bush. Since then that area has been little disturbed and they thought members of the Botanical Society might like to explore it, and any other part of the property that might interest them. Meet at the Dept of Botany car park 464 Great King St at 9.00 am. Finish 4.00 pm. Contact Allison Knight, Ph: (03) 487 8265.

17th October Talks by Botany Department Students First a talk on bryophytes and community structure entitled "**It's the little things that matter**" by Kelly Frogley, winner of the Tom Moss Competition, followed by talks from Botany Department Colloquium winners showcasing some of

the latest research by our most capable young botanists. A stimulating and varied evening is in store so please come and support the speakers. Drawings from the Audrey Eagle Botanical Drawing Competition will be on display and the winners will be announced.

3rd November Saturday Field Trip to Catlins Mohua Park is a 14 hectare private forest reserve owned by Fergus and Mary Sutherland. Eight hectares are varied native forest - mature podocarp, mature silver beech and secondary growth podocarp. Some of the special features of the native forest include the many matai, lowland ribbonwoods, kaikomako and small-leafed milkwoods. The native forest area is protected by a QE II open space covenant and is especially rich in bird life as a result of continuously maintained predator control. There are also three hectares of planted forest - the bulk of which is radiata pine, as well as a recently established deciduous woodland. The native forest on the property was preserved as a steading around the hill-top homestead of Tawanui's sawmill owner and manager: J. R. Wilson. The old homestead was built in the 1920's, and has a well established garden and lawn. Fergus and Mary have built four tourist accommodation eco cottages on the property and they also use it as a base for their Catlins eco tours. More information about Mohua Park, including a video, can be seen on their website: www.catlinsmohuapark.co.nz
Location: 744 Catlins Valley Road, Tawanui - sign-posted off the Southern Scenic Routes 10 kms south of Owaka. Meet 8.30 am at the Botany Dept Car Park, 464 Great King St. Distance 127 km. Return time 6 pm. Contact: Allison Knight, Ph: (03) 487 8265. For a plant list, map of tracks and more information see the BSO website.

14th November 5.20 pm. Interesting Local Lichens. Our speaker Lars Ludwig, will talk about his PhD research, focusing on the reproductive ecology of the rare but eye-catching subalpine lichen *Icmadophila splachnirima*. He will also present some interesting lichenological discoveries from the Dunedin area.

5th December End of year dinner at Harvest Court Start time: 7:00 pm Finish time: 10:00 pm. Always a fun and popular event! This year we return to the Golden Harvest Chinese Restaurant, Harvest Court Mall, 218 George St, Dunedin. Make sure you let Bill Wilson know if you'd like to come. Contact [Bill Wilson](mailto:Bill.Wilson@clear.net.nz), Ph: (03) 477 2282.

8th/9th December Weekend Field Trip to the St Marys Range, North Otago. A trip led by David Lyttle. Contact [David Lyttle](mailto:David.Lyttle@clear.net.nz), Ph: (03) 454 5470.

29 Dec – 7 Jan 2013 Trips around Arthurs Pass. Wellington Botanical Society invites BSO members to join them at its annual “camp” at the Arthurs Pass Outdoor Education Centre from the afternoon of Saturday 29 December 2012 to the morning of Monday 7 January 2013. Information about the Centre and its location are on <http://www.apoec.org.nz/index.html>
Accommodation is in bunk rooms, at \$20 per night. The centre can sleep 45 people. Catering arrangements have yet to be settled. If you would like to register an expression of interest then let Rodney Lewington know on rodnejl@clear.net.nz. You will then be kept up to date as arrangements are finalised. Firm registrations with a deposit of \$200, will be called for in early October. A further payment will be required in the third week of December so as to cover most of the anticipated cost.

Contents

BSO Meetings and Field Trips	1
Contents	4
Editor's Notes	6
Correspondence and News	7
AGM & Photo Competition, 18 April 2012	7
Letter to Editor	7
MW Press - Botanical field guides	8
Record your plant observations - from <i>Trilepidea</i> 101, April 2012	8
Wellington Society Award Applications Now Open.....	8
Articles	9
Alpine occurrences of <i>Anogramma leptophylla</i> in Otago.....	9
Is that Brazil nut an imposter?	10
Rakiura Profiles - Noeline Baker	10
Meeting and trip reports	11
Knight's Biodiversity Reserve Tuapeka West 24 th March	11
Workshop on Propagation of New Zealand Native Plants.....	13
The BSO AGM and Photographic Competition: a Critical Review	13
Joint BotSoc and Forest and Bird trip to Craigieburn Reserve.	17
Bot. Soc. Trip to Quarantine Island. June 23 rd	18
Errata	20



Plants in Landscape Section of Botanical Society Photography Competition: 'Mysterious Vegetable Sheep'. Photo by David Lyttle.

Chairman's Notes

The BSO has reached the midpoint of what has seemed to be quite a busy year with further events to look forward to. I would like to record my appreciation of the work of the Committee - there always seems to be someone who steps forward to organize a trip or talk or sort out a problem that has arisen in the course of the BSO's activities. I would like encourage all the members of the BSO to join in these activities. There is ample scope to lead a trip, write an article or a trip report as by participating, the BSO will continue to be the interesting and dynamic group that it is at present.

This year the 26th National Fungal Foray came south and was based at Riverton. Fungi are not strictly speaking plants but by default mycology falls under the umbrella of botany. When I was growing up we would tramp for miles in the rain to collect a feed of mushrooms (mushrooms were not available in the supermarkets; there were no supermarkets). Fungi, in general, had a rather sinister reputation; anything other than *Agaricus campestris* was regarded with suspicion and was considered dangerous and not to be gathered or handled. It was not until much later that I realised that many northern hemisphere cultures valued wild-gathered mushrooms as food some species being particularly prized for example *Lactarius deliciosus* (saffron milk cap), *Boletus edulis* (cep), *Morchella esculenta* (morel). Over many millennia the people living there had learned what was edible and what was to be avoided as any source of food was valuable and provided a means for survival during lean times. Methods were devised for storing (drying and pickling) the harvest and detoxifying poisonous species such as the false morel, *Gyromitra esculenta*. *Gyromitra* contains hydrazine which is used as rocket fuel but is not particularly palatable. A similar species *Gyromitra tasmanica* occurs in New

David Lyttle

Zealand but its edibility or otherwise has not been tested.

For anyone who goes into a New Zealand beech forest in autumn what is evident is the remarkable diversity of species in form, colour and size. The weird and wild array of fungal fruiting bodies represents only the macroscopic structures of organisms that are for the most part microscopic and hidden. Not only are fungi fascinating organisms in their own right they are as important to the forest as the trees themselves, principally as mycorrhizal symbionts assisting plants with the uptake of nutrients and as recycling agents breaking down plant debris and returning the same nutrients to the forest ecosystem. The Foray has been instrumental in documenting the fungal diversity of New Zealand since 1986 each year visiting a different part of the country. The Foray attracts both amateur and professional mycologists and has over the years developed into an enterprise that now operates with military precision. Each day field parties go out far and wide to collect fungi. The collections are brought back to the base venue identified, recorded by being entered into the FUNNZ database and finally specimens of interest are dried on food dehydrators and dispatched to the various herbaria. Various individuals have assumed key roles in this operation. For any lay person with a passing interest in fungi, participation on a Fungal Foray should be on their bucket list. I have found participating in several Forays an immensely valuable experience dispelling the prejudices and myths that are prevalent about fungi and learning more about the essential role that this diverse and beautiful group of organisms play in natural ecosystems. The Fungal Network of New Zealand website is <http://www.funnz.org.nz/>

Editor's Notes

**Please submit copy for next newsletter by
12th October 2012.**

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. Electronic submission (by email to the editor: (lorna.little@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.

Message from the Treasurer

Please note: When people write out cheques to the Botanical Society/BotSoc they **must** be made out to **Botanical Society of Otago** - no abbreviations etc as the Bank will not accept anything but the right name!!

Also please note that annual subscriptions are now due on **1 April** each year. We had to raise them to cover increased printing costs, but if you get your newsletter only in electronic form there will be no increase in cost. We have also updated our mailing list.

Jean Bretherton, Treasurer



Laccaria violaceonigra, Martin Huts Track, Longwood Range, 26th NZ Fungal Foray, Riverton. Photo: David Lyttle.

Correspondence and News

AGM & Photo Competition, 18 April 2012

Apology: David Galloway. The **minutes of last year's AGM, Chairman's report and Treasurers report** were presented and accepted. Jean spoke about increased costs of printing and photocopying and the meeting agreed to the following subscription costs, to take effect from 1 June 2012:

Student/Unwaged: \$10/ year, \$40 for 5 years. Reduced \$5/year for emailed Newsletter pdf.

Ordinary Members: \$20/year, \$80 for 5 years. Reduced to \$15/year for emailed Newsletter.

Family: \$25/year, \$100 for 5 years. Reduced to \$20/year for emailed Newsletter.

Allison pointed out that there would be no increase in cost to members who wanted the Newsletter emailed to them. Lala said that she liked the colour pictures in the electronic version, but thought the membership list needed updating. Robyn said this was in progress.

The following were elected unopposed: **Chairman**, David Lytle, **Secretary** Allison Knight, **Treasurer** Jean Bretherton,

Committee: *Robyn*

Bridges (Programme manager; communications officer),

Bill Wilson (Social organizer, labelling and folding Newsletter)

David Orlovich (Web Manager)

John Barkla (Calendar; Proof-reading Newsletter)

Lorna Little (Student rep.; formatting Newsletter)

Tina Summerfield (Photo Competition; labelling and folding Newsletter)

Bastow Wilson (help with trips, talks, articles etc.)

Nicola Baines (help with trips, talks, articles etc.)

The Chairman thanked all those who had helped make the past year a success and said It is very gratifying to see the diverse contributions that BSO members whether they be professional botanists, students or amateurs made to the Society during the year.

There was no other business and the **meeting finished in 13 minutes.**
Allison Knight, Secretary

Letter to Editor

Date: Tue, 17 Apr 2012

Hi there,

My name is Joanna Bishop. I am a PhD candidate in the history department at Waikato University. My thesis topic is the role of medicinal plants in professional and non-professional settler medical practice in New Zealand, c1850-1950. As part of my research, I am interested in the introduction and naturalisation of particular medicinal species to New Zealand. (I have a background in botanical science and have a wonderful botanist on my supervisory panel) I wonder if any of your members pursue

an interest in medical botany or the history of plant introductions? Do you know if anyone has explored the introduction of the Opium poppy (*Papaver somniferum*) to your district for instance?

I would greatly appreciate any leads, links or advice you may have.

Thanks for your time and I wish you all the best for what appears to be a thriving community of botanists and enthusiasts!

Cheers

Joanna Bishop

MW Press - Botanical field guides

Trees & Shrubs of New Zealand is back in print with a new cover, and *Wetland Plants of New Zealand* has been reduced in price. [Special offer set price for both books is \\$99.99.](#)

Record your plant observations – from *Trilepidea* 101, April 2012

You can now record all your observations of native and exotic plants using the Network website. Previously, it was possible to record only phenology observations but now you can record any observation of any plant to add to the flora mapping system that was launched a few weeks ago.

[Record your observation](#)

[Site search](#)

[Species search](#)

First, log in using your username and password (or register as a recorder if you are not already a Network member). Then search for the species using the Network Flora search and click on the “Record observation” link

in the Resources box on the right hand side. Then fill in the observation form by choosing a site name, selecting the location using the map and recording an approximate abundance.

Of most interest are records of threatened plant populations, species that appear to be outside of their natural range and exotic plant populations that occur in, or near, nature reserves, scenic reserves or parks. If you are in any doubt about the identity of a species you want to record, please check with another Network member or botanist or post a photo of the plant to the Network forum.

This information will increase understanding of plant distribution and abundance in New Zealand and will form the basis of future plant conservation strategies. It will also help those involved in [ecological restoration](#) work by providing information about potential seed sources. Please ask if you have any queries about the flora mapping system or recording your observations.

email: info@nzpcn.org.nz

Wellington Society Award Applications Now Open

Applications now open for:

- The Wellington Botanical Society Jubilee Award
- The Ruth and Arnold Dench Award
- The John Child Bryophyte and Lichen Workshop Tom Moss Award

More details are available at: www.wellingtonbotsoc.org.nz/awards

Articles

Alpine occurrences of *Anogramma leptophylla* in Otago

By John Barkla

Annual fern or Jersey fern (*Anogramma leptophylla*) is a small, tufted, winter-dormant indigenous fern found mainly in the east of the North and South Islands. It also occurs in Australia, Central and South America, Africa, India and Europe. In New Zealand it is considered threatened with a ranking of 'Nationally Vulnerable' (de Lange et al. 2009).

It is a small fern with 3-9 cm long fronds and fan-shaped leaflets that die-off at the end of the growing season. A rarity in the Pteridophyta, it is a fern whose sporophyte tends to have an annual life cycle. Next season's growth arises from small gamete-forming plant that persists from year to year. Published descriptions refer to its habitat as lowland to montane (Allan 1961) and coastal to montane (de Lange et al. 2010). It was therefore a surprise to discover in March 2012, a small colony of *Anogramma leptophylla* at c. 1260 m on the Pisa Range. The site, at the head of Rose Creek at the southern end of the range, was located at the dry base of a slightly overhanging schist rock outcrop. A specimen was collected (CHR 619254) and its identity confirmed by Allan Herbarium staff.

About a month later, in mid April, I found a further colony on the Pisa Range. This second site, on the crest of the range c. 1 km south of Mt Dottrel, was at an altitude of c. 1550 m. Again its habitat was at the sheltered base of an overhanging schist rock outcrop.

I regard both of these sites as being in the alpine zone (sensu Mark & Adams 1995) being above the 1200 m contour that they

nominate as the likely upper limit of widespread forest in eastern South Island.

Other Otago records

I could find few other records of this fern from Otago. From the Lake Wanaka area there is a 1964 record from Glendhu Bluff, another from Mou Tapu Island in 1975, and in 2006 I collected the fern from dry rocks on Stevensons Island. Most recently, in May 2012, I found a population on a rocky bank in the Macraes District.

References : Allan H. H. 1961. *Flora of New Zealand. Vol. I*, Government Printer, Wellington.

de Lange P. J., Norton D. A., Courtney S. P., Heenan P. B., Barkla J. W., Cameron E. K., Hitchmough R., and Townsend A. J. 2009. Threatened and uncommon plants of New Zealand (2008 revision). *NZ Journal of Botany* 47:61-96

de Lange P., Heenan P., Norton D., Rolfe J., Sawyer J. 2010. *Threatened Plants of New Zealand*. Canterbury University Press.



Anogramma leptophylla in the Pisa Ranges.
Photo by John Barkla.

Is that Brazil nut an imposter?

By J.B. Wilson

John Steel, in a recent article in the *New Zealand Journal of Botany* (vol. 50, pages 71-76), considers how many of the ‘nuts’ that we eat are really nuts. For example, nuts have a woody fruit wall. Pines, being gymnosperms, don’t have a fruit wall at all, woody or not, so pine ‘nuts’ can’t possibly be nuts. The Chinese water chestnut is an underground stem. Many other ‘nuts’ have a fleshy fruit wall, and so can’t be nuts. John concludes there is only one true edible nut:

“There are many plant species with genuine nuts, but of the edible ‘nuts’, the ██████████ is the only true nut.

“I’m Charley’s aunt from Brazil, where the nuts come from”, says character Lord Fancourt Babberly in *Charley’s Aunt*, impersonating the real aunt (Thomas 1892). But the Brazil nuts were impersonating too”.

Which one is the true nut? You’ll have to read the paper. If you’d like a PDF of it, send a request to john.steel@botany.otago.ac.nz



Nut or Not?



Rakiura Profiles – Noeline Baker

By Maryanne Miller

The historic Stewart Island native garden, Moturau Moana, was a gift to the nation by Loder Cup winner Noeline Baker (1878-1958). A student of the Slade School of Art her drawings of Stewart Island plants, seen here, display not only talent but her enthusiasm for Island flora. Professor Geoff Baylis described her garden as a “unique gift to learning in New Zealand” as she grew all plants indigenous to the Island as listed by Cockayne.

References: Leah Taylor: *Baker, Isabel Noeline - Biography*, from the Dictionary of New Zealand Biography. Te Ara -the Encyclopedia of New Zealand, updated 1 Sep 10.

Natusch, Sheila, 1953: *Stewart Island Plants*, Wellington Botanical Society Bulletin, No 26 January 1953.

Thanks to J Robinson for permission to photograph the Baker drawings.



FERNS:

Asplenium flabellifolium
Asplenium flaccidum
Asplenium gracillimum
Asplenium hookerianum
Blechnum fluviatile
Blechnum penna-marina
Grammitis magellanica
Histiopteris incisa
Microsorium pustulatum
Paesia scaberula
Pellaea rotundifolia
Polystichum neozelandicum subsp.
zerophyllum
Polystichum vestitum
Pyrrosia eleagnifolia

GYMNOSPERMS:

Podocarpus cunninghamii
Prumnopitys taxifolia
Pseudotsuga menziesii[°]

ANGIOSPERMS:**Dicotyledons:**

Acaena juvenca ?? [= Johnson's *Acaena*
 'Forest Type' ??]
Aristotelia serrata
Calystegia tuguriorum
Cardamine debilis
Carpodetus serratus
Cerastium fontanum[°]
Cirsium vulgare[°]
Clematis foetida
Coprosma crassifolia
Coprosma linariifolia
Coprosma rhamnoides
Coprosma rotundifolia
Crepis capillaris[°]
Dichondra repens
Digitalis purpurea[°]
Einadia allanii
Elaeocarpus hookerianus
Euchiton audax
Fuchsia excorticata

Galium propinquum
Griselinia littoralis
Hydrocotyle heteromeria
Hydrocotyle moschata
Hypericum androsaemum[°]
Hypochaeris radicata[°]
Jacobaea vulgaris[°]
Kunzea ericoides
Lagenifera strangulata
Leptecophylla juniperina
Marrubium vulgare[°]
Melicope simplex
Muehlenbeckia australis
Mycelis muralis[°]
Myrsine divaricata
Nertera villosa
Nothofagus menziesii
Nothofagus solandri var. *cliffortioides*
Oxalis lactea (= *Oxalis magellanica*?)
Parsonsia heterophylla
Pennantia corymbosa
Prunella vulgaris[°]
Pseudopanax crassifolius
Pseudowintera colorata
Ranunculus reflexus
Ribes sanguineum[°]
Rubus cissoides
Sagina procumbens[°]
Senecio minimus
Solanum nigrum[°]
Sonchus oleraceus[°]
Sophora microphylla
Stellaria parviflora
Teucrium parviflorum
Wahlenbergia violacea
Monocotyledons:
Agrostis capillaris[°]
Arthropodium candidum
Carex coriacea
Cordyline australis
Echinopogon ovatus
Uncinia uncinata

Workshop on Propagation of New Zealand Native Plants

David Lyttle

This workshop was conducted by Alice Lloyd Fitt and Nicola Baines at the Dunedin Botanic Gardens on Saturday, 19th May. Topics covered were seed collection and cleaning, seed sowing growing mixes and propagating plants from cuttings. The workshop was very well attended with 27 participants showing that there is widespread interest in the cultivation of New Zealand native plants. Alice was very well organised and presented her material in such a manner that the unexpected large attendance did not detract at all from the experience of the participants. The emphasis of the workshop was on the practical aspects of growing natives, and much of the information that was presented was not the sort of thing you read in standard texts. We learnt that commercial seed raising mixes were less than optimal for germinating native seed and that a certain amount of patience and skill was required. Nicola gave

us a demonstration of preparing seed from fruit such as *Coprosma* by rubbing the berries between rubber sheets to remove the pulp and then washing off the debris using a technique similar to gold panning. Finally, Alice demonstrated how to select and prepare suitable material for growing plants from cuttings and the methods used to keep the cuttings viable while they were rooting. The workshop was very interactive with various questions, contributions and comments from the participants. John Fitzgerald, a skilled local grower of New Zealand alpine plants, brought in some of his collection for display. John showed that *Celmisias* and other reputedly difficult plants can be grown successfully in a domestic setting. All in all, the workshop offered something for both the experienced and novice grower. Our thanks to Alice and Nicola for running this workshop, and the Dunedin Botanic Gardens for allowing us to use their facilities. Also a special thanks to John Fitzgerald for bringing in plants for display.

The BSO AGM and Photographic Competition: a Critical Review

by J. Bastow Wilson

The AGM was despatched by the Chairman in 5 minutes, partly by his saying "We'll elect all these people, any objections? No? Done then!", and partly by people calling out "Don't read out your Chairman's report, it's all in the order paper".

The photo competition is always one of the highlights of the year. BSO meetings always like pretty slides, and everyone likes to hear criticism of other people, so how could it fail? Two of the three judges took turns to give their opinions: Peter Johnson and Rod Morris. The first photo was a seedling, and that's where we gathered the third judge, Kelvin Lloyd, was, looking after his own two seedlings.

There were 40 photos from 14 photographers. Peter started by saying that the judges often didn't agree, and that turned out to be half the fun. He said telling a story and novelty were foremost of their criteria, composition last (and so it seemed to be).

From stalwart photographer, trumper and botanist John Barkla (he works for DoC, but sometimes seems unsure whether he's working for DoC or tramping) we had a very pretty picture of *Calystegia soldanella*. Peter said Kelvin had wanted one of the two beautiful flowers in the foreground weeded out. A silly opinion I thought, and why should his views be so prominent when he hadn't turned up?

Lorna Little's excellent 'Cloud Watching' close-up of *Ranunculus lyallii* (Mount Cook Buttercup) against a blue sky puzzled the judges. Clever title I thought. The flowers were watching for clouds and they were clouds.

David Lyttle's '*Wahlenbergia albomarginata* subsp. *laxa*' was rightly praised (again Weeder Kelvin had wanted some stuff removed). I thought the composition wrong – the flowers led the eye out of the picture – but then the judges had said they didn't bother much about composition.



Another photo of his, a beautiful close-up of *Pentachondra pumila* turf (above), was criticised, again by the absent Kelvin, for out-of-focus background, even though this was technically and artistically essential. He'd better front up next time, and I'll tell him what's what.

Allison Knight was very restrained, with only one of her notorious lichen close-ups, and

she'd thoughtfully selected a dull grey lichen to ensure someone else won this year.

The **winner of Plant Portraits** was 'Life raft' by Jon Williams.. A novel photo of a green leaf of the giant water-lily *Victoria amazonica* against green plant scum of almost identical colour. OK if you like that shade of green, I suppose. The leaf was said to be big enough to bear a baby, though real big *Victoria amazonica* leaves get to 3 m across and can bear a tea party (almost).

'Plants in the Landscape' was a smaller section, the best being a mysterious vegetable sheep in the mist (*Haastia pulvinaris*).

The judges mentioned the idea that it might have been better in bright sunshine, but surely all the mystery would be removed. (If they ask me to do this next year I may start putting in my own opinions.) The prettiest in this section was of *Pleurophyllum speciosum* by John Barkla, but was dismissed on the grounds that he'd had the luck to be on Campbell Island when it was flowering and none of the judges ever had. Jealousy. The actual **winner of Plants in the Landscape** and **Overall Winner** was almost as good, Lorna Little's 'Scale of Mountains': saucer of a *Phyllachne* apparently being attacked by mosses, and indeed set in the landscape.



Winner of Plant Portraits was 'Life raft' by Jon Williams.



It's a sad fact that botanists on field trips often get more excited when they see an animal than they have all day about the plants, and indeed a young bellbird making a mess of itself with pollen whilst gorging on flax (above) almost stole the **Plant Interactions** section, but the eventual **winner** was a plant [this is to annoy David Orlovich, who pretends fungi aren't plants]: Suli Teasdale's 'Wood for Fruit' coral fungus (below).



Alyth Grant's 'Companion plants, Avalanche Peak' (above) and Suli Teasdale's 'Southern Giant' (below).



It was photographed in Allison Knight's bush, so Allison sort of won this year anyway.

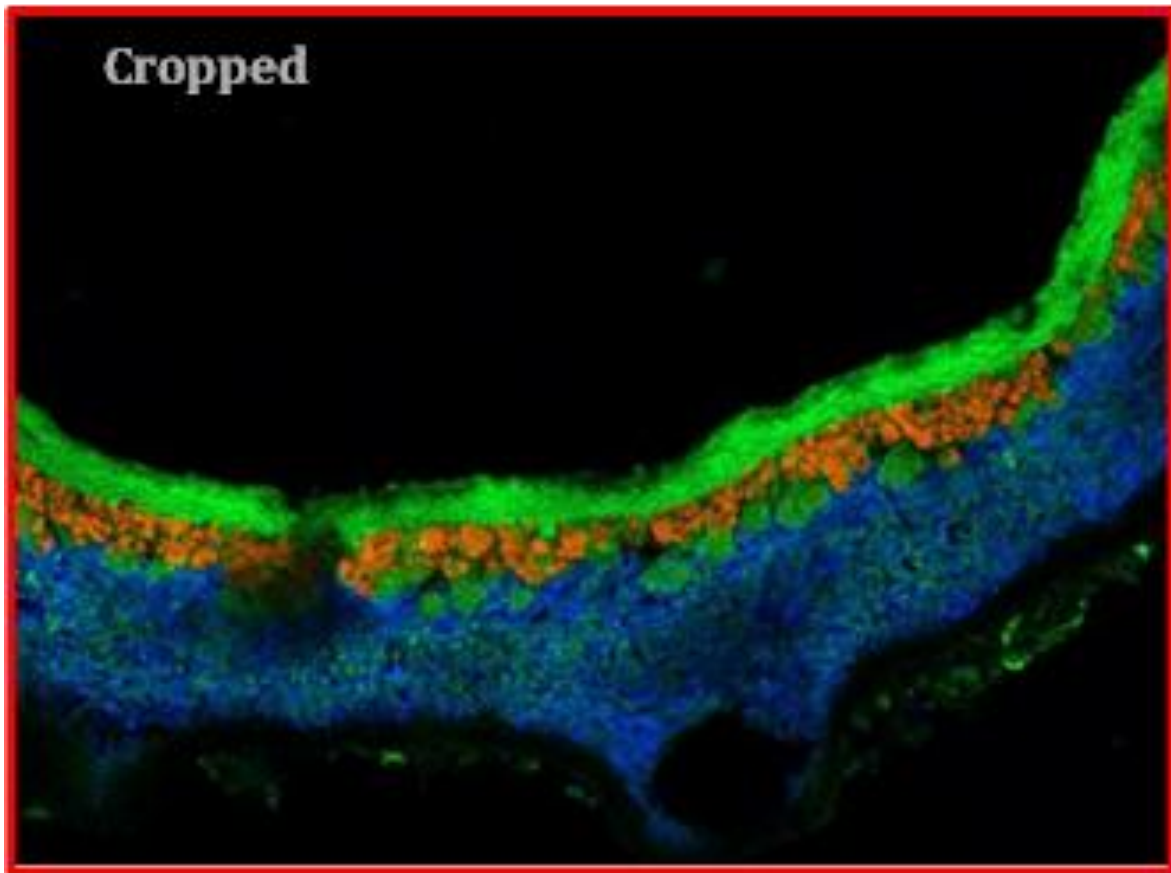


The judges started and finished by emphasising that the competition was very close this year. Almost any of the photos could have been up there, and everyone could consider themselves winners. The Members present emphasised this, with almost everyone voting for different photos and the tied **Members' Choice winners** being none of the Judges' choices:

There were three photomicrographs entered (photos taken down a microscope to you and me). Rod specially liked these and thought there should be a special section for them next year. Alyth Grant kindly donated her prize money for one this year, and the judges nominated the **Photomicrograph winner** as 'What's behind the pretty colours?' by Emma Wallace. [For next year, remember the Botany Dept has some superb set-ups for taking photos down microscopes, and if that's too daunting it's often possible to just aim your compact camera down the eye tube.] So, congratulations to those who quite deservedly won, to those I thought should have won, to those other people thought should have won, and to Allison for going easy on the lichens but being a sort-of winner anyway. Thanks to the judges (even Kelvin)

for the work they did, for their greater expertise than mine, and for their entertaining us so well (especially Kelvin). The judges commented that five of the six winners were students. In a university town one of the Bot Soc's major functions has to be interesting students in botany: real botany, not hormones and DNA and all that stuff. Does DNA even exist? John Steel tells me he was once shewn a test tube with some white goo which was claimed to be DNA. Scientists believed in phlogiston once.

The committee will vote on the best 13 photos to go in next year's calendar. It's likely they'll choose a different set again, if only because, as the judges commented, what makes a good calendar photo is different. Look forward to a stunning calendar for 2013, and be in quick – last year's calendar sold out!



Photomicrograph Winner: 'What's behind the pretty colours?' by Emma Wallace



Overall Winner of the Botanical Society Photography Competition: 'Scale of Mountains' by Lorna Little

Joint BotSoc and Forest and Bird trip to Craigieburn Reserve.

Up until then I thought Craigieburn Reserve was in South Canterbury and was oblivious to a namesake here in Dunedin. Paul Pope was our guide, or maybe raconteur is a better term, and for two-plus hours he managed to cover everything from Maori folklore to future dreams! A brilliant autumn day saw us gather at the entrance of this small reserve which abuts the northern boundary of Ross Creek and here Paul gave us a brief history of its acquisition by the Dunedin Amenities Society with the aid of the Dunedin City Council.

A few yards into the bush, Paul's enthusiasm for what appears to be his pet project, was patently obvious as he pointed

out a rather nondescript depression in the bush floor; nondescript at least until he began the first of his tales of early settler occupancy and highlighted traces of the chimney and boundaries of what was once the dwelling of woman who occupied it to avoid the plague of rats in her nearby property. From there onwards, piles of stones, massive old macrocarpas and remains of tracks became markers for the lives of its early occupants, the Rankins, Sherriffs and Tanners. Stories, embellished with a near-barrage of fascinating trivia, followed way too fast for me to remember them all as we leapt from one fact to another fleshing out the lives of the families of the area, in particular of Mrs.

Sherriff, the daughter of the first settlers, William and Elizabeth Rankin. William died after ten years hard labour and Elizabeth married the lodger, Edwin Tanner who put a stop to tree-felling on the property. Elizabeth married the guy next door, but returned with her ten children in 1902 after his death. She lived and worked the property for much of her 94 years giving the Amenities Society first option to buy the property on her death in 1949 all the while insisting the forest be left standing.

Paul has overseen and worked on the preservation and fixing of the remains of the old, three-sided cottage as well as the foundations of the old dairy buildings and dry-stone walls, tracks and site-restoration. The human aspect of these was constantly brought to the fore as he explained the huge difficulties endured by those early families, tempered with tales of friendly gatherings and hints of juicy gossip. Mrs. Sherriff determinedly hung on to her piece of forest in what has to be one of the earlier, privately-covenanted pieces of bush in the area, if not nationally. The tour ended at a spot overlooking Leith Valley with an information board displaying an old photograph of Mr. Tanner and his three step-(?) daughters poignantly seated with their backs to us admiring the view with us, a view Paul hopes to see grow as the reserves from the Town Belt, Woodhaugh, Leith Valley, linked by Craigieburn, unite to form a natural corridor. This was not just a cute history lesson of

some long-gone family, but a tart reminder of the part we are all playing; what will that view be like when a future generation stands behind us and Edwin Tanner witnessing the effects of our presence on the valley?

Botanically, the reserve is a continuation of the mixed forest of Ross Creek, but with a significant component of 53 mature rimu, some estimated at over 500 years old. The upper slopes are quite dry and the understorey sparse, but this gradually changes going down into the valley, especially the more northerly end where the undergrowth is quite dense with some very old crown ferns predominating. The old macrocarpas are being left alone, but the edge of the forest is being extended by planting natives, especially the restorer's favourite, *Pittosporum tenuifolium*. These plantings have been done in stages, the earliest ten years old now, and seeing the changes taking place alongside each other gives some interesting perspectives. Two kahikatea have been planted rather strangely like driveway entrance markers to the old cottage while *Libocedrus bidwillii* have been planted in the restoration areas where I would not have expected them.

If you haven't been here yet, I would suggest it is well worth the visit, especially if you have the opportunity to go with Paul for his illuminating, informative and highly refreshing story of Dunedin's early settlement. **NB:** The species list will be published in the next issue of the newsletter.

Bot. Soc. Trip to Quarantine Island. June 23rd

Bill Wilson

12 members of the society gathered at Back Beach, Port Chalmers despite somewhat threatening forecasts of cold showers and gale force South-Westerly winds. The weather was delightfully calm and sunny and warm and those of us who had donned polyprops plus three layers regretted it. John McLachlan (4728725/ 0276814778 if you want to go

there) took us across to Quarantine Island, and later to Goat Island efficiently and cheaply and we are grateful to Francine and the other members of the St. Martin Island Community who welcomed us.

The island is some 37 acres most of which is still grassland grazed by 60 sheep, but there is an area of mixed planted and natural bush at the North end and there has been extensive planting above the shoreline all round the island. This is mainly the work of Ken Mason and other volunteers from the Forest and Bird Protection Society and has been very successful. The St. Martin Community, which

leases the land from DOC, has done lot of work in installing a jetty and restoring the remaining historic buildings from when the Island, otherwise known by its maori name Kamau Tarua, really was a Quarantine Station for ships coming to Dunedin.

The trip was botanically interesting. There is a good track round the Island and the trip to Goat Island was even more rewarding as regrowth is entirely natural, though there was a much higher proportion of weeds.

Photo Below: *Cortinarius porphyroideus* (left), *Weraroa virescens* (centre and bottom right) and *Cortinarius perauranticus* (top right) Fruiting bodies of the three species showing contrasting colours. Martins Hut Track, Longwood Range, 26th NZ Fungal Foray, Riverton. Photo: David Lyttle.



Errata

We are reprinting the species list for Akatore Creek published with the field trip report in our last newsletter (Bridges R 2012. Akatore Field Trip Sunday 17th November 2011. *Botanical Society of Otago Newsletter* 65 14-17) as a draft was inadvertently substituted for the correct version. Our thanks to Pat Enright for pointing out a number of errors. It is reassuring to know that people actually do read the newsletter.

SPECIES LIST – AKATORE CREEK

Regenerating bush remnant along the true left bank of Akatore Creek from the road to the sea and comprising a mainly exotic area near the road, through native bush culminating in exotic farm pasture and some rock outcrops by the sea.

Access via Milton Taieri Mouth Road, 45 kms/50 mins from Dunedin.

NZMS 260 145 170° 10' E 46° 07' S
920517 0-50m

List compiled from BSO field trip 18 March 2006 and 19 November 2011

° = exotic

References: Livesey, H. (2006) 18th March 2006, BotSoc foray to Akatore. *Botanical Society of Otago Newsletter*,

48:24-25.

LICHENS:

Brigantiaea chrysosticta
Buellia albula
Buellia fuscoatrula
Caloplaca cerinelloides
Caloplaca circumlutosa
Caloplaca flavorubescens
Caloplaca homologa
Caloplaca litoralis (was *Caloplaca rosei*)
Caloplaca mooreae
Caloplaca sp.
Caloplaca subpyracea
Chrysothrix candelaris
Cladonia fimbriata
Cladonia humilis
Coenogonium implexum
Haematomma babingtonii
Hyperphyscia plinthiza
Lecanora carpinea
Lecanora flavidomarginata
Lecanora semipallida (was *Lecanora flotoviana*)
Lepraria incana
Megalospora gompholoma
Menegazzia neozelandica
Menegazzia subpertusa

Opegrapha agelaeoides
Opegrapha aff *atra*
Opegrapha diaphoriza
Parmelinopsis afrorevoluta
Parmelia cunninghamii
Parmotrema perlatum
Parmotrema reticulatum
Peltigera hymenina
Pertusaria graphica
Pertusaria knightiana?
Physcia adscendens
Physcia caesia
Physcia erumpens
Physcia jackii
Punctelia borrii
Pyrenula deliquescens
Ramalina glaucescens
Ramalina inflexa
Rinodina thiomela
Strigula oceanica?
Teloschistes chrysophthalmus
Thelotrema lepadinum
Usnea sp.
Usnea tenerior
Verrucaria maura
Xanthoparmelia spp.
Jackelexia ligulata (was *Xanthoria ligulata*)
Xanthoria parietina

LIVERWORTS:

Heteroscyphus biciliatus
Lunularia cruciata °

MOSESSES:

Echinodium hispidum

FERNS:

Asplenium appendiculatum
Asplenium flaccidum
Asplenium gracillimum
Asplenium hookerianum
Asplenium hybrids
Asplenium lyallii
Asplenium obtusatum
Asplenium polyodon
Blechnum blechnoides
Blechnum chambersii
Blechnum durum
Blechnum discolor
Blechnum fluviatile
Blechnum minus
Blechnum procerum
Dicksonia fibrosa
Dryopteris affinis °
Microsorium pustulatum
Polystichum neozelandicum var *xerophyllum*
Polystichum vestitum
Pteridium esculentum
Pyrrosia eleagnifolia

GYMNOSPERMS:

Dacrydium cupressinum

Podocarpus cunninghamii
Prumnopitys ferruginea
Prumnopitys taxifolia

ANGIOSPERMS:

Dicotyledons:

Acaena juvenca
Acaena novae-zelandiae
Acaena pallida
Achillea millefolium[°]
Anaphaloides hookeri
Aphanes inexpectata[°]
Apium prostratum subsp. *prostratum* var. *filiforme*
Bellis perennis[°]
Callitriche stagnalis[°]
Calystegia tuguriorum
Capsella bursa-pastoris[°]
Cardamine debilis agg.
Cardamine hirsuta[°]
Carmichaelia petriei
Carpodetus serratus
Cerastium fontanum[°]
Cirsium arvense[°]
Cirsium vulgare[°]
Clematis foetida
Colobanths muelleri
Conium maculatum[°]
Coprosma crassifolia
Coprosma hybrids
Coprosma linariifolia
Coprosma lucida
Coprosma obconica
Coprosma propinqua
Coprosma rhamnoides
Coprosma rotundifolia
Coprosma rubra
Cotula coronopifolia
Crassula moschata
Cytisus scoparius[°]
Disphyma australe subsp. *australe*
Epilobium brunnescens
Epilobium komarovianum
Fuchsia excorticata
Galium aparine[°]
Geranium potentilloides
Griselinia littoralis
Gunnera monoica
Haloragis erecta
Helichrysum filicaule
Helichrysum lanceolatum
Hoheria angustifolia
Hydrocotyle heteromeria
Hydrocotyle novae-zelandiae var. *montana*
Hydrocotyle moschata
Hypericum androsaemum[°]
Hypochaeris radicata[°]
Jacobaea vulgaris[°]
Korthalsella clavata
Korthalsella lindsayi
Kunzea ericoides
Lepidium tenuicaule

Leycesteria formosa[°]
Linum catharticum[°]
Linum monogynum
Lotus corniculatus[°]
Lupinus arboreus[°]
Lychnis arvensis[°]
Malus x domestica[°]
Matricaria matricarioides[°]
Melicope simplex
Melicytus alpinus
Melicytus flexuosus
Melicytus ramiflorus
Metrosideros umbellata
Muehlenbeckia australis
Muehlenbeckia complexa
Mycelis muralis[°]
Myosotis pygmaea
Myrsine divaricata
Myrsine australis
Olearia arborescens
Olearia avicenniaefolia
Olearia fragrantissima
Oxalis exilis
Parsonsia heterophylla
Pennantia corymbosa
Pilosella officinarum[°]
Pimelea prostrata subsp. *prostrata*
Pittosporum eugenioides
Pittosporum tenuifolium
Plagianthus divaricatus
Plantago lanceolata[°]
Plantago major[°]
Plantago raoulii
Prunella vulgaris[°]
Pseudognaphalium luteo-album
Pseudopanax crassifolius
Pseudopanax ferox
Pseudowintera colorata
Ranunculus acaulis
Ranunculus acris[°]
Ranunculus foliosus
Ranunculus repens[°]
Raoulia subsericea
Raukaua anomalus
Ribes sanguineum[°]
Ribes uva-crispa[°]
Rosa rubiginosa[°]
Rubus cissoides
Rubus fruticosus[°]
Rumex acetosella[°]
Rumex crispus[°]
Rumex obtusifolius[°]
Sagina apetala[°]
Sagina procumbens[°]
Samolus repens
Scleranthus uniflorus
Selliera radicans
Senecio biserratus
Senecio carnosulus
Senecio minimus
Senecio vulgaris[°]
Solanum dulcamara[°]

Solanum laciniatum
Solanum tuberosum[°]
Sonchus asper[°]
Sonchus kirkii
Sonchus oleraceus[°]
Sophora microphylla
Spergula arvensis[°]
Stellaria media[°]
Stellaria parviflora
Streblus heterophyllus
Taraxacum officinale[°]
Tetragonia implexicoma
Trifolium dubium[°]
Trifolium repens[°]
Tupeia antarctica
Ulex europaeus[°]
Veronica arvensis[°]
Veronica elliptica
Veronica persica[°]
Veronica salicifolia
Veronica verna[°]
Vicia sativa[°]

Monocotyledons:

Agrostis capillaris[°]

Agrostis stolonifera[°]
Ammophila arenaria[°]
Anthoxanthum odoratum[°]
Arrhenatherum elatior[°]
Astelia fragrans
Carex appressa
Carex coriacea
Carex geminata
Carex litorosa
Carex trifida
Cordyline australis
Dactylis glomerata[°]
Ficinia nodosa
Holcus lanatus[°]
Isolepis aucklandica
Juncus edgariae
Libertia ixioides
Lolium perenne[°]
Luzula rufa
Microlaena avenacea
Phormium tenax
Poa astonii
Poa cita
Schoenoplectus pungens
Thelymitra longifolia



Xanthoria ligulata (now called *Jackelixia ligulata* after the Australian lichenologist Jack Elix), on the coastal rocks at Akatore. Photo by Allison Knight

Botanical Society of Otago

Patron: Audrey Eagle

Committee 2012–2013Chairman: **David Lyttle**

djlyttle@ihug.co.nz

Secretary: **Allison Knight**

alli_knight@hotmail.com

Treasurer: **Jean Bretherton**

jeanbretherton@hotmail.com

Communications and Programme: **Robyn Bridges**

robyn.bridges@otago.ac.nz

Social co-ordinator: **Bill Wilson**

rdwilson-dn@xtra.co.nz

Web Editor: **David Orlovich**

david.orlovich@otago.ac.nz

Newsletter Editor: **Lorna Little**

lorna.little@otago.ac.nz

Committee:

Nicola Baines

ndbaines@gmail.com

John Barkla

jbarkla@doc.govt.nz

Tina Summerfield

tina.summerfield@otago.ac.nz

Bastow Wilson

bastow@otago.ac.nz

Marcia Dale

m.dale@ryderconsulting.co.nz

Please submit copy for next newsletter to Lorna Little by 12th October 2012**This Newsletter was published on 20 July 2012.****ISSN 0113-0854 (Print) ISSN 1179-9250 (Online)****Membership form: Botanical Society of Otago, 2012***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: _____

Phone: work () _____ home () _____

Electronic Newsletter only? Yes/No

Subscriptions are reduced by \$5/year if electronic newsletter only is chosen.

Annual Subscriptions are due on 1 April each year.**Only \$10 Concessional (student /unwaged), [\$40 for 5 years]****\$20 Full (waged/salary/philanthropist) [\$80 for 5 years],****\$25 Family (2 adults + children) [\$100 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