MINUTES OF NZ ECOLOGICAL SOCIETY COUNCIL MEETING

Friday 19 May 2000, 9:30am, PAMS, University of Canterbury

Present
Carol West, Dave Kelly (secretary, until 12:00),
Mark Sanders (secretary, from 12:00), Craig Miller,
James Ross, Ben Reddix, Bruce Burns, Janet
Wilmshurst, Hazel Chapman (10:00 - 10:40), Laura
Sessions (10:40-11:00)

Apologies
Jacqueline Beggs, David Wardle

Minutes of last meeting
Accepted as accurate: moved Carol seconded Mark

Credit card payments
We are now in action and the secretariat has a swipe machine. It will be expensive and setup is going to be about $225, and minimum charge of $120 per year, and variable cost per transaction. Put info on web but leave off paper flyer, and review in Feb 2001. Credit cards are very handy on web but by mail a cheque is no harder.

Cost of maintaining web pages
It cost $521 to set up and since then $80 for initial corrections and recently $200 for 8 hrs updating (initial budget was $180/year). The page has had about 800 hits so far this year. It was suggested that we could simplify the layout and eventually find a volunteer in the society who can do the updating for free.

PDF files: Previous copies of the Journal will be obtained from Swiftprint.

Complimentary subs
Mark has reviewed them and provided a summary table of all complimentary subs. There are two types: complimentary memberships (get journal and newsletter), and complimentary subs (journal only). The Council decided to keep libraries in general (as these increase publicity) and to ditch any agents who don’t currently give us any subs.

Conference 2000
Bruce outlined conference programme. Still working on getting invited speakers. Symposia planned at present:

- Biodiversity strategy - mainland islands, managing ecosystems with deer present, also address “Biowhat”;
- Environmental Performance Indicators Program; and
- Keystone Species.

Agreed to make registration fee substantially higher for non-members, and to follow these attendees up after the conference to invite them to join. Discussed idea of field trips on Sunday (to let attendees take

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advantage of cheaper airfares that include a Saturday night). Will invite Peter Hodgson MP to open the conference.

Conference 2001
Hazel Chapman joined us to discuss the Jubilee conference, as she has agreed to be lead organiser. Two main aspects: the usual conference stuff, and the jubilee angle (invite older members, organise a retrospective etc).

Dates: in August break (provisionally 18 Aug-2 Sept) was the preference from Blenheim conference attendees when they were asked.

The Council intends to develop a conference ‘organisation package’ on disk. Previous conference reports have been located, which includes a short ‘how to run a conference’ guide.

Invited speaker: A possible option it to combine with Entsoc (Gary Barker, president) or Systanz (Dianne Gleeson, president) and apply to Royal Society or MRST for money to bring one speaker.

Conference 2002
Jill Landsberg is going to check out costs and options for running the joint ESA/NZES meeting in Cairns and she will report back to the next full ESA Council meeting in mid July. Jann Williams (president of SEA) says she thinks Jill is warming to the idea of organising the conference, so it’s looking more positive.

Advocacy and education strategy
Goal is to launch the interactive CD (see previous meeting) at the jubilee conference in August 2001 at the latest. This project would cost $20-25K to produce commercially and it was decided to apply to the Watson Trust and investigate whether FRST or MRST have a technology promotion fund. NZES will provide some ‘seed’ money for the first meeting of the new sub-committee (ie. $600).

Correspondence
15 new members officially admitted with thanks, including Minister of Research Science and Technology.

Waged: Minister of RST, David Coomes, Adam Fraser, Roger MacGibbon, Dawn Palmer, Steven Seefeldt, Mandy Tocher, Lindsay Wilson.

Joint: Mark Bellingham and Alison Davis.

Unwaged: Barbara Anderson, Christine Jacobson, Rachel Keedwell, Kate McAlpine, Debra Wotton.

10 resignations accepted with regret: Almut Arneth, Rachael Ashton, RW Balham, Wayne Hutchinson, Leigh Marshall, Lucy Martinez, Ian Popay/Alison Popay, Vicki Staines, Bernie Warmington.

Treasurer’s report
Have about $35,000 in bank plus $7000 on term deposit (at 3%) after outstanding cheques are drawn. The investment should be increased and put at a better rate of interest. Annual accounts for 98/99 currently being audited. We should make sure we have the accounts for this year audited before the conference and published in full in the newsletter. Ben pointed out that air fares for council meetings have been very expensive and need to be booked as far in advance as possible.

Journal editor’s report
David says everything is going well, it is ‘going like clockwork’. We have received 13 manuscripts so far this year, and the CRI pulse of outputs in midyear is yet to come. Council expressed its thanks for his sterling efforts.

Newsletter editor’s report
Last issue looks fine. It was slightly late as the new editor is still sorting out the processes.

It was discussed whether the newsletter should publish thesis abstracts? Also a ‘technical tips’ column would be useful for ecological field tips.

Mailing list
Default ‘reply-to’ can’t seem to be changed easily, leading to problems with messages going to everyone by mistake. It was discussed whether the mailing list should it be moderated by someone.

Submissions

General business
Code of Ethics: The Society had three submissions; two agreeing to adopt RSNZ code, one from John Innes suggesting specific statement re use of animals in research and teaching. We will request the exact wording from John and then present this at the upcoming AGM.

Next meeting
Friday 18 August, 9:30am, PAMS, Christchurch.

Meeting closed at 1:10 pm
**NEWSLETTER EDITOR'S REPORT**

The article deadline for the next newsletter is 1 September 2000 and I invite all members to forward any interesting articles, graphics, book reviews, and upcoming conference details. I am interested in all information relating to NZ and overseas ecological issues and would like to incorporate a variety of different (even conflicting) viewpoints.

A new inclusion in this newsletter is a technical-tips section and I have included a useful website address. I invite all members to E-mail any technical/field tips to me for future issues. In the next issue I will include abstracts of student-research projects from different Universities. We will start with Lincoln students (Entomology and Animal Ecology Division) and I invite students from other universities to E-mail any abstracts (eg. ones used at overseas conferences) to me for later inclusion.

Regards
James Ross
Applied Computing, Mathematics and Statistics Group
PO Box 84
Lincoln University
PH: 03-325-2811 ext. 8278
Fax: 03-325-3839
E-mail: rossj1@tui.lincoln.ac.nz

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**2001 COCKAYNE MEMORIAL LECTURE**

The Royal Society has announced that Dr Matt McGlone, Landcare Research will present the Cockayne Memorial Lecture at regional scientific societies in 2001. The title of the lecture will be 'Reconstructing the Future: Past and present influences on the vegetation cover of New Zealand, and future trajectories'.

Understanding of New Zealand vegetation history has increased dramatically over the past few years. New approaches, techniques, and modelling have increased the resolution and range of information that can be obtained from a rapidly growing number of sites. More than ever before, present day palaeoecological studies can be seen as forming an unbroken continuum. As a result, we are now in a much better position to achieve a synoptic overview of the vegetation into which large spatial and long temporal scales are integrated. It is now apparent that New Zealand has almost completely lost a whole suite of unique ecosystems. While this is well known in a general sense, the impact of the loss is barely appreciated, and depauperate successor ecosystems are widely treated as if they were the natural vegetation cover. In this lecture I will discuss how the vegetation cover of New Zealand came to be, how it was disrupted, and the alternative futures that lie ahead.

Matt McGlone is a scientist at Landcare Research, Lincoln. His main research interests are vegetation change of the last Pleistocene-Holocene period, climate change, impact of human settlement, and plant biogeography. Current projects he is involved in are vegetation change on the subantarctic islands, mapping of the original vegetation cover of New Zealand, climate and vegetation modelling from fossil evidence, and deciduousness in New Zealand trees and shrubs.

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**PHD AND MSC SCHOLARSHIPS**

To study Mangrove Ecology, Physiology, and Population Genetics
A MARSDEn grant has been awarded to study the ecological, physiological and genetic factors that limit the southern distribution of mangroves to 38°S in New Zealand. This work will concern the physiology, ecology and population genetics of mangrove at its southern limit and make comparisons with areas in the north of its range. The work is designed to determine the factors that control the southern limits of plants in New Zealand and to provide some benchmarks for assessing the effects of climate change on distribution.

A PhD scholarship is available for a student interested in one or more of the areas of ecology, physiology and population genetics. A tax-free scholarship of $15 000 pa plus fees allowance of up to $3000 pa is payable for up to three years.

A MSc scholarship of $7000 pa plus a fees allowance is also available.

Interested students should contact Dr Chrissen Gemmell at the address below. Work will commence as soon as practicable.

Dept of Biological Sciences
University of Waikato
Private Bag 3105
Hamilton
Ph 07-838-4053
Fax 07-838-4324
CONSERVING SOUTHERN HEMISPHERE ALBATROSSES AND PETRELS WITH THE BONN CONVENTION FOR MIGRATORY SPECIES: A ROLE FOR NEW ZEALAND

In November last year the Sixth Conference of the Parties (COP) of the Bonn Convention for the Conservation of Migratory Species of Wild Animals was held in Somerset West, South Africa. BirdLife International, to which the Royal Forest and Bird Protection Society of New Zealand is affiliated, attended as an international NGO observer with a large team, which included John Cooper of its Seabird Conservation Program; Longline fishing: A threat to southern seabirds. At the previous Conference of the Parties southern hemisphere albatrosses at risk from longline fishing had been successfully nominated to Appendix II of the Convention by Australia, thus creating the opportunity for a Regional Agreement between range states for their enhanced protection. This nomination included all the New Zealand breeding species.

During the course of 1998, a review commissioned by the Food and Agriculture Organisation of the United Nations (Brothers et al. 1999) had shown that, in addition to albatross, the larger petrels of the genera Macronectes and Procellaria, totalling seven species, were also under serious threat from longliners in the Southern Ocean and adjoining seas. Five of these species are New Zealand breeders - the Northern Giant Petrel (M. halli), and four of the five Procellaria petrels, two of which, the Black Petrel (P. parkinsoni) and the Westland Petrel (P. westlandica), are endemic to New Zealand. Both endemics have been given a Vulnerable category of threat by BirdLife on behalf of the World Conservation Union (IUCN).

The White-chinned Petrel (P. aequinocitalis), which breeds within New Zealand on the Auckland, Antipodes and Campbell Islands, is especially at risk from longlining in the Southern Ocean, where it continues to be caught in numbers by the Patagonian Toothfish (Diostomus eleginolias) fisheries around sub-Antarctic islands in both the Atlantic and Indian Oceans. Within New Zealand waters, the rare Grey Petrel (P. circeus) has fallen foul of tuna longliners (Murray et al. 1993). With this situation in mind, agreement was reached between the BirdLife International Seabird Conservation Program and the South African Department of Environmental Affairs and Tourism (DEAT) to nominate the seven members of the Macronectes and Procellaria genera to Appendix II of the Convention at its 6th COP, so that they could also be included in a Regional Agreement (Huyser et al. 1999).

Once the Conference of Parties started, all went relatively smoothly. First the Scientific Council and then the full COP unanimously adopted the nominations, thus successfully adding the seven petrel species to Appendix II. A Southern Hemisphere Albatross Agreement. At the 6th COP, BirdLife offered strong support to a resolution led by Australia (and importantly supported by France, South Africa, the United Kingdom and Uruguay, all range states for Southern Ocean albatrosses) that encouraged speedy action towards finalising a Southern Hemisphere Albatross Agreement. Additionally, the United Kingdom delegation brought forward a resolution on fisheries by-catch, which also addressed the issue of seabird mortality from longlining. Both resolutions were adopted.

With the seven petrels safely listed in Appendix II, BirdLife then lobbied range states to consider including them from the start in a Regional Agreement, offering, only partially tongue in cheek, the acronym 'ASAP', to stand for 'The Agreement for Southern Albatross and Petrels', as a way of encouraging quick action. All the range states present at the 6th Bonn COP were supportive, so we hope to see a Regional Agreement drafted within the year.

Already, Australia, France and the United Kingdom have held a preliminary meeting in Paris in January, and a full meeting of range states is to be held in July in Hobart, Australia. BirdLife International, and its Seabird Conservation Programme, hope to be in attendance to help push the issue to a successful conclusion, working closely with the BirdLife global partnership, including the Royal Forest and Bird Protection Society, in furthering the conservation status of the albatross and petrel of the Southern Ocean.

New Zealand should join the Bonn Convention. New Zealand is not yet a member of the Bonn and thus was not represented at the South African meeting. Many of New Zealand’s seabirds (and other fauna) are migratory species in terms of the Convention, crossing international boundaries as part of their pelagic foraging patterns. New Zealand apparently plans to accede to this important international convention this year, and can then join with the other southern albatross and petrel range states in negotiating an Agreement which will help conserve its own seabirds as they fly over the Southern Ocean.

References
The incidental catch of seabirds by longline fisheries: worldwide review and technical
guidelines for mitigation. FAO Fisheries
Circular No. 937. 100pp.
Proposals from the Republic of South Africa for
amendments to Appendix II of the Convention
on the Conservation of Migratory Species of
Wild Animals (the Bonn Convention). Avian
Demography Unit Research Report No. 34. 41 pp.
Murray, T.E., Bartle, J.A., Kalish, S.R. & Taylor,
P.R.E. 1993. Incidental capture of seabirds by
Japanese Southern Bluefin Tuna longline vessels
John Cooper
Coordinator
Birdlife International Seabird Conservation Programme
Based at the Avian Demography Unit
Department of Statistical Sciences
University of Cape Town
Rondebosch 7700
South Africa
E-mail: jcooper@botzoo.uct.ac.za
Website: http://www.uct.ac.za/depts/stats/auz/seabirds
Office Phone: +27-21-650-3426
Office Fax: +27-21-650-3434
Home Phone: +27-21-685-1357 (answer machine)
Support the ‘Save the Albatross Campaign: Keeping
Seabirds off the Hook’ of Birdlife International

AUSTRALASIAN WILDLIFE
MANAGEMENT SOCIETY
ANNUAL CONFERENCE 2000

First notice
This year’s Australasian Wildlife Management
Society (AWMS) conference is to be held in
Queenstown, NZ, during the last week of November.
The conference will run over 4 days and there are 3
symposia planned (as well as open sessions):
1. Ecosystem consequences of wildlife management;
2. Ecology and management of small mammals; and
3. Wildlife management on oceanic and mainland
islands.
When?
Tuesday 28 November - Friday 1 December 2000.
A student session will be held on Monday 27
November.
Further details will appear in the next newsletter
and on the AWMS Internet site at that time. (http://
www.awms.org). Further inquiries to:
Dr Wendy Ruscoe
Landcare Research
P.O. Box 69
Lincoln
Ph (03) 325 6701 ext 2251
E-mail: ruscoew@landcarecri.nz

ERADICATION OF ISLAND
INVASIVES: PRACTICAL
ACTIONS AND RESULTS
ACHIEVED

Second announcement and call for papers
An international conference of the Invasive Species
Specialist Group of IUCN to be held at the Univer-
sity of Auckland, New Zealand from 19 to 23
The conference
Papers presented and discussion sessions will be
strictly limited to the subject of: ‘Eradication of
invasive species from islands; methods used and the
results achieved.’ The term ‘eradicating’ may
include work to remove invasive species where
complete eradication is some, or many, years away
but the methods used to date are achieving positive
results or providing a significant learning experience.
The term ‘island’ may include true islands, natural
habitat islands (eg. ponds), remnant and artificial
habitat islands (eg. reserves), or new invasions of
natural ecosystems where eradication was deemed
feasible.

2000 NEW ZEALAND
ECOLOGICAL SOCIETY AWARD

Nominations for the 2000 ecological society award
are now invited from any members. This award,
which is made annually, recognises society members
who have made an outstanding contribution to the
study and application of ecological science.
The award will be made to the person(s) who
have published the best original research in the
ecology of New Zealand, and its dependencies
(including the Ross Dependency), in the previous
two calendar years, or the person(s) who have
made the most outstanding contribution to applied
ecology, particularly conservation and management,
in New Zealand and its dependencies over the same
period. Recipients of the award may be asked to
give a presentation of their work at the society’s next
annual conference.
In 1999, the award was made to Dr Carolyn
King, University of Waikato. Nominations should be
made on the form on the back of the conference
registration pages in this issue and forwarded to the
Awards Convenor no later than 31 August 2000.
Preference will be given to papers, which provide detail of the techniques used, or of the ecosystem response to the work. Significant learning experiences may include methods which failed.

The conference is planned to run from mid-morning Monday 19 February to mid-day Friday 23 February 2001. It will include plenary sessions, invited speakers, contributed papers, poster sessions and social events. One full day field trip to locations appropriate to the eradication of invasives theme will be offered.

Registration
Registration will open on 1 July 2000 and forms will be available on the website or posted or emailed on request to the Conference Manager (see address details below). The expected registration cost is less than NZ$250.00 (about US$125). This price does not include social events and field trips. Reduced rates will be offered for students and those who register early. General registration will be possible up to the start of the conference.

Limited student hostel accommodation is available. Addresses and costs of a range of accommodations will be available with registration information.

Submission of abstracts
We invite the submission of abstracts for oral presentations and posters on any topics related to the conference theme. This abstract is for the information of conference participants, not a published paper, and must follow the instructions on preparation and submission available on the conference website or from the Conference Manager. Oral presentations are limited and if more abstracts are received the authors will be asked to present the paper in poster form instead. There is no limit on the number of posters.

We request that you advise the Conference Manager of the title of your presentation by 15 July 2000 to assist with programme drafting. Completed abstracts must be received no later than 1 October 2000 although late offers may be considered.

Oral presentations will be 20 minutes in length, with 10 minutes for questions (30 minutes total). To ensure maximum participation, each author may present only one oral presentation but may be a co-author on more than one presentation. Overhead projectors, slide projectors, and equipment for power point presentations will be available. Posters will be displayed for the duration of the conference and there will be a time slot specifically for the viewing of posters during which presenters are expected to be present.

The draft scientific programme will be available on the ISSG website by 15 November 2000.

The title of your presentation is requested by 15 June 2000

The deadline for the receipt of abstracts is 1 October 2000

Late offers may be considered.

Publication of contributions
All participants will receive a volume containing all of the abstracts at the start of the meeting. All accepted oral and poster papers will be published in an exclusive IUCN publication, subject to a review process and editing by the conference organisers. Speakers will be required to arrive at the conference with the manuscript ready for submission. Instructions for completion of manuscripts will be sent to authors when their presentation is accepted.

Contact details
Conference Director: Dr Mick Clout, Chair, Invasive Species Specialist Group.

All correspondence to the Conference Manager:
Mr Dick Veitch, 48 Manse Road, Papakura, New Zealand. Ph & Fax +64-9-298 5775, E-mail: dveitch@kiwiki.co.nz

ISSG Website: www.issg.org

OTHER UPcomings

July 3-7, 2000
15th Australian Statistical Conference
Adelaide, Australia. Contact E-mail: 15ASC@sapmea.asn.au

July 3-7, 2000
15th Australian Geological Convention:
Understanding Planet Earth - Searching for a Sustainable Future
Sydney, Australia. Contact 15th AGC C/- Geological Society of Australia, Suite 706, 301 George Street, SYDNEY NSW 2000. Ph 02 9290 2194, fax 02 9290 2198, E-mail: 15thagc@gsa.org.au

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# NEW ZEALAND ECOLOGICAL SOCIETY ANNUAL CONFERENCE

**19 - 23 Nov. 2000, University of Waikato, Hamilton, New Zealand**

## KEYSTONE ECOLOGY: UNDERSTANDING COMMUNITIES AND ECOSYSTEMS

### Conference Location

The conference is to be held at the University of Waikato, Hamilton. The University of Waikato occupies a campus of 67 ha including extensive gardens, several small lakes, and a recently developed fernery. Hamilton is New Zealand’s largest inland city and is situated on the banks of the Waikato River. City attractions include the Hamilton Gardens and the increasingly vibrant cafe, restaurant, and nightlife scene of southern Victoria St. Hamilton is near to a diversity of ecosystem types: restiad bogs (e.g., Koputai peat dome); conifer-broadleaf forest on Mt Pirongia; the wading bird flocks of Miranda; and the cave ecosystems of Waitomo.

Relevant websites: [www.waikato.ac.nz](http://www.waikato.ac.nz), [www.bcc.govt.nz](http://www.bcc.govt.nz), [www.hamiltoncity.co.nz](http://www.hamiltoncity.co.nz)

For further details of conference and other information see the New Zealand Ecological Society website: [www.nzes.org.nz](http://www.nzes.org.nz)

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<thead>
<tr>
<th>Sun. 19</th>
<th>morning sessions</th>
<th>afternoon sessions</th>
<th>evening</th>
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<tr>
<td></td>
<td>Postgrad colloquium (students only)</td>
<td>Postgrad colloquium (students only) Registration from 3pm</td>
<td>Registration until 8:30 pm</td>
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<td>Mon. 20</td>
<td>Conference opening 1999 NZES Prize winner Dr. Kim King (Univ. of Waikato)</td>
<td>Concurrent Symposia: “Ecology in human-dominated landscapes” Guest Speaker: Dr Richard Hobbs (Australia): “Wetlands”</td>
<td>Smorgasbord at “The Station” 7:30 pm Natural History Unit film evening</td>
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<td>Tue. 21</td>
<td>Symposium: “Ecosystem management” Guest Speaker: Prof. Neo Martinez (USA) Concurrent contributed papers</td>
<td>Poster session Symposium continues Concurrent contributed papers</td>
<td>6:00 pm AGM 7:00 pm Wine and pizza evening at “The Station”</td>
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<td>Wed. 22</td>
<td><em>All day field trips</em></td>
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<td>Conference dinner and dance</td>
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<td>Thu. 23</td>
<td>Symposium: “Keystone species: ecological naivety or critical paradigm” Concurrent contributed papers</td>
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NZES 2000 Conference Registration Form

Please post form and payment by 4th September 2000 to:

NZES 2000, Landcare Research,
Private Bag 3127, Hamilton, New Zealand.

Surname: .............................................. Title: ............. First Name: .........................
Name for name tag: ............................................................................................................
Full Postal Address: ............................................................................................................
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Day time Phone number: ........................................ Fax: ..............................................
E-mail: .................................................................................................................................

I am a member of the New Zealand Ecological Society ( )
I am not a member of the New Zealand Ecological Society ( )
( ) I wish to offer a paper (student session) / paper (main conference) / poster
(cross out the option or options that do not apply)

All delegates offering papers/posters should submit an abstract (12 pt font, title in bold, authors
and address(es) on new line, presenter underlined, max. of 200 words) by 4th September 2000 by
e-mail to burns@landcare.cri.nz (prefer MS-Word7 or Wordperfect formatting) or by post to:

NZES 2000, Abstracts Co-ordinator, Landcare Research
Private Bag 3127, Hamilton, New Zealand

( ) I wish to attend the student-only day (no charge)

For further information contact Wade Tozer, Department of Biological Sciences, University of
Waikato, Private Bag 3105, Hamilton, New Zealand or e-mail: wct@waikato.ac.nz. Student travel
grants are available to society members presenting papers or posters in the main conference (see
over for application forms).

DAY REGISTRATIONS ONLY

If you are enrolling for part of the conference, tick the day(s) you wish to attend. Registration
includes registration pack (including programme and abstract book), lunch, and morning and
afternoon teas.

Monday ( ) Tuesday ( ) Thursday ( )

ACCOMMODATION

Single room, College Hall (bed and breakfast) for the following night(s) ( )
Sun ( ) Mon ( ) Tues ( ) Wed ( ) Thurs ( )

Special diet Vegetarian ( ) Other ( ) (specify .........................................................)
Other needs Mobility ( ) Other ( ) (specify .........................................................)
PAYMENT DETAILS

Registration includes registration pack (including programme and abstract book), lunch, morning tea and afternoon tea for Monday, Tuesday, and Thursday of the conference.

Waged NZES members

full conference $130 ..................
or ...........days @ $65 per day ..................

OR

Student and unwaged members

full conference $80 ..................
or ...........days @ $40 per day ..................

OR

Non-members

full conference $180 ..................
or ...........days @ $90 per day ..................

Student’s Aftermatch (students only), Sunday evening $10 ..................

Station Smorgasbord, Monday evening $25 ..................

Wine & Pizza, Tuesday evening $18 ..................

Conference Dinner and Dance

..... persons @ $45 per person ..................

Dance only ..... persons @ $10 per person ..................

Field trip options

Botany of the Waikato $25 per person ..................

Managing ecosystems: Mapara and Warrenheip $25 per person ..................

Karst ecology at Waitomo $25 per person ..................

Accommodation: ....... nights @ $47 per night ..................

Total Enclosed $ ............

Return this Form, with Payment, by 4 September 2000

Late registrations will be accepted, but will incur an additional charge of $10.

Abstracts submitted after 4 September will not be accepted.
STUDENT TRAVEL GRANTS

Travel grants are awarded annually to encourage student participation at the Society's annual conference. All bona-fide students currently enrolled at a secondary or tertiary educational institute are eligible. Membership of the Society is not required.

Students should apply in writing to the Conference Organiser at least two weeks before the start of the conference, and should include a statement of support from an appropriate staff member. The numbers of grants are limited. Priority will be given to those presenting papers at the main session and those who have the furthest to travel. Grants are collected from the Conference Organiser during the conference.

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NZES 2000 CONFERENCE STUDENT TRAVEL GRANT APPLICATION

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<th>Student applying</th>
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<td>City or place of residence</td>
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<td>Are you presenting a paper in the main session of the conference? yes/no (delete one)</td>
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<td>Are you presenting a paper in the student session of the conference? yes/no (delete one)</td>
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2000 NEW ZEALAND ECOLOGICAL SOCIETY AWARD NOMINATION

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<td>Statement of support including reference to any relevant publications</td>
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<td>post to Ben Reddiex, Ecology and Entomology Group, PO Box 84, Lincoln University, Canterbury by 31 August 2000.</td>
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CONT. FROM P.6

July 16 - 23, 2000
XIX Congress of the International Society for Photogrammetry and Remote Sensing (ISPRS), Geoinformation for all
Amsterdam, The Netherlands. ISPRS Organising Committee, Attn. Ms Saskia Tempelman
E-mail: isprs@tnc.nl, URL: http://www.tnc.nl/isprs

August 6-10, 2000
Ecological Society of America 85th Annual Meeting
Snowbird, Utah

August 7-12, 2000
XXI IUFO World Forestry Congress
Kuala Lumpur, Malaysia.
Information: iufroxxi@frim.gov.my
Website: http://frim.gov.my/iufro.html

August 14-18, 2000
29th International Geographical Congress
Seoul, Korea.
E-mail: igpseoul@plaza.snu.ac.kr

September 3-8, 2000
11th International Biotechnology Symposium and Exhibition
Berlin, Germany. Contact Fax: (49-30)-7564201

September 4-6, 2000
Evolution and Revolution = C21 Nutrition
Wellington, New Zealand.
Contact Dee Armstrong, Ph: 04 562 8392 (home),
E-mail: Dee.Armstrong@bvhi.co.nz

November 19-23, 2000
New Zealand Ecological Society Conference
Hamilton, New Zealand. Contact Burn Burns,
Landcare research, Private Bag 3127, Hamilton.
Ph (07) 858-3728, E-mail: burnsb@landcare.cri.nz

November 28-December 1, 2000
Australasian Wildlife Management Society Conference
Queenstown, New Zealand. Contact Dr Wendy Ruscoe, Landcare Research, P.O. Box 69, Lincoln.
Ph (03) 325 6701 ext. 2251, E-mail: ruscoe@landcare.cri.nz

February 19-23, 2001
Eradication of Island Invasives Conference
Auckland, New Zealand. Contact Mr Dick Veltch, 48 Manse Road, Papakura, New Zealand. Ph & Fax +64-9-298 5775, E-mail: dveltch@kiwilink.co.nz

INTERNATIONAL RESEARCH PROJECTS EXTRACTED FROM THE ECOCLOGICAL SOCIETY OF AMERICA LISTSERVER

Global warming
A GRASSY hillside near Stanford University offers a glimpse of just how complicated the change could get.

Heat lamps dangle over wild oats and wildflowers. Black tubes release a hiss of carbon dioxide gas into the vegetation. Researchers push a tiny video camera down a clear tube set in the ground to study the growth of roots.

It’s all part of an effort to find out how widespread changes brought about by human activity might interact - reinforcing each other, cancelling each other out or combining in ways that no one anticipated.

“People think of global warming as the only component of global change, but it’s not,” said Harold A. Mooney, a Stanford biologist who is involved in the experiment.

Warming is by far the best-known effect, caused by a build-up of gases in the atmosphere that act like a greenhouse window to trap heat against the ground.

But that’s just the start of it. Global change could also increase rainfall along the California coast and fertilise the ground with a dusting of nitrogen, a by-product of increased air pollution and farming. In addition, the most famous of the greenhouse gases — carbon dioxide, given off when fossil fuels are burned — could have a fertilising effect, promoting the growth of plants both wild and domestic.

Scientists from Stanford and from the Carnegie Institution of Washington have rigged up a hillside at Jasper Ridge Biological Preserve to test every possible combination of these factors on the growth of wild grassland. They say it’s the first of its kind; previous field studies have examined only one or two possible effects of global change at a time.

“These four treatments we’re using are the ones that are the big drivers of global change almost everywhere”, Mooney said as he stood last week among the breeze-blown stalks.

Grassland is an ideal place to study global change because the plants there go through a complete generation, from sprout to dry, withered stalk, in just a few months. This allows researchers to see how multiple generations are affected in a relatively short time.

“But the results should apply equally to brushland and forest, and to long-lived species like...
the redwood”, Mooney said. ‘We’re speeding up the movie, but the plot is the same.’ While the experiment is only half finished and the results have not been formally analysed, the differences in these patches of grassland are already apparent.

There are 36 circular plots, each about two yards wide and divided like a pie into four wedges. Each is ringed with tubing that can waft carbon dioxide gas over the plants, doubling the concentration in any given plot to simulate changes expected over the next century. Sensors measure the level of the gas and shoot the information to a laptop computer, which automatically adjusts the amount coming out of the tubes.

‘Every two seconds it makes a new decision about how much to put on’, said Christopher B. Field of the Carnegie Institution of Washington. ‘It used to do it every second, but the computer got overloaded.’

The system also takes the speed and direction of the wind into account; on windy days it can waft the gas over the plot from the most favourable direction.

‘There’s a sense in which the experiment is contributing to global change by releasing carbon dioxide’, Field said. But the amounts are relatively small; he calculates that they’re the equivalent of burning a tank-full of gas in a sport utility vehicle each day.

To simulate the warming that doubling of carbon dioxide in the atmosphere could trigger, lamps dangling overhead heat half the plots. They raise the temperature at the ground surface by 3.5 to 7 degrees.

Some of the wedges are given 50 percent more water whenever it rains; others are fertilised with a smattering of nitrogen. ‘You can really see the difference’, said Becky Shaw, a postdoctoral researcher at Stanford. ‘When we laid out these plots they all had the same plot composition’.

Now, she pointed out, wild oats and other grasses are abundant in a wedge given extra water, carbon dioxide and nitrogen. But next to it, separated by barriers below and above ground, is a wedge with more flowers than grasses - geranium, scarlet pimpernel, blue-eyed grass and a shrubby yellow relative of the dandelion. It had been treated with carbon dioxide and water.

A third wedge got nitrogen and carbon dioxide; it’s thick with oats and blue-eyed grass, but the vegetation has already started to dry and turn brown in the late-spring sun.

And the fourth, treated with carbon dioxide alone, is a mixture of grass and flowers indistinguishable from the surrounding hillside. Some researchers have suggested that global change could actually be a good thing because the extra carbon dioxide in the air would fertilise plants and enhance the growth of crops. And since plants absorb the gas as they grow, they argue the atmosphere would eventually stabilise itself without any need for emissions controls.

‘Experiments here and elsewhere show that such arguments are incorrect’, Field said. ‘The increase in growth from carbon dioxide alone has proven to be quite small’, he said; it appears that plant growth is limited by the availability of water and of other nutrients in the soil.

‘As the various aspects of global change combine and interact’, he said, ‘they could push ecosystems in new directions – turning grassland to brush, for instance, or allowing foreign species to invade a habitat and push native plants out.’ The experiment is now in its second year, with one year to go, and the researchers have asked the National Science Foundation to extend funding for an additional four years.

Contact Glenda Chui at gchui@si mercury.com or (408) 920-5433.

EMPLOYMENT OPPORTUNITIES

FAUNA & FLORA INTERNATIONAL (FFI)
The worlds Eurasia (Eastern Europe, Central Asia, the Caucasus and the Middle East) Division wishes to recruit the following positions:-

Director of Programs, Eurasia

Role
To further develop and direct FFI’s overall management team directly contributing to the overall direction and success of the organisation.

Skills
Strategic and operational planning within the sector, financial, project and personnel management, communications, proposal writing, together with a good understanding of regional and international conservation issues, organisations, mechanisms and funding.

Location
Cambridge UK, with regular travel within the region.

Protected Area Management Specialist

Role
To work with in-country organisations to help facilitate the development of a wide range of conservation plans, and to help identify external support required for their effective implementation, and to help prepare proposals to obtain such support.
Skills
Good technical knowledge of conservation management, particularly Protected Area Management, in the region. Participatory planning, facilitation, training, communication and writing skills.

Location
Cambridge, UK but with approximately 50% time in the region.

For Terms of Reference and conditions or for further information please contact:
Mr. Martin Hollands,
Deputy Director,
Fauna & Flora International,
E-mail - mjhollands@wcloxe.demon.co.uk

RELUCTANT SALE, AT ST ARNAUD, NELSON LAKES NATIONAL PARK

Combination elite Homestay B&B and partly botanically based Eco-tourism Businesses. Upmarket, profitable, tempting income (full or lifestyle). Much admired, superior wooden home, delightfully situated in natural beech forest, sunny, short walk to Lake Rotoiti. Great place to live. Home has four double bedrooms/bathrooms, large lounge, and farm style kitchen. Separate extra large double garage and carport, self-contained sleep-out and games room.

Discerning guests, 90% overseas, among them botanists, geologists, and zoologists and other professionals. Eco-tourism activities, botanical, birdlife, geology, natural history/ecology, marvellous 4wd access to alpine. Tours all developed. DOC concessionaire. Room for growth of both business entities.

A photo of house and partial listing of ecotours can be seen in Friars Guide for Discerning Travellers, South Island Traveler, and Page 38. These businesses admirably suited to early retired or redundant professionals, with teaching abilities.

Reply Colin and Jill Clarke
St Arnaud Homestay and Guiding Services Ltd,
Postal Agency, St Arnaud, Nelson
Tel 03 521 1028
E-mail: c-clarke@st-arnaud.co.nz

ECOLOGICAL SOFTWARE ON THE INTERNET

All 34 programs in Ecology Software by Hsin Chi are updated.

At this moment, you can only get them from http://ftp.nchu.edu.tw/nchu/Ecology/Welcome.html (National Chung Hsing University, Taiwan). They will be soon available at http://nhshig.inhs.uiuc.edu/wes/chi.html (Illinois Natural History Surveys, USA).

Best regards,
Hsin Chi, Laboratory of Theoretical Ecology
E-mail: HsinChi@nchu.edu.tw

Here's another handy site for ecologists - calculates sun altitude, azimuth, time of sunrise, sunset and various other stuff for any time and place: http://susdesign.com/sunangle/

NZ ECOLSOC EMAIL LIST SERVER AND WEB PAGE

E-mail list server
To subscribe to this server, send a message to the automatic Mailser processor at:
nzecosoc-request@its.cantebury.ac.nz

The recommended way to subscribe is to send a message with two lines:
SUBSCRIBE NZECOSOC
END

The command line to stop receiving mail from this list is:
UNSUBSCRIBE NZECOSOC

Once subscribed, you will receive instructions on how to send messages, unsubscribe etc.

PLEASE KEEP THESE INSTRUCTIONS AND FOLLOW THEM.

To send a message to anybody on the list, even if you are not a subscriber, use the address:
nzecosoc@its.cantebury.ac.nz

To reply 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).

For information on the listserver contact the newsletter editor (rossj1@tui.lincoln.ac.nz) or myself at d.kelly@botn.canterbury.ac.nz. For information on the Australian listserver contact Dave Kelly.

Web page
To obtain additional conference details contact the NZ Ecological Society website: www.nzec.org.nz.
This site also has membership details, information on awards and prizes, information on submitting papers to the journal and links to overseas ecological organisations.
MEMBERSHIP CALL

Calling all Cantabrians
The Canterbury Branch of the Royal Society of New Zealand welcomes new members.

- Hear speakers such as Freeman Dyson, at monthly sponsored lectures.
- Join others on interesting day trips and weekend excursions.
- Make use of borrowing privileges at University of Canterbury libraries.
- Keep up to date with local events through our informative monthly newsletter.
- Help young students with travel or study through our Branch Awards.

Receive all this for only $37.00 annual membership by contacting:

Dr Alistair Campbell
Secretary
PO Box 52
Lincoln University
Canterbury 8150
Ph 03-325-2811 ext. 8236
E-mail: campbell@lincoln.ac.nz
### Office Holders of the New Zealand Ecological Society 1999/2000

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<tbody>
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<td>Landcare Research</td>
<td>PO Box 59, Lincoln</td>
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This Newsletter was produced by James Ross and Jeremy Rolfe.

Contributions for the newsletter – news, views, letters, cartoons, etc. – are welcomed. If possible, please send articles for the newsletter both on disk and in hard copy. 3.5” disks are preferred; MS Word, Word Perfect or ASCII file text, formatted for Macintosh or MS-DOS. Please do not use complex formatting; capital letters, italics, bold, and hard returns only, no spacing between paragraphs. Send disk and hard copy to:

James Ross  
Applied Computing, Mathematics and Statistics Group  
PO Box 84  
Lincoln University

Next deadline for the newsletter is 1 October 2000.

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 (1999/2000)

Full (receive journal and newsletter) $65 per annum
Unwaged (with journal) .................. $35 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 ........................................ $65 per annum
Overseas ..................................... $85 per annum
Joint members get one copy of the journal and newsletter to one address.
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

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MOVING? If so, please print your name and new address below, and return with the old address label to us.

Name: ____________________________
Address: ____________________________
Year: ____________
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Postcode: ____________
Address: ____________________________