



BOTANICAL SOCIETY

OF OTAGO

Newsletter Number 54 June 2008

BSO Meetings and Field Trips

- 16 July**, Wednesday 5.20 pm. **Flora of the Forties and Fifties.** An illustrated talk by Lorna Little. Lorna voyaged with Heritage Expeditions to the Subantarctic Islands in February this year, coming across many interesting plants, only some of which were recognisable. This talk portrays some of the fascinating flora that can be found in these, technically, South Pacific islands. It will begin, like her trip, with the plants on the furthest island, Campbell Island. Auckland and Enderby Islands will follow, finishing up with a sampling of the flora of the Snares Islands! See Meeting Details, p. 3 for venue.
- 26 July**, Saturday 10 am. **Field trip to flax collection, Dunedin Botanic Garden.** Debra Carr from Clothing & Textile Science, University of Otago and Rua McCallum (Ngai Tahu) will introduce the Rene Weaving Collection and the 'Dunedin Cultivars' which have whitau (fibre) as good as the best in the Rene Collection. The Dunedin Cultivars were donated to the Garden in the early 1900s by Matthews, a Dunedin horticulturist. Debra & Rua will teach how to care for and clean harakeke according to traditional methods and demonstrate how whitau is extracted. Bring a sharp knife that has not been used for food, gardening gloves, boots, packed lunch and warm clothing. **SPECIAL NOTE:** Meet in the carpark next to the Polytechnic Centre, Botanic Garden, on Lovelock Avenue. Alternative day in case of rain is Sunday 27 July. If in doubt contact Debra Carr 021 239 3045.
- 20 August**, Wednesday 12 noon **Sequencing the seas.** Prof John A Raven, University of Dundee, Scotland and John Smaillie Tennant Lecturer at University of Otago for 2008. Union Street Lecture Theatre.
- 20 August**, Wednesday 5.20 pm. **Canadian Arctic.** A talk by Audrey Eagle. A surprising variety of plants are in flower in the areas surrounding Bathurst Inlet during the short Arctic Summer. Photographs of these together with some

reference to geological features, animals and Inuit culture will be shown. See Meeting details, p. 3 for venue.

- 21 August**, Thursday 6.00 p.m. **Astrobiology**. Prof John A Raven, University of Dundee, Scotland and John Smaille Tennant Lecturer at University of Otago for 2008. Archway 4 Lecture Theatre, cnr Union Place E and Leith Walk, O.Uni.
- 23 August**, Saturday 9.00 am. Field trip to **Bull Creek & Coastline**. Southern rata dominated forest extends down lower Bull Creek to its small attractive estuary. We'll investigate the forest by way of a walking track that follows the creek up to a small waterfall before exploring the coastline strand and turf communities. Depart Botany Carpark at 9 am, returning mid-afternoon. Contact John Barkla ph. 476 3686.
- 24 September**, Wednesday 5.45 pm. 7th Annual Geoff Baylis Lecture organised jointly with the Botany Department, University of Otago. **Sex in the bush: what are our native woody plants up to?** A talk by Dr Brian Molloy, Research Associate, Landcare Research, Lincoln. For the past 35 years Dr Molloy has been associated with the restoration and management of Riccarton Bush in Christchurch City and has observed the reproductive behaviour and recruitment of native woody seed plants there. He argues there is strong presumptive evidence that many woody species in Riccarton Bush are facultative apomicts whose progeny now dominate the understorey and ground layer. These observations will be discussed with emphasis on species and disturbance events in Riccarton Bush and he will briefly review examples of these and other species elsewhere in the NZ Botanical Region. **NOTE SPECIAL VENUE:** Castle 1 Lecture Theatre, by Library, University of Otago. Nibbles and drinks will be available in the Castle Concourse from 5.10 pm.
- 28 September**, Sunday 8 am. All day field trip to **Berwick bogs and bits of bush**. John steel will lead a trip to a small stand of podocarps in a steep sided gully at Halfway Road Bush followed by a visit to Redpath Road Bog, a raised bog with associations of *Sphagnum*, *Empodisma*, *Gleichenia*, *Halocarpus*, *Eleocharis* etc. Depart Botany Carpark, at 8 am. Leader John Steel ph. 479 4572 or 473 7211.
- 18 October**, Saturday 8.30 am. **Fungal Foray to Knight's Bush, Tuapeka West**. John and Alli Knight's forest on the banks of the Clutha River has a variety of fungal habitats, ranging from *Pinus radiata* at the top, *Kunzea ericoides*. *Nothofagus menziesii* and *N. solandri* on the slopes and mixed podocarp/broadleaf/*Nothofagus* on the river flat. While we've had autumn trips to Knight's Bush, we've never had a spring one. We hope to collect newly recorded species by collecting at this time of the year. There may be some cross-country walking and some of the forest tracks are steepish. Wear boots with good support and grip. Bring your camera along. Depart Botany Department car

park at 8:30 am, return about 6:30 pm. If weather is unsuitable on Saturday a Sunday trip may be possible. Contact [David Orlovich](#), phone: (03) 479 9060.

22 October, Wednesday 5.10 pm. Ecosystem diversity in Bolivia. An illustrated talk by Robin Mitchell. Robin worked in Bolivia with Conservation International and during this talk he will give a brief tour from forests at 5500 m above sea level to the continent's last unmodified tropical savannas. See Meeting Details, p 3 for venue.

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 (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/bso/>



Planted cabbage trees at Tavora Reserve, North Otago. Photo John Barkla

Contents

BSO MEETINGS AND FIELD TRIPS.....	1
CONTENTS.....	4
CHAIRMAN'S NOTES	5
EDITOR'S NOTES	5
CORRESPONDENCE AND NEWS	6
OBITUARY – PETER BANNISTER 1939 – 2008	6
BOTSOC ANNUAL GENERAL MEETING HELD	7
NEW PATRON FOR SOCIETY	8
BSO 2009 CALENDAR	8
BOOKS	9
BSO AUDREY EAGLE BOTANICAL DRAWING COMPETITION	10
ARTICLES	10
<i>OLEARIA FRAGRANTISSIMA</i> , FRAGRANT TREE DAISY, ON THE OTAGO PENINSULA	10
MEETING AND TRIP REPORTS	13
PROF. ULF MOLAU ON CLIFF ECOLOGY – FEBRUARY MEETING	13
PETER JOHNSON TALK ON BOTANY OF THE CHATHAM ISLANDS – MARCH MEETING	13
MOUNT WATKIN FIELD TRIP 29 MARCH 2008.....	14
PHOTOGRAPHIC COMPETITION APRIL MEETING.....	16
KURINUI, NORTH OTAGO – APRIL FIELD TRIP	16
MEMBERS NIGHT MAY MEETING	18

Chairman's Notes

John Barkla

I was excited to see how the photo competition has really taken off after last year's inaugural competition. This year we had an even greater number of contributors and photos were of a high quality (see later report). Perhaps last year's calendar and judge's comments helped inspire members. If so, maybe next year will be even better.

Our members evening in May was a huge success. It was difficult to predict if members would take up the challenge to share a botanical snippet with the audience. We need not have worried though as the evening was full of eclectic contributions that came together perfectly. Allison has written a full account of the night later in the newsletter.

Our AGM has been and gone and I'm pleased that our great committee is little changed. Kevin Gould, our

previous Secretary, has left for Wellington (thanks Kevin for your time with the committee) and Allison Knight has kindly stepped up to fill that position. We also welcome back Christina Lister after a break away. New committee members are always welcome – let me or one of the committee members know if you're interested.

The trip programme takes us almost through to the end of the year - hopefully you will find something of interest. Make a special note in your diary for the 7th Baylis Lecture in September.

On a sad note I salute the passing of our first patron Emeritus Professor Peter Bannister, a friend to many members and a generous supporter of the Society. Our sympathy is extended to Jennifer and Peter's family.

Editor's Notes

John Barkla

Welcome to *BSO Newsletter No. 54!* David is taking a break from this issue so I hope I can keep up his high standards! **Please submit copy for next newsletter by 15 Sept 2008.**

Editor's guidelines: Contributions are always welcome. 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.

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, nor do they necessarily reflect the views of the Department of Botany, University of Otago, which is supportive of, but separate from, our society. Publishing of advertisements does not necessarily imply endorsement by this Society.

Correspondence and News

Obituary – Peter Bannister 1939 – 2008

It is with great sadness and regret that we have to report the death of our patron, Peter Bannister, who faced his last bout of cancer with great courage but died in late February. He was a kind and gentle man, so modest and unassuming that many did not realize the full breadth and depth of his talents. Born in England of a German mother and an English father at the start of the Second World War, he faced early divided loyalties. His grandfathers had fought against each other in the First World War, while his mother had to be careful not to speak to him in German during the war years. Peter regretted not being fully bilingual, but still made the effort to converse in German with students far from their German-speaking homelands, and was always generous in helping others translate documents written in German.

Interested in plants from an early age, he won prizes at school, gained a degree in Botany from Nottingham University, then a PhD in heathland ecology from the University of Aberdeen, after which he retained a lifelong interest in heathers. His first post as a lecturer was at Glasgow University where he started his career as one of the first plant physiological ecologists, later he became a senior lecturer at the University of Stirling. Peter's knowledge of plants, and how they worked, was so extensive that his PhD supervisor wrote to Jennifer "I am so pleased to have known him as one of the most distinguished of my

Allison Knight

students". In 1979 he moved to Dunedin with his first wife, Margaret to become Professor of Botany and Head of Department, a position he held until 2002. He had three children and 7 (nearly 8) grandchildren all of whom he was inordinately proud. Peter quickly became familiar with New Zealand plants, and prided himself on being able to identify any exotic plant brought to him. He gave generously of his time and effort in mentoring students, and, in the words of one PhD student, now a professor "He was an inspirational teacher and supervisor."

Peter had a distinguished academic career, publishing over 110 scholarly botanical papers. This included a very thorough study, with his second wife Jennifer, whom he married in 1993, on the distribution of the lichen genus *Ramalina* in New Zealand. In New Zealand he became intrigued by the physiological relationships between native mistletoes and their hosts, and in the frost resistance of native plants, which he later extended to other plants in the Southern Hemisphere. More recently he contributed to our knowledge on the potential effects of global warming with his studies on the frost tolerance of alpine species. His dedication was so great that he hired a helicopter in the middle of winter to go to the top of the Rock and Pillar Range, where he dug through metres of snow to collect samples to complete the seasonal graph. One of his last papers enabled him to bring together much of

his research in frost resistance when he was invited to contribute a Godley review for the New Zealand Journal of Botany, which he entitled 'A touch of frost? Cold hardiness of plants in the Southern Hemisphere', this appeared in March 2007. He retired in 2005 and was made an Emeritus Professor.

In 2003 the New Zealand Society of Plant Physiologists presented him with their Outstanding Physiologist Award. After he died tributes came from around the world testifying to Peter's international standing. As Prof Kath Dickinson said, his 1976 book, 'An introduction to Physiological Plant Ecology' is still regarded as an icon in its field. The Botany Department has named a new research laboratory the Bannister Laboratory, in his honour. There is also a cryptic bicycle shed that Peter contributed to generously and dedicated to his cyclist father, Jack.

Ornithology was an abiding interest, shared with Jennifer, and they took delight in knowing the look and habits of nearly all the birds in New Zealand, whatever their origin. Peter was a talented artist of both botanical and life

Botsoc Annual General Meeting April

It took just 7 minutes for the minutes of the 2007 AGM, the chairman's report and the treasurer's report to be read and accepted, and the new committee: (as on back page) to be elected unopposed. Some fresh faces would be very welcome. Please see any of the committee if you are willing to lend a hand. (Looks good on the cv, too)

forms. He belonged to the Dunedin Art Society for many years, becoming an artist member, and recently helped to judge the Botanical Society Audrey Eagle Botanical Drawing Competition. As Patron of the Botanical Society of Otago Peter enhanced many meetings and meticulously proofread and raised the standard of many Newsletters. Our sympathy goes out to his family and to his wife Jennifer, who has known him since they studied undergraduate Botany together at the University of Nottingham.



Peter with son Matthew and grandsons Albert and Tom

Allison Knight

Chairman:	John Barkla
Secretary:	Allison Knight
Treasurer	Lyn Bentley
Web/newsletter	David Orlovich
Communication:	Robyn Bridges
Committee:	Mike Thorsen
	Mascha Bischoff
	Abe Gray
	Bastow Wilson
	Christina Lister

New Patron for Society

We are thrilled that Audrey Eagle has kindly agreed to be the Society's Patron. Audrey is well known as an active member of the Society and as the author of the award-winning

Eagle's Complete Trees and Shrubs of New Zealand. In 2001 she was appointed a Companion of the New Zealand Order of Merit for her services to botanical art.

BSO 2009 Calendar

Our trial 2008 calendar, which was produced using images entered in the inaugural BSO photo competition, was so popular and well produced, thanks to Abe, that it exceeded all expectations. This year there were more entries in the photo competition, of an even higher standard, so it was very difficult choosing the best selection for the next Calendar. We could have compiled half a dozen equally good 2009 calendars! The final

calendar will botanically enhance any house or office and make great gifts for friends and family anywhere in the world. Every month brings a fresh, full-page A4 feature of one of the most striking botanical treasures of our southern landscape.

The first calendar sold out, so be in quick when the 2009 Calendar comes on sale at the Baylis Lecture, 24 September.



Leucogenes grandiceps Mt Hutt skifield, Canterbury. Photo: Kate Barnard

Books

Clearance Specials!

Manaaki Whenua Press have limited quantities of the 3 botanical books below, plus various other, books for sale at very good prices if you order on line. So check out their website: <http://www.mwpress.co.nz>. They also offer Bot Soc members 10% discount on all non-sale items, so don't forget to tell them that you are a member.

Southern Beeches

A L Poole

\$NZ 5.00 (+ shipping)

Discusses the ecology of the *Nothofagus* beech forests in the southern regions of the world - New Zealand, Australia, South America, Papua New Guinea, and New Caledonia. The importance of this Gondwana genus in contributing to studies on flowering plant evolution and migration routes is also covered.

List Price \$27.50 ~ You save \$22.50

The Current Names for Wild Plants in New Zealand

A list of botanical names in current use for wild plants in New Zealand, as used by the Plant Herbarium CHR at Landcare Research in Lincoln, Canterbury. Wild plants are defined as those that are indigenous to New Zealand or have been collected growing spontaneously outside a fenced area or as weeds in a sown or planted community.

The list is based on the series Flora of New Zealand volumes I – IV (1961 –

Allison Knight

1988), and includes revisions up to 31 December 1995. Gymnospermae, Monocotyledonae (except grasses) and Dicotyledonae are covered.

Each listing includes the current botanical name, authorities, common and/or Maori names if recorded, relevant Flora or journal reference, a distribution guide, and an indication of taxon status.

On Line Price \$20.00 (+ shipping) ~

List Price \$42.50

You save \$22.50

Towards Forest Sustainability

David B Lindenmayer and Jerry F Franklin

\$NZ 20.00 (+ shipping)

A collection of practical essays in which the authors describe the changes that have taken place in forest management, highlighting what worked, what didn't, and the lessons that have been learned. With contributions from the world's leading forest ecologists and managers from the USA, Canada, Finland, Sweden, Australia and New Zealand, this book documents the drivers of the change in the logging industry and the resulting outcomes. It provides real-world insights from an international perspective into government policy, industry concerns, and conservation and biodiversity issues.

List Price \$44.95 ~ You save \$24.95

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BSO Audrey Eagle Botanical Drawing competition



Kowhai painting by Peter Bannister

Reminder- entries due by Friday 12 September 2008! They can be handed in to Trish at the office of the Botany Department, 464 Great King Street, or posted to the Botanical Society of Otago, PO Box 6214, North Dunedin 9059, NZ. Entries will be displayed at

the Baylis Lecture on 24 Sept, and the prize winners will be announced. First prize is \$100, second prize \$50 and third prize \$25. So far there's never been more than 10 entries, so your chances are much better than Lotto or even the Photo Competition!

Entry forms, conditions of entry and judging criteria are in the February Newsletter, on the BSO web site: <http://www.botany.otago.ac.nz/bsol/>.

They will also be posted on the BSO noticeboard in the Botany Department corridor.

Remember, preference will be given to rarely illustrated plants – and for this purpose lichens and even non-photosynthesising plants will be accepted.

Articles

Olearia fragrantissima, fragrant tree daisy, on the Otago Peninsula

Moira Parker

I first came across *Olearia fragrantissima* on a November Botanical Society trip to the Nuggets. A small tree was in full bloom at the start of the walking track to the

lighthouse. The characteristic clusters of small yellow flowers have an amazing scent, just like that of ripe peaches. The next day we found more *O. fragrantissima* among stunted

kowhai and *Coprosma* shrubs on the exposed face below the lighthouse.

The species is classified as At Risk: Sparse (de Lange et al. 2004) with only 3 known populations on the Otago Peninsula. These are in a bush remnant above the Karetai Rd, on the cliff top at Vauxhall and in the Sandymount Reserve.

The large shrubs in the Karetai Road bush and at Sandymount look old, with no obvious regeneration taking place. As Ribbonwood Nursery has had limited success propagating cuttings from an old tree at Vauxhall, I wondered if it would be worth trying to propagate from seed.

Helen Clarke, another member of the Botanical Society, and I made several trips to Karetai Rd, to locate the *O. fragrantissima* shrubs in the bush remnant and then to collect seed. We tried to time our visits so the fluffy seed heads would be mature, but before the wind had dispersed them. We gathered some seeds, but sadly none germinated.

In April 2005 the Botanical Society of Otago was granted a DoC permit to collect seed and cuttings from the Sandymount Reserve. In November, David Lyttle guided a few members to the location of the remaining *O. fragrantissima* trees, growing among *Coprosma* sp. and the native broom *Carmichaelia petriei* on a ridge south of Sandymount. Some cutting material was collected, but there were no mature seeds on that occasion.

However, in early December, Helen Clarke and I timed it perfectly. The fluffy seeds were absolutely ready for dispersal – flying about and getting caught on our polar fleece jackets and in our hair. The seed was given to four people, to increase the chances of success and mostly sown within a day or so of collection.

A few weeks later, I was thrilled to get over 30 tiny seedlings, most of which just sat in the seed tray without making any further growth. In desperation, I pricked a few out, some of which survived. My end result was a meagre 4 plants in pb 3 planter bags.

Fortunately, others more knowledgeable than I, knew to prick out the tiny seedlings at the first true leaf stage, and had much better results. At the Yellow-eyed Penguin Trust plant nursery Margaret Suman and Anita Pillai produced 55 *O. fragrantissima* plants in pb 3's from the seed collected at Sandymount in December 2005

Where are all the plants now? They have been donated and are well distributed around the Otago Peninsula. Most have been planted in groups, for instance at the Otapahi yellow-eyed penguin habitat north of Allans Beach, Portobello School native tree reserve, a DoC bush covenant by the Sandymount lime kilns, and properties at Allans Beach, Sandymount and on Centre Road. A further 10 plants are being held for planting at Colinswood Bush DoC covenant in Macandrew Bay.

Helen Clarke, too, had great success and produced 45 *O. fragrantissima* in pb 3's for planting out in 2007. She distributed them to several Broad Bay sites, such as the Styles Creek QEII covenant, the Dunedin City Council owned "Slip Site" that has been revegetated by Save the Otago Peninsula, several private gardens and Varleys Hill QEII covenant. Many of those Olearias have been in the ground for a year now and have established well. I planted some in quite dry spots on Varleys Hill. Those within reach of the hose got the occasional watering, but the rest coped well with the dry summer conditions.

This year more plants are being added to Styles Creek Bush, the Slip Site, Alf Webb's property and Varleys Hill QEII covenant. And from more seed collected in 2007, Helen has another 10 plants to go to next year to various Otago Peninsula QEII covenants.

That makes a grand total of 142 *Olearia fragrantissima*. The aim of the Sandymount Reserve collection permit is to increase the numbers of particular species that are uncommon on the Otago Peninsula. The Botanical Society is well on the way to achieving that objective for the fragrant tree daisy.



Drawing of *Olearia fragrantissima* by Rebecca Wagstaff

Meeting and trip reports

Prof. Ulf Molau on Cliff Ecology – February Meeting

John Barkla

Fresh from examining rock tors on the Rock and Pillar Range Prof. Ulf Molau, the Otago University William Evans Visiting Fellow from Gothenburg University, Sweden, gave a presentation on cliff ecology.

Cliffs of course present special challenges both in survey and in mapping. By definition a cliff was required to have an inclination of at least 45 degrees and be more than 2 m high. Ulf introduced the audience to the Alpine Cliff Ecology (ACE) Programme which aims to assess biodiversity in a landscape where cliffs occupy 25% of the total surface area in a typical alpine watershed.

His study site is the Latnjajaure Catchment in northern Swedish Lapland; a U-shaped glacial valley at c. 900 – 1500 m above sea level. Of the 178 vascular plant species recorded for the catchment, 42 are cliff species

(chasmophytes) and an additional 28 species are rupestral (rock living). Among lichens and mosses 50% are obligate chasmophytes. We learned that the black coating on rocks was actually cyanobacteria that helped the rocks heat up and also provided nitrogen. The lush vegetation often observed at the base of cliffs is possibly attributable to the increased nitrogen supply. Cliffs were summarised as being vertical miniature landscapes with unique microclimate, with naturally fragmented populations that were resilient to climate change.

Prof Molau concluded by contrasting alpine cliffs with snowbanks which he described as being at the opposite extreme in the landscape. They have a short growing season, mild and stable ground temperature, sustainable water supply, many specialised plants and are extremely sensitive to climate change.

Peter Johnson talk on botany of the Chatham Islands – March Meeting

John Barkla

After 30 trips to the Chatham Islands Peter Johnson was well placed to talk about this island outpost 800 km east of mainland NZ. He started though with images from his first trip to the islands, taken from the Air Chathams Convair on its landing approach. We soon learned that his first botanical treats,

Chatham Island forget-me-not (*Myosotidium hortensia*) and *Astelia chathamica* are, ironically, more common in Chatham gardens than in the wild. The rather familiar scenario of fire, felling and farming has devastated the Chathams flora but has given rise to many of the iconic scenes

we now associate with the islands; Moriori dendroglyphs on kopi trees, dead tree skeletons and lone wind-swept akeake (*Olearia traversii*).

Many of the Chatham plants differ in some way from their mainland cousins. Peter told us about the world's most southern palm (*Rhopalostylis* sp.) and the largest member of the *Dracophyllum* genus (*Dracophyllum arboreum*). The islands also have their own ribbonwood (almost lacks a juvenile form), karamu, matipo, mahoe and lancewood. Then came the spectacular rautini tree daisy (*Brachyglottis huntii*), *Olearia chathamica* and stunning purple aster (*Olearia semidentata*).

The main island is dominated by the large Te Whanga Lagoon (big enough to swallow the Otago Peninsula) and numerous freshwater lakes with turfy edges full of tiny wetland herbs. The Chathams have their weed problems

Mount Watkin Field trip 29 March 2008

After the short drive into the mountains we 'wandered off' into the large unknown (apart from our guide Kelvin Lloyd who knew the way). We were all very impressed with this forgotten piece of the city which is now free of grazing animals and is regenerating bush. Mount Watkin Scenic Reserve is owned by the DCC who are currently going through the management plan process. Judging by the rooting, the reserve seems to be part of pig heaven which they share with other creatures

too – the usual suspects of gorse, blackberry and Himalayan honeysuckle are there along with the more worrisome Chilean guava (*Ugni molinae*) with its predilection to peatland, and even Chilean flame creeper. Peter warned of three new weeds per year establishing on the islands.

Peter also spoke of numerous conservation success stories including the large-scale restoration programme on Mangere Island to provide more habitat for the black robin, and forest recovery following exclusion of stock in Henga Scenic Reserve on Pitt Island. Peter finished with pictures from recent tours he has led, which have included a large contingent of botsoc members, many of whom were in the large audience. Many thanks Peter for a whimsical presentation that gave us an enthralling insight into the botanical, geological and social fabric of this intriguing island group

Bradley Curnow

such as colourful looking spiders, tomtits and skinks.

Along the way to our final destination (a cliff overlooking the Waikouaiti River), we came across porcupine scrub (*Melicytus alpinus*), and indulged in berry eating from a leafless bush lawyer (*Rubus squarrosus*). We also 'discovered' an awesomely large cabbage tree (*Cordyline australis*) and native jasmine (*Parsonsia heterophylla*). Down in the valleys were numerous kowhai (*Sophora*

microphylla) which must look stunning in flower. Kanuka (*Kunzea ericoides*) forms the dominant vegetation on the valley sides, with the odd manuka tree (*Leptospermum scoparium*) providing some variety. We did our part for conservation by pulling out *Dryopteris filix-mas* fern, and hanging them in trees to die. The saddest find was the Chilean flame creeper (*Tropaeolum speciosum*) which is currently rare and localised, but no doubt will be very prolific in the future. Several varieties of our friends the bidibids were also sighted. *Acaena novae-zelandiae*, *A. agnipila* (from Australia) and *A. juvenca*. One matagouri (*Discaria toumatou*) provided a prickly spectacle with two native nettles present to keep us on guard. These nettles were the tree nettle (*Urtica ferox*) and *Urtica incisa* being a ground dwelling stinger. After much botanising we arrived at the cliff top, which was about 250 metres above the largely waterless Waikouaiti River. This is where the

most exciting botany find of the day was made when Alf's keen eye spotted rare native mistletoe (*Korthalsella salicornioides*) growing on kanuka. I also positively enjoyed the sugary taste of a corokia (*Corokia cotoneaster*) berry, but Jaz was less impressed emotionally describing the taste as a 'bitter, foul, and evil concoction'.

On the way back our leader described the reserve as having 'outstanding biodiversity values'. Pat was lost for words, as was Jaz who was still recovering from the berry incident'. To Lala the whole area was simply 'magnificent' and that we really should come back here when the kowhai are in flower. To this suggestion everyone agreed. Thanks to Kelvin Lloyd for our wander in the bush from Bradley Curnow, James Wang, Su Zhou, Pat Gallagher, Rosi Miller, Lala Frazer, Alf Webb, Scott Dunavan, and Jaz Morris.



Not turf plants, but reptile investigation. Photo by Lala Frazer

Photographic competition April Meeting

After the AGM a capacity crowd watched and listened entranced as our three expert judges, Peter Johnson, Rod Morris and Kelvin Lloyd presented and discussed the 59 entries in this year's photographic competition. The Plant Portrait section drew the most entries, 33, of which 29 contained 'reproductive stuff' mostly flowers, plus a few fungi and even a couple of fruiting lichens. The other 4 were of foliage, and the judges thought it would be refreshingly different to see a portrait of a tree or a tussock or something else for a change. They also preferred glossy to matt prints, as these scanned more clearly.

Winner of the Portrait section, and also the overall winner, was Ken Allen, for his stunning portrait of *Celmisia verbascifolia*, in the Gertrude valley, which was almost as clear and precise as an Audrey Eagle drawing. Congratulations, Ken!

Ecological Processes drew 9 entries, with the winning image telling a very graphic story of a rotting sheep in a barren landscape, its decay providing nutrient to a little ring of green moss. Congratulations to David Lyttle for 'Caught in the Last Muster'. The judges repeatedly emphasized how

Kurinui, North Otago – April Field Trip

Leaving a chilly, wet Dunedin, with snow on Flagstaff, the last thing we expected was sunshine by the time we reached Blueskin Bay. Nine folks made

Allison Knight

much they liked a photo that told a story.

Of the 6 entries in Plant Community the winner was a very evocative Peruvian rain forest community 'Looking down' by Amelie Auge. Here the judges thought we should make it clear that photos can be from anywhere in the world, not just Otago, though the Calendar will still be mainly Otago.

Landscape drew 7 entries, and the winner was Gretchen Brownstein's, 'Turf Wars'. This showed clearly a story of a coastal turf community being invaded by clover, in a landscape full of other interesting coastal, agricultural and urban stories.

There were only 4 entries in the Human Interaction section, and the one the judges thought told the best story was 'Lichen Tribute', by Allison Knight, which depicted a 'posy' of colourful lichens decorating a gravestone.

Many thanks to the judges for giving so much time and thought and encouragement to our budding photographers, and especially for their willingness to judge again next year and to hope for still more photos in 2009 (and a complimentary calendar!)

Kate Barnard

the trip up to Kurinui, about a 20 minute drive west of Hampden. We were greeted by Scott, Dinah and their two friendly dogs, Bud and Lucy.

Armed with the plant species list compiled by Wildland consultants we headed off on a circuit round the eastern side of their land. With stock removed in 2002, the 750 hectare

property is now an Open Space covenant under the QEII National Trust. Steep sided ridge, rocky outcrops and small creeks and wetlands make for a really varied range of habitats.



View into the headwaters of Kurinui Creek. Photo by Kate Barnard

The structural leaves of *Celmisia hookeri*, fine spines of *Aciphylla subflabellata* and blue green softness of *Gingidia grisea* were all new plants to me on our walk through the tussock and mixed woodland that made up the vegetation on the side of this valley. *Helichrysum intermedium* perched on rocky outcrops along the way, with stunted *Coprosma*. Looking out over the canopy of the trees, lancewoods, broadleaf and totara could be spied, along with the odd miro and matai.

With a short break at the saddle, half the group headed off to a rocky

outcrop, which had fantastic views to the coast. A falcon glided away from us as we climbed up and along the ridge to the knoll at the end for lunch. Heavily berried *Melicytus alpinus* was draped over the rocks up there and I learnt that this could also be a lunch spot for native lizards, with geckos thought to be a pollinator and dispersal agent for some native plants. Looking at the downward hanging *Melicytus* berries hidden in their twiggy latticework it certainly seemed to make more sense than any birds fighting their way through to feast on them.

Following the rest of the group round to Scott and Dinah's house we enjoyed a welcome cup of tea before heading out again into the drier kanuka forest below their house. There were a large number of native tree seedlings emerging on the forest floor, but the highlight was the red berries of *Coprosma rhamnoides* glowing like jewels in the afternoon sunlight.

Members night May Meeting

Our first BSO members night was full of surprises, as people brought along an extraordinarily wide range of botanical treasures to share. First off was a wonderful burst of song and botanical images 'Which Plant is Which' an audiovisual extravaganza compiled by Adi. Next John Barkla gave us a visual tour of a newly acquired parts of the DOC estate in Otago, including the Hawkdun and St Bathans Ranges, the Ahuriri and Dingle valleys. He showed and described the distribution and management some of the rare and threatened plants in these parts of our 'backyard', including *Pittosporum patulum* and *Leonohebe cupressoides*.

Audrey Eagle talked enthusiastically about the amazing collection of treasures she had brought along: three of her recently framed oil paintings from the 1960s, a display on the rare, elusive *Thismia*, which flowers under the leaf litter, another display of *Dactylanthus*, which parasitises roots, is pollinated by bats and threatened by possums, and several good-sized 'vegetable caterpillars' parasitised by

Continuing our circuit back into more open ground, the dark green shapes of kanuka forest on facing hills was very obvious, showing previous phases of burning of the mixed woodland.

Thanks to Scott and Dinah for their enthusiasm and hospitality from John, Marilyn, Kate, Judy, Loie, Graeme, Sue, Rosie and Warren.

Allison Knight

the *Cordyceps* fungus. Alf Webb showed his precious historic Cheeseman Flora, all 3 volumes leather-bound into one, with annotations and pressed specimens from prominent early Dunedin Botanist George Simpson. David Lyttle filled a whole table with his pots of rare and threatened plants grown mainly from cutting, but also from seed. He talked knowledgeably about their provenance and propagation. There were two boards displaying lichen photos by Allison Knight – the first steps towards a beginners Field Guide to Lichens.

Ken Allen had two photos of the Pagoda fungus from under the Eucalypts at Orokonui and was keen to know more about it. David Orlovich obliged, and showed his own 'ask and tell' – a rock from Mt Burnett in North-West Nelson containing leaf fossils. Chuck Landis also had a query about a fossil – a root uncovered from a development in Wanaka, which had been buried in silt and covered in loess. He estimated it was 7-10 thousand years old, and was curious to know

what it might be, and why it was so laterally compressed.

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Please submit copy for next newsletter to David Orlovich by 15 September 2008

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