# Ecological Society Newsletter

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# **FROM THE EDITORS**

The 2007 NZES Annual Conference is gearing up, and this newsletter delivers plenty of details to whet your appetite. This year the conference returns to the theme of the 1986 NZES conferences "Moas, mammals, and climate in the ecological history of New Zealand"; with the aim of reviewing and synthesizing what we now know about past changes to New Zealand's fauna and flora.

The conference is also the time that the annual society awards are presented. Please note that award nominations have a tight timeframe for submissions this year, be sure to get your nominations to Jacqueline before 20 July. Details of the awards and eligibility are available below. Hannah Buckley and Ruth Guthrie Bio-Protection and Ecology Division PO Box 84 Lincoln University Phone: 03 325 2811 E-mail: <u>newsletter@nzes.org.nz</u>



The deadline for submissions for the next issue of this newsletter will be Friday 24 August 2007.

If you have any questions or comments about the newsletter, we encourage you to put it in the form of a letter to the editors.

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#### A PRESIDENT HONOURED, A PRESIDENT DEPARTED

#### **Murray Williams**

The scientific career of Dr lan Atkinson, President of NZES between 1985 and 1987, and a life member, was honoured at Victoria University in March with the opening of the "Ian Atkinson laboratory for biodiversity and restoration ecology research". Last year Victoria University established a masters programme in ecological restoration and as part of that initiative, built a substantial laboratory to support field research by the programme's students. The university's Council accepted the suggestion of staff in the School of Biological Sciences that the laboratory be named in honour of lan's very formative contributions to New Zealand ecological research, conservation and restoration of island and mainland ecosystems. Congratulations lan! The tributes paid to lan at the opening of the laboratory (in the presence of many NZES members and former work colleagues), and lan's response can be read at http://www.yuw.ac.nz/biodiversity/events/news.aspx

On a sadder note, NZES President during 1981-83, Tom Caithness died in Wellington on 16 May from complications after a fall which broke his pelvis. Tom will probably be unknown to many contemporary ecologists aged 40 and under, but to long-standing members of NZES he will be remembered as one of the more colourful characters of our ecological stable. He joined the Wildlife Service in 1956, transferred into DoC in 1987, and retired in 1990. Although he did not leave a large legacy of formal scientific publications, Tom made an indelible contribution to two areas of applied ecology - gamebird management and birds and aircraft hazard reduction. He ran a gamebird hunters' diary scheme from 1969 to 1990 which produced the first nationwide statistics on gamebird harvests and laid the foundation for more scientific management of gamebird hunting, something badly needed at the time. He had the good sense to provide his diary scheme contributors with a quirky annual summary, an excellent example of science communication tailored to its audience and which ultimately became a treasured collector's item amongst duckshooters. Tom's contribution to managing airfields and their environs to reduce bird - aircraft collisions was highly valued by the commercial aviation sector in New Zealand, Australia and Singapore. He conducted regular surveys of bird hazards at all NZ commercial and military airports for about 30 years, was a principal environmental advisor during the development and construction of Singapore's Changi airport, and continued as an advisor to NZ Civil Aviation until just a few years ago. In retirement Tom devoted his time to the advancement of junior golf in the Wellington region and served several years as President of the Wellington Golf Association. His wife Diana and children Steve and Sue were joined by over 600 people to bid Tom farewell.

# 55TH ANNUAL GENERAL MEETING OF THE NEW ZEALAND ECOLOGICAL SOCIETY

The AGM of NZES will be held during the annual conference on **Tuesday 20 November, 6 pm, Lecture Room C1, University of Canterbury**. All members are urged to attend. The minutes of the 54th AGM can be found in the December 2006 issue of the newsletter <u>www.newzealandecology.org/newsletter/</u> <u>EcolNews119.pdf</u>. Members are reminded that notices of significant motions that are to be put by members need to be submitted to council at least 28 days prior to the AGM. After that time, following the society rules, no new motions may be proposed, discussed, or put to vote except by consent of more than two-thirds of the members present. Please note there are several council positions vacant. If you would like to contribute to the NZ Ecological Society at a council level please consider standing for one of these positions.

# NOMINATIONS FOR NZES AWARDS

#### Te Tohu Taiao – Award for Ecological Excellence

Nominations are invited for the Te tohu taiao award (formerly NZES award). This award is presented annually to recognise individuals who have made outstanding contribution to the study and application of ecological science. The award is made to the person(s) who have published the best original research in ecology of New Zealand, and its dependencies (including the Ross Dependency) or person(s) who have made the most outstanding contribution to applied ecology particularly conservation and management. NB. This award used to be presented to members only but a council decision in 2006 supported the recommendation to make non-members eligible. Please email any nominations to Jacqueline Beggs (j.beggs@auckland.ac.nz) by Friday 20 July 2007.

#### **Honorary Life Membership**

Honorary life memberships are conferred from time to time to recognise excellence and longstanding service in the study or application of ecological science in New Zealand. Nominations should be presented to council, seconded and must include statements of support. The selection committee will consider candidates' eminence in the scientific field and contribution to original research or the application of such research in New Zealand and the extent of their association with the Society. This award is often presented at the AGM during the conference

#### NZES Award for Best Publication by a new researcher

The NZES awards an annual prize of NZ\$500 for the best published paper of an ecological nature, by a new researcher. This award is targeted at people at the start of their research career. The award will be announced at the Ecological Society's annual conference, and reported in the NZES newsletter as well as being posted on the NZES website.

Authors wishing to be considered must meet the following criteria:

- Be the senior author or sole author of the paper.
- Be a current member of the NZ Ecological Society.
- Either currently be a student or have graduated within the last 3 years, and be at the start of their research career.
- The paper should be published in an ecological journal (not restricted to NZ J of Ecology).

Only one paper per eligible author.

Authors wishing to be considered for this award should send 4 copies of their publication by Friday 20 July to Jacqueline Beggs (c/- SGGES, Tamaki Campus, University of Auckland, Private Bag 92019, Auckland). All publications will be reviewed by a committee nominated by the NZES council. At the discretion of the nominated committee no award may be made in any given year.

#### NZES Ecology in Action Award

As announced at the joint NZ Ecological Society and NZ Freshwater Society Conference in 2005, the NZ Ecological Society Council has recently established the "Ecology in Action" award. This award was established to recognise individuals who are achieving excellence and best practice in the promotion of ecology, including communication, education and transfer of ecological science at the grass roots. The Society would like to recognise work of individuals achieved in promoting ecology and education at a local government level, with landowners, community groups, politicians and councils. This award is for individuals, whose role is primarily the transfer of ecology and research, but who are not necessarily involved in pure ecological research. This award reflects one of the primary aims of the society that includes promotion of the study of ecology and the application of ecological knowledge in all its aspects. The society also recognises that the transfer of ecological knowledge at a community and local government level is important in changing behaviours and achieving practical protection and restoration of biodiversity, particularly of our threatened lowland ecosystems.

The Society offers recipients with:

- 1. \$500 contribution towards attending the next NZ Ecological Society Conference;
- 2. \$500 contribution to a local restoration project of your choice.

Recipients of the award are invited to present a paper at the next annual NZ Ecological Society Conference. The work can also be given profile via a media item, or highlighted in the NZ Ecological Society newsletter. Nominations for this award should be emailed directly to Jacqueline Beggs by Friday 20<sup>th</sup> July.

# **POSITIONS ON NZES COUNCIL**

At the AGM in November at the Christchurch, the NZES Council will be looking to fill a number of vacancies. Please start to think about nominating keen people for these positions. In particular, we will need to fill the following two positions:

- 1. Treasurer our current hard working treasurer Rachel Keedwell will stand down from this position this year.
- 2. Secretary this position is currently vacant
- We also need people on council to help out with the following:
- Co-ordinating yearly awards
- Assisting with organising the Intecol Conference in Brisbane in 2009. This is looming up fast and will be very significant event for Ecological Society.
- Co-ordinating Ecological Society submissions on key issues

We are looking for keen people who have the time to offer and to attend 4 meetings a year.

If you want to know more, think you are interested, or even interested in helping out in the meantime, please contact the president Shona Myers (shona. myers@arc.govt.nz) or any of the other Council members.

Dave Kelly, University of Canterbury, <u>dave.kelly@canterbury.ac.nz</u> on behalf of the conference organising committee

## NZES ANNUAL CONFERENCE



18-23 November 2007

#### Introduction

The 2007 conference of the New Zealand Ecological Society is set for 18-23 November, in Christchurch. The venue will be the Central lecture block at the llam campus of the University of Canterbury.

The conference features a major symposium titled "Feathers to Fur: the ecological transformation of Aotearoa". This is an update of 21 years of progress on the topics that make New Zealand unique, following on from the 1986 conference "Moas, Mammals and Climate" which was published in a special issue of *NZ J Ecology* in 1989.

The conference logo symbolises this transformation with a Maori cave drawing of a "bird-man" from Frenchmans Gully (used by permission of Te Runanga o Waihao and Arowhenua and the Ngai Tahu Rock Art Trust).

There will also be several other symposia (see below) and the usual interesting range of contributed talks and posters.

#### **Timing and dates**

Registration and the call for papers are now open. The early-bird cheaper registration, and final call for paper abstracts, both **close on Friday 21 September**. However don't leave it too late as all the field trips have limited places and will be closed off once full. So register early!

During the conference, the main talks will run for three consecutive days, **Tuesday 20 – Thursday 22 November**, with the key symposium on the first day (Table 1). All this is preceded by the field trips on the Monday, and the studentonly day on Sunday as usual.

Time	Sunday 18	Monday 19	Tuesday 20	Weds 21	Thurs 22
Day	Student Day	Field trips (half or full day)	SYMPOSIUM: Feathers to Fur	TALKS & Poster session	TALKS
Evening		6:00-9:00 pm Informal mixer	6:00-7:30 AGM 7:30-11pm Barbecue dinner	7:30 - 12:00 Conference dinner	Conference finishes 6pm

Table 1: Sequence of events in November 2007 conference.

The AGM will be on Tuesday 20 November at 6pm in lecture room C1.

Note that the Ecological Society of Australia are meeting in Perth in November in the week after our conference (26-30 November) so it will be possible to attend both if you are keen.

For more information, visit: www.newzealandecology. org/conf2007

#### Scientific programme

#### "Feathers to Fur: the ecological transformation of Aotearoa"

This year, the NZES conference returns to update the theme of its 1986 conference, "Moas, mammals, and climate in the ecological history of New Zealand", by reviewing and synthesizing current understanding about past changes to NZ's fauna and flora. New Zealand's biota has changed substantially over the past several million years. The recent human-caused upheavals are just the last of many revolutions that have occurred on what Matt McGlone recently dubbed the "flypaper of the Pacific". As in the 1986 conference, we plan to compare and contrast the abiotic (climate, earthquakes, etc.) and biotic (extinction of moa, lost mutualists, invasions, etc.) causes and consequences of biotic change. We anticipate that this conference will provide the state-of-the-art historical context necessary to understand what NZ ecology will look like in the near future.

Most of the talks on this first day will be invited speakers whom we hope will give exciting reviews of progress since 1986 and summarise the current state of knowledge. A draft of what we are planning for the first day was in the last newsletter (<u>http://www.nzes.org.nz/newsletter/EcolNews120.pdf</u>). Note that the alliterative title *Feathers to Fur* is not meant to imply a focus on introduced mammals to the exclusion of fire, climate, geology, fragmentation etc; all will be scrutinised. We expect some of the contributed talks will also be on aspects of the *Feathers to Fur* theme, and these may be incorporated into a continuation session on Wednesday morning.

The 1989 "moa" volume of *NZ J Ecology* which published papers from the 1986 conference was a concise summary of our ecological understanding of NZ in the mid 1980s, and it has been highly cited as a result. Four of the ten most cited papers in the history of *NZ J Ecology* come from the 1989 special issue (Table 2). This is impressive given that there have been 48 issues of the journal so far since it was renamed in 1978.

Table 2: The ten most-cited papers in NZ J Ecology (Web of Science as of June 2007). The moa symposium is vol 12 (supplement).

Rank	Citations	Author	Year	Vol	Page
1	207	Vitousek PM	1997	21	1
2	110	McGlone MS	1989	12(S)	115
3	72	Sakai A	1978	1	51
4	66	Holdaway RN	1989	12(S)	11
5	57	Wilson JB	1990	13	17
6	56	Mclennan JA	1996	20	27
7	55	Murphy EC	1995	19	97
8	49	Clout MN & Hay JR	1989	12(S)	27
9	47	Atkinson IAE	1989	12(S)	67
10	45	OConnor KF	1982	5	97

Overall, the special issue has attracted more citations per paper per year than any other issue of similar vintage (Table 3).

Table 3. Citation rates for NZ J Ecology issues 1986–1991. The "moas" volume is Supplement to Vol 12.

Year	lssue	Citations	Papers per issue	Cites / paper / year
1986	9	133	15	0.42
1987	10	133	17	0.39
1988	11	137	14	0.52
1989	12	111	12	0.51
1989	12(S)	372	17	1.22
1990	13	144	9	0.94
1990	14	125	9	0.82
1991	15(1)	113	10	0.71
1991	15(2)	78	10	0.49



plement to New Zealand Journal of Ecology, Volume 12, 1

Thanks to sponsorship from Landcare Research, *Feathers to Fur* will be published in 2008 as another special issue of the *New Zealand Journal of Ecology*, including both the invited papers and any relevant contributed talks from the rest of the conference. We hope that it proves to be as useful in the next two decades as the 1989 volume has been over the last two decades.

#### Other symposia and final call for symposia

There are three other symposia already identified for the conference, to run on Wednesday or Thursday, as follows.

#### 1. Scaling up – biodiversity and ecosystem function

Although it is well recognised that species affect ecosystem processes through different impacts on carbon sequestration, nutrient cycling, and hydrological regimes, the way and area over which this occurs varies considerably in different ecosystems. This symposium explores the species-ecosystem function issue by examining the topic at different spatial scales and across a range of ecosystem functions. Major questions include: How do species, either directly or indirectly, change ecosystem characteristics, and over what spatial scales do these processes effectively operate? Are species interactions more important than individual species effects? Do cryptic components of biodiversity (microbes, fungi etc) drive ecosystem processes? Do species-ecosystem linkages have a role in conservation?

#### 2. Toxins and pest control

As a spin off of the current 1080 review and recent developments in the efficacy of aerial 1080 against rats and mustelids, there has been heightened interest in the relative value of different pest control methods. In particular, this symposium will address the following. What animal pest control method or combination of methods is/are most likely (taking into account factors such as cost, accessibility, topography, etc) to protect the full range of biodiversity comprising New Zealand's mainland forest ecosystems - and where (ecosystem type, areas of high biodiversity value, etc) and when (frequency, timing, etc) would these method(s) be applied to best protect a representative sample of this biodiversity?

#### 3. LENZ (Land Environments NZ) and Threatened Environments Classification

We aim to review and update the science underpinning the LENZ and Threatened Environment Classification systems. These spatial tools have been designed to assist in land use and conservation decision making. We hope this will raise issues of relevance to local and regional authorities, among others.

We also make a **final call for any other symposia topics** (typically of 5-6 talks) of interest to people. If you want to suggest an additional symposium topic please contact Jon Sullivan (sullivaj@lincoln.ac.nz) **before 31 July.** 

#### Registration costs and how to register (link)

The conference this year is very reasonably priced, being only \$230 for early-bird full registration for ordinary NZES members and \$150 for student members (which are \$90 and \$110 cheaper, respectively, than last year's fees, albeit that last year's very successful conference was larger and more ambitious).

Early-bird registration closes on 21 September, but don't wait or you might forget – register now!

Note that there is no subsidised registration rate for students who are not members. If you are a student and you want to take advantage of the cheaper student rate, you must sign up as a member (\$35) first; you can do this via the <u>NZES web pages</u>.

#### **Student Day**

The traditional Student Day will be held on Sunday 18<sup>th</sup> November in the Biology Building at University of Canterbury, room to be advised. This is an opportunity for students to share their research, network and socialise with their peers from other institutions.

If you would like to contribute to the symposium please contact Bill Lee (<u>leew@</u> <u>landcareresearch.co.nz</u>) Landcare Research, Private Bag 1930, Dunedin.

If you would like to contribute to the symposium please contact Shaun Ogilvie at Lincoln University (<u>ogilvies@lincoln.</u> <u>ac.nz</u>).

If you would like to contribute to the symposium please contact Philip Grove at Environment Canterbury (<u>philip.grove@ecan.govt.</u> nz).

For full information on registration costs see the web pages (<u>www.</u> <u>newzealandecology.org</u>).

Further enquiries should be directed to Ruth Guthrie: <u>guthrier@lincoln.ac.nz</u> Presentations will commence at 9am, with morning tea and lunch provided at the venue.

Any student registered as a conference attendee may offer an oral presentation. The presentation to the student audience can be the same as that being offered for inclusion in the main conference programme, and should therefore follow the same format guidelines.

The student day is free, but only students registered as conference attendees may attend the presentations. Please register for the student day on the conference website.

#### **Student Prizes**

The New Zealand Ecological Society will be offering awards for the best student presentations (oral and poster). Please tick the box on the registration form if you are presenting in the main conference and wish to be eligible for best student presentation awards.

#### **Student Travel Grants**

Travel grants are awarded annually to encourage student participation at the Society's annual conference. Four grants of \$250 each are available and priority is given to those presenting papers at the main conference and those who have furthest to travel. All bona-fide students enrolled at a secondary or tertiary educational institute are eligible. Membership to the society is not required (but see note above, it is worth joining to save on registration). Students should **apply in writing (email or letter) by 21 September** to Ruth Guthrie (guthrier@lincoln. ac.nz; Bioprotection and Ecology Division, PO Box 94, Lincoln). Your application should include full details of your course of study (name of degree, title of project, years of enrolment, name of primary supervisor, and email address of primary supervisor). You should also say where you are travelling from, whether you have any other funding confirmed towards your trip (eg from your department) and whether you have applied unsuccessfully for funds (this is viewed positively). The four grants will be made available to the successful students prior to the conference.

#### **Social events**

Two social events are already included in the registration cost: the barbeque dinner on Tuesday evening (meal provided, cash bar available), and the poster session (one glass of wine/beer provided) on Wednesday afternoon. For those in town on Monday evening there is also the opportunity to gather at the Staff Club with a cash bar in the evening. Optional social events are the conference dinner, and extra (partner) tickets to the Tuesday barbeque (\$29 per ticket; see website).

# Conference dinner (\$77 per person, special rate of \$60 for student members of NZES)

The conference dinner will be held from 7:30 pm on Wednesday 21 November at the Hotel Grand Chancellor, one of Christchurch's premiere venues, located in the city centre, 5 minutes walk from Cathedral Square. Conference participants will be offered bus transport from the university to the dinner. The dinner will be a buffet with hot and cold dishes (including vegetarian options) and desserts. We will also provide the equivalent of half a bottle of wine per person, and additional drinks can be purchased from the cash bar. For those with stamina, the hotel is very close to the bar and nightclub area of Christchurch so you can easily move on to other revelry after midnight.

#### **Field trips**

There are four choices of field trip on Monday 19 November: two full-day trips and two half-day (afternoon) trips. It is possible to fly in Monday morning from all major centres in time to go straight to the full-day trips. The trips are all limited

Students should **apply in** writing (email or letter) by 21 September to Ruth Guthrie (guthrier@lincoln.ac.nz; Bioprotection and Ecology Division, PO Box 94, Lincoln). to maximum numbers of about 45 and will be closed off when those places are taken - so register early (and book those air tickets)!

#### Full-day trips

#### 1. Banks Peninsula forests & dolphins, \$80 per person

A trip by bus to Akaroa, including a 2 hour boat trip on Canterbury Cat to see Hectors dolphins, and visits to several peninsula forest remnants. Includes lunch. Boat trip is weather dependent but refundable if cancelled. Maximum of 43 places, minimum of 28. \$80 per person—good value given that the boat trip alone normally costs \$55 at that time of year (for more information see <u>www.blackcat.</u> <u>co.nz</u>). Departs from outside C lecture block, University of Canterbury at 8:30am then via domestic terminal at airport at 8:40am, return to university 5:30pm.

#### 2. Quail Island, \$30 per person

A day on the island restoration project in Lyttelton Harbour, by bus from the university and ferry from Lyttelton. Lunch provided. You will be shown progress with revegetation and pest control and also be able to see historic sites, including those used by Robert Falcon Scott before his Antarctic expedition.

Maximum of 43 places, minimum of 30. \$30 per person. Depart from outside C lecture block, Univ of Canterbury at 9:30am, return 5pm.

#### Half-day trips

#### Bird watching 1pm-5pm \$10 per person

Half-day trip to several sites around Christchurch to see land and wading birds. Bus provided, bring your own binoculars and drinks. Maximum of 43 places. \$10 per person. Departs from outside C lecture block, Univ of Canterbury at 1pm.

**Canterbury Museum moas: 1:30–2:30 pm; 2:30–3:30 pm; 3:30–4:30 pm** One-hour exploration with Richard Holdaway of the moa bones stored in the Canterbury Museum, including moa pelvis bones with *Harpagornis* puncture wounds. Maximum of 15 on each of the three tours. Before or after your tour you can explore the rest of the Museum and its café, or visit other sites or cafes in the Arts Centre, Art Gallery and Botanic Gardens which are all adjacent. \$5 per person. Transport to the Museum not provided, at the start time meet at the Museum information desk inside the front entrance.

1:30 trip \$5 per person, maximum 15 2:30 trip \$5 per person, maximum 15 3:30 trip \$5 per person, maximum 15

#### Sustainability: carbon credits, conference bags

We have given some thought to reducing the environmental impact of the conference. We have NOT been able to look at making the full conference carbon-neutral: the time and methodologies to do this were not available. We are trying to reduce impacts in several ways. Firstly the drinks and meals will all use washable crockery not disposable plates etc. Secondly there WILL NOT BE A CONFERENCE BAG given out. We are asking you to REUSE—bring your favourite conference bag from times past, this could be a good talking point at morning tea if it is from somewhere exotic. Moreover we ask you to DONATE ANY SURPLUS OLD BAGS you have, bring them along to put in our reuse box and we will make those available to anyone who arrives without a conference bag and needs something to hang over their shoulder.

One major carbon impact of conferences is travel to and from the host city. We ask you to consider how this is done so that you can minimise your carbon dioxide emissions—come by land rather than air, take public transport not a car, get together to fill the car or van with people. We encourage you to make a voluntary payment to offset your carbon emissions. If you want to do this properly, go to the carbonzero website (www.carbonzero.co.nz/calculators/calculators tourist. asp) where you can work out the emissions from your whole trip (travel to and from Christchurch, travel around town, emissions from staying in a hotel, and so

For more information see www.doc.govt.nz/ templates/PlaceProfile. aspx?id=35294. forth). You can then buy carbon credits through their website to get a certified offset of your emissions. However, note that there is a \$22.50 minimum charge in their system, so this is most useful for those coming a long way.

To try and focus on transport emissions and allow the offset of small amounts for those coming short distances, we have a voluntary option on the registration page to donate smaller amounts to offset travel to and from Christchurch, with the costs estimated approximately from the carbon emissions and current offset pricing (ranging from \$9.00 for return air travel from Auckland, down to \$1.20 for driving from Greymouth; see website for list of distances). We will amalgamate all these small donations, and send the whole amount (minus GST and Visa transaction charges) to Hinewai Reserve behind Akaroa. Hinewai is a well-known forest restoration project that is producing benefits to biodiversity as well as sequestering carbon.

#### Accommodation options

There are many options for staying in Christchurch. We offer three options through the web page: student hostel accommodation on campus, the midrange Academy Motel (on Creyke Road directly opposite the university), and at the more luxurious Chateau On The Park (on Kilmarnock St on the edge of Hagley Park, situated on a bus route that goes directly to the University or a pleasant 2.5 km walk through Riccarton Bush to the conference). For prices see the web page. Note that there are a limited number of rooms available at each of these so get in early.

See you in November!

#### **BIOBLITZ 2007 AT OTARI-WILTON'S BUSH, WELLINGTON**

Stephen Hartley

On 3pm Friday 23 March 2007, over fifty scientists and natural history enthusiasts descended on Otari-Wilton's Bush to kick-start Wellington's first ever Bioblitz. For those who have never heard of a Bioblitz, the purpose is to track down as many different species as possible from a defined site over a 24 hour period – while at the same time having fun and raising public awareness of local biodiversity. Our site, Otari-Wilton's Bush, is a popular recreational spot in the western suburbs of Wellington currently celebrating one-hundred years as a designated reserve. Adjacent to a nationally important native plant garden, the reserve consists of both old-growth and regenerating bush.

Most Bioblitzes throw-up a few surprises—this one was no exception. By 3pm the next day 1345 species had been recorded including a large and impressive, undescribed species of mushroom (*Amanita* sp), the first New Zealand record of the exotic plant *Veronica javanica*, and many more species previously unknown from Otari (e.g. the native fish *Galaxias brevipinnis* and 66 "new" plants). Members of the public enjoyed the mixture of guided walks, exhibits and the chance to talk to specialists as they examined specimens under the microscope in a race against time.

One of the best things about the Bioblitz was the opportunity to mingle with so many passionate and enthusiastic specialists, all joining forces towards a common goal. Despite the hype surrounding the final species count, the enduring benefit will be the interest that has been sparked in both the participating scientists and general public alike. Finally, a big thank you to everyone who contributed!



Professor Phil Garnock-Jones (left) talking to the media during the final seconds of the Otari BioBlitz, while a tired but happy Rudi Schnitzler looks on

# To find out more about Bioblitzes in New Zealand, or the Otari-Wilton Bush centenary, visit:

### http://www.landcareresearch.co.nz/research/biosystematics/bioblitz/ http://otari100.org.nz/index.php/home

Table 1. List of species richness recorded in different taxonomic groups (including morpho-species). These results are as much a reflection of the taxonomic expertise available on the day, as they are of the true distribution of species richness.

Category	Count on the day	Revised count for the day
Birds	19	24
Fish	5	5
Lizards and Frogs	4	4
Mammals	2	2
Molluscs	19	20
Freshwater invertebrates	6	7
Beetles	82	82
Flies	95	94
Moths & butterflies	11	11
Wasps, bees & ants	26	27
Spiders	40	41
Other arthropods	340	337
Vascular plants - native	208	210
Vascular plants – adventive	153	152
Mosses	73	73
Lichens	10	10
Liverworts and hornworts	51	52
Fungi	30	32
Algae and diatoms	91	104
Nematodes	1	1
Zooplankton/Protozoa	79	79
GRAND TOTAL	1345	1367



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# **Journal of Biological Dynamics**

#### Editors in Chief:

**J. M. Cushing** - Department of Mathematics and Interdisciplinary Program in Applied Mathematics, University of Arizona, 617 N. Santa Rita, Tucson AZ 87521-0089, USA.

**S. N. Elaydi**- Department of Mathematics, Trinity University, One Trinity Place, San Antonio, TX 78212-7200, USA.

*Journal of Biological Dynamics* publishes state of the art papers dealing with the analysis of dynamic models that arise from biological processes. The Journal focuses on dynamic phenomena, at scales ranging from the level of individual organisms to that of populations, communities, and ecosystems, that arise in the fields of ecology and evolutionary biology, population dynamics, epidemiology, immunology,



NEW FOR 2007!

environmental science, and animal behavior. Papers in other areas are acceptable at the editors' discretion. In addition to papers that analyze original mathematical models and develop new theories and analytic methods, the Journal welcomes papers that connect mathematical modeling and analysis to experimental and observational data. The Journal also publishes short notes, expository and review articles, book reviews and a section on open problems.

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# ECOLOGY STUCK ON THE WEB

#### 8: Recording New Zealand biodiversity observations online

I am excited. The NZBRN has landed. NZBRN is an acronym for the New Zealand Biodiversity Recording Network, a fancy title for a website with a simple aim. It wants to store, map, and share the species observations made by you and all your friends. And acquaintances.

You can find NZBRN at <u>http://www.nzbrn.org.nz</u>. It sits in the large, mostly empty space below the likes of the National Vegetation Survey (NVS) database (<u>http://nvs.landcareresearch.co.nz/</u>) and herbarium databases (e.g., the mapped CHR records in <u>http://nzflora.landcareresearch.co.nz</u>) and above your field notebooks and Excel spreadsheets. NZBRN is built to gather all the haphazard observations that we all make when we're out and about, as well as survey data collected with methods that do not conform to the needs of databases like NVS.

Colin Meurk of Landcare Research has written a useful manual you can download to get started. Anyone can use the website to search for species observations, view distribution maps, and download records in the form of Excelcompatible spreadsheets, among other things. To enter your own observations, you will need to log in with a user name and password. Once you're signed in (for free), you can enter your own species observations of birds, plants, fungi, and, soon, selected insects, reptiles, and mammals. It can take a little while to get the knack of the website layout, but once you've entered a few observations, it's quick and easy.

The system includes a long list of sophisticated entry options you can choose to use. Among my favourites are the ability to upload spreadsheets of data and the ability to note absence data. There is a handy Excel spreadsheet template that you can download so you can enter your observations off-line and upload them to NZBRN when it is convenient. Anyone who has tried to model distributions will know the value of absence data as well as presence data.

I recently used the spreadsheet upload option to upload all the species observation data from a gorse-kanuka succession project I did with Peter Williams and Susan Timmins (see *NZ Journal of Ecology* 31(1), now online). I was able to easily load up every plant species we found, as well as every plant we searched for but did not find, at each of our 48 field sites across Nelson and Wellington. These observations now show up when any of these species are mapped on the website.

For those of you involved with more sensitive observations of threatened species, the system can allow you to make your records private. More usefully, it also allows you to fuzz the accuracy of your site coordinates so that your data can still be used in the distribution maps but cannot be used to find the exact site.

The mapping system on the website doesn't have the gee-whiz elegance of Google Earth but it does an acceptable job for most purposes (see the screenshots for examples). You can display species maps, zoom in and out of areas, and display site names. If you want to create a publication quality map or something particularly creative, you can easily download as a spreadsheet all the publicly available NZBRN data for a species and create your own maps in GIS (either using the excellent but expensive ESRI ArcGIS, if you're at work, or the good and free, open-source QGIS if you're at home, available at <a href="http://qgis.org/">http://qgis.org/</a>).

NZBRN is not restricted to modern data. Observations can be added from any date. To start the ball rolling, all of the plant and bird observations from Banks Peninsula scenic reserves in Kelly's 1972 Canterbury Scenic Reserves Survey and uploaded to NZBRN (thanks largely to Lincoln University summer scholar Sean Fergus). If you've got old datasets collecting dust in your hard drive, it would be great to upload them (or ask a minion to do it, if you are lucky enough to have minions).

Jon Sullivan Lincoln University webmaster@nzes.org.nz The system is based on the award winning and wildly successful Swedish website, Artportalen (<u>http://artportalen.se/</u>), developed by Johan Nilsson. Arportalen means "Species Gateway" in Swedish. Calling Artportalen wildly successful is no exaggeration. Between 2002 and 2004, 7,000 users entered 2.5 million observations.

Johan kindly allowed his project code to form the foundation of our New Zealand equivalent, at no cost. His admirable attitude was that the Swedish taxpayers had already funded its creation so it was now free to share. This is a substantial gift so be sure to thank any Swedish taxpayers you meet on your travels.

The New Zealand government's TFBIS ("Terrestrial and Freshwater Biodiversity Information System") generously funded the time required for our local computer gurus to make the translation (often literally). Particularly exuberant hat tipping needs to be directed to Landcare Research's Mark Fuglestad and Jerry Cooper for making this a reality. Colin Meurk acted as the chief instigator and cheerleader, with my intermittent help. Colin has already dumped a wealth of his own records into the system, now free for anyone to access and use.

It is worth emphasising that this is a project for everyone. Yes, even you. While the website is currently kindly hosted by Landcare Research, the data is not the property of Landcare Research. The TFBIS bid that made NZBRN possible was supported by a wide range of New Zealand science and natural history societies, including the New Zealand Ecological Society. In the coming months, a board will be formed with representatives from such societies and interested parties to oversee the ongoing management and development of the project.

One of the roles of this board will be to finalise systems for dealing with unusual data. The Swedish Artportalen system now automatically sends details of all observations made in unexpected places and at unexpected times to designated experts for follow-up. They contact the observer to confirm the validity of the usual observation. Johan tells me that this works well for weeding out misidentifications. Arportalen also now has the ability to upload photos to confirm observations, a feature that NZBRN does not have (yet).

While still a little rough and Swedish around the edges, NZBRN already works well. It captures and stores biodiversity data in a solid and reliable way, it easily makes things like species maps, and it allows data to be extracted simply and at any time. If NZBRN can gain sufficient support and widespread use, this seedling has the potential to become an emergent totara among New Zealand ecology websites. I strongly encourage you all to login and try it out.

Enjoy.

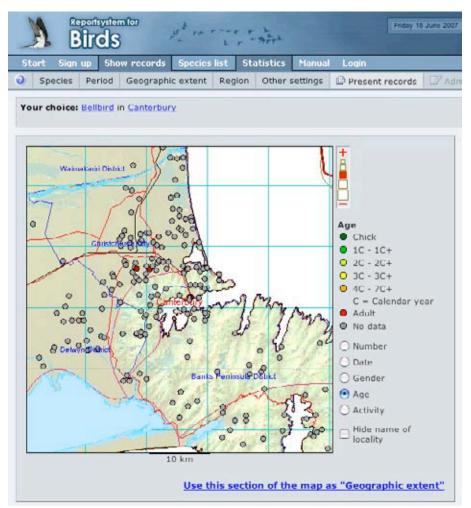


Fig. 1. The NZBRN map of bellbird sightings in and around Christchurch and Banks Peninsula. This is a screenshot of the website page.

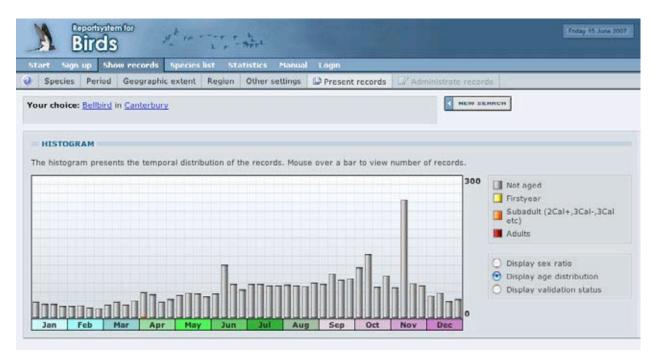


Fig. 2. NZBRN also allows you to view a histogram summarising how many observations have been seen each month. The screenshot here, again of Canterbury bellbirds, shows twice as many bellbird sightings in winter months than summer months. Most of the observations currently come from Christchurch city, which bellbirds come down into during the winter months.

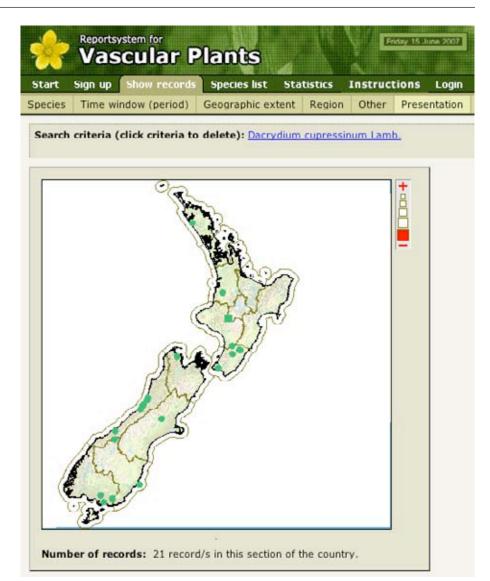


Fig. 3. The current NZBRN map of rimu. There are only 21 records at the moment. Think how much better it can get with your observations included. The current map already suggests the absence of rimu in lowland mid-Canterbury, especially apparent when compared with the maps of other common podocarps (not shown) which have a concentration of records around Banks Peninsula (thanks to Colin Meurk's observations and the 1972 scenic reserve data).

### PLANT-SYNZ DATABASE GOES LIVE

Nicholas Martin Crop & Food Research, Auckland martinn@crop.cri.nz The Plant-SyNZ database links New Zealand plants with their insect and mite herbivores. The database can be searched by plant or by herbivore name and produces reports that list the herbivores associated with a plant or the plants on which a herbivore lives. This information is of importance to people with interests in biodiversity, biosecurity, ecology and education.

The database, which was originally developed to keep track of information about leaf mining insects and gall forming insects and mites has been expanded to include all kinds of invertebrate herbivores and present contains the names of 1386 plant species, 2482 herbivore species and 6209 herbivore-host plant associations.

A possibly unique feature of the Plant-SyNZ database is the reliability index used to score each host association. The quality of information supporting a host association varies from excellent (insect reared on host plant) to poor (adults found sitting on host plant). Each association is given a score from 0 to 10, with 10 being excellent evidence and 0 a mistake in the literature. The reliability index also allows users to filter information above a minimum level of quality. Another feature of the database is that it has a direct link to the plant databases hosted by Landcare Research and when it is available it will link directly to the invertebrate names database.

The project has been made possible thanks to two New Zealand Crown Research Institutes, Crop & Food Research and Landcare Research, with the support of the Terrestrial and Freshwater Biodiversity Fund (TFBIS) Programme. The TFBIS programme is funded by Government to help achieve the goals of the New Zealand Biodiversity Strategy, and is administered by the Department of Conservation.

Check out the database at: <u>http://www.crop.cri.nz/home/plant-synz/</u> <u>database/databasehome.jsp</u>

### **NEWS FROM COUNCIL**

Editors note: Edited and abridged minutes

#### Minutes of NZ Ecological Society Council Meeting, 18 May 2007, Auckland Botanic Gardens

**Present**: John Sawyer, Rachel Keedwell, Shona Myers, Mel Galbraith, Kate McNutt

**Apologies**: Jacqueline Beggs, Peter Bellingham, Bruce Burns, Ruth Guthrie, Roger Dungan

#### Treasurers report (Rachel Keedwell)

Rachel discussed the estimated figures she has calculated for the NZES. She estimates NZES will be approximately \$6000 over spent. However, this is based on number of assumptions such as an estimated \$5000 profit from the 2007 conference and unknown absolute figures for membership. Rachel found it difficult to give exact figures. We did increase fees by \$5 dollars to reduce the gap between profit and loss but on the other hand we also increased spending on awards. Council agreed to wait until the profits and losses are known before moving any funds to the Kauri Fund.

Nigel Barlow's \$50000 is sitting in a separate cash-fund account with interest accumulating. Rachel can then just transfer any interest into the cheque account when the grant is given. If there is enough interest (\$\$) by 2009 then we can run a process for overseas students to apply for a grant. Rachel estimates there should be over \$6000 in interest. In February 2008 we will need to start a process to allocate the funding.

- Action: Shona to let Dave Kelly know Council would like to allocate the \$1000 from the anonymous donor towards the special journal addition for the Moa and Climate change conference. If they don't need the funds we can allocate to the 2008 conference
- Action: Rachel will visit an accounts expert to get everything up to scratch before taking it to chartered accountant.

#### Journal report (Peter Bellingham)

Only 2 items to report from the journal editor's desk:

1. First issue for 2007 (volume 31, No. 1) complete with 9 Research Articles and 3 Short Communications. It should be at the printers and distributed by June this year. Two Research Articles currently accepted for volume 31, No. 2.

2. 2007 is shaping up for a record number of submissions: 24 manuscripts submitted so far (cf. 7 in 2006 and 11 in 2005 at the same time of year).

- Rachel said that the costs of journal printing are still very high and she would like to proceed with investigations of different printing options. An A4 choice is thought to be cheaper.
- John has been told that the format and typeset of the NZJE is the most expensive you can get.
- Any change in format will be put to the society at the next AGM. We will out forward an option for NZJE to go completely electronic.

#### Conferences

#### NZES 2007

Council had some discussions and decided to sponsor entry of two influential community groups/individuals to the 2007 Conference. This would be of little cost to the society but it would support people who would not normally go to the conference. The Council would invite regionally local individuals (Council will not cover cost of transport and fieldtrips).

 The invitation would be sent by the Council but the conference organising committee could nominate potential recipients. Moved by Karen Denyer, seconded by John.

#### 2008 Auckland Conference (Mel Galbraith):

Mel proposed a couple of venues either the Waitakere Stadium or Unitec. He thought that Unitec would not be large enough to hold opening sessions but Kate and John informed him that 250 people would be about the maximum number of seats needed.

#### INTECOL

Kate said she was struggling to formulate the structure for fieldtrips, sponsorship as well as all the admin for the company etc. She needs more active input from the Council as she is losing enthusiasm to constantly maintain the level of input and time that INTECOL demands. She needs a draft of fieldtrip routes for the next conference call in June. The Council quickly brainstormed on some potential fieldtrips and there was debate about how to deliver these. It was decided the best option is to approach recognised naturalists who carry out eco-tours as a profession and ask if they would be interested in formulating a programme and delivering it in 2009. As well as bringing in other experts along the way.

- Action: Kate will draft emails outlining INTECOL to DOC, MFE, Tourism NZ Fonterra, Meridian, MRP and other influential organisations for Shona (as president) to sign. They need to outline the compelling reasons why they should help the society. Shona will forward the newsletter template to Kate.
- Action: Mel will type up the draft fieldtrip table and put out an email asking help with INTECOL through the email lists (the fieldtrips will not have names of potential fieldtrip consultants). Then we can link up potential fieldtrip leaders with potential fieldtrip consultants.

#### Communication Strategy (Karen Denyer)

It still needs some work but Karen is largely happy with the content as most gaps were filled after workshop at last meeting. It is now at the stage where she needs more detailed comments form the Council. She will circulate the document and we can track changes.

Karen would like input into why we are dong it (section 2), priority issues and criteria for issues and targets (p12), branding (section 13), measuring monitoring strategy and final recommendations (sections 14 and 15).

The draft strategy will be presented at the 2007 conference.

#### Positions on Council

Roger Dungan has resigned due to the pressures of his new job.

It is becoming apparent that Councillors who are unable to regularly attend Council meetings is causing other Council members to carry high workloads. We need a submissions coordinator.

#### Update on membership (from Secretariat)

Membership at May 2007 is 596. 70% have up to date memberships and 175 memberships are outstanding. Numbers are remaining stable (in Feb 2006 there were 602 members).

 Action: Rachel will remind Secretariat to provide list pf those unpaid for 2 yrs therefore they are stuck off members list.

#### Web report (Jon Sullivan)

The website is running along fine. Usage is still high (between 5000-7000 unique visitors a month), and is tracking almost exactly the month-by-month usage we got last year.

Here is the text from my most recent article in the NZES newsletter:

"I had reason recently to sit down and calculate just how well used our New Zealand Journal of Ecology website has been since all the back issues of the journal were made available in September 2004. We have had over 213,000 unique visitors visit over 600,000 webpages and download approximately 132,000 PDF files of journal articles. These numbers well illustrate just how valuable these electronic back issue projects can be.

I'd like to call to your attention the New Zealand Ecology Reviews webpages (http://www.nzes.org.nz/nzecologyblog/) that were set up to continue and expand on the old Hot Science project. It is pretty much sitting there unused. If any of you read interesting New Zealand related ecology in articles other than NZJE (especially overseas journals, book chapters, and reports), please consider posting a paragraph about it on New Zealand Ecology Reviews. Just email me to get set up with a login and you can post as often as you like. The more entries we get on it, the more likely other NZES members will join. I'm not sure quite how to get it up to critical mass enough to start snowballing.

You may have noticed that I recently gave the journal pages a bit of an update, including a more detailed search engine. This also included, more recently, an online tool to allow other people to upload new journal articles. The technical editors will soon be taking over this role using this upload tool. I've also been tinkering around with a complete redesign of the website (mainly to make it look sexier). Once I have the journal updates out of my hair, I'll finish that off.

I have the visa online banking thing completely shelved for the moment. Helping to organise the conference will be the rest of my contribution to the society this year."

- John thinks that there is good reason to redesign the intro page/logo/ branding of the web site.
- We need to increase the exposure to the reviews page but this should wait until we need have filled Councillor positions.
- Jon Sullivan would like to spend time redesigning the front page.

#### Submissions

The communication strategy directly feeds in to the problems that we need a strategy about what we communicate about and their priority. It would be good to get a database together of member's skills so we can identify who could help with specific submissions.

We really need a submissions coordinator so we could discuss at the AGM which issues the Society intends to submit on, so topics that require submissions are identified early so we can proactively engage in them (not be reactive).

Next meeting Fri 24 August in Auckland

# NZ ECOLOGICAL SOCIETY LISTSERVER

#### What is a listserv?

A listserv (short for List Server) is a centralised list of e-mail addresses of subscribers. Anyone who is subscribed listserv will automatically receive all emails sent to the listserv, and can send e-mails to all subscribers via the listserv. You can subscribe and unsubscribe from a listserv at any time.

#### The NZ Ecological Society listserv

By subscribing to the NZ ecosoc listserv, you will receive emails about meetings, seminars, jobs, and issues Zealand ecology. You will also be able to post emails that will be received by most practising ecologists in New Zealand.

#### Subscribing to the NZ EcoSoc listserv

To subscribe to this server, e-mail a message to the automatic Mailserv processor at: <u>nzecosoc-request@it.canterbury.ac.nz</u>

Include nothing in the e-mail except the following text in the body of the e-mail: SUBSCRIBE NZECOSOC

END

To unsubscribe from the listserv, send another email to the above address, but this time use the following text:

UNSUBSCRIBE NZECOSOC

Once subscribed, you will receive instructions on how to send messages, unsubscribe etc. PLEASE READ INSTRUCTIONS AND FOLLOW THEM.

#### Sending list messages

To send a message to everybody on the list, use the address, <u>nzecosoc@it.canterbury.</u> <u>ac.nz</u>. Only people subscribed to the list are able to post messages on the list. If you are not on the list and don't want to subscribe, but want a message, send it to Dave Kelly (<u>Dave.Kelly@canterbury.ac.nz</u>) to forward on.

Messages on the list should follow these simple rules:

- NO ATTACHMENTS!!!
- Put the info in plain text in the message
- If there is bulky or graphic material some people may want, put a web address in the message that can click on if they want, or give a contact email address where people can ask for it
- Only send stuff that is likely to be of general interest to NZ ecologists

#### **Replying to list messages**

To reply to a list email, you have two options. You can either hit reply and this will reply to everybody, or you can reply to the author only (e.g., a new e-mail with the author's personal e-mail address). If you want to reply to the person who sent it, please be careful that your reply goes to the person, and not to the list (to be bounced out to everyone!). In other words, double-check what "To:" field your reply has picked up before you press "send".

#### If you change your email address

If you change your email address, you have to unsubscribe from the old one, and subscribe from the new address. If you changed address but forgot to tell the server, we start getting error messages from your old address and will have to unsubscribe you manually, so make my life easier and do this yourself. If your email address has problems (such as messages rejected because your inbox is full) for more than a few weeks we will also unsubscribe you. If you are not getting any messages and wonder if you are still on the list, just send another subscribe command. The easiest way to unsubscribe your old email address is to send a message while you are logged on as that user; if the old email address is dead you may not be able to unsubscribe it because the system sees you as someone else, if you see what I mean. In this case send the details to me and I can delete the old address.

For information on the listserver contact me, Dave Kelly (<u>Dave.Kelly@canterbury.</u> <u>ac.nz</u>).

# Office Holders of the New Zealand Ecological Society 2006/2007

(Effective from June 2007)

In the first instance, please send postal or email correspondence to:

### Secretariat (society office – Susan Sheppard)

NZ Ecological Society Secretariat P.O. Box 25-178, Christchurch 8144 Physical Address: 46 Genesis Drive Edendale, RD 1 CHRISTCHURCH 7671 Phone 64 3 318 1056 Fax 64 3 318 1061 E-mail: <u>nzecosoc@paradise.net.nz</u> Web: <u>www.nzes.org.nz</u>

#### President

Shona Myers Auckland Regional Council Private Bag 92012 Auckland Ph: 09 366 2000 ex 8233 Fax: 09 366 2155 Ph (hm): 09 4185339 Mobile: 021 708042 E-mail: shona.myers@arc.govt.nz

#### Vice President

Bruce Burns Landcare Research Private Bag 3127 Hamilton Ph (07) 859 3700 E-mail: <u>burnsb@landcarereserach.</u> co.nz

#### Immediate Past President

John Sawyer Department of Conservation P.O. Box 5086 Wellington Ph (wk): 04 472 5821 Fax: 04 499 0077 Ph (hm): 04 386 3722 Mobile: 021 0583894 E-mail: jsawyer@doc.govt.nz

# Secretary Vacant until AGM November 2007

#### Treasurer

Rachel Keedwell 24 Buick Crescent PO Box 5539, Palmerston North Ph: (06) 356 5519 Fax: (06) 356 4723 Mobile: 021 1772790 E-mail: rachel.keedwell@xtra.co.nz

#### Councillors (3)

Kate McNutt (2005–07) Department of Conservation

Research, Development and Improvement Division PO Box 13049, Christchurch 8141 Level 5, 137 Kilmore St, Christchurch E-mail: <u>kmcnutt@doc.govt.nz</u>

#### Mel Galbraith (2005–07)

Lecturer, School of Natural Sciences Unitec New Zealand, P. Bag 92025 Carrington Rd, Mt Albert, Auckland Ph: (09) 815 4321 ex 7296 Mobile: 025-6948139 E-mail: mgalbraith@unitec.ac.nz

# Jacqueline Beggs (2006–08)

Lecturer, School of Biological Sciences University of Auckland Ph: (09) 3737599 ex 86823 E-mail: j.beggs@auckland.ac.nz

#### 1 councillor position vacant until AGM November 2007

Co-opted Councillor (Education/ Advocacy) Karen Denyer Environment Waikato PO Box 4010, Hamilton East Ph: (07) 859 0999 E-mail: Karen.Denyer@ew.govt.nz

# Journal scientific editors

#### **Duane Peltzer**

Landcare Research, PO Box 69, Lincoln Ph (wk):03 325 6701 ext 2252 Fax: (03) 325 2418 Ph (hm):03 325 5789 E-mail: peltzerd@landcareresearch.co.nz

#### **Peter Bellingham**

Landcare Research, PO Box 69, Lincoln Ph: 03 325 6701 Fax: 03 325 2418 E-mail: <u>bellinghamp@landcarere-</u> search.co.nz

### Journal technical editor

Roger Dungan School of Biological Sciences University of Canterbury Private Bag 4800, Christchurch E-mail: Roger.Dungan@canterbury.ac.nz

#### Newsletter editors

Ruth Guthrie and Hannah Buckley Lincoln University, PO Box 84, Lincoln Ph: 03 325 2811, Fax: 03 325 3844, E-mail: <u>newsletter@nzes.org.nz</u>

# Webmaster

Jon Sullivan Ecology, Lincoln University, PO Box 84, Lincoln, Ph: 03 325 2811, Fax: 03 325 3844, E-mail: sullivaj@lincoln.ac.nz Web: webmaster@nzes.org.nz

2007 Conference Organiser **Dave Kelly** University of Canterbury E-mail: <u>dave.kelly@canterbury.ac.nz</u>

This Newsletter was produced by Hannah Buckley, Ruth Guthrie and Jeremy Rolfe.

Contributions for the newsletter – news, views, letters, cartoons, etc. – are welcomed. Please e-mail to editors (<u>newsletter@nzes.org.nz</u>) with document attached (Word formatted for Windows) or post. If posting, if possible, please send articles for the newsletter both on disk and in hard copy. Please do not use complex formatting; capital letters, italics, bold, and hard returns only, no spacing between paragraphs. Send disk and hard copy to:

Ruth Guthrie or Hannah Buckley Bio-Protection and Ecology Division P.O. Box 84, Lincoln University, Canterbury

#### Next deadline for the newsletter is 24 August 2007.

Unless indicated otherwise, the views expressed in this Newsletter are not necessarily those of the New Zealand Ecological Society or its Council.

# **MEMBERSHIP**

Membership of the society is open to any person interested in ecology and includes botanists, zoologists, teachers, students, soil scientists, conservation managers, amateurs and professionals.

#### **Types of Membership and Subscription Rates (2006)**

Full (receive journal and newsletter).\$75\* per annum Unwaged (with journal)......\$45\* per annum Unwaged membership is available only on application to Council for full-time students, retired persons etc. Unwaged members may receive the journal but must specifically request it. Joint......\$75\* per annum Joint members get one copy of the journal and

newsletter to one address. Overseas Full ......\$95\* per annum Overseas Unwaged......\$65\* per annum

School.....\$12 per annum

Educational institutions may receive the newsletter at the cost of production to stay in touch with Society activities. By application to Council.

There are also Institutional Rates for libraries, government departments etc.

Overseas members may send personal cheques for their local equivalent of the NZ\$ amount at current exchange rates, for most major overseas currencies.

For more details on membership please write to:

NZ Ecological Society PO Box 25 178 Christchurch NEW ZEALAND

or e-mail: info@nzes.org.nz

\* There is a \$10 rebate for members who renew before Feb 15 each year, and for new members